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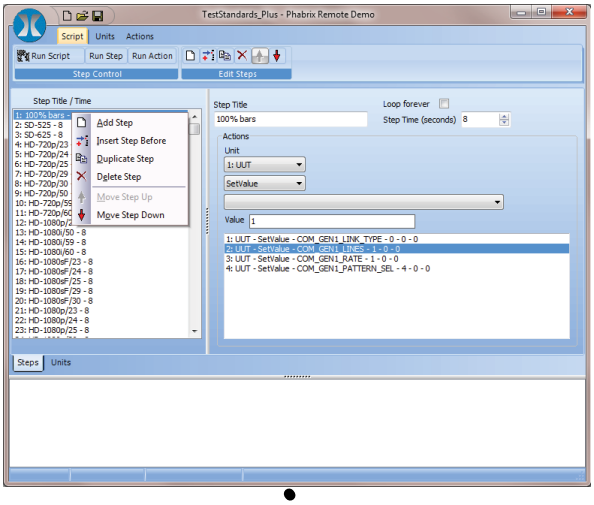

PHABRIX Remote Control

Software Release 0.09.0024

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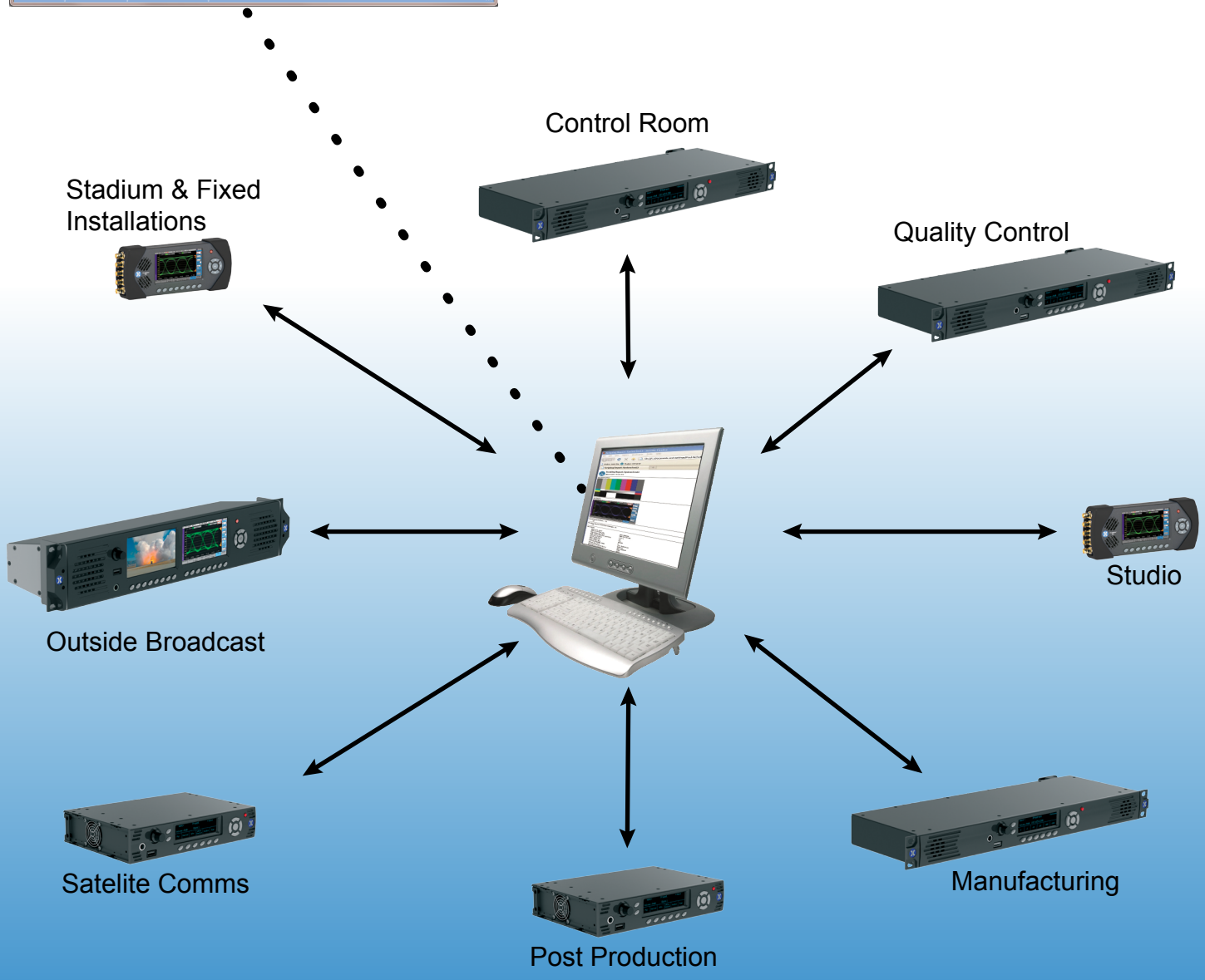

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1 Overview

Remote Control and Monitoring

Overview

For a number of years now, manufacturers of broadcast equipment have used remote controlled test installations to allow them to test systems and modules for compliance against a huge array of broadcast and non-broadcast video formats and test patterns. Remote control is one tool that allows manufacturers to quickly check if the equipment under test meets its specification as well as providing documented test results. In these types of test installations scripts are used to select functions (such as video format and test pattern choice) and control the test equipment without the need to manually setup each test in turn.

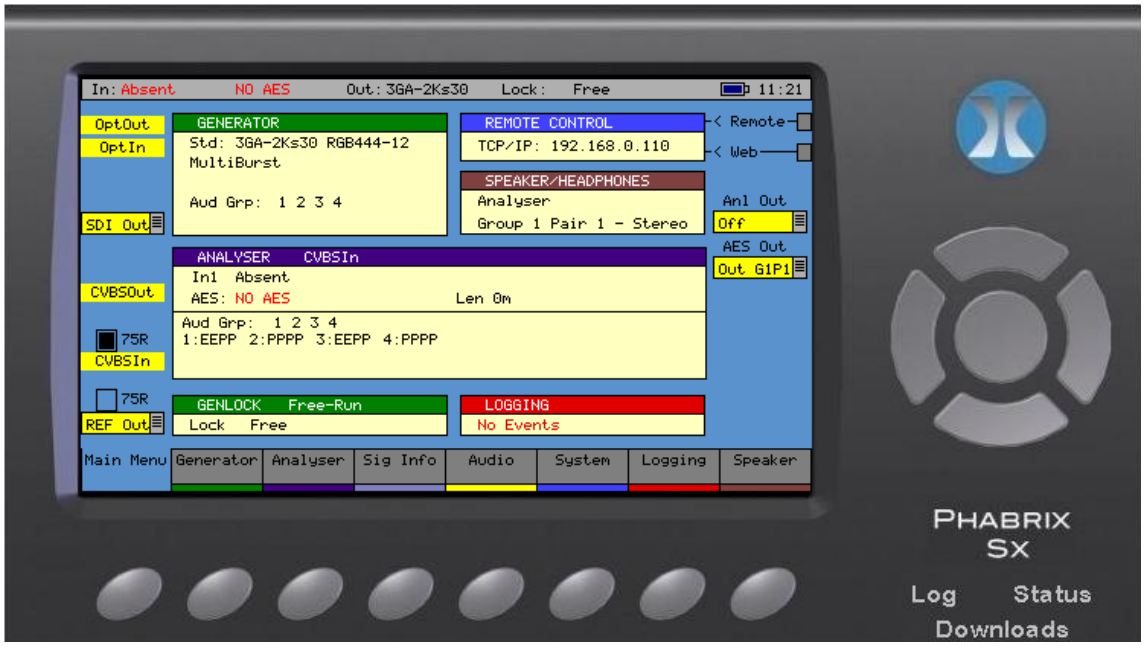
Away from the factory, however, the equipment under test may be down in the depths of the building and being temperamental. You need to find out what is going wrong but you don't want to spend the whole day standing over it waiting for it to go wrong. Here automated remote controlled testing does not help you.

The PHABRIX Sx handheld range and Rx rack mount range of test and measurement equipment provide a sophisticated range of remote control tools and applications to allow the remote access, remote control and remote automation of these units.

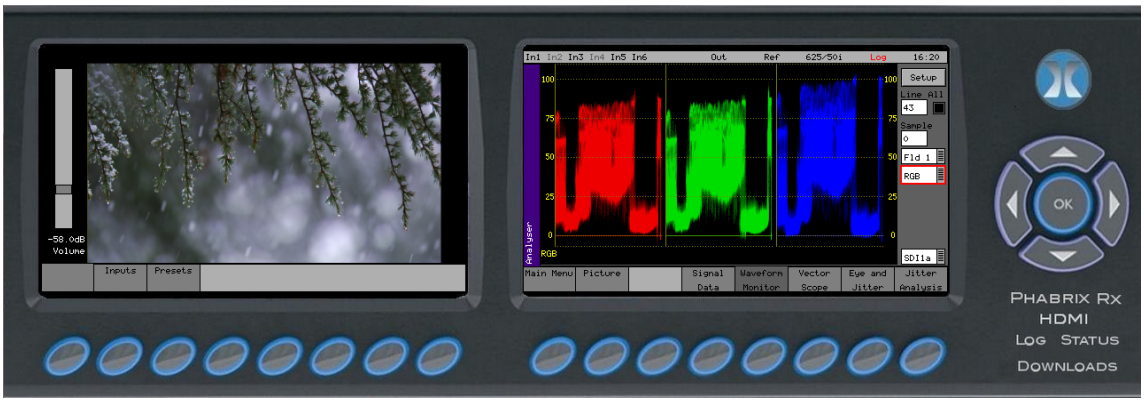
With over 400 different format combinations in broadcast and production worldwide, manufacturers have to design and test equipment that may need to support all or a large subset of these combinations. These have to be tested both in development and in production to ensure that they are compliant with SMPTE and EBU specifications. To do this the tools available within products such as the PHABRIX Sx and Rx instruments can be used. Automated scripts and remote control can be used to make systematic selection of generator test patterns, video formats, line rates, frame rates, colour spaces, bit depths, etc while the equipment under test is monitored and errors reported using the in-built logging system.

Browser Control

The PHABRIX Sx range of handheld instruments can be controlled via a web browser that accesses the built-in web server. To connect to the Sx handheld instrument, find out the IP address (displayed in the Main Menu) and Enter it into the web browser.



The PHABRIX Rx2000 instrument can be controlled via a web browser that accesses the built-in web server. To connect to the Rx2000 instrument, find out the IP address (displayed in the bottom right corner of the Monitor output and in the System - Network menu from the front panel) and Enter it into the web browser.



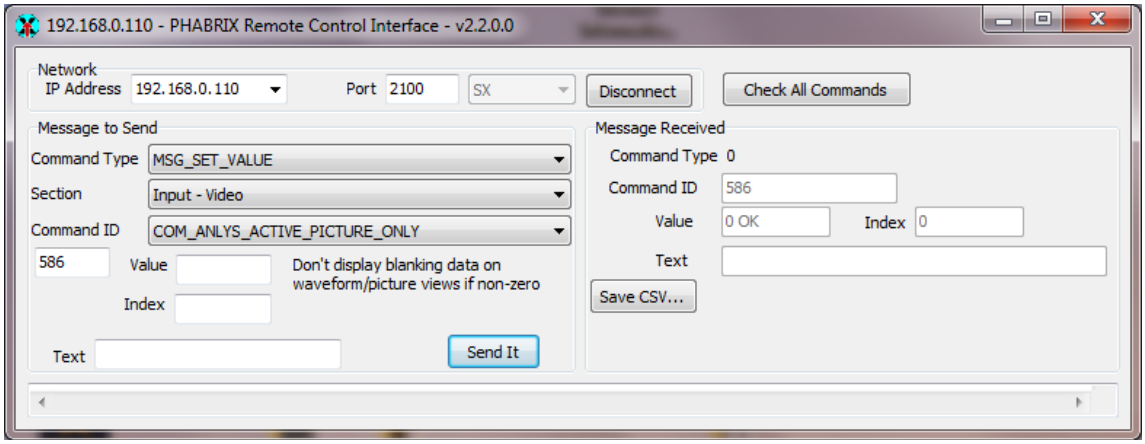
Browser operation has been tested using Firefox, Opera, Safari, Chrome and Internet Explorer but should work with any browser which allows JavaScript.

Clicking on the buttons works exactly like the instrument that you are connected to (note that auto-repeat doesn't work due to browser speed limitations). The menu screen on the browser image is updated every 10 seconds but may be refreshed manually by clicking the screen area on the browser.

The "HDMI" link displays a copy of the HDMI output in the browser window. Clicking on the position where a menu box appears on the browser HDMI display will control the corresponding menu on the actual Rx HDMI menu. This browser display will take a few seconds to update.

PHABRIX Remote Control Interface Application

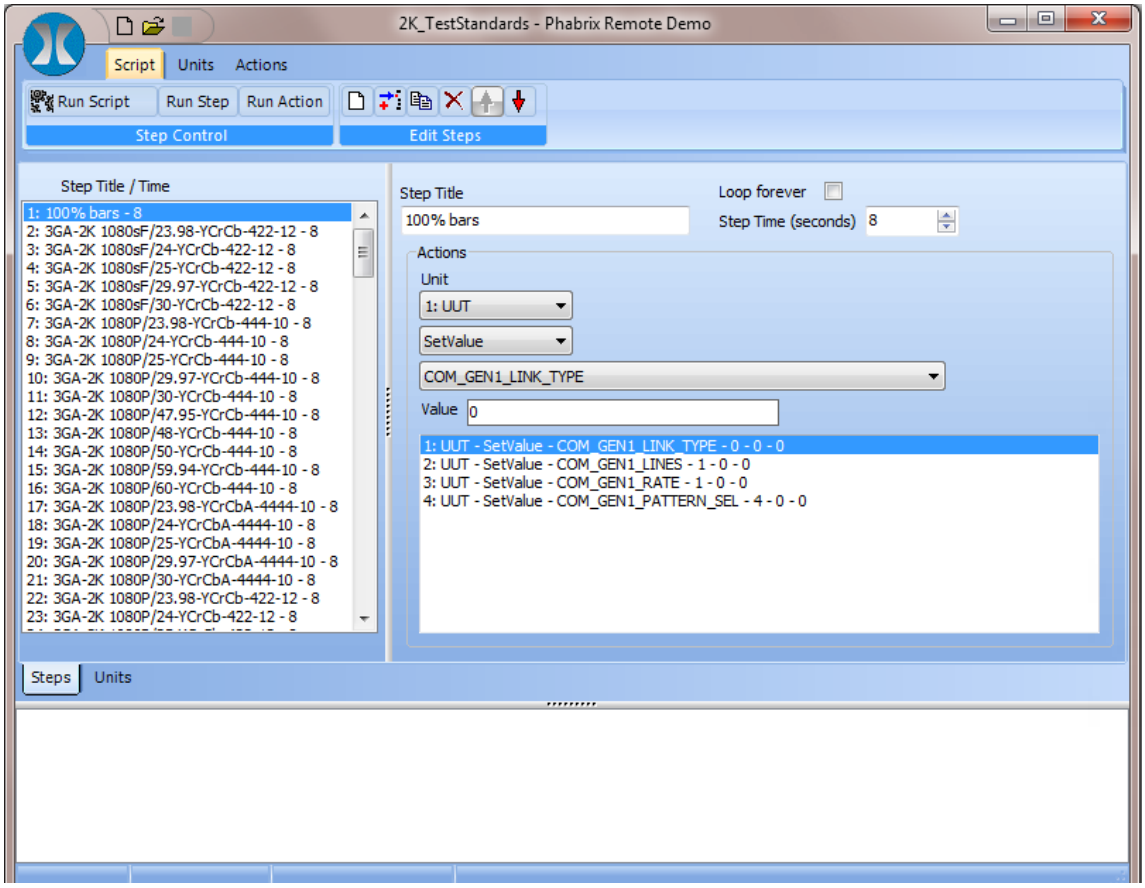
The PHABRIX Remote Control Interface application, available for Windows, allows an Sx handheld (with Remote Control option installed) or a Rx rack mount instrument to be controlled by the selection of individual commands and values. This is ideal for learning the command structure of the PHABRIX Remote Control Protocol.



PHABRIX Remote Control Demo Application

The PHABRIX Remote Control Demo application, available for Windows, allows an Sx handheld (with Remote Control option installed) or a Rx rack mount instrument to be controlled by an automate sequence of the selection of individual commands and values. This is a powerful tool for the automation of repetitive tasks in a development or manufacturing environment.

This application is available with a selection of examples that can be adapted by end user to perform a comprehensive range of automatic system configurations, test cases and measure results and failures.



Remote Control Protocol

The PHABRIX Remote Control Protocol is provided with example source code, classes and DLLs for Visual Basic, C# and Dephi for organisations wishing to develop their own bespoke remote control or to integrate testing using PHABRIX products into the own existing test automation installation.

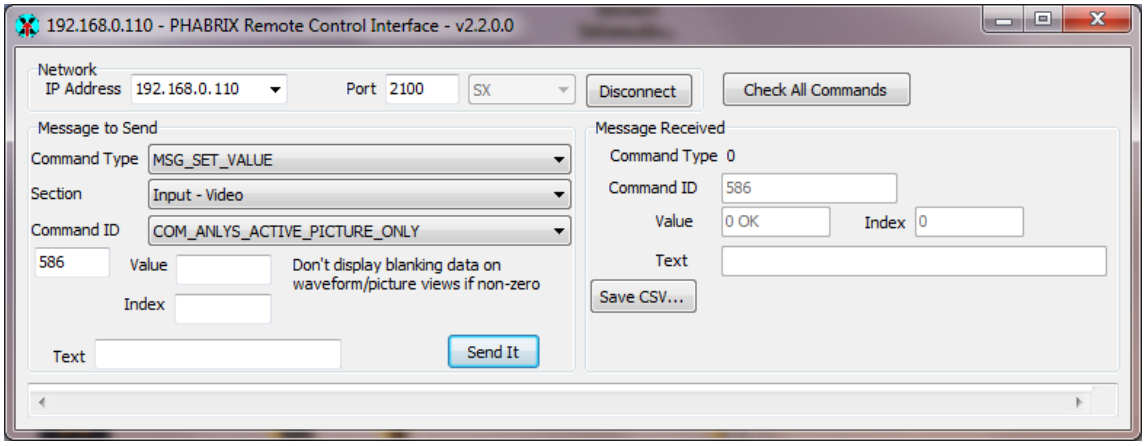
PHABRIX® broadcast excellence

2 Control Interface

Remote Control Interface Application

Description

The PHABRIX Remote Control Interface application, available for Windows, allows an Sx handheld (with Remote Control option installed) or a Rx rack mount instrument to be controlled by the selection of individual commands and values. This is ideal for learning the command structure of the PHABRIX Remote Control Protocol.



Menu Overview

The interface consists of a number of different areas:

Network

The Network are used to connect the application to a specific PHABRIX Sx or Rx unit which has the remote control option installed and is configure to allow remote access via the network.

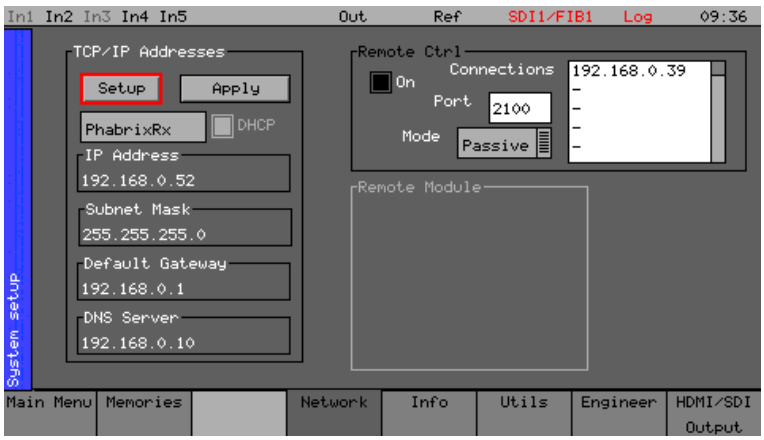
IP Address - this is the address of the Sx or Rx unit to be controlled.

Port - this is the network port used by the Sx or Rx unit. Normally this is port 2100.

Sx/Rx - selects the appropriate command set for the Sx or Rx remote control.

Connect/Disconnect - this is used to establish the connection to the Sx or Rx unit using the selected IP Address and Port number.

Check All Commands - this performs Set and Get instructions for all of the commands available and displays the response in the “Message Received” are of the application.



The Network menu of the Sx or Rx unit needs to be configured to enable remote control. This is done using the check box in the “Remote Ctrl” section.

Note that Remote Control is provided as standard on the PHABRIX Rx range but is a software option on the PHABRIX Sx range.

Message to Send

The Message to Send are is used to select the required command and Get/Set instruction.

Command Type - this drop down list allows the selection of the required Get or Set instruction

MSG_SET_VALUE - Set value for specified Command Number

MSG_SET_TEXT - Set text string for specified Command Number

MSG_SET_ENABLE - Enable/Disable specified Command Number – 1 = Enable, 0 = Disable

MSG_SET_VISIBLE - Show/Hide specified Command Number – 1 = Show, 0 = Hide

MSG_SET_COLOUR - Set the control colour for the specified Command Number

MSG_CLEAR_ITEMS - Clear all items for specified Command Number (List/Combo-box)

MSG_ADD_ITEM_VALUE - Add an item value/text pair for specified Command Number (List/Combo-box)

MSG_SET_ITEM_TEXT - Set the item text for specified Command Number (List/Combobox)

MSG_SET_ITEM_VALUE - Set the item value for specified Command Number (List/Combobox)

MSG_SET_ITEM_TEXT_VALUE - Set the item value AND text for specified Command Number (List/Combo-box)

MSG_SET_ITEM_ENABLED - Enables/Disables the specified item for the specified Command Number

MSG_SET_ITEM_VALUES - Set all the item values for specified Command Number (List/Combo-box) (Not implemented yet)

MSG_SET_ITEM_STRINGS - Set all item strings for specified Command Number. Individual items are 'tab' separated. (Not implemented yet)

SET_FOCUS - Set the focus to the control with the specified Command Number. Data Value specifies whether control is focussed(1) or defocused(0) (Not implemented yet)

MSG_GET_TEXT - Get textual value for specified Command Number

MSG_GET_VALUE - Get numeric value for specified Command Number

MSG_GET_COLOUR - Get control colour for specified Command Number

MSG_GET_ITEM_COUNT - Get number of items for specified Command Number (List/Combo-box)

MSG_GET_ITEM_VALUE - Get item value for specified Command Number (List/Combo-box)

MSG_GET_ITEM_TEXT - Get item text for specified Command Number (List/Combo-box)

MSG_GET_ITEM_TEXT_VALUE - Get item text and value for specified Command Number (List/Combo-box)

MSG_GET_ITEM_ENABLED - Get item enabled state for specified Command Number (List/Combo-box)

MSG_GET_ITEM_VALUES - Get all item values for specified Command Number (List/Combobox) (Not implemented yet)

MSG_GET_ITEM_STRINGS - Get all item strings (tab separated) for specified Command Number (List/Combo-box) (Not implemented yet)

Command ID - allows the command to be used to be entered by it unique identifier instead of selecting from the drop down list.

Value - allows a specific value to be used with the selected value command. For example the MSG_SET_VALUE command type.

Index -

Text - allows specific text to be used with the selected text command. For example the MSG_SET_TEXT command type.

Send It - this transmits the current command and instruction to the Sx or Rx unit.

Message Received

The Message Received are used to display the response by the PHABRIX Sx or Rx unit to the command sent by the application.

Command - this displays the command number returned from the Sx or Rx unit when a command is sent.

Command ID - this displays the command ID returned from the Sx or Rx unit when a command is sent.

Value - this displays the value returned from the Sx or Rx unit when a value command is sent.

Index -

Text - this displays text returned from the Sx or Rx unit when a text command is sent.

Save CSV - this saves and returned string as a comma separated value text file.

Sending a Message

Selecting a test pattern

Command type: MSG_SET_VALUE

Command ID: COM_GEN1_PATTERN_SEL

Value: 4

Send it

The test pattern should change to 100% Colour bars

Checking current generator video format

Command type: MSG_GET_TEXT

Command ID: COM_GEN1_STD_TEXT

Send it

The “Text” field of the “Message Received” area should display the current generator video format as text.

Checking the current analyser input video format

Command type: MSG_GET_TEXT

Command ID: COM_ANLYS_INP1_STD

Send it

The “Text” field of the “Message Received” area should display the current analyser video format as text.

Checking the input SDI video frequency

Command type: MSG_GET_VALUE

Command ID: COM_INPUT_1_FREQ

Send it

The “Value” field of the “Message Received” area should display the current analyser SDI video frequency as a value.

Receiving a Message

Checking current test pattern selection

When the following message is sent to the Sx or Rx unit

Command type:	MSG_GET_VALUE
Command ID:	COM_GEN1_PATTERN_SEL
	Send it

The “Received Message” area should display the following:

Command type:	MSG_RET_VALUE
Command ID:	15 (COM_GEN1_PATTERN_SEL)
Value:	4 (100% Colour Bars)

Checking current generator video format

When the following message is sent to the Sx or Rx unit

Command type:	MSG_GET_TEXT
Command ID:	COM_GEN1_STD_TEXT
	Send it

The “Received Message” area should display the following:

Command type:	MSG_RET_TEXT
Command ID:	14 (COM_GEN1_STD_TEXT)
Text:	625i50 (for example)

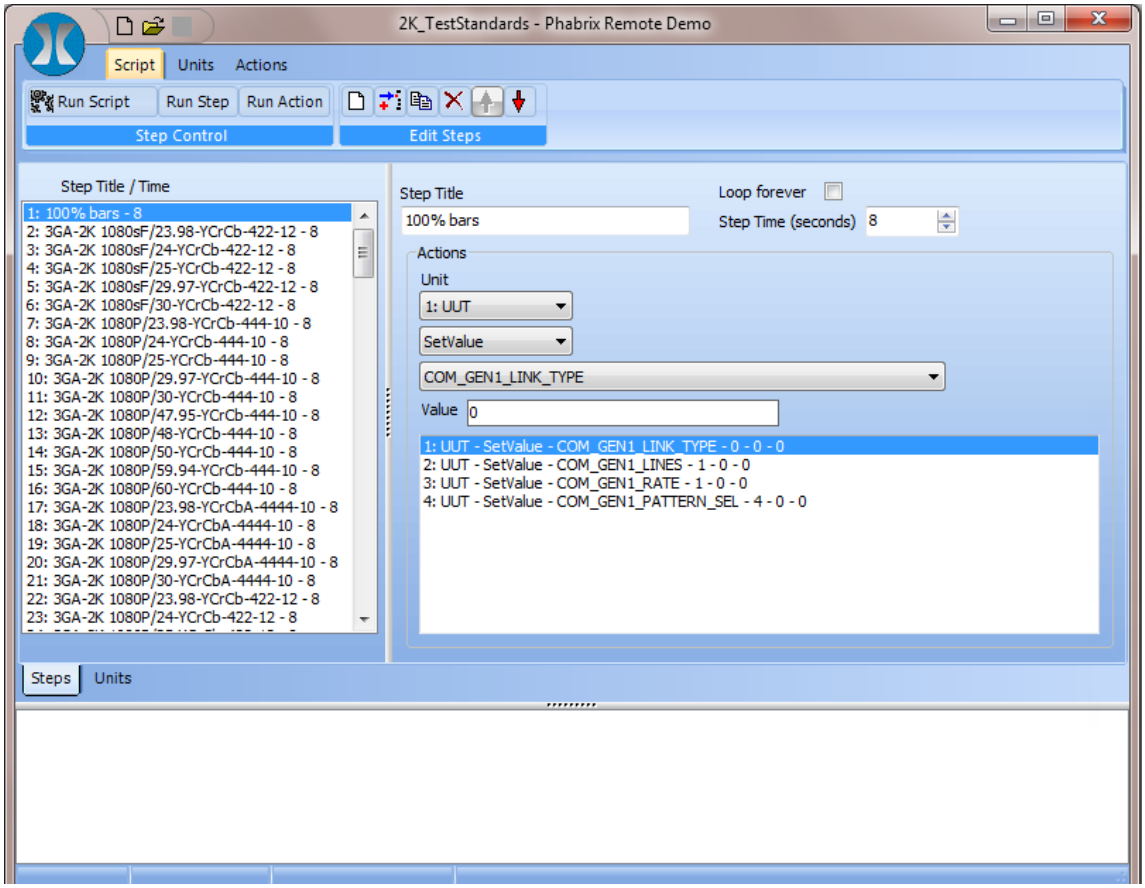
3 DemoApplication

Overview

PHABRIX Remote Control Demo Application

The PHABRIX Remote Control Demo application, available for Windows, allows an Sx handheld (with Remote Control option installed) or a Rx rack mount instrument to be controlled by an automate sequence of the selection of individual commands and values. This is a powerful tool for the automation of repetitive tasks in a development or manufacturing environment.

This application is available with a selection of examples that can be adapted by end user to perform a comprehensive range of automatic system configurations, test cases and measure results and failures.



The Scripts used by the application are a sequence of steps which can contain individual actions (for example selecting a test pattern, frame rate or line rate). Each action uses an individual remote control command with a Set or Get command type and appropriate command value.

The time taken for each step can be set to allow any changes to the PHABRIX Sx or Rx can be allow to settle. For example allowing the Sx or Rx to re-lock when a video standard is changed.

Script contain specific named units (Sx and Rx units configured in the Units tab) and each action within each step can be applied to a specific unit. For example where one unit is being used as a generator and another unit is being used as an analyser.

When actions are being used to Get values from the specified unit (Sx or Rx) then upper and lower limits can be set so that when the Script is run only those actions where the value is outside the expected limits will be reported in the log area.

Scripts can be created, saved, loaded and re-worked as required.

The user interface consists of a number of different areas that are accessed via tabs at the top of the application:

Units - is where different PHABRIX units (Sx handheld and Rx rack mount) can be configured.

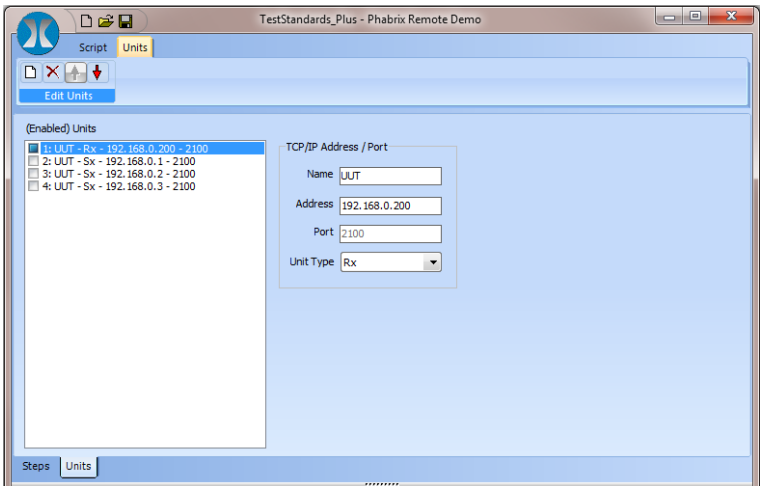
Scripts - is where scripts can be created, saved, loaded and run.

Actions - is where actions can be created and edited.

The standard Windows icons at the top of the application allow new scripts to be created, existing scripts to be loaded and the currently selected script to be saved.

Selecting the PHABRIX icon in the top left corner of the application allows previously loaded scripts to be selected.

Units Tab

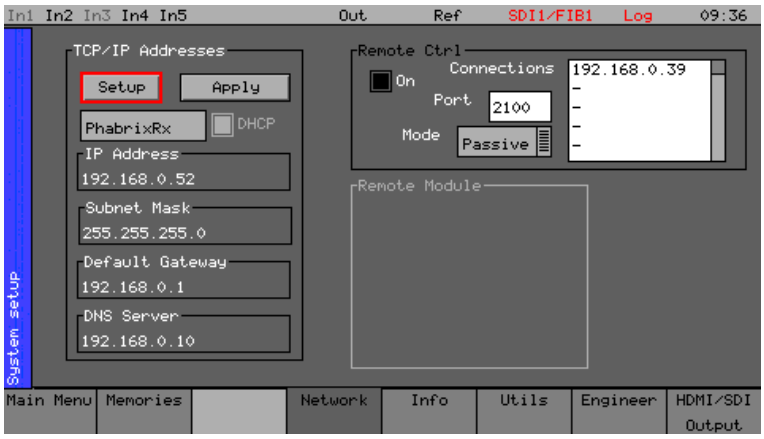


The Units tab, shown here, is used to configure the connection between the Remote Control Demo application and specified PHABRIX Sx and Rx devices.

This tab allows units to be defined with Name, IP address, Port number and with protocol type (ie Sx or Rx).

The icons at the top of the tab allow new Units to be added, existing units to be deleted and their positions in the list to be changed.

Once a Unit has been defined, clicking on the check box to the right of is description in the list will connect the Remote Control Demo application to that unit. When connection has been made, the check box will turn green to indicate the successful connection.



The Network menu of the Sx or Rx unit needs to be configured to enable remote control. This is done using the check box in the “Remote Ctrl” section.

Note that Remote Control is provided as standard on the PHABRIX Rx range but is a software option on the PHABRIX Sx range.

Note that the type of Remote Control Protocol selected in the Units tab will define which commands will be displayed in the Scripts and Actions menus while scripts are being created and edited. Note also that not all Sx and Rx commands are interchangeable.

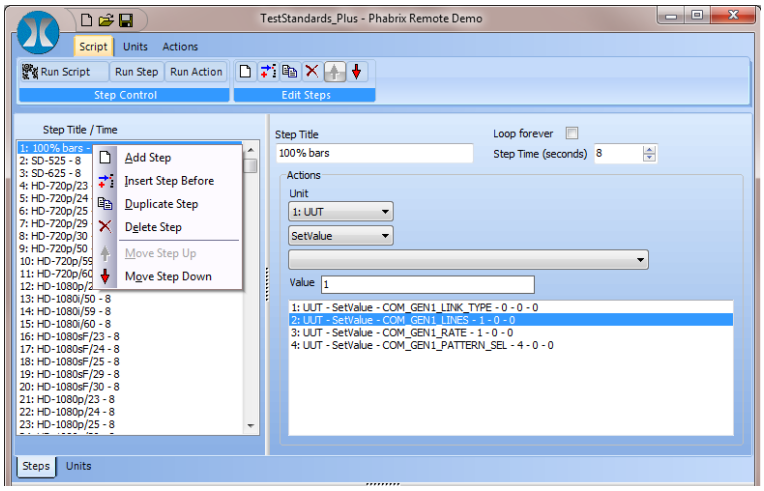
The Name field allows the Rx or Sx unit to be given a name that will be used throughout the application. It is better to chose a name that is generic (for example UUT - unit under test) rather than something very specific. This then allows the created script to be used for all units under test.

The Address field defines the actual physical IP Address of the Rx or Sx unit to be connected to the Remote Control application.

The Port field defines the network port to be used for the Remote Control connection. This Port number must be the same as that defined by the Rx or Sx unit and is typically set to 2100.

The Unit Type drop down menu allows the selection of either the Rx or Sx protocol and determines the commands that will be available in the Action editor.

Scripts Tab



The Scripts tab, shown here, is used to add and edit Steps in a sequence. Each Step can consist of a number of Action which will be applied to specific Units.

Both icons and contextual menus (ie mouse right click) are available.

The icons at the top of the Scripts tab and the contextual menu available if you right click in the left-hand window with the heading “Step Title / Time”:

Add Step - adds a new blank Step below the currently highlighted Step.

Insert Step Before - adds a new blank Step before the currently highlighted Step.

Duplicate Step - copies the currently highlighted Step and places it at the end of the script.

Delete Step - deletes the currently highlighted Step and moves all Steps below it up one position.

Move Step Up - moves the currently highlighted Step up one position in the Script and shuffles all Steps accordingly.

Move Step Down - moves the currently highlighted Step down one position in the Script and shuffles all Steps accordingly.

The Run Script button will start the currently displayed script from step 1 to the end of the script. If the Loop Forever check box is selected, then once the script reaches the last step it will start again from step 1.

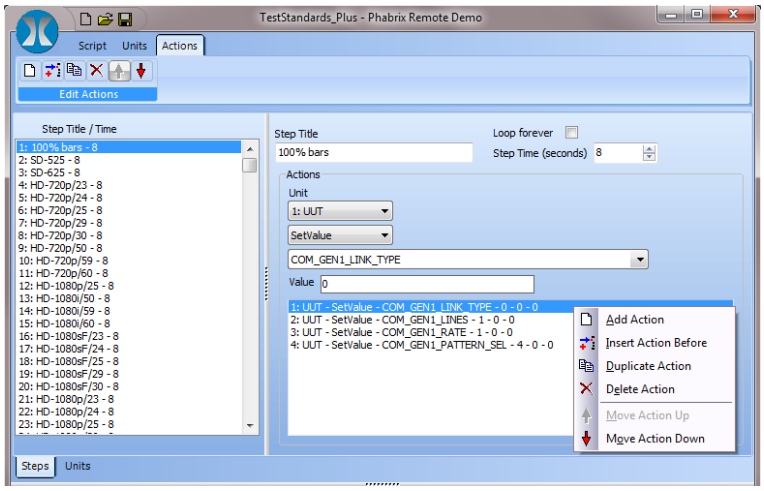
The Run Step button will run the currently highlighted step in the script.

The Run Action button will run the currently highlighted action in the currently highlighted step.

Each step is number automatically based on its position in the script. Each step can also be given a descriptive title which makes the script easier to understand when running and when editing.

Each step can be given a duration time, typically a few seconds, so that the Unit can recover and re-lock when a system configuration is made or when a video signal standard is changed.

Actions Tab



The Actions tab, shown here, is used to add and edit Action in a sequence within a Step. Each Action defines a specific command, the Get or Set command type and the value (or Text) to be sent or received from the specific Unit.

Both icons and contextual menus (ie mouse right click) are available.

The icons at the top of the Actions tab and the contextual menu available if you right click in the right-hand window:

Add Action - adds a new blank Action below the currently highlighted Action.

Insert Action Before - adds a new blank Action before the currently highlighted Action.

Duplicate Action - copies the currently highlighted Action and places it at the end of the Step.

Delete Action - deletes the currently highlighted Action and moves all Actions below it up one position.

Move Action Up - moves the currently highlighted Action up one position in the Step and shuffles all Actions accordingly.

Move Step Down - moves the currently highlighted Action down one position in the Step and shuffles all Actions accordingly.

The Unit drop down button allows the currently highlighted Action to be applied to a Unit, by the name defined in the Units tab.

Command type drop down button allows the selection of:

GetValue - to get the value available for the command

SetValue - to set the value for a command

GetText - to get the text available for the command

SetText - to set the text for a command

The Command drop down button allows the required Remote Control command to be selected from the list of available Rx or Sx compatible commands.

The value field allows the value to be defined for the SetValue command. If the GetValue command is used then the value field defines the expected value. The Min and Max values then define the tolerance range for the expected value. Note the logging area will display only the out of tolerance results when the script is run.

When the SetText command type is used the Value field can be used to enter the required text.

Action Examples

Selecting a test pattern

Unit: UUT

Command type: **SetValue**

Command ID: **COM_GEN1_PATTERN_SEL**

Value: **4**

This should change the test pattern to 100% Colour bars on the Generator (Sx Generator and Rx Generator module fitted in slot 1)

Checking the input SDI video frequency

Unit: UUT

Command type: **GetValue**

Command ID: **COM_INPUT_1_FREQ**

Min: 0

Max: 0

This should display the frequency of the SDI video connected to Input 1 on the Sx.

Checking current generator video format

Unit: UUT

Command type: **GetText**

Command ID: **COM_GEN1_STD_TEXT**

Value:

This should display the current generator video format as text in the logging area.

Checking the current analyser input video format

Unit: UUT

Command type: **GetText**

Command ID: **COM_ANLYS_INP1_STD**

Value:

This should display the current analyser video format as text in the logging area.

Setting the Dolby program description

Unit: UUT

Command type: **SetText**

Command ID: **COM_GEN_DOLBY_PGM_DESCRIPTION**

Value: Dolby E - 5.1 - 16-bit

This should enter “Dolby E - 5.1 - 16-bit” into the Dolby Generator program description

4 Protocol

Protocol

Remote Control Protocol

Overview

Remote control of the PHABRIX Sx or Rx unit is performed using TCP/IP protocol using standard sockets. This protocol is only available on software builds 0.09.2451 and onwards and only enabled if the Remote Control option has been purchased. If disabled, you will receive MSG_NACK replies to all requests.

Passive Mode of control is used by the automation system or test application running on a Client PC. This will be the first method of remote control implemented. The host unit (the client) must poll the remote unit for status changes. Typically, the application will perform SET_xxx actions to set values on the Sx and GET_xxxx actions to get values from the Sx.

Remote Control of the Sx unit is performed using GET_xxx and SET_xxx requests. All messages are acknowledged for reliability so after sending a message, a message should always be returned. If a GET_xxx request is performed, a RET_xxx message should be returned. If a SET_xxx request is performed the reply should be a MSG_ACK unless an error is detected.

Message Header

In order to control the Sx or Rx unit, you need to connect to the socket on the unit as a client and send messages to it. The Port number on the Sx and Rx unit is 2100 by default. Once connected, messages can be sent to the Port by writing the header followed by any optional text/data values. The message header has the following structure:

Element	Size (bits)	Description
0	32	Magic number 0xa55acb12
1	16	Command type (see below)
2	16	Command Number (CommandID) see the 'C' header file for full details.
3	16	String length (in bytes) default to 0
4	16	Unused packing element to get next element on 32bit boundary
5	32	Item index if required or 0 (signed) -1...0...n
6	32	32 bit signed Data value if required or 0 (signed) (any value

The packet is therefore 20 bytes long.

All fields are Intel byte order, ie low byte first, little endian.

If a text message is sent or received, then the text string will follow the header and the text length is set by the String Length field.

Once the full message has been sent, the host should wait for a response before sending any more messages. The protocol is thus a half-duplex protocol.

Passive Mode Command Types

Value	Name	Description
0	MSG_ACK	Acknowledge of a message – used if message does not require a return value.
1	MSG_NACK	Error in message received by remote unit. See Error Codes below
2	reserved	
3	reserved	
4	reserved	
5	MSG_SET_VALUE	Set value for specified Command Number
6	MSG_SET_TEXT	Set text string for specified Command Number
7	MSG_SET_ENABLE	Enable/Disable specified Command Number – 1 = Enable, 0 = Disable
8	MSG_SET_VISIBLE	Show/Hide specified Command Number – 1 = Show, 0 = Hide
9	MSG_SET_COLOUR	Set the control colour for the specified Command Number
10	MSG_CLEAR_ITEMS	Clear all items for specified Command Number (List/Combo-box)
11	MSG_ADD_ITEM_VALUE	Add an item value/text pair for specified Command Number (List/Combo-box)
12	MSG_SET_ITEM_TEXT	Set the item text for specified Command Number (List/Combobox)
13	MSG_SET_ITEM_VALUE	Set the item value for specified Command Number (List/Combobox)
14	MSG_SET_ITEM_TEXT_VALUE	Set the item value AND text for specified Command Number (List/Combo-box)
15	MSG_SET_ITEM_ENABLED	Enables/Disables the specified item for the specified Command Number
16	MSG_SET_ITEM_VALUES	Set all the item values for specified Command Number (List/Combo-box) (Not implemented)
17	MSG_SET_ITEM_STRINGS	Set all item strings for specified Command Number. Individual items are 'tab' separated. (Not implemented)
18	SET_FOCUS	Set the focus to the control with the specified Command Number. Data Value specifies whether control is focussed(1) or de-focused(0) (Not implemented)
20	MSG_GET_TEXT	Get textual value for specified Command Number
21	MSG_GET_VALUE	Get numeric value for specified Command Number
22	MSG_GET_COLOUR	Get control colour for specified Command Number
23	MSG_GET_ITEM_COUNT	Get number of items for specified Command Number (List/Combo-box)
24	MSG_GET_ITEM_VALUE	Get item value for specified Command Number (List/Combo-box)
25	MSG_GET_ITEM_TEXT	Get item text for specified Command Number (List/Combo-box)
26	MSG_GET_ITEM_TEXT_VALUE	Get item text and value for specified Command Number (List/Combo-box)

Value	Name	Description
27	MSG_GET_ITEM_ENABLED	
28	MSG_GET_ITEM_VALUES	Get all item values for specified Command Number (List/Combobox) (Not implemented)
29	MSG_GET_ITEM_STRINGS	Get all item strings (tab separated) for specified Command Number (List/Combo-box) (Not implemented)
Following types are returned by remote unit when requested by MSG_GET_xxxxx command types		
30	MSG_RET_TEXT	This message contains text for the requested Command Number following header. String Length is length of string which is NOT null terminated.
31	MSG_RET_VALUE	This message contains value for the requested Command Number in Data Value
32	MSG_RET_COLOUR	This message contains colour for the requested Command Number in Data Value
33	MSG_RET_ITEM_COUNT	This message contains the number of items for the requested Command Number in Data Value (List/Combo-box)
34	MSG_RET_ITEM_VALUE	This message contains the value for the requested Command Number in Data Value (List/Combo-box
35	MSG_RET_ITEM_TEXT	This message contains the text for the requested Command Number following header. String Length is length of string which is NOT null terminated. (List/Combo-box)
36	MSG_RET_ITEM_TEXT_VALUE	This message contains the value and text for the requested Command Number following header. String Length is length of string which is NOT null terminated. (List/Combo-box)
37	MSG_RET_ITEM_ENABLED	This message contains the enabled (i.e. visible) state for the requested Command Number following header. Data Value is 1 if enabled or 0 if disabled(hidden) (List/Combo-box)
38	MSG_RET_ITEM_VALUES	(Not implemented)
52	MSG_GET_ENABLE	Requests the enabled state for the specified field
53	MSG_RET_ENABLE	This message contains the enabled state for the specified field
54	MSG_GET_VISIBLE	Requests the visible state for the specified field
55	MSG_RET_VISIBLE	This message contains the visible state for the specified field
56	MSG_GET_LCD	This message requests the LCD display to be returned. DataValue is the LCD to be returned, on an SxA/SxE/SxD this should be 0.
57	MSG_RET_LCD	This message contains the LCD display information as a block of data which is the LCD image as a bitmap file (.bmp)

The ItemIndex field is the length of the block containing the bitmap data. Once the header has been read, read ItemIndex bytes to get the LCD image data which may then be saved to a bitmap file.

Error Codes

IF you receive a MSG_NACK reply, one of the following error codes in the Data Value field will be returned to describe the reason for failure:

0	MSG_ERR_OK	Default value
-1	MSG_ERR_CMDTYPE	An invalid Command Type was sent
-2	MSG_ERR_CMD_ID	An invalid Command Number was sent
-3	MSG_ERR_STR_LENGTH	The String Length was too large
-4	MSG_ERR_INDEX	The Item Index was too large
-5	MSG_ERR_DISABLED	The Remote Control interface is disabled. This may be either by the remote unit or because remote control option has not been purchased.

Control Types

The Sx and Rx user interfaces contain a number of control types and not all control types have the same set of valid command types. The following table shows which command types are valid for each control type.

Control type	Valid Command Types
Check Box (eg Generator output on/off)	MSG_SET_VALUE, MSG_GET_VALUE
Button	MSG_SET_VALUE, MSG_GET_VALUE
Drop Down Combo-Box	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT (to get selected text item)
Text Edit (eg Generator Ident. Text)	MSG_SET_TEXT, MSG_GET_TEXT
Colour List (eg Generator Text Font Colour)	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_ITEM_VALUE, MSG_GET_ITEM_COUNT
List Box (eg Event Log)	MSG_GET_ITEM_TEXT, MSG_SET_VALUE, MSG_GET_ITEM_COUNT, MSG_GET_VALUE (which item is selected)
ScrollBar (eg Speaker Volume)	MSG_SET_VALUE, MSG_GET_VALUE
Progress Bar (eg Audio Meter Levels)	MSG_SET_VALUE, MSG_GET_VALUE
LCD Image block	MSG_GET_LCD (See definition above)

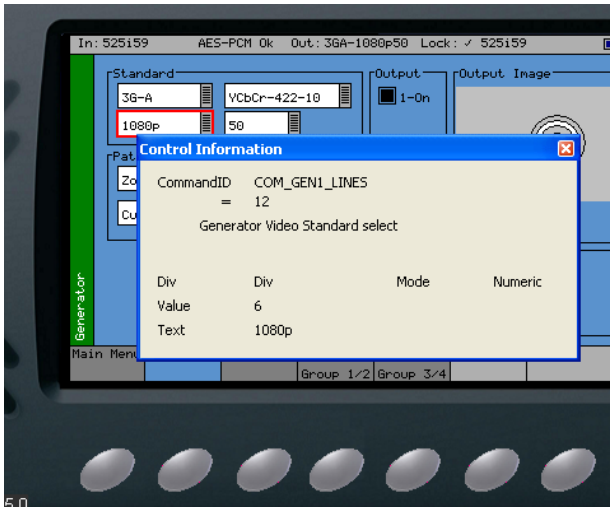
Controls which contain items such as List Boxes, Combo boxes and Colour Lists may be interrogated as to what the lists contain. The simplest method of doing this is to send a MSG_GET_ITEM_COUNT message and use the result to iterate through the contents and send MSG_GET_ITEM_TEXT or MSG_GET_ITEM_VALUE. This is the normal method for controls such as the EventLog which may contain a large number of entries. An alternative, faster and more accurate method is to send a MSG_GET_ITEM_STRINGS which will return all strings in the control, tab separated with DataValue set to the number of strings present. Similarly, if a control contains multiple values, a MSG_GET_ITEM_VALUES message should be sent to get all the values as one message which is much faster and will also guarantee to get the values from a single video frame.

Using the Simulator When Remote Controlling a Sx

The Sx and Rx PC simulators have a mode where they can show Command information for each field.

Download the simulator and use the context menu to check “Show Remote Control Commands”. If this option is checked, using the mouse to click on a control or field will display the CommandID and other information associated with that field.

A window is displayed with the CommandID in text and numeric form and a description field saying what the control does.



You can also find out whether the Command is a numeric field (uses GetValue/SetValue messages types) or a text field (uses GetText/SetText message types). The current value and text for that command are also displayed. The ‘Div’ value shows what divisor to use for the fixed point fields.

Examples of Remote Control

Here are some examples of message sequences. You will need to check the CommandID document for the relevant command ID to perform the tasks.

Getting the Event Log

The event log is a ListBox and thus to get its contents you will need to know the number of events. The sequence of messages is thus:

Message Sent	Reply received
MSG_GET_ITEM_COUNT	MSG_RET_ITEM_COUNT with Value = Number of Items

Clearing the Event Log

Message Sent	Reply received
MSG_SET_VALUE (Value = 1)	MSG_ACK if message succeeds

Checking the CRC Error Counts

Message Sent	Reply received
MSG_GET_VALUE	MSG_RET_VALUE with Data Value containing error counts

Setting up a Test Pattern at a Particular Video Standard

Send Message	Value
MSG_SET_VALUE for command COM_GEN1_LINK_TYPE This sets up the video link type	0 = SD, 1 = HD, 2 = HD-2 streams(SxD only), 3 = 3G-LevelA, 4 = 3G-LevelB, 5 = 3G-LevelB-2streams, 6 = Dual Link(SxD only)
MSG_SET_VALUE for command COM_GEN1_LINES This setups up the video line rate	0 = 525, 1 = 625, 2 = 720p, 3 = 1035i, 4 = 1080i, 5 = 1080sF, 6 = 1080p. Only valid line standards for the LinkType selected may be used.
MSG_SET_VALUE for command COM_GEN1_RATE This setups up the frame rate	0 = 23.98 1 = 24 2 = 25 3 = 29.97 4 = 30 5 = 50 6 = 59.94 7 = 60 8 = 47.95 9 = 48 Only valid rates for the specified LinkType and Line standard may be used.

Example Driver Source Code

The SDK installer includes source code examples in C++, Visual Basic and Delphi to help create your own driver. A DLL is also provided with a 'C' header file for use with other languages.

Unit Identifier

Typedef void * PhSxUnit;

This is used for all communication to a unit. Multiple units can be connected using the same DLL. To have complete independence between units you should make each connection in it's own thread/task.

Open Connection

PhSxUnit __declspec(dllexport) OpenConnection(const char *IpAddress, unsigned long PortNo);

Open a connection to an Sx unit – returns a PhSxUnit pointer to be used for future communication to that unit.

Close Connection

Void __declspec(dllexport) CloseConnection(PhSxUnit SxUnit);

Close the specified connection – used when your application shuts down. You will need to close each connection opened with OpenConnection

Get Last Error for Specified Unit

const char * __declspec(dllexport) GetError(PhSxUnit SxUnit);

If a GetXXX/SetXXX call returns a non-zero value, a call to GetError will return a textual ASCII string describing the error.

Set the Numeric Value of a Field on a Unit

Const int __declspec(dllexport) SetValue(PhSxUnit SxUnit, short CommandID, long *pValue);

SxUnit	unit for message to be sent to.
CommandID	which field to set
pValue	points to the value to be set for that field (signed 32 bits)
returns	0 if OK else an error was detected. Use GetError to get last error.

Set the Textual Value of a Field on a Unit

const int __declspec(dllexport) SetText(PhSxUnit SxUnit, short CommandID, const char *Text);

SxUnit	unit for message to be sent to.
CommandID	which field to set
Text	points to the ASCII text to be set for that field
returns	0 if OK else an error was detected. Use GetError to get last error.

Get the Numeric Value of a Field on a Unit

Const int __declspec(dllexport) GetValue(PhSxUnit SxUnit, short CommandID, long *pValue);

SxUnit	unit for message to be sent to.
CommandID	which field to set
pValue	points to the where the return value will be placed (signed 32 bits)
returns	0 if OK else an error was detected. Use GetError to get last error.

Get the Textual Value of a Field on a Unit

const int __declspec(dllexport) GetText(PhSxUnit SxUnit, short CommandID, char *Text, size_t BufferSize);

SxUnit	unit for message to be sent to.
CommandID	which field to set
Text	points to a buffer of size BufferSize where the returned ASCII text string will be placed
returns	0 if OK else an error was detected. Use GetError to get last error.

Set the Numeric Value of an Item of a Field on a Unit

const int __declspec(dllexport) SetItemValue(PhSxUnit SxUnit, short CommandID, long *pValue, long ItemIndex);

SxUnit	unit for message to be sent to.
CommandID	which field to set
pValue	points to the value to be set for that field (signed 32 bits)
returns	0 if OK else an error was detected. Use GetError to get last error.

Set the Textual Value of an Item of a Field on a Unit

const int __declspec(dllexport) SetItemText(PhSxUnit SxUnit, short CommandID, const char *Text, long ItemIndex);

SxUnit	unit for message to be sent to.
CommandID	which field to set
pValue	points to the value to be set for that field
returns	0 if OK else an error was detected. Use GetError to get last error.

Get the Numeric Value of an Item of a Field on a Unit

const int __declspec(dllexport) GetItemValue(PhSxUnit SxUnit, short CommandID, long *pValue, long ItemIndex);

SxUnit	unit for message to be sent to.
CommandID	which field to set
pValue	points to the where the return value will be placed (signed 32 bits)
returns	0 if OK else an error was detected. Use GetError to get last error.

Get the Textual Value of an Item of a Field on a Unit

const int __declspec(dllexport) GetItemText(PhSxUnit SxUnit, short CommandID, char *Text, size_t BufferSize, long ItemIndex);

SxUnit	unit for message to be sent to.
CommandID	which field to set
Text	points to a buffer of size BufferSize where the returned ASCII text string will be placed
returns	0 if OK else an error was detected. Use GetError to get last error.

Get the Current LCD Image

const int __declspec(dllexport) GetLCD(PhSxUnit SxUnit, long WhichLcd, const char *FilePath);

SxUnit	unit for message to be sent to.
WhichLcd	Which LCD on the unit to be grabbed (MUST be 0 for Sx range)
FilePath	Path to where file will be stored (should be a .bmp filename)

Protocol

PHABRIX® broadcast excellence A Generator

Generator

System Architecture

Overview

The PHABRIX Remote Control Protocol can be used to control both the Sx hand held range of instruments and the Rx rack mount range of instruments. The Sx range on has a single analyser and a single generator whereas the Rx range can have up to 4 analysers and generator modules in any combination.

To differentiate between these different analysers and generators each command defines the specific one to control:

GEN = Sx and Rx system wide generator controls and audio controls for SxA, SxD, SxE, SxTAG Generator, Rx 1st installed generator module

GEN0 = Rx CPU module on-board generator

GEN1 = Video controls for SxA, SxD, SxE, SxTAG Generator and Rx 1st installed generator module

GEN2 = Video and audio controls for Rx 2nd installed generator module

GEN2_1 = Ist output of 2nd installed generator module

GEN2_2 = 2nd output of 2nd installed generator module

GEN3 = Video and audio controls for Rx 3rd installed generator module

GEN3_1 = Ist output of 3rd installed generator module

GEN3_2 = 2nd output of 3rd installed generator module

GEN4 = Video and audio controls for Rx 4th installed generator module

GEN4_1 = Ist output of 4th installed generator module

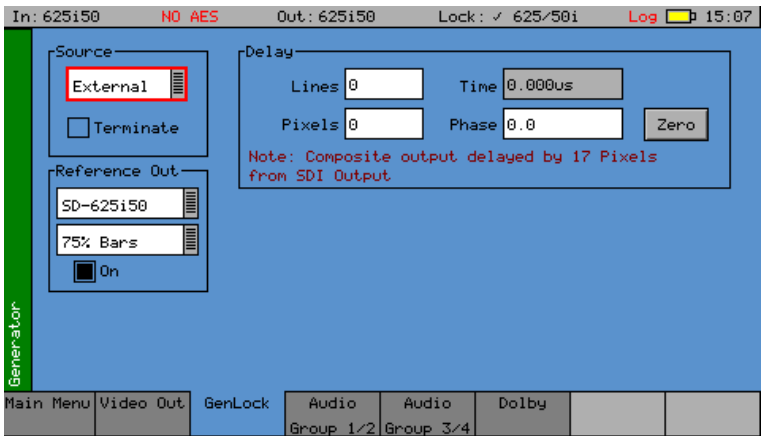
GEN4_2 = 2nd output of 4th installed generator module

Throughout this command reference specific hex and decimal values will be provided for these different variants.

Generator

Video Output Controls

Generator Locking Reference



The Sx and Rx instruments can create video test signals that are either free-running or locked to a studio reference signal.

The Genlock menu is used to select an external locking reference or set the instrument to free run.

Note that the Reference Out functions are only available in the SxTAG

COM_GEN_REF_SOURCE

Description	Defines the Sx or Rx unit's locking reference
Hex Code, Decimal Code	0x0028, 00040
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Free Run 1 = Ext Ref 2 = SDI-Input 3 = CVBS In (SxTAG Only)

COM_GEN_REF_DELAY_LINES

Description	Sets the delay/advance of the generated test pattern as lines with respect to the unit's external locking reference.
Hex Code, Decimal Code	0x002b, 00043
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -9999 Max = 9999 Divisor = 1 Values depend on chosen video format.

COM_GEN_REF_DELAY_PIXELS

Description	Sets the delay/advance of the generated test pattern as pixel with respect to the unit's external locking reference.
Hex Code, Decimal Code	0x002a, 00042
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -9999 Max = 9999 Divisor = 1 Values depend on chosen video format.

COM_GEN_REF_DELAY_US

Description	Sets the delay/advance of the generated test pattern in micro seconds with respect to the unit's external locking reference.
Hex Code, Decimal Code	0x0029, 00041
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -50000000, Max = 50000000, Divisor = 1000 Values depend on chosen video format.

COM_GEN_REF_OUT_ON

Description	On the SxTAG this controls the bi-directional reference connection
Hex Code, Decimal Code	0x0031, 00049
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Connector is reference input 1 = Connector provides reference output

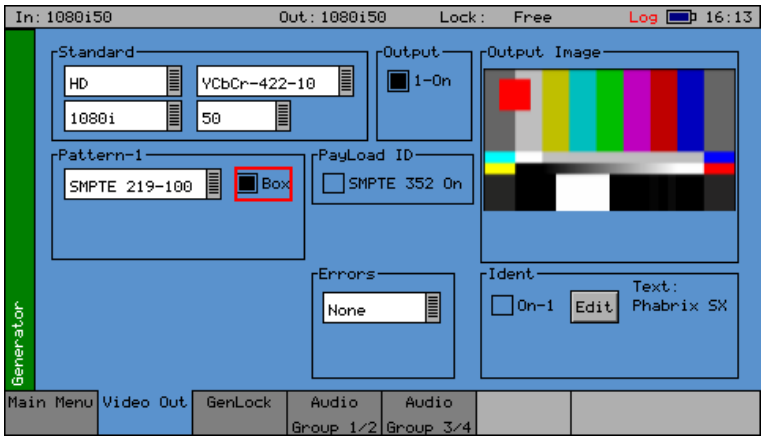
COM_GEN_REF_OUT_STD

Description	On the SxTAG this selects PAL/NTSC as the output reference when COM_GEN_REF_OUT_ON has a value of 1
Hex Code, Decimal Code	0x002e, 00046
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = SD 525i59 1 = SD 625i50

COM_GEN_REF_OUT_TERMINATE

Description	On the SxTAG this selects terminates the reference connector
Hex Code, Decimal Code	0x0045, 00069
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = termination off 1 = terminantion on

Video Standard



The Sx and Rx generator can create video test signals for all supported SD and HD SDI output standards including the 3GHz standards at 1080p/50/59/60. It will support Y,Cr,Cb formats as well as RGB formats.

COM_GEN1_STD_TEXT

Description	Current generator video standard in text format
GEN1 Hex Code, Decimal Code	0x000e, 00014
GEN2 Hex Code, Decimal Code	0x113b, 04411
GEN3 Hex Code, Decimal Code	0x1203, 04611
GEN4 Hex Code, Decimal Code	0x12cb, 04811
Valid Command Types	MSG_GET_TEXT

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_STD_LONG_TEXT

Description	Current generator video standard in long text format including colour mapping
GEN1 Hex Code, Decimal Code	0x0026, 00038
GEN2 Hex Code, Decimal Code	0x113a, 04410
GEN3 Hex Code, Decimal Code	0x1202, 04610
GEN4 Hex Code, Decimal Code	0x12ca, 04810
Valid Command Types	MSG_GET_TEXT

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_OUT_ENABLE

Description	SDI output enable
GEN1 Hex Code, Decimal Code	0x000a, 00010
GEN2 Hex Code, Decimal Code	0x000b, 00011
GEN2_1 Hex Code, Decimal Code	0x10a9, 04265
GEN2_2 Hex Code, Decimal Code	0x10bd, 04285
GEN3_1 Hex Code, Decimal Code	0x1171, 04465
GEN3_2 Hex Code, Decimal Code	0x1185, 04485
GEN4_1 Hex Code, Decimal Code	0x1239, 04665
GEN4_2 Hex Code, Decimal Code	0x124d, 04685
GEN0 Hex Code, Decimal Code	0x0c1c, 03100
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where GEN0 refers to the Rx on-board generator, GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_LINES

Description	Generator Video Standard select
GEN1 Hex Code, Decimal Code	0x000c, 00012
GEN2 Hex Code, Decimal Code	0x112b, 04395
GEN3 Hex Code, Decimal Code	0x11f3, 04595
GEN4 Hex Code, Decimal Code	0x12bb, 04795
GEN0 Hex Code, Decimal Code	0x0c1e, 03102
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values (Only valid line standards for the LinkType selected may be used.)	0 = 525, 1 = 625, 2 = 720p, 3 = 1035i, 4 = 1080i, 5 = 1080sF, 6 = 1080p.

Where GEN0 refers to the Rx on-board generator, GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_LINK_TYPE

Description	Specifies SDI link type
GEN1 Hex Code, Decimal Code	0x0024, 00036
GEN2 Hex Code, Decimal Code	0x112c, 04396
GEN3 Hex Code, Decimal Code	0x11f4, 04596
GEN4 Hex Code, Decimal Code	0x12bc, 04796
GEN0 Hex Code, Decimal Code	0x0c1d, 03101
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = SD, 1 = HD, 2 = HD-2 streams(SxD and Rx GDL only), 3 = 3G-LevelA, 4 = 3G-LevelB, 5 = 3G-LevelB-2streams, 6 = Dual Link(SxD and Rx GDL module)

Where GEN0 refers to the Rx on-board generator, GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_RATE

Description	Generator video frame rate
GEN1 Hex Code, Decimal Code	0x000d, 00013
GEN2 Hex Code, Decimal Code	0x1134, 04404
GEN3 Hex Code, Decimal Code	0x11fc, 04604
GEN4 Hex Code, Decimal Code	0x12c4, 04804
GEN0 Hex Code, Decimal Code	0x0c1f, 03103
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values (Only valid rates for the specified LinkType and Line standard may be used.)	0 = 23.98, 1 = 24, 2 = 25, 3 = 29.97, 4 = 30, 5 =50, 6= 59.94, 7 = 60, 8 = 47.95, 9=48

Where GEN0 refers to the Rx on-board generator, GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_COLOUR_TYPE

Description	Specifies generator colour format YCbCr/ RGB and element bit size
GEN1 Hex Code, Decimal Code	0x0025, 00037
GEN2 Hex Code, Decimal Code	0x113c, 04412
GEN3 Hex Code, Decimal Code	0x11ed, 04589
GEN4 Hex Code, Decimal Code	0x12b5, 04789
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values (Only valid rates for the specified LinkType and Line standard may be used.)	0 = not used 1 = YCrCb - 444 - 10, 2 = YCrCbA - 4444 - 10, 3 = YCrCb - 422 - 12, 4 = YCrCb - 444 - 12 5 = RGB - 444 - 10, 6 = RGBA - 4444 - 10, 7 = RGB - 444 - 12,

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ERROR_RATE

Description	Selects error generation mode if non-zero
GEN1 Hex Code, Decimal Code	0x0016, 00022
GEN2 Hex Code, Decimal Code	0x1128, 04392
GEN3 Hex Code, Decimal Code	0x11f0, 04592
GEN4 Hex Code, Decimal Code	0x12b8, 04792
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on, 2 = Switch line errors (F1)

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_PAYLOAD_ID

Description	Turns the SMPTE 352 payload ID on/off (settings stored separately for SD/HD/3G)
GEN1 Hex Code, Decimal Code	0x0014, 00020
GEN2 Hex Code, Decimal Code	0x1130, 04400
GEN3 Hex Code, Decimal Code	0x11f8, 04600
GEN4 Hex Code, Decimal Code	0x12c0, 04800
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on,

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

Moving Box

COM_GEN1_MOVING_BOX

Description	Enables a moving box over the selected test pattern for stream 1
GEN1 Hex Code, Decimal Code	0x0010 00016
GEN2 Hex Code, Decimal Code	0x0327, 00807
GEN2_1 Hex Code, Decimal Code	0x10a7, 04263
GEN2_2 Hex Code, Decimal Code	0x10bb, 04283
GEN3_1 Hex Code, Decimal Code	0x116f, 04463
GEN3_2 Hex Code, Decimal Code	0x1183, 04483
GEN4_1 Hex Code, Decimal Code	0x1237, 04663
GEN4_2 Hex Code, Decimal Code	0x124b, 04683
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on,

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_MOVING_BOX_COLOUR

Description	Defines the colour of the moving box over the selected test pattern for stream 1
GEN1 Hex Code, Decimal Code	0x004e, 00078
GEN2 Hex Code, Decimal Code	0x0335, 00821
GEN2_1 Hex Code, Decimal Code	0x10a8, 04264
GEN2_2 Hex Code, Decimal Code	0x10bc, 04284
GEN3_1 Hex Code, Decimal Code	0x1170, 04464
GEN3_2 Hex Code, Decimal Code	0x1184, 04484
GEN4_1 Hex Code, Decimal Code	0x1238, 04664
GEN4_2 Hex Code, Decimal Code	0x124c, 04684
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 1st colour pot, 1 = 2nd colour pot etc

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

Test Patterns

The Sx and Rx generators allow the selection of a video pattern that is output by the generator. Many standard patterns are provided by the instrument. You may also upload your own test patterns to the instrument into the 'Patterns' directory and then select them using the 'User File' option in this field.

COM_GEN1_PATTERN_SEL

Description	Selects test pattern/user file/zone plate/ colour field to generate
GEN1 Hex Code, Decimal Code	0x000f, 00015
GEN2 Hex Code, Decimal Code	0x0324, 00804
GEN2_1 Hex Code, Decimal Code	0x10aa, 04266
GEN2_2 Hex Code, Decimal Code	0x10be, 04286
GEN3_1 Hex Code, Decimal Code	0x1172, 04466
GEN3_2 Hex Code, Decimal Code	0x1186, 04486
GEN4_1 Hex Code, Decimal Code	0x123a, 04666
GEN4_2 Hex Code, Decimal Code	0x124e, 04686
GEN0 Hex Code, Decimal Code	0x0c20, 03104
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = User file, 1 = Colour Field, 2 = zone plate, 3 = unused, 4 = 100% Colour Bars 5 = 75% Colour Bars 6 = 75% Colour Bars + Red 7 = SMPTE Bars 8 = SMPTE 219-100 Bars 9 = SMPTE 219-75 Bars 10 = SMPTE 219+i Bars 11 = Tartan Colour Bars 12 = Check Field 13 = EQ Check 14 = PLL Check 15 = Luminance Ramp 16 = Luminance Ramp Down 17 = Legal Luminance Ramp 18 = Full Luminance Ramp 19 = Valid Ramps 20 = Component Ramp 21 = Vertical Luminance Ramp 22 = Multiburst 23 = Pluge 24 = Bowtie 25 = Grey 5 Horizontal Steps 26 = Grey 5 Vertical Steps 27 = Grey 10 Horizontal Steps 28 = Grey 10 Vertical Steps 29 = Chrominance Ramp 30 = ARIB 28-100 Bars 31 = ARIB 28-75 Bars 32 = ARIB 28+i Bars

COM_GEN1_USER_FILE_SEL

Description	Specifies which user file to display - text string for stream 1 when COM_GEN1_ PATTERN_SEL is set to value 0
GEN1 Hex Code, Decimal Code	0x0011, 00017
GEN2 Hex Code, Decimal Code	0x0321, 00801
GEN2_1 Hex Code, Decimal Code	0x10ac, 04268
GEN2_2 Hex Code, Decimal Code	0x10c0, 04288
GEN3_1 Hex Code, Decimal Code	0x1174, 04468
GEN3_2 Hex Code, Decimal Code	0x1188, 04488
GEN4_1 Hex Code, Decimal Code	0x123c, 04668
GEN4_2 Hex Code, Decimal Code	0x1250, 04688
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = selects first installed user file 1 = selects second installed user file, etc

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_USER_FILE_INFO_HDMI

Description	Causes the user file dialogue to be displayed on the Rx HDMI output
GEN1 Hex Code, Decimal Code	
GEN2 Hex Code, Decimal Code	
GEN2_1 Hex Code, Decimal Code	0x10ab, 04267
GEN2_2 Hex Code, Decimal Code	0x10bf, 04287
GEN3_1 Hex Code, Decimal Code	0x1173, 04467
GEN3_2 Hex Code, Decimal Code	0x1187, 04487
GEN4_1 Hex Code, Decimal Code	0x123b, 04667
GEN4_2 Hex Code, Decimal Code	0x124f, 04687
Valid Command Types	MSG_SET_VALUE,
Values	1 = enable

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_CFLD_SEL

Description	Specifies which colour to use as test pattern if colour field selected for stream 1 when COM_GEN1_PATTERN_SEL is set to value 1
GEN1 Hex Code, Decimal Code	0x0013, 00019
GEN2 Hex Code, Decimal Code	0x0322, 00802
GEN2_1 Hex Code, Decimal Code	0x109b, 04251
GEN2_2 Hex Code, Decimal Code	0x10b0, 04272
GEN3_1 Hex Code, Decimal Code	0x1163, 04451
GEN3_2 Hex Code, Decimal Code	0x1178, 04472
GEN4_1 Hex Code, Decimal Code	0x122b, 04651
GEN4_2 Hex Code, Decimal Code	0x1240, 04672
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Black 1 = 75% Grey 2 = 50% Grey 3 = 25% Grey 4 = White 5 = Red 6 = Green 7 = Blue 8 = Cyan 9 = Magenta 10 = Yellow 11 = Custom Colour 1 12 = Custom Colour 2 13 = Custom Colour 3

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_CFLD_EDIT

Description	Causes colour field edit dialogue to be displayed for stream 1 when COM_GEN1_PATTERN_SEL is set to value 1
GEN1 Hex Code, Decimal Code	0x001b, 00027
GEN2 Hex Code, Decimal Code	0x0323, 00803
GEN2_1 Hex Code, Decimal Code	0x113e, 04414
GEN2_2 Hex Code, Decimal Code	0x1143, 04419
GEN3_1 Hex Code, Decimal Code	0x1205, 04613
GEN3_2 Hex Code, Decimal Code	0x120a, 04618
GEN4_1 Hex Code, Decimal Code	0x12cd, 04813
GEN4_2 Hex Code, Decimal Code	0x12d2, 04818
Valid Command Types	MSG_SET_VALUE
Values	1 = displays colour field edit dialogue,

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_CFLD_EDIT_HDMI

Description	Causes colour field edit dialogue to be displayed for stream 1 on the Rx HDMI output when COM_GEN1_PATTERN_SEL is set to value 1
GEN1 Hex Code, Decimal Code	0x0fe7, 04071
GEN2 Hex Code, Decimal Code	0x0fe8, 04072
GEN2_1 Hex Code, Decimal Code	0x109d, 04253
GEN2_2 Hex Code, Decimal Code	0x10af, 04271
GEN3_1 Hex Code, Decimal Code	0x1162, 04450
GEN3_2 Hex Code, Decimal Code	0x1177, 04471
GEN4_1 Hex Code, Decimal Code	0x122a, 04650
GEN4_2 Hex Code, Decimal Code	0x123f, 04671
Valid Command Types	MSG_SET_VALUE
Values	1 = displays colour field edit dialogue,

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_CFLD_EDIT_SEL

Description	Used by colour field dialogue to select the custom colour to be edited
GEN1 Hex Code, Decimal Code	0x0046, 00070
GEN2 Hex Code, Decimal Code	0x079e, 01950
GEN3 Hex Code, Decimal Code	0x07a6, 01958
GEN4 Hex Code, Decimal Code	0x07ae, 01966
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Custom Colour 1 1 = Custom Colour 2 2 = Custom Colour 3

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_CFLD_RED_EDIT

Description	Used by colour field dialogue to adjust red component of current colour
GEN1 Hex Code, Decimal Code	0x0047, 00071
GEN2 Hex Code, Decimal Code	0x0798, 01944
GEN3 Hex Code, Decimal Code	0x07a0, 01952
GEN4 Hex Code, Decimal Code	0x07a8, 01960
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 4092 Divisor = 4

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_CFLD_GREEN_EDIT

Description	Used by colour field dialogue to adjust green component of current colour
GEN1 Hex Code, Decimal Code	0x0048, 00072
GEN2 Hex Code, Decimal Code	0x0799, 01945
GEN3 Hex Code, Decimal Code	0x07a1, 01953
GEN4 Hex Code, Decimal Code	0x07a9, 01961
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 4092 Divisor = 4

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_CFLD_BLUE_EDIT

Description	Used by colour field dialogue to adjust blue component of current colour
GEN1 Hex Code, Decimal Code	0x0049, 00073
GEN2 Hex Code, Decimal Code	0x079a, 01946
GEN3 Hex Code, Decimal Code	0x07a2, 01954
GEN4 Hex Code, Decimal Code	0x07aa, 01962
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 4092 Divisor = 4

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_CFLD_LUMA_EDIT

Description	Used by colour field dialogue to adjust luminance component of current colour
GEN1 Hex Code, Decimal Code	0x004a, 00074
GEN2 Hex Code, Decimal Code	0x079b, 01947
GEN3 Hex Code, Decimal Code	0x07a3, 01955
GEN4 Hex Code, Decimal Code	0x07ab, 01963
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 4092 Divisor = 4

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_CFLD_CB_EDIT

Description	Used by colour field dialogue to adjust Cb component of current colour
GEN1 Hex Code, Decimal Code	0x004b, 00075
GEN2 Hex Code, Decimal Code	0x079c, 01948
GEN3 Hex Code, Decimal Code	0x07a4, 01956
GEN4 Hex Code, Decimal Code	0x07ac, 01964
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 4092 Divisor = 4

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_CFLD_CR_EDIT

Description	Used by colour field dialogue to adjust Cr component of current colour
GEN1 Hex Code, Decimal Code	0x004c, 00076
GEN2 Hex Code, Decimal Code	0x079d, 01949
GEN3 Hex Code, Decimal Code	0x07a5, 01957
GEN4 Hex Code, Decimal Code	0x07ad, 01965
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 4092 Divisor = 4

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_CFLD_COLOUR_LIST

Description	Used by colour field dialogue to select a standard colour from colour list
GEN1 Hex Code, Decimal Code	0x004d, 00077
GEN2 Hex Code, Decimal Code	0x079f, 01951
GEN3 Hex Code, Decimal Code	0x07a7, 01959
GEN4 Hex Code, Decimal Code	0x07af, 01967
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 1st colour pot, 1 = 2nd colour pot, etc

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_SEL

Description	Specifies which zone plate to use for stream 1 when COM_GEN1_PATTERN_SEL is set to value 2
GEN1 Hex Code, Decimal Code	0x001d, 00029
GEN2 Hex Code, Decimal Code	0x0329, 00809
GEN2_1 Hex Code, Decimal Code	0x10ae, 04270
GEN2_2 Hex Code, Decimal Code	0x10c2, 04290
GEN3_1 Hex Code, Decimal Code	0x1176, 04470
GEN3_2 Hex Code, Decimal Code	0x118a, 04490
GEN4_1 Hex Code, Decimal Code	0x123e, 04670
GEN4_2 Hex Code, Decimal Code	0x1252, 04690
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = custom zone plate 1 1 = custom zone plate 2 2 = custom zone plate 1 3 = Moving Zone-2H 4 = Static Zone-2H 5 = Static Zone-2V 6 = Frequency Sweep Horizontal 7 = Frequency Sweep Vertical 8 = Grating=50kHz 9 = Grating 1MHz@HD 10 = Grating 5MHz@HD

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_ZONE_EDIT

Description	Causes zone plate dialogue to be displayed for stream 1 when COM_GEN1_PATTERN_SEL is set to value 2
GEN1 Hex Code, Decimal Code	0x001c, 00028
GEN2 Hex Code, Decimal Code	0x032a, 00810
GEN2_1 Hex Code, Decimal Code	0x113f, 04415
GEN2_2 Hex Code, Decimal Code	0x1144, 04420
GEN3_1 Hex Code, Decimal Code	0x1206, 04614
GEN3_2 Hex Code, Decimal Code	0x120b, 04619
GEN4_1 Hex Code, Decimal Code	0x12ce, 04814
GEN4_2 Hex Code, Decimal Code	0x12d3, 04819
Valid Command Types	MSG_SET_VALUE
Values	1 = displays zone plate edit dialogue,

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_ZONE_EDIT_HDMI

Description	Causes zone plate dialogue to be displayed for stream 1 on the Rx HDMI output when COM_GEN1_PATTERN_SEL is set to value 2
GEN1 Hex Code, Decimal Code	0x0fe5, 04069
GEN2 Hex Code, Decimal Code	0x0fe6, 04070
GEN2_1 Hex Code, Decimal Code	0x10ad, 04269
GEN2_2 Hex Code, Decimal Code	0x10c1, 04289
GEN3_1 Hex Code, Decimal Code	0x1175, 04469
GEN3_2 Hex Code, Decimal Code	0x1189, 04489
GEN4_1 Hex Code, Decimal Code	0x12ce, 04814
GEN4_2 Hex Code, Decimal Code	0x1251, 04689
Valid Command Types	MSG_SET_VALUE
Values	1 = displays zone plate edit dialogue,

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_ZONE_DATA_COPY

Description	Used to copy zone plate settings from one preset to a custom preset in the zone plate dialogue
GEN1 Hex Code, Decimal Code	0x039b, 00923
GEN2 Hex Code, Decimal Code	0x078a, 01930
GEN3 Hex Code, Decimal Code	0x078d, 01933
GEN4 Hex Code, Decimal Code	0x0790, 01936
Valid Command Types	MSG_SET_VALUE
Values	1 = copies the currently selected zone plate (COM_GEN1_ZONE_SEL) to the currently selected custom setting defined by (COM_GEN1_ZONE_SEL2)

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_SEL2

Description	Used to select destination custom zone plate when copying settings
GEN1 Hex Code, Decimal Code	0x03a1, 00929
GEN2 Hex Code, Decimal Code	0x078b, 01931
GEN3 Hex Code, Decimal Code	0x078e, 01934
GEN4 Hex Code, Decimal Code	0x0791, 01937
Valid Command Types	MSG_SET_VALUE
Values	0 = custom zone plate 1 1 = custom zone plate 2 2 = custom zone plate 1

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_MODE

Description	Set mode of zone plate generator to ZonePlate, Grating or sweep
GEN1 Hex Code, Decimal Code	0x03a3, 00931
GEN2 Hex Code, Decimal Code	0x0770, 01904
GEN3 Hex Code, Decimal Code	0x077a, 01914
GEN4 Hex Code, Decimal Code	0x0784, 01924
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Zone Plate 1 = Grating 2 = Sweep

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_X_POS

Description	Zone plate editor - x-position
GEN1 Hex Code, Decimal Code	0x0398, 00920
GEN2 Hex Code, Decimal Code	0x076c, 01900
GEN3 Hex Code, Decimal Code	0x0776, 01910
GEN4 Hex Code, Decimal Code	0x0780, 01920
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 10000 Divisor = 100

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_Y_POS

Description	Zone plate editor - y-position
GEN1 Hex Code, Decimal Code	0x0399. 00921
GEN2 Hex Code, Decimal Code	0x076d, 01901
GEN3 Hex Code, Decimal Code	0x0777, 01911
GEN4 Hex Code, Decimal Code	0x0781, 01921
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 10000, Divisor = 100

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_SCALE_X

Description	Zone plate editor - x scaler
GEN1 Hex Code, Decimal Code	0x03a0, 00928
GEN2 Hex Code, Decimal Code	0x076e, 01902
GEN3 Hex Code, Decimal Code	0x0778, 01912
GEN4 Hex Code, Decimal Code	0x0782, 01922
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 7500 Divisor = 1

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_SCALE_Y

Description	Zone plate editor - y scaler
GEN1 Hex Code, Decimal Code	0x039c, 00924
GEN2 Hex Code, Decimal Code	0x076f, 01903
GEN3 Hex Code, Decimal Code	0x0779, 01913
GEN4 Hex Code, Decimal Code	0x0783, 01923
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 7500 Divisor = 1

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_START_PHASE

Description	Zone plate editor - start phase angle
GEN1 Hex Code, Decimal Code	0x039f, 00927
GEN2 Hex Code, Decimal Code	0x0771, 01905
GEN3 Hex Code, Decimal Code	0x077b, 01915
GEN4 Hex Code, Decimal Code	0x0785, 01925
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 360 Divisor = 1

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_PHASE_INC

Description	Zone plate editor - radius speed increment
GEN1 Hex Code, Decimal Code	0x039d, 00925
GEN2 Hex Code, Decimal Code	0x0772, 01906
GEN3 Hex Code, Decimal Code	0x077c, 01916
GEN4 Hex Code, Decimal Code	0x0786, 01926
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -1800 Max = 1800 Divisor = 10

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_ANGLE

Description	Zone plate editor - angle
GEN1 Hex Code, Decimal Code	0x039a, 00922
GEN2 Hex Code, Decimal Code	0x0773, 01907
GEN3 Hex Code, Decimal Code	0x077d, 01917
GEN4 Hex Code, Decimal Code	0x0787, 01927
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 360 Divisor = 1

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_LINK_SWEEP_RATE

Description	Zone plate editor - sweep rate control
GEN1 Hex Code, Decimal Code	0x03a2, 00930
GEN2 Hex Code, Decimal Code	0x0775, 01909
GEN3 Hex Code, Decimal Code	0x077f, 01919
GEN4 Hex Code, Decimal Code	0x0789, 01929
Valid Command Types	MSG_GET_VALUE
Values	

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_SCALE_X_TEXT

Description	Display value of Start/End Freq for zone plates
GEN1 Hex Code, Decimal Code	0x03a5, 00933
GEN2 Hex Code, Decimal Code	0x0792, 01938
GEN3 Hex Code, Decimal Code	0x0794, 01940
GEN4 Hex Code, Decimal Code	0x0796, 01942
Valid Command Types	MSG_GET_TEXT
Values	Divisor = 1

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_SCALE_Y_TEXT

Description	Display value of Start/End Freq for zone plates
GEN1 Hex Code, Decimal Code	0x03a4, 00932
GEN2 Hex Code, Decimal Code	0x0793, 01939
GEN3 Hex Code, Decimal Code	0x0795, 01941
GEN4 Hex Code, Decimal Code	0x0797, 01943
Valid Command Types	MSG_GET_TEXT
Values	Divisor = 1

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN1_ZONE_CUSTOM1_MODE

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x03a3, 00931 CUSTOM2 = 0x0379, 00889 CUSTOM3 = 0x038d, 00909
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

COM_GEN1_ZONE_CUSTOM1_XPOS

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x0360, 00864 CUSTOM2 = 0x0374, 00884 CUSTOM3 = 0x0388, 00904
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

COM_GEN1_ZONE_CUSTOM1_YPOS

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x0362, 00866 CUSTOM2 = 0x0376, 00886 CUSTOM3 = 0x038a, 00906
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

COM_GEN1_ZONE_CUSTOM1_XSWEEP

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x0361, 00865 CUSTOM2 = 0x0375, 00885 CUSTOM3 = 0x0389, 00905
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

COM_GEN1_ZONE_CUSTOM1_YSWEEP

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x0363, 00867 CUSTOM2 = 0x0377, 00887 CUSTOM3 = 0x038b, 00907
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

COM_GEN1_ZONE_CUSTOM1_PHASE_START

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x035e, 00862 CUSTOM2 = 0x0372, 00882 CUSTOM3 = 0x0386, 00902
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

COM_GEN1_ZONE_CUSTOM1_PHASE_INC

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x035d, 00861 CUSTOM2 = 0x0371, 00881 CUSTOM3 = 0x0385., 00901
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

COM_GEN1_ZONE_CUSTOM1_ANGLE

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x035c, 00860 CUSTOM2 = 0x0370, 00880 CUSTOM3 = 0x0384, 00900
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

COM_GEN1_ZONE_CUSTOM1_LINK_RATES

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x0364, 00868 CUSTOM2 = 0x0378, 00888 CUSTOM3 = 0x038c, 00908
Valid Command Types	MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

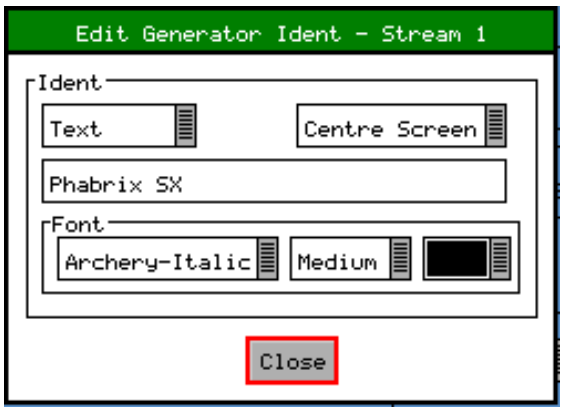
COM_GEN1_ZONE_CUSTOM1_RADIUS

Description	Used to store values of custom zone plate settings for Custom 1, 2 or 3
Hex Code, Decimal Code	CUSTOM1 = 0x035f, 00863 CUSTOM2 = 0x0373, 00883 CUSTOM3 = 0x0387, 00903
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -99999 Max = 99999 Divisor = 1

Test Pattern Ident

An picture or text 'Ident' may be set to identify an SDI source. This Ident can be turned on/off from this page but changing the text/font/bitmap is performed by selecting the Edit button to bring up the Ident Dialogue. An overview of what the Ident is can be seen beside the Edit button. Note: If zone plate or colour field are selected, text cannot be overlaid over them.

A smaller version of the video output signal is displayed on this page with any overlaid ident.



This dialogue allows selection of either a user defined bit map picture which has been downloaded into the 'Idents' directory of the Sx instrument or user defined text.

For both types, the position of the ident can be set to one of Top-Left, Top-Centre, Top-Right, Left-Centre, Centre-Screen, Right Centre, Bottom-Left, Bottom-Centre, Bottom-Right. When text ident is used, the font, font size and colour can be specified. Several fonts are built in to the Sx instrument, other true-type (.ttf) fonts may be downloaded as required.

COM_GEN1_IDENT_ON

Description	Turn on text or image ident over test pattern for stream 1
GEN1 Hex Code, Decimal Code	0x0032, 00050
GEN2 Hex Code, Decimal Code	0x0328, 00808
GEN2_1 Hex Code, Decimal Code	0x10a2, 04258
GEN2_2 Hex Code, Decimal Code	0x10b7, 04279
GEN3_1 Hex Code, Decimal Code	0x116a, 04458
GEN3_2 Hex Code, Decimal Code	0x117f, 04479
GEN4_1 Hex Code, Decimal Code	0x1232, 04658
GEN4_2 Hex Code, Decimal Code	0x1247, 04679
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_TYPE

Description	Select text or image ident over test pattern for stream 1
GEN1 Hex Code, Decimal Code	0x0033, 00051
GEN2 Hex Code, Decimal Code	0x0330, 00816
GEN2_1 Hex Code, Decimal Code	0x10a5, 04261
GEN2_2 Hex Code, Decimal Code	0x10ba, 04282
GEN3_1 Hex Code, Decimal Code	0x116c, 04460
GEN3_2 Hex Code, Decimal Code	0x1182, 04482
GEN4_1 Hex Code, Decimal Code	0x1234, 04660
GEN4_2 Hex Code, Decimal Code	0x124a, 04682
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = text, 1 = image

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_POSITION

Description	Select overlay ident position
GEN1 Hex Code, Decimal Code	0x0035, 00053
GEN2 Hex Code, Decimal Code	0x032e, 00814
GEN2_1 Hex Code, Decimal Code	0x10a3, 04259
GEN2_2 Hex Code, Decimal Code	0x10b8, 04280
GEN3_1 Hex Code, Decimal Code	0x116b, 04459
GEN3_2 Hex Code, Decimal Code	0x1180, 04480
GEN4_1 Hex Code, Decimal Code	0x1233, 04659
GEN4_2 Hex Code, Decimal Code	0x1248, 04680
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = top left, 1 = top middle 2 = top right 3 = middle left 4 = centre screen 5 = middle right 6 = bottom left 7 = bottom middle 8 = bottom right

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_EDIT

Description	Displays the ident editing dialogue for stream 1
GEN1 Hex Code, Decimal Code	0x0326, 00806
GEN2 Hex Code, Decimal Code	0x0325, 00805
GEN2_1 Hex Code, Decimal Code	0x113d, 04413
GEN2_2 Hex Code, Decimal Code	0x1142, 04418
GEN3_1 Hex Code, Decimal Code	0x1204, 04612
GEN3_2 Hex Code, Decimal Code	0x1209, 04617
GEN4_1 Hex Code, Decimal Code	0x12cc, 04812
GEN4_2 Hex Code, Decimal Code	0x12d1, 04817
Valid Command Types	MSG_SET_VALUE
Values	1 = enable

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_EDIT_HDMI

Description	Displays the ident editing dialogue for stream 1 on the Rx HDMI output
GEN1 Hex Code, Decimal Code	0x1099, 04249
GEN2 Hex Code, Decimal Code	0x1098, 04248
GEN2_1 Hex Code, Decimal Code	0x109a, 04250
GEN2_2 Hex Code, Decimal Code	0x10b2, 04274
GEN3_1 Hex Code, Decimal Code	0x1165, 04453
GEN3_2 Hex Code, Decimal Code	0x117a, 04474
GEN4_1 Hex Code, Decimal Code	0x122d, 04653
GEN4_2 Hex Code, Decimal Code	0x1242, 04674
Valid Command Types	MSG_SET_VALUE
Values	1 = enable

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_TEXT

Description	Allows ident text to be entered
GEN1 Hex Code, Decimal Code	0x0034, 00052
GEN2 Hex Code, Decimal Code	0x0331, 00817
GEN2_1 Hex Code, Decimal Code	0x10a4, 04260
GEN2_2 Hex Code, Decimal Code	0x10b9, 04281
GEN3_1 Hex Code, Decimal Code	0x116c, 04460
GEN3_2 Hex Code, Decimal Code	0x1181, 04481
GEN4_1 Hex Code, Decimal Code	0x1234, 04660
GEN4_2 Hex Code, Decimal Code	0x1249, 04681
Valid Command Types	MSG_SET_TEXT, MSG_GET_TEXT
Values	user defined text ident

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_INFO

Description	Displays the file or text used for stream 1
GEN1 Hex Code, Decimal Code	0x032c, 00812
GEN2 Hex Code, Decimal Code	0x032d 00813
GEN2_1 Hex Code, Decimal Code	0x10a1, 04257
GEN2_2 Hex Code, Decimal Code	0x10b6, 04278
GEN3_1 Hex Code, Decimal Code	0x1169, 04457
GEN3_2 Hex Code, Decimal Code	0x117e, 04478
GEN4_1 Hex Code, Decimal Code	0x1231, 04657
GEN4_2 Hex Code, Decimal Code	0x1246, 04678
Valid Command Types	MSG_GET_TEXT
Values	

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_FONT_NAME

Description	Defines text ident font type
GEN1 Hex Code, Decimal Code	0x0037, 00055
GEN2 Hex Code, Decimal Code	0x0333, 00819
GEN2_1 Hex Code, Decimal Code	0x109e, 04254
GEN2_2 Hex Code, Decimal Code	0x10b4, 04276
GEN3_1 Hex Code, Decimal Code	0x1167, 04455
GEN3_2 Hex Code, Decimal Code	0x117d, 04477
GEN4_1 Hex Code, Decimal Code	0x122f, 04655
GEN4_2 Hex Code, Decimal Code	0x1244, 04676
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 1st installed font, 1 = 2nd installed font etc

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_FONT_SIZE

Description	Defines text ident font size
GEN1 Hex Code, Decimal Code	0x0038, 00056
GEN2 Hex Code, Decimal Code	0x0334, 00820
GEN2_1 Hex Code, Decimal Code	0x10a0, 04256
GEN2_2 Hex Code, Decimal Code	0x10b5, 04277
GEN3_1 Hex Code, Decimal Code	0x1168, 04456
GEN3_2 Hex Code, Decimal Code	0x117d, 04477
GEN4_1 Hex Code, Decimal Code	0x1230, 04656
GEN4_2 Hex Code, Decimal Code	0x1245, 04677
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = small, 1 = medium 2 = large etc

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_COLOUR

Description	Defines text ident colour
GEN1 Hex Code, Decimal Code	0x0039, 00057
GEN2 Hex Code, Decimal Code	0x0332, 00818
GEN2_1 Hex Code, Decimal Code	0x109c, 04252
GEN2_2 Hex Code, Decimal Code	0x10b1, 04273
GEN3_1 Hex Code, Decimal Code	0x1164, 04452
GEN3_2 Hex Code, Decimal Code	0x1179, 04473
GEN4_1 Hex Code, Decimal Code	0x122c, 04652
GEN4_2 Hex Code, Decimal Code	0x1241, 04673
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = text, 1 = image

Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

COM_GEN1_IDENT_FILENAME

Description	Defines the image to be displayed
GEN1 Hex Code, Decimal Code	0x0036, 00054
GEN2 Hex Code, Decimal Code	0x032f 00815
GEN2_1 Hex Code, Decimal Code	0x109e, 04254
GEN2_2 Hex Code, Decimal Code	0x10b3, 04275
GEN3_1 Hex Code, Decimal Code	0x1166, 04454
GEN3_2 Hex Code, Decimal Code	0x117b, 04475
GEN4_1 Hex Code, Decimal Code	0x122e, 04654
GEN4_2 Hex Code, Decimal Code	0x1243, 04675
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 1st installed image 1 = 2nd installed image etc

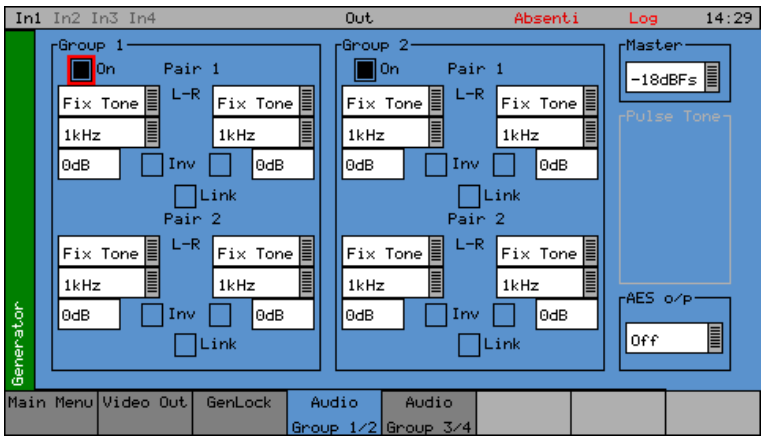
Where GEN1 refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

And where GEN2_1 refers to the Ist output of 2nd installed generator module and GEN2_2 = 2nd output of 2nd installed generator module.

Generator

Generator Audio Controls

Overview



The Sx and Rx generator can embed an audio signal on all 16 embedded audio outputs.

The Audio Group menu controls which audio channels, pairs or groups have test tones applied and the type of tone.

Group Output Enable

COM_GEN_AUDIO_ON_G1

Description	Turn on/off generation of audio group 1.
GEN Hex Code, Decimal Code	0x0089, 00137
GEN2 Hex Code, Decimal Code	0x10ff, 04351
GEN3 Hex Code, Decimal Code	0x11c7, 04551
GEN4 Hex Code, Decimal Code	0x128f, 04751
GEN0 Hex Code, Decimal Code	0x0c26, 03110
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_ON_G2

Description	Turn on/off generation of audio group 2.
GEN Hex Code, Decimal Code	0x008a, 00138
GEN2 Hex Code, Decimal Code	0x1100, 04352
GEN3 Hex Code, Decimal Code	0x11c8, 04552
GEN4 Hex Code, Decimal Code	0x1290, 04752
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_ON_G3

Description	Turn on/off generation of audio group 3.
GEN Hex Code, Decimal Code	0x008b, 00139
GEN2 Hex Code, Decimal Code	0x1101, 04353
GEN3 Hex Code, Decimal Code	0x11c9, 04553
GEN4 Hex Code, Decimal Code	0x1291, 04753
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

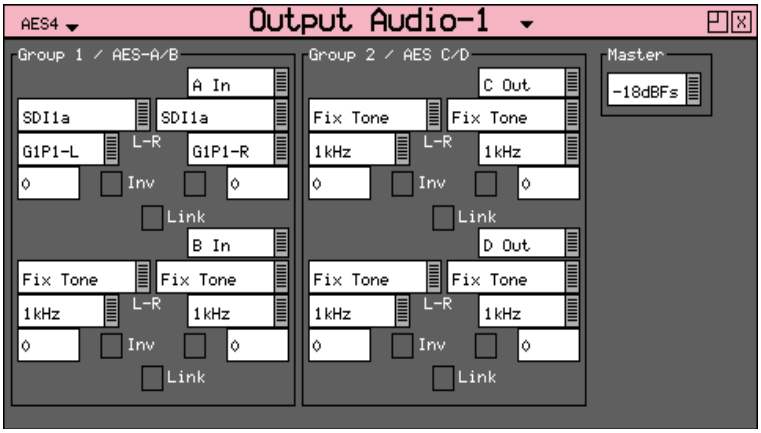
Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_ON_G4

Description	Turn on/off generation of audio group 4.
GEN Hex Code, Decimal Code	0x008c, 00140
GEN2 Hex Code, Decimal Code	0x1102, 04354
GEN3 Hex Code, Decimal Code	0x11ca, 04554
GEN4 Hex Code, Decimal Code	0x1292, 04754
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

Rx 4AES Module Input/Output Selection



The PHRXM-4AGE module has 4 bi directional AES digital audio pairs (“IO_A”, “IO_B”, “IO_C” and “IO_D”).

These are controlled by the COM_GEN_AUDIO_PAIR#_ON command.

COM_GEN_AUDIO_PAIR1_ON

Description	Select AES port direction.
GEN Hex Code, Decimal Code	0x00e6, 00230
GEN2 Hex Code, Decimal Code	0x114e, 04430
GEN3 Hex Code, Decimal Code	0x1216, 04630
GEN4 Hex Code, Decimal Code	0x12de, 04830
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = In (analyser), 1 = Out (generator), 2 = Loop

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_PAIR2_ON

Description	Select AES port direction.
GEN Hex Code, Decimal Code	0x00e7, 00231
GEN2 Hex Code, Decimal Code	0x114f, 04431
GEN3 Hex Code, Decimal Code	0x1217, 04631
GEN4 Hex Code, Decimal Code	0x12df, 04831
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = In (analyser), 1 = Out (generator), 2 = Loop

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_PAIR3_ON

Description	Select AES port direction.
GEN Hex Code, Decimal Code	0x00e8, 00232
GEN2 Hex Code, Decimal Code	0x1150, 04432
GEN3 Hex Code, Decimal Code	0x1218, 04632
GEN4 Hex Code, Decimal Code	0x12e0, 04832
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = In (analyser), 1 = Out (generator), 2 = Loop

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_PAIR4_ON

Description	Select AES port direction.
GEN Hex Code, Decimal Code	0x00e9, 00233
GEN2 Hex Code, Decimal Code	0x1151, 04433
GEN3 Hex Code, Decimal Code	0x1219, 04633
GEN4 Hex Code, Decimal Code	0x12e1, 04833
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = In (analyser), 1 = Out (generator), 2 = Loop

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

Generator Audio Source

COM_GEN_AUDIO_SOURCE_G1_P1_L

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x0091, 00145
GEN2 Hex Code, Decimal Code	0x1103, 04355
GEN3 Hex Code, Decimal Code	0x11cb, 04555
GEN4 Hex Code, Decimal Code	0x1293, 04755
GEN0 Hex Code, Decimal Code	0x0c27, 03111
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = silence 1 = Fixed tone 2 = Var tone 3 = noise 4 = pulse tone 5 = AES in-L 6 = AES in-r 7 = Dolby 8 = Analogue Audio L (SxTAG) 9 = Analogue Audio R (SxTAG)

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00a1, 00161
GEN2 Hex Code, Decimal Code	0x1113, 04371
GEN3 Hex Code, Decimal Code	0x11db, 04571
GEN4 Hex Code, Decimal Code	0x12a3, 04771
GEN0 Hex Code, Decimal Code	0x0c31, 03121
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 100Hz 1 = 125Hz 2 = 200Hz 3 = 250Hz 4 = 400Hz 5 = 500Hz 6 = 800Hz 7 = 1kHz 8 = 1.5kHz 9 = 2kHz 10 = 3kHz 11 = 4kHz 12 = 5kHz 13 = 8kHz 14 = 10kHz 15 = 15kHz 16 = 20kHz

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G1_P1_R

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x0092, 00146
GEN2 Hex Code, Decimal Code	0x1104, 04356
GEN3 Hex Code, Decimal Code	0x11cc, 04556
GEN4 Hex Code, Decimal Code	0x1294, 04756
GEN0 Hex Code, Decimal Code	0x0c28, 03112
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G1_P1_R

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00a2, 00162
GEN2 Hex Code, Decimal Code	0x1114, 04372
GEN3 Hex Code, Decimal Code	0x11dc, 04572
GEN4 Hex Code, Decimal Code	0x12a4, 04772
GEN0 Hex Code, Decimal Code	0x0c32, 03122
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G1_P2_L

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x0093, 00147
GEN2 Hex Code, Decimal Code	0x1105, 04357
GEN3 Hex Code, Decimal Code	0x11cd, 04557
GEN4 Hex Code, Decimal Code	0x1295, 04757
GEN0 Hex Code, Decimal Code	0x0c29, 03113
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G1_P2_L

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00a3, 00163
GEN2 Hex Code, Decimal Code	0x1115, 04373
GEN3 Hex Code, Decimal Code	0x11dd, 04573
GEN4 Hex Code, Decimal Code	0x12a5, 04773
GEN0 Hex Code, Decimal Code	0x0c33, 03123
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G1_P2_R

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x0094, 00148
GEN2 Hex Code, Decimal Code	0x1155, 04437
GEN3 Hex Code, Decimal Code	0x11ce, 04558
GEN4 Hex Code, Decimal Code	0x1296, 04758
GEN0 Hex Code, Decimal Code	0x0c2a, 03114
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G1_P2_R

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00a4, 00164
GEN2 Hex Code, Decimal Code	
GEN3 Hex Code, Decimal Code	
GEN4 Hex Code, Decimal Code	
GEN0 Hex Code, Decimal Code	
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G2_P1_L

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x0095, 00149
GEN2 Hex Code, Decimal Code	0x1107, 04359
GEN3 Hex Code, Decimal Code	0x11cf, 04559
GEN4 Hex Code, Decimal Code	0x1297, 04759
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G2_P1_L

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00a5, 00165
GEN2 Hex Code, Decimal Code	0x1117, 04375
GEN3 Hex Code, Decimal Code	0x11df, 04575
GEN4 Hex Code, Decimal Code	0x12a5, 04773
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G2_P1_R

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x0096, 00150
GEN2 Hex Code, Decimal Code	0x1108, 04360
GEN3 Hex Code, Decimal Code	0x11d0, 04560
GEN4 Hex Code, Decimal Code	0x1298, 04760
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G2_P1_R

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00a6, 00166
GEN2 Hex Code, Decimal Code	0x1118, 04376
GEN3 Hex Code, Decimal Code	0x11e0, 04576
GEN4 Hex Code, Decimal Code	0x12a8, 04776
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G2_P2_L

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x0097, 00151
GEN2 Hex Code, Decimal Code	0x1109, 04361
GEN3 Hex Code, Decimal Code	0x11d1, 04561
GEN4 Hex Code, Decimal Code	0x1299, 04761
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G2_P2_L

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00a7, 00167
GEN2 Hex Code, Decimal Code	0x1119, 04377
GEN3 Hex Code, Decimal Code	0x11e1, 04577
GEN4 Hex Code, Decimal Code	0x12a9, 04777
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G2_P2_R

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x0098, 00152
GEN2 Hex Code, Decimal Code	0x110a, 04362
GEN3 Hex Code, Decimal Code	0x11d2, 04562
GEN4 Hex Code, Decimal Code	0x129a, 04762
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G2_P2_R

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00a8, 00168
GEN2 Hex Code, Decimal Code	0x111a, 04378
GEN3 Hex Code, Decimal Code	0x11e2, 04578
GEN4 Hex Code, Decimal Code	0x12aa, 04778
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G3_P1_L

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x0099, 00153
GEN2 Hex Code, Decimal Code	0x110b, 04363
GEN3 Hex Code, Decimal Code	0x11d3, 04563
GEN4 Hex Code, Decimal Code	0x129b, 04763
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G3_P1_L

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00a9, 00169
GEN2 Hex Code, Decimal Code	0x111b, 04379
GEN3 Hex Code, Decimal Code	0x11e3, 04579
GEN4 Hex Code, Decimal Code	0x12ab, 04779
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G3_P1_R

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x009a, 00154
GEN2 Hex Code, Decimal Code	0x110c, 04364
GEN3 Hex Code, Decimal Code	0x11d4, 04564
GEN4 Hex Code, Decimal Code	0x129c, 04764
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G3_P1_R

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00aa, 00170
GEN2 Hex Code, Decimal Code	0x111c, 04380
GEN3 Hex Code, Decimal Code	0x11e4, 04580
GEN4 Hex Code, Decimal Code	0x12ac, 04780
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G3_P2_L

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x009b, 00155
GEN2 Hex Code, Decimal Code	0x110d, 04365
GEN3 Hex Code, Decimal Code	0x11d5, 04565
GEN4 Hex Code, Decimal Code	0x129d, 04765
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G3_P2_L

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00ab, 00171
GEN2 Hex Code, Decimal Code	0x111d, 04381
GEN3 Hex Code, Decimal Code	0x11e5, 04581
GEN4 Hex Code, Decimal Code	0x12ad, 04781
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G3_P2_R

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x009c, 00156
GEN2 Hex Code, Decimal Code	0x110e, 04366
GEN3 Hex Code, Decimal Code	0x11d6, 04566
GEN4 Hex Code, Decimal Code	0x129e, 04766
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G3_P2_R

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00ac, 00172
GEN2 Hex Code, Decimal Code	0x111e, 04382
GEN3 Hex Code, Decimal Code	0x11e6, 04582
GEN4 Hex Code, Decimal Code	012ae, 04782
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G4_P1_L

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x009d, 00157
GEN2 Hex Code, Decimal Code	0x110f, 04367
GEN3 Hex Code, Decimal Code	0x11d7, 04567
GEN4 Hex Code, Decimal Code	0x129f, 04767
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G4_P1_L

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00ad, 00173
GEN2 Hex Code, Decimal Code	0x111f, 04383
GEN3 Hex Code, Decimal Code	0x11e7, 04583
GEN4 Hex Code, Decimal Code	0x12af, 04783
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G4_P1_R

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x009e, 00158
GEN2 Hex Code, Decimal Code	0x1110, 04368
GEN3 Hex Code, Decimal Code	0x11d8, 04568
GEN4 Hex Code, Decimal Code	0x12a0, 04768
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G4_P1_R

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00ae, 00174
GEN2 Hex Code, Decimal Code	0x1120, 04384
GEN3 Hex Code, Decimal Code	0x11e8, 04584
GEN4 Hex Code, Decimal Code	0x12b0, 04784
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G4_P2_L

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x009f, 00159
GEN2 Hex Code, Decimal Code	0x1111, 04369
GEN3 Hex Code, Decimal Code	0x11d9, 04569
GEN4 Hex Code, Decimal Code	0x12a1, 04769
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G4_P2_L

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00af, 00175
GEN2 Hex Code, Decimal Code	0x1121, 04385
GEN3 Hex Code, Decimal Code	0x11e9, 04585
GEN4 Hex Code, Decimal Code	0x12b1, 04785
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SOURCE_G4_P2_R

Description	Select source for embedded audio
GEN Hex Code, Decimal Code	0x00a0, 00160
GEN2 Hex Code, Decimal Code	0x1112, 04370
GEN3 Hex Code, Decimal Code	0x11da, 04570
GEN4 Hex Code, Decimal Code	0x12a2, 04770
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_SUBSOURCE_G4_P2_R

Description	Selects Fixed tone frequency when AUDIO_SOURCE is set to value 1
GEN Hex Code, Decimal Code	0x00b0, 00176
GEN2 Hex Code, Decimal Code	0x1122, 04386
GEN3 Hex Code, Decimal Code	0x11ea, 04586
GEN4 Hex Code, Decimal Code	0x12b2, 04786
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	See COM_GEN_AUDIO_SUBSOURCE_G1_P1_L

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G1_P1_L

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0050, 00080
GEN2 Hex Code, Decimal Code	0x10c6, 04294
GEN3 Hex Code, Decimal Code	0x118e, 04494
GEN4 Hex Code, Decimal Code	0x1256, 04694
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G1_P1_R

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0051, 00081
GEN2 Hex Code, Decimal Code	0x10c7, 04295
GEN3 Hex Code, Decimal Code	0x118f, 04495
GEN4 Hex Code, Decimal Code	0x1257, 04695
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G1_P2_L

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0052, 00082
GEN2 Hex Code, Decimal Code	0x10c8, 04296
GEN3 Hex Code, Decimal Code	0x1190, 04496
GEN4 Hex Code, Decimal Code	0x1258, 04696
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G1_P2_R

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0053, 00083
GEN2 Hex Code, Decimal Code	0x10c9, 04297
GEN3 Hex Code, Decimal Code	0x1191, 04497
GEN4 Hex Code, Decimal Code	0x1259, 04697
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G2_P1_L

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0054, 00084
GEN2 Hex Code, Decimal Code	0x10ca, 04298
GEN3 Hex Code, Decimal Code	0x1192, 04498
GEN4 Hex Code, Decimal Code	0x125a, 04698
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G2_P1_R

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0055, 00085
GEN2 Hex Code, Decimal Code	0x10cb, 04299
GEN3 Hex Code, Decimal Code	0x1193, 04499
GEN4 Hex Code, Decimal Code	0x125b, 04699
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G2_P2_L

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0056, 00086
GEN2 Hex Code, Decimal Code	0x10cc, 04300
GEN3 Hex Code, Decimal Code	0x1194, 04500
GEN4 Hex Code, Decimal Code	0x125c, 04700
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G2_P2_R

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0057, 00087
GEN2 Hex Code, Decimal Code	0x10cd, 04301
GEN3 Hex Code, Decimal Code	0x1195, 04501
GEN4 Hex Code, Decimal Code	0x125d, 04701
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G3_P1_L

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0058, 00088
GEN2 Hex Code, Decimal Code	0x10ce, 04302
GEN3 Hex Code, Decimal Code	0x1196, 04502
GEN4 Hex Code, Decimal Code	0x125e, 04702
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G3_P1_R

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x0059, 00089
GEN2 Hex Code, Decimal Code	0x10cf, 04303
GEN3 Hex Code, Decimal Code	0x1197, 04503
GEN4 Hex Code, Decimal Code	0x125f, 04703
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G3_P2_L

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x005a, 00090
GEN2 Hex Code, Decimal Code	0x10d0, 04304
GEN3 Hex Code, Decimal Code	0x1198, 04504
GEN4 Hex Code, Decimal Code	0x1260, 04704
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G3_P2_R

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x005b, 00091
GEN2 Hex Code, Decimal Code	0x10d1, 04305
GEN3 Hex Code, Decimal Code	0x1199, 04505
GEN4 Hex Code, Decimal Code	0x1261, 04705
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G4_P1_L

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x005c, 00092
GEN2 Hex Code, Decimal Code	0x10d2, 04306
GEN3 Hex Code, Decimal Code	0x119a, 04506
GEN4 Hex Code, Decimal Code	0x1262, 04706
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G4_P1_R

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x005d, 00093
GEN2 Hex Code, Decimal Code	0x10d3, 04307
GEN3 Hex Code, Decimal Code	0x119b, 04507
GEN4 Hex Code, Decimal Code	0x1263, 04707
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G4_P2_L

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x005e, 00094
GEN2 Hex Code, Decimal Code	0x10d4, 04308
GEN3 Hex Code, Decimal Code	0x119c, 04508
GEN4 Hex Code, Decimal Code	0x1264, 04708
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_FREQ_VAR_G4_P2_R

Description	Set audio frequency in 1 Hz steps when AUDIO_SOURCE is set to value 2
GEN Hex Code, Decimal Code	0x005f, 00095
GEN2 Hex Code, Decimal Code	0x10d5, 04309
GEN3 Hex Code, Decimal Code	0x119d, 04509
GEN4 Hex Code, Decimal Code	0x1265, 04709
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 23999 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

Generator Audio Level

COM_GEN_AUDIO_MASTER_LEVEL

Description	Set master audio output level
GEN Hex Code, Decimal Code	0x0088, 00136
GEN2 Hex Code, Decimal Code	0x10fe, 04350
GEN3 Hex Code, Decimal Code	0x11c6, 04550
GEN4 Hex Code, Decimal Code	0x128e, 04750
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 0dBs 18 = -18dBs 20 = -20dBs

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G1_P1_L

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0070, 00112
GEN2 Hex Code, Decimal Code	0x10e6, 04326
GEN3 Hex Code, Decimal Code	0x11ae, 04526
GEN4 Hex Code, Decimal Code	0x1276, 04726
GEN0 Hex Code, Decimal Code	0x0c2b, 03115
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G1_P1_R

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0071, 00113
GEN2 Hex Code, Decimal Code	0x10e7, 04327
GEN3 Hex Code, Decimal Code	0x11af, 04527
GEN4 Hex Code, Decimal Code	0x1277, 04727
GEN0 Hex Code, Decimal Code	0x0c2c, 03116
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G1_P2_L

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0072, 00114
GEN2 Hex Code, Decimal Code	0x10e8, 04328
GEN3 Hex Code, Decimal Code	0x11b0, 04528
GEN4 Hex Code, Decimal Code	0x1278, 04728
GEN0 Hex Code, Decimal Code	0x0c2d, 03117
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G1_P2_R

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0073, 00115
GEN2 Hex Code, Decimal Code	0x10e9, 04329
GEN3 Hex Code, Decimal Code	0x11b1, 04529
GEN4 Hex Code, Decimal Code	0x1279, 04729
GEN0 Hex Code, Decimal Code	0x0c2e, 03118
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN0 refers to the Rx on-board generator, GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G2_P1_L

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0074, 00116
GEN2 Hex Code, Decimal Code	0x10ea, 04330
GEN3 Hex Code, Decimal Code	0x11b2, 04530
GEN4 Hex Code, Decimal Code	0x127a, 04730
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G2_P1_R

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0075, 00117
GEN2 Hex Code, Decimal Code	0x10eb, 04331
GEN3 Hex Code, Decimal Code	0x11b3, 04531
GEN4 Hex Code, Decimal Code	0x127b, 04731
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G2_P2_L

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0076, 00118
GEN2 Hex Code, Decimal Code	0x10ec, 04332
GEN3 Hex Code, Decimal Code	0x11b4, 04532
GEN4 Hex Code, Decimal Code	0x127c, 04732
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G2_P2_R

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0077, 00119
GEN2 Hex Code, Decimal Code	0x10ed, 04333
GEN3 Hex Code, Decimal Code	0x11b5, 04533
GEN4 Hex Code, Decimal Code	0x127d, 04733
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G3_P1_L

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0078, 00120
GEN2 Hex Code, Decimal Code	0x10ee, 04334
GEN3 Hex Code, Decimal Code	0x11b6, 04534
GEN4 Hex Code, Decimal Code	0x127e, 04734
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G3_P1_R

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x0079, 00121
GEN2 Hex Code, Decimal Code	0x10ef, 04335
GEN3 Hex Code, Decimal Code	0x11b7, 04535
GEN4 Hex Code, Decimal Code	0x127f, 04735
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G3_P2_L

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x007a, 00122
GEN2 Hex Code, Decimal Code	0x10f0, 04336
GEN3 Hex Code, Decimal Code	0x11b8, 04536
GEN4 Hex Code, Decimal Code	0x1280, 04736
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G3_P2_R

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x007b, 00123
GEN2 Hex Code, Decimal Code	0x10f1, 04337
GEN3 Hex Code, Decimal Code	0x11b9, 04537
GEN4 Hex Code, Decimal Code	0x1281, 04737
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G4_P1_L

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x007c, 00124
GEN2 Hex Code, Decimal Code	0x10f2, 04338
GEN3 Hex Code, Decimal Code	0x11ba, 04538
GEN4 Hex Code, Decimal Code	0x1282, 04738
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G4_P1_R

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x007d, 00125
GEN2 Hex Code, Decimal Code	0x10f3, 04339
GEN3 Hex Code, Decimal Code	0x11bb, 04539
GEN4 Hex Code, Decimal Code	0x1283, 04739
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G4_P2_L

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x007e, 00126
GEN2 Hex Code, Decimal Code	0x10f4, 04340
GEN3 Hex Code, Decimal Code	0x11bc, 04540
GEN4 Hex Code, Decimal Code	0x1284, 04740
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LEVEL_VAR_G4_P2_R

Description	Set audio level in 1dB steps relative to master level.
GEN Hex Code, Decimal Code	0x007f, 00127
GEN2 Hex Code, Decimal Code	0x10f5, 04341
GEN3 Hex Code, Decimal Code	0x11bd, 04541
GEN4 Hex Code, Decimal Code	0x1285, 04741
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100 Max = 20 Divisor = 1

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

Generator Audio Channel Linking

COM_GEN_AUDIO_LINK_G1_P1

Description	Link left and right level control so that they track
GEN Hex Code, Decimal Code	0x0080, 00128
GEN2 Hex Code, Decimal Code	0x10f5, 04341
GEN3 Hex Code, Decimal Code	0x11bd, 04541
GEN4 Hex Code, Decimal Code	0x1285, 04741
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = unlinked 1 = linked

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LINK_G1_P2

Description	Link left and right level control so that they track
GEN Hex Code, Decimal Code	0x0081, 00129
GEN2 Hex Code, Decimal Code	0x10f7, 04343
GEN3 Hex Code, Decimal Code	0x11bf, 04543
GEN4 Hex Code, Decimal Code	0x1287, 04743
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = unlinked 1 = linked

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LINK_G2_P1

Description	Link left and right level control so that they track
GEN Hex Code, Decimal Code	0x0082, 00130
GEN2 Hex Code, Decimal Code	0x10f8, 04344
GEN3 Hex Code, Decimal Code	0x11c0, 04544
GEN4 Hex Code, Decimal Code	0x1288, 04744
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = unlinked 1 = linked

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LINK_G2_P2

Description	Link left and right level control so that they track
GEN Hex Code, Decimal Code	0x0083, 00131
GEN2 Hex Code, Decimal Code	0x10f9, 04345
GEN3 Hex Code, Decimal Code	0x11c1, 04545
GEN4 Hex Code, Decimal Code	0x1289, 04745
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = unlinked 1 = linked

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LINK_G3_P1

Description	Link left and right level control so that they track
GEN Hex Code, Decimal Code	0x0084, 00132
GEN2 Hex Code, Decimal Code	0x10fa, 04346
GEN3 Hex Code, Decimal Code	0x11c2, 04546
GEN4 Hex Code, Decimal Code	0x128a, 04746
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = unlinked 1 = linked

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LINK_G3_P2

Description	Link left and right level control so that they track
GEN Hex Code, Decimal Code	0x0085, 00133
GEN2 Hex Code, Decimal Code	0x10fb, 04347
GEN3 Hex Code, Decimal Code	0x11c3, 04547
GEN4 Hex Code, Decimal Code	0x128b, 04747
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = unlinked 1 = linked

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LINK_G4_P1

Description	Link left and right level control so that they track
GEN Hex Code, Decimal Code	0x0086, 00134
GEN2 Hex Code, Decimal Code	0x10fc, 04348
GEN3 Hex Code, Decimal Code	0x11c4, 04548
GEN4 Hex Code, Decimal Code	0x128c ,04748
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = unlinked 1 = linked

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_LINK_G4_P2

Description	Link left and right level control so that they track
GEN Hex Code, Decimal Code	0x0087, 00135
GEN2 Hex Code, Decimal Code	0x10fd, 04349
GEN3 Hex Code, Decimal Code	0x11c5, 04549
GEN4 Hex Code, Decimal Code	0x128d, 04749
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = unlinked 1 = linked

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

Generator Audio Invert

COM_GEN_AUDIO_INV_G1_P1_L

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0060, 00096
GEN2 Hex Code, Decimal Code	0x10d6, 04310
GEN3 Hex Code, Decimal Code	0x119e, 04510
GEN4 Hex Code, Decimal Code	0x1266, 04710
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G1_P1_R

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0061, 00097
GEN2 Hex Code, Decimal Code	0x10d7, 04311
GEN3 Hex Code, Decimal Code	0x119f, 04511
GEN4 Hex Code, Decimal Code	0x1267, 04711
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G1_P2_L

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0062, 00098
GEN2 Hex Code, Decimal Code	0x10d8, 04312
GEN3 Hex Code, Decimal Code	0x11a0, 04512
GEN4 Hex Code, Decimal Code	0x1268, 04712
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G1_P2_R

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0063, 00099
GEN2 Hex Code, Decimal Code	0x10d9, 04313
GEN3 Hex Code, Decimal Code	0x11a1, 04513
GEN4 Hex Code, Decimal Code	0x1269, 04713
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G2_P1_L

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0064, 00100
GEN2 Hex Code, Decimal Code	0x10da, 04314
GEN3 Hex Code, Decimal Code	0x11a2, 04514
GEN4 Hex Code, Decimal Code	0x126a, 04714
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G2_P1_R

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0065, 00101
GEN2 Hex Code, Decimal Code	0x10db, 04315
GEN3 Hex Code, Decimal Code	0x11a3, 04515
GEN4 Hex Code, Decimal Code	0x126b, 04715
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G2_P2_L

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0066, 00102
GEN2 Hex Code, Decimal Code	0x10dc, 04316
GEN3 Hex Code, Decimal Code	0x11a4, 04516
GEN4 Hex Code, Decimal Code	0x126c, 04716
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G2_P2_R

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0067, 00103
GEN2 Hex Code, Decimal Code	0x10dd, 04317
GEN3 Hex Code, Decimal Code	0x11a5, 04517
GEN4 Hex Code, Decimal Code	0x126d, 04717
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G3_P1_L

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0068, 00104
GEN2 Hex Code, Decimal Code	0x10de, 04318
GEN3 Hex Code, Decimal Code	0x11a6, 04518
GEN4 Hex Code, Decimal Code	0x126e, 04718
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G3_P1_R

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x0069, 00105
GEN2 Hex Code, Decimal Code	0x10df, 04319
GEN3 Hex Code, Decimal Code	0x11a7, 04519
GEN4 Hex Code, Decimal Code	0x126f, 04719
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G3_P2_L

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x006a, 00106
GEN2 Hex Code, Decimal Code	0x10e0, 04320
GEN3 Hex Code, Decimal Code	0x11a8, 04520
GEN4 Hex Code, Decimal Code	0x1270, 04720
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G3_P2_R

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x006b, 00107
GEN2 Hex Code, Decimal Code	0x10e1, 04321
GEN3 Hex Code, Decimal Code	0x11a9, 04521
GEN4 Hex Code, Decimal Code	0x1271, 04721
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G4_P1_L

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x006c, 00108
GEN2 Hex Code, Decimal Code	0x10e2, 04322
GEN3 Hex Code, Decimal Code	0x11aa, 04522
GEN4 Hex Code, Decimal Code	0x1272, 04722
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G4_P1_R

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x006d, 00109
GEN2 Hex Code, Decimal Code	0x10e3, 04323
GEN3 Hex Code, Decimal Code	0x11ab, 04523
GEN4 Hex Code, Decimal Code	0x1273, 04723
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G4_P2_L

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x006e, 00110
GEN2 Hex Code, Decimal Code	0x10e4 04324
GEN3 Hex Code, Decimal Code	0x11ac 04524
GEN4 Hex Code, Decimal Code	0x1274 04724
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

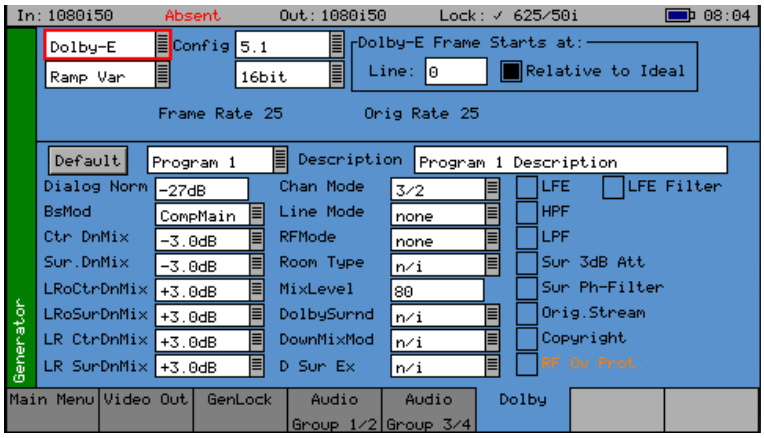
Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

COM_GEN_AUDIO_INV_G4_P2_R

Description	Invert phase of audio signal being generated
GEN Hex Code, Decimal Code	0x006f, 00111
GEN2 Hex Code, Decimal Code	0x10e5, 04325
GEN3 Hex Code, Decimal Code	0x11ad, 04525
GEN4 Hex Code, Decimal Code	0x1275, 04725
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal 1 = inverted

Where GEN refers to the Sx generator or Rx generator module 1, GEN2 refers to the Rx generator module 2, etc.

Generator Dolby



The Dolby Generator software option allows generation of Dolby-E, Dolby Digital and Dolby Digital Plus pre-encoded test signals to check that they are transferred transparently through the broadcast chain unaffected by routers/switchers, satellite links, etc.

Note that there is only one Dolby Generator within the Sx or Rx system but the Dolby data stream can be embedded in any generated SDI or AES output.

COM_GEN_DOLBY_TYPE

Description	This selects Dolby E / D /Plus audio type for routing via embedded SDI audio when COM_GEN_AUDIO_SOURCE is set to a value of 7
GEN Hex Code, Decimal Code	0x07d1, 02001
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Dolby E 1 = Dolby D Legacy 2 = Dolby Digital 3 = Dolby Digital Plus

COM_GEN_DOLBY_BIT_DEPTH

Description	This sets the Bit Depth for generated Dolby E Stream
GEN Hex Code, Decimal Code	0x07d2, 02002
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 16bit, 1 = 20 bit

COM_GEN_DOLBY_NAME

Description	This sets the type of data in Dolby Stream
GEN Hex Code, Decimal Code	0x07db' 02011
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Ramp Var, 1 = -20 dB Fix, 2 = -18dB Fix, 3 = -3dB Fix

COM_GEN_DOLBY_D_RATE

Description	This sets Sets data rate for Dolby D/D+
GEN Hex Code, Decimal Code	0x07de, 02014
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 1 = 64kbps 2 = 80kbps 3 = 96kbps 4 = 112kbps 5 = 128kbps 6 = 160kbps 7 = 192kbps 8 = 224kbps 9 = 256kbps 10 = 320kbps 11 = 384kbps 12 = 448kbps 13 = 512kbps 14 = 576kbps

COM_GEN_DOLBY_PGM_CONFIG

Description	This sets Program Configuration for the generated Dolby Stream
GEN Hex Code, Decimal Code	0x07d0, 02000
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 5.1+2 (Dolby E - 20-bit) 1 = 5.1+2x1 (Dolby E - 20-bit) 2 = 2x4 (Dolby E - 20-bit) 3 = 4+2x2 (Dolby E - 20-bit) 4 = 4+2+2x1 (Dolby E - 20-bit) 5 = 4+4x1 (Dolby E - 20-bit) 6 = 4x2 (Dolby E - 20-bit) 7 = 3x2+2x1 (Dolby E - 20-bit) 8 = 2x2+4x1 (Dolby E - 20-bit) 9 = 2+6x1 (Dolby E - 20-bit) 10 = 8x1 (Dolby E - 20-bit) 11 = 5.1 (Dolby E - 16-bit, 20-bit) 12 = 4+2 (Dolby E - 16-bit, 20-bit) 13 = 4+2x1 (Dolby E - 16-bit, 20-bit) 14 -= 3x2 (Dolby E - 16-bit, 20-bit) 15 = 2x2+2x1 (Dolby E - 16-bit, 20-bit) 16 = 2+4x1 (Dolby E - 16-bit, 20-bit) 17 = 6x1 (Dolby E - 16-bit, 20-bit) 18 = 4 (Dolby E - 16-bit, 20-bit) 19 = 2x2 (Dolby E - 16-bit, 20-bit) 20 = 2+2x1 (Dolby E - 16-bit, 20-bit) 21 = 4x1 (Dolby E - 16-bit, 20-bit)

COM_GEN_DOLBY_LINES

Description	This Selects Dolby Line that stream starts on. May be relative to ideal line specified by Dolby
GEN Hex Code, Decimal Code	0x07d3, 02003
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUES
Values	Line Number

COM_GEN_DOLBY_RELATIVE_NOMINAL

Description	This enables the relative check box to ideal line specified by Dolby
GEN Hex Code, Decimal Code	0x07d4, 02004
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_GEN_DOLBY_DEFAULT

Description	This sets all of the metadata values to their default
GEN Hex Code, Decimal Code	0x07d5, 02005
Valid Command Types	MSG_SET_VALUE
Values	1 = reset values

COM_GEN_DOLBY_PGM_SOURCE

Description	This selects the Dolby Program and populates the metadata display with corresponding values.
GEN Hex Code, Decimal Code	0x07d8 02008
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Program 1 1 = Program 2 2 = Program 3 3 = Program 4

COM_GEN_DOLBY_PGM_DESCRIPTION

Description	This sets the Program description for currently selected Dolby E program
GEN Hex Code, Decimal Code	0x07e4 02020
Valid Command Types	MSG_SET_TEXT MSG_GET_TEXT

COM_GEN_DOLBY_BS_MOD

Description	This sets the Dolby BSMod metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x07ed, 02029
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = CompMain, 1 = MusicFx, 2 = VisualImp, 3 = HearingImp, 4 = Dialogue. 5 = Commentary, 6 = Emergency, 7 = VoiceOver

COM_GEN_DOLBY_DIALOG_NORM

Description	This sets the Dolby Dialogue Norm metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0811, 02065
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	-27 = -27dB

COM_GEN_DOLBY_CTR_DOWN_MIX

Description	This sets the Dolby Centre Down Mix metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0808, 02056
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = -3.0dB, 1 = -4.5dB, 2 = -6.0dB

COM_GEN_DOLBY_SUR_DOWN_MIX

Description	This sets the Dolby Surround Down Mix metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x08c5, 02245
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = -3.0dB, 1 = -6.0dB, 2 = 0dB, 3 = Res

COM_GEN_DOLBY_LRO_CTR_DOWN_MIX

Description	This sets the Left/Right Surround Centre Down Mix metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0874 02164
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = +3.0dB, 1 = +1.5dB, 2 = 0dB, 3 = -1.5dB, 4 = -3dB, 5 = -4.5dB, 6 = -6dB, 7 = Off

COM_GEN_DOLBY_LRO_SUR_DOWN_MIX

Description	This sets the Left/Right Surround Down Mix metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x087d 02173
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = +3.0dB, 1 = +1.5dB, 2 = 0dB, 3 = -1.5dB, 4 = -3dB, 5= -4.5dB, 6=-6dB, 7 = Off

COM_GEN_DOLBY_LR_CTR_DOWN_MIX

Description	This sets the Left/Right Centre Down Mix metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0862 02146
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = +3.0dB, 1 = +1.5dB, 2 = 0dB, 3 = -1.5dB, 4 = -3dB, 5= -4.5dB, 6=-6dB, 7 = Off

COM_GEN_DOLBY_LR_SUR_DOWN_MIX

Description	This sets the Left/Right Surround Down Mix metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x086b 02155
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = +3.0dB, 1 = +1.5dB, 2 = 0dB, 3 = -1.5dB, 4 = -3dB, 5= -4.5dB, 6=-6dB, 7 = Off

COM_GEN_DOLBY_CHAN_MODE

Description	This sets the channel mode metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x07f6 02038
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 1+1 1 = 1/0 2 = 2/0 3 = 3/0 4 = 2/1 5 = 3/1 6 = 2/2 7 = 3/2

COM_GEN_DOLBY_LINE_MODE

Description	This sets the line mode metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0850, 02128
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = none 1 = FilmStd 2 = FilmLight 3 = MusicStd 4 = MusicLight 5 = Speech

COM_GEN_DOLBY_RF_MODE

Description	This sets the RF mode metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x08a1, 02209
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = none 1 = FilmStd 2 = FilmLight 3 = MusicStd 4 = MusicLight 5 = Speech

COM_GEN_DOLBY_ROOM_TYPE

Description	This sets the Room Type metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x08b3, 02227
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = n/i 1 = Large/X 2 = small/flat 3 = Res

COM_GEN_DOLBY_MIX_LEVEL

Description	This sets the Mix Level metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0886, 02182
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	

COM_GEN_DOLBY_DOLBY_SURROUND

Description	This sets the Dolby Surround metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0823, 02083
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = n/i 1 = off 2 = on 3 = Res

COM_GEN_DOLBY_DOWN_MIX_MODE

Description	This sets the Dolby Down Mix Mode metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x082c, 02092
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = n/i 1 = Lt/Rt Pret 2 = Lo/Ro Pret 3 = Res

COM_GEN_DOLBY_DOLBY_SURND_EX

Description	This sets the Dolby Surround Ex metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x081a, 02074
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = n/i 1 = Off 2 = On 3 = Res

COM_GEN_DOLBY_LFE

Description	This sets the LFE metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x083e, 02110
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off, 1 = On

COM_GEN_DOLBY_HPF

Description	This sets the HPF metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0835, 02101
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off, 1 = On

COM_GEN_DOLBY_LPF

Description	This sets the LPF metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0859, 02137
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off, 1 = On

COM_GEN_DOLBY_SUR_3DB_ATT

Description	This sets the Surround 3dB Attribute metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x08bc, 02236
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off, 1 = On

COM_GEN_DOLBY_PHASE_FILTER

Description	This sets the Phase Filter metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0898, 02200
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off, 1 = On

COM_GEN_DOLBY_ORIG_STREAM

Description	This sets the Original Stream metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x088f, 02191
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off, 1 = On

COM_GEN_DOLBY_COPYRIGHT

Description	This sets the Copyright metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x07ff, 02047
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off, 1 = On

COM_GEN_DOLBY_RF_OV_PROT

Description	This sets the RF Over-modulation Protection metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x08aa, 02218
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off, 1 = On

COM_GEN_DOLBY_LFE_FILTER

Description	This sets the Low Frequency Effects Filter metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x0847, 02119
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off, 1 = On

COM_GEN_DOLBY_ORIG_RATE

Description	This sets the Original Rate metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x07d7, 02007
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Divisor = 1

COM_GEN_DOLBY_ERRORS

Description	This sets the Dolby Errors metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x07da, 02010
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Divisor = 1

COM_GEN_DOLBY_FRAME_RATE

Description	This sets the Dolby Frame Rate metadata parameter generated Dolby E Stream
GEN Hex Code, Decimal Code	0x07d6, 02006
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Divisor = 1

COM_GEN_DOLBY_INFO

Description	This shows information about the selected Dolby Stream
GEN Hex Code, Decimal Code	0x07dc, 02012
Valid Command Types	MSG_GET_TEXT

Buttons shows information about selected Dolby Stream

COM_GEN_DOLBY_HDMI_DEFAULT

Description	On the Rx HDMI output, this sets the all metadata parameter generated to their default values.
GEN Hex Code, Decimal Code	0x07df, 02015
Valid Command Types	MSG_SET_VALUE,
Values	Reset = 1

COM_GEN_DOLBY_HDMI_INFO

Description	On the Rx HDMI output ,this shows information about the selected Dolby Stream
GEN Hex Code, Decimal Code	0x07e0, 02016
Valid Command Types	MSG_GET_TEXT

Output ANC Controls

COM_GEN_ANC_VI_NTSC_LINE_F1

Description	Generator Line that Video Index signal is inserted on (Field1/Field2)
GEN Hex Code, Decimal Code	0x0637, 01591
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 525 Divisor = 1

COM_GEN_ANC_VI_NTSC_LINE_F2

Description	Generator Line that Video Index signal is inserted on (Field1/Field2)
GEN Hex Code, Decimal Code	0x0638, 01592
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 525 Divisor = 1

COM_GEN_ANC_VI_PAL_LINE_F1

Description	Generator Line that Video Index signal is inserted on (Field1/Field2)
GEN Hex Code, Decimal Code	0x0636, 01590
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 625 Divisor = 1

COM_GEN_ANC_VI_PAL_LINE_F2

Description	Generator Line that Video Index signal is inserted on (Field1/Field2)
GEN Hex Code, Decimal Code	0x0639, 01593
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 625 Divisor = 1

COM_GEN_ANC_WSS_LINE

Description	Generator Line that WSS is to be inserted in
GEN Hex Code, Decimal Code	0x062c, 01580
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 625 Divisor = 1

COM_GEN_WSS_PRESENT

Description	Visible if WSS Present on SDI output
GEN Hex Code, Decimal Code	0x0630, 01584
Valid Command Types	MSG_GET_VALUE

COM_GEN_CC_PRESENT

Description	Visible if Closed Caption signal Present
GEN Hex Code, Decimal Code	0x0643, 01603
Valid Command Types	MSG_GET_VALUE

COM_GEN_VI_PRESENT

Description	Visible if VI Present on SDI output
GEN Hex Code, Decimal Code	0x063d, 01597
Valid Command Types	MSG_GET_VALUE

PHABRIX® B Analyser

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System Architecture

Overview

The PHABRIX Remote Control Protocol can be used to control both the Sx hand held range of instruments and the Rx rack mount range of instruments. The Sx range on has a single analyser and a single generator whereas the Rx range can have up to 4 analysers and generator modules in any combination.

To differentiate between these different analysers and generators each command defines the specific one to control:

ANLYS = SxA, SxD, SxE, SxTAG Analyser SDI input

ANLYS_1 = 1st Rx module Analyser channel SDI input

ANLYS_2 = 2nd Rx module Analyser channel SDI input

ANLYS_3 = 3rd Rx module Analyser channel SDI input

ANLYS_4 = 4th Rx module Analyser channel SDI input

ANLYS_5 = 5th Rx module Analyser channel SDI input

ANLYS_6 = 6th Rx module Analyser channel SDI input

ANLYS_7 = 7th Rx module Analyser channel SDI input

ANLYS_8 = 8th Rx module Analyser channel SDI input

Throughout this command reference specific hex and decimal values will be provided for these different variants.

Input Front End Analyser

Analyser Input Selection

COM_ANLYS_INP_SEL

Description	Select Sx analyser source (Input/Output)
Hex Code, Decimal Code	0x023d, 00573
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = SDI Input 1 2 = SDI Input 2 (SxD only) 6 = SDI Output 1 (Generator output) 9 = SDI Output 2 (SxD only) 15 = CVBS In (SxTAG Only) 16 = External Reference (SxTAG Only)

COM_ANLYS_INP1_STD

Description	Show Input 1 (Sx or Rx analyser module 1 input 1) video standard as string
Hex Code, Decimal Code	0x0230, 00560
Valid Command Types	MSG_GET_TEXT

COM_ANLYS_INP2_STD

Description	Show Input 2 (SxD 2nd input or Rx analyser module 1 input 2) video standard as string
Hex Code, Decimal Code	0x0231, 00561
Valid Command Types	MSG_GET_TEXT

COM_ANLYS_INP1_LONG_STD

Description	Show Input 1 (Sx or Rx analyser module 1 input 1) video standard as string including colour space
Hex Code, Decimal Code	0x0235, 00565
Valid Command Types	MSG_GET_TEXT

COM_ANLYS_INP2_LONG_STD

Description	Show Input 1 (Sx or Rx analyser module 1 input 1) video standard as string including colour space
Hex Code, Decimal Code	0x0236, 00566
Valid Command Types	MSG_GET_TEXT

COM_ANLYS_INP1_LABEL

Description	Show Input 1 (Sx or Rx analyser module 1 input 1) video standard as string
Hex Code, Decimal Code	0x024c, 00588
Valid Command Types	MSG_GET_TEXT

COM_ANLYS_INP2_LABEL

Description	Show Input 2 (Sx or Rx analyser module 1 input 2) video standard as string
Hex Code, Decimal Code	0x024d, 00589
Valid Command Types	MSG_GET_TEXT

Input Analysis (Rx Only)

COM_INPUT_1_ACTIVE_PIXELS

Description	Displays the count of active pixels on input
INPUT_1 Hex Code, Decimal Code	0x1982, 06530
INPUT_2 Hex Code, Decimal Code	0x19e6, 06630
INPUT_3 Hex Code, Decimal Code	0x1a4a, 06730
INPUT_4 Hex Code, Decimal Code	0x1aae, 06830
INPUT_5 Hex Code, Decimal Code	0x1b12, 06930
INPUT_6 Hex Code, Decimal Code	0x1b76, 07030
INPUT_7 Hex Code, Decimal Code	0x1bda, 07130
INPUT_8 Hex Code, Decimal Code	0x1c3e, 07230
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_ALL_PIXELS

Description	Displays the count of active pixels on input
INPUT_1 Hex Code, Decimal Code	0x1984, 06532
INPUT_2 Hex Code, Decimal Code	0x19e7, 06631
INPUT_3 Hex Code, Decimal Code	0x1a4c, 06732
INPUT_4 Hex Code, Decimal Code	0x1ab0, 06832
INPUT_5 Hex Code, Decimal Code	0x1b14, 06932
INPUT_6 Hex Code, Decimal Code	0x1b78, 07032
INPUT_7 Hex Code, Decimal Code	0x1bdc, 07132
INPUT_8 Hex Code, Decimal Code	0x1c40, 07232
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_ALL_LINES

Description	Displays the count of all lines on input
INPUT_1 Hex Code, Decimal Code	0x1983, 06531
INPUT_2 Hex Code, Decimal Code	0x19e7, 06631
INPUT_3 Hex Code, Decimal Code	0x1a4b, 06731
INPUT_4 Hex Code, Decimal Code	0x1aaf, 06831
INPUT_5 Hex Code, Decimal Code	0x1b13, 06931
INPUT_6 Hex Code, Decimal Code	0x1b77, 07031
INPUT_7 Hex Code, Decimal Code	0x1bdb, 07131
INPUT_8 Hex Code, Decimal Code	0x1c3f, 07231
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_CABLE_LENGTH

Description	Displays the approximate cable length
INPUT_1 Hex Code, Decimal Code	0x1985, 06533
INPUT_2 Hex Code, Decimal Code	0x19e9, 06633
INPUT_3 Hex Code, Decimal Code	0x1a4d, 06733
INPUT_4 Hex Code, Decimal Code	0x1ab1, 06833
INPUT_5 Hex Code, Decimal Code	0x1b15, 06933
INPUT_6 Hex Code, Decimal Code	0x1b79, 07033
INPUT_7 Hex Code, Decimal Code	0x1bdd, 07133
INPUT_8 Hex Code, Decimal Code	0x1c41, 07233
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_CLEAR_ALL_ERRORS

Description	Clear all errors on an SDI input
INPUT_1 Hex Code, Decimal Code	0x1986, 06534
INPUT_2 Hex Code, Decimal Code	0x19ea, 06634
INPUT_3 Hex Code, Decimal Code	0x1a4e, 06734
INPUT_4 Hex Code, Decimal Code	0x1ab2, 06834
INPUT_5 Hex Code, Decimal Code	0x1b16, 06934
INPUT_6 Hex Code, Decimal Code	0x1b7a, 07034
INPUT_7 Hex Code, Decimal Code	0x1bde, 07134
INPUT_8 Hex Code, Decimal Code	0x1c42, 07234
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_CLEAR_FRAMER_ERRORS

Description	Clear all framing errors on an SDI input
INPUT_1 Hex Code, Decimal Code	0x1987, 06535
INPUT_2 Hex Code, Decimal Code	0x19eb, 06635
INPUT_3 Hex Code, Decimal Code	0x1a4f, 06735
INPUT_4 Hex Code, Decimal Code	0x1ab3, 06835
INPUT_5 Hex Code, Decimal Code	0x1b17, 06935
INPUT_6 Hex Code, Decimal Code	0x1b7b, 07035
INPUT_7 Hex Code, Decimal Code	0x1bdf, 07135
INPUT_8 Hex Code, Decimal Code	0x1c43, 07235
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_AP_CALC_FIELD_1

Description	Used to display EDH AP (Active Picture) status
INPUT_1 Hex Code, Decimal Code	0x1988, 06536
INPUT_2 Hex Code, Decimal Code	0x19ec, 06636
INPUT_3 Hex Code, Decimal Code	0x1a50, 06736
INPUT_4 Hex Code, Decimal Code	0x1ab4, 06836
INPUT_5 Hex Code, Decimal Code	0x1b18, 06936
INPUT_6 Hex Code, Decimal Code	0x1b7c ,07036
INPUT_7 Hex Code, Decimal Code	0x1be0, 07136
INPUT_8 Hex Code, Decimal Code	0x1c44, 07236
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_AP_CALC_FIELD_2

Description	Used to display EDH AP (Active Picture) status
INPUT_1 Hex Code, Decimal Code	0x1989, 06537
INPUT_2 Hex Code, Decimal Code	0x19ed, 06637
INPUT_3 Hex Code, Decimal Code	0x1a51, 06737
INPUT_4 Hex Code, Decimal Code	0x1ab5, 06837
INPUT_5 Hex Code, Decimal Code	0x1b19, 06937
INPUT_6 Hex Code, Decimal Code	0x1b7d, 07037
INPUT_7 Hex Code, Decimal Code	0x1be1, 07137
INPUT_8 Hex Code, Decimal Code	0x1c45, 07237
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_AP_RX_FIELD_1

Description	Used to display EDH AP (Active Picture) status
INPUT_1 Hex Code, Decimal Code	0x198a, 06538
INPUT_2 Hex Code, Decimal Code	0x19ee, 06638
INPUT_3 Hex Code, Decimal Code	0x1a52, 06738
INPUT_4 Hex Code, Decimal Code	0x1ab6, 06838
INPUT_5 Hex Code, Decimal Code	0x1b1a, 06938
INPUT_6 Hex Code, Decimal Code	0x1b7e, 07038
INPUT_7 Hex Code, Decimal Code	0x1be2, 07138
INPUT_8 Hex Code, Decimal Code	0x1c46, 07238
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_AP_RX_FIELD_2

Description	Used to display EDH AP (Active Picture) status
INPUT_1 Hex Code, Decimal Code	0x198b, 06539
INPUT_2 Hex Code, Decimal Code	0x19ef, 06639
INPUT_3 Hex Code, Decimal Code	0x1a53, 06739
INPUT_4 Hex Code, Decimal Code	0x1ab7, 06839
INPUT_5 Hex Code, Decimal Code	0x1b1b, 06939
INPUT_6 Hex Code, Decimal Code	0x1b7f, 07039
INPUT_7 Hex Code, Decimal Code	0x1be3, 07139
INPUT_8 Hex Code, Decimal Code	0x1c47, 07239
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_EDA_FLAGS

Description	Used to display EDH EDA (Error Detected Already) status
INPUT_1 Hex Code, Decimal Code	0x198c, 06540
INPUT_2 Hex Code, Decimal Code	0x19f0, 06640
INPUT_3 Hex Code, Decimal Code	0x1a54, 06740
INPUT_4 Hex Code, Decimal Code	0x1ab8, 06840
INPUT_5 Hex Code, Decimal Code	0x1b1c, 06940
INPUT_6 Hex Code, Decimal Code	0x1b80, 07040
INPUT_7 Hex Code, Decimal Code	0x1be4, 07140
INPUT_8 Hex Code, Decimal Code	0x1c48, 07240
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_EDH_FLAGS

Description	Used to display EDH status
INPUT_1 Hex Code, Decimal Code	0x198d, 06541
INPUT_2 Hex Code, Decimal Code	0x19f1, 06641
INPUT_3 Hex Code, Decimal Code	0x1a55, 06741
INPUT_4 Hex Code, Decimal Code	0x1ab9, 06841
INPUT_5 Hex Code, Decimal Code	0x1b1d, 06941
INPUT_6 Hex Code, Decimal Code	0x1b81, 07041
INPUT_7 Hex Code, Decimal Code	0x1be5, 07141
INPUT_8 Hex Code, Decimal Code	0x1c49 07241
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_FF_CALC_FIELD_1

Description	Used to display EDH FF (Full Field) status
INPUT_1 Hex Code, Decimal Code	0x198e, 06542
INPUT_2 Hex Code, Decimal Code	0x19f2, 06642
INPUT_3 Hex Code, Decimal Code	0x1a56, 06742
INPUT_4 Hex Code, Decimal Code	0x1aba, 06842
INPUT_5 Hex Code, Decimal Code	0x1b1e, 06942
INPUT_6 Hex Code, Decimal Code	0x1b82, 07042
INPUT_7 Hex Code, Decimal Code	0x1be6, 07142
INPUT_8 Hex Code, Decimal Code	0x1c4a, 07242
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_FF_CALC_FIELD_2

Description	Used to display EDH FF (Full Field) status
INPUT_1 Hex Code, Decimal Code	0x198f, 06543
INPUT_2 Hex Code, Decimal Code	0x19f3, 06643
INPUT_3 Hex Code, Decimal Code	0x1a57, 06743
INPUT_4 Hex Code, Decimal Code	0x1abb, 06843
INPUT_5 Hex Code, Decimal Code	0x1b1f, 06943
INPUT_6 Hex Code, Decimal Code	0x1b83, 07043
INPUT_7 Hex Code, Decimal Code	0x1be7, 07143
INPUT_8 Hex Code, Decimal Code	0x1c4b, 07243
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_FF_RX_FIELD_1

Description	Used to display EDH FF (Full Field) status
INPUT_1 Hex Code, Decimal Code	0x1990, 06544
INPUT_2 Hex Code, Decimal Code	0x19f4 06644
INPUT_3 Hex Code, Decimal Code	0x1a58 06744
INPUT_4 Hex Code, Decimal Code	0x1abc 06844
INPUT_5 Hex Code, Decimal Code	0x1b20 06944
INPUT_6 Hex Code, Decimal Code	0x1b84 07044
INPUT_7 Hex Code, Decimal Code	0x1be8 07144
INPUT_8 Hex Code, Decimal Code	0x1c4c 07244
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_FF_RX_FIELD_2

Description	Used to display EDH FF (Full Field) status
INPUT_1 Hex Code, Decimal Code	0x1991, 06545
INPUT_2 Hex Code, Decimal Code	0x19f5, 06645
INPUT_3 Hex Code, Decimal Code	0x1a59, 06745
INPUT_4 Hex Code, Decimal Code	0x1abd, 06845
INPUT_5 Hex Code, Decimal Code	0x1b21, 06945
INPUT_6 Hex Code, Decimal Code	0x1b85, 07045
INPUT_7 Hex Code, Decimal Code	0x1be9, 07145
INPUT_8 Hex Code, Decimal Code	0x1c4d, 07245
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_IDA_FLAGS

Description	Used to display EDH IDA (Internal Error Detected Already) flag status
INPUT_1 Hex Code, Decimal Code	0x1993, 06547
INPUT_2 Hex Code, Decimal Code	0x19f7, 06647
INPUT_3 Hex Code, Decimal Code	0x1a5b, 06747
INPUT_4 Hex Code, Decimal Code	0x1abf, 06847
INPUT_5 Hex Code, Decimal Code	0x1b23, 06947
INPUT_6 Hex Code, Decimal Code	0x1b87, 07047
INPUT_7 Hex Code, Decimal Code	0x1beb, 07147
INPUT_8 Hex Code, Decimal Code	0x1c4f, 07247
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_IDH_FLAGS

Description	Used to display EDH IDH (Internal Error Detected Here) flag status
INPUT_1 Hex Code, Decimal Code	0x1994, 06548
INPUT_2 Hex Code, Decimal Code	0x19f8, 06648
INPUT_3 Hex Code, Decimal Code	0x1a5c, 06748
INPUT_4 Hex Code, Decimal Code	0x1ac0, 06848
INPUT_5 Hex Code, Decimal Code	0x1b24, 06948
INPUT_6 Hex Code, Decimal Code	0x1b88, 07048
INPUT_7 Hex Code, Decimal Code	0x1bec, 07148
INPUT_8 Hex Code, Decimal Code	0x1c50, 07248
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_EDH_UES_FLAGS

Description	Used to display EDH UES (Unknown Error Status) flag status
INPUT_1 Hex Code, Decimal Code	0x1995, 06549
INPUT_2 Hex Code, Decimal Code	0x19f9, 06649
INPUT_3 Hex Code, Decimal Code	0x1a5d, 06749
INPUT_4 Hex Code, Decimal Code	0x1ac1, 06849
INPUT_5 Hex Code, Decimal Code	0x1b25, 06949
INPUT_6 Hex Code, Decimal Code	0x1b89, 07049
INPUT_7 Hex Code, Decimal Code	0x1bed, 07149
INPUT_8 Hex Code, Decimal Code	0x1c51, 07249
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_FRAMER_ERRORS

Description	Displays the value of re-framer errors indicating the number of times an input has been re-synchronised
INPUT_1 Hex Code, Decimal Code	0x1996, 06550
INPUT_2 Hex Code, Decimal Code	0x19fa, 06650
INPUT_3 Hex Code, Decimal Code	0x1a5e, 06750
INPUT_4 Hex Code, Decimal Code	0x1ac2, 06850
INPUT_5 Hex Code, Decimal Code	0x1b26, 06950
INPUT_6 Hex Code, Decimal Code	0x1b8a, 07050
INPUT_7 Hex Code, Decimal Code	0x1bee, 07150
INPUT_8 Hex Code, Decimal Code	0x1c52, 07250
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_FREQ

Description	Displays the SDI input frequency
INPUT_1 Hex Code, Decimal Code	0x1997, 06551
INPUT_2 Hex Code, Decimal Code	0x19fb 06651
INPUT_3 Hex Code, Decimal Code	0x1a5f 06751
INPUT_4 Hex Code, Decimal Code	0x1ac3 06851
INPUT_5 Hex Code, Decimal Code	0x1b27 06951
INPUT_6 Hex Code, Decimal Code	0x1b8b 07051
INPUT_7 Hex Code, Decimal Code	0x1bef 07151
INPUT_8 Hex Code, Decimal Code	0x1c53 07251
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1000

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

SDI Link 1 Information (Rx Only)

COM_INPUT_1_LINK_1_ACTIVE_PICTURE_CHANGES

Description	Displays the Active picture CRC change count for link 1 of the SDI signal
INPUT_1 Hex Code, Decimal Code	0x1998, 06552
INPUT_2 Hex Code, Decimal Code	0x19fc, 06652
INPUT_3 Hex Code, Decimal Code	0x1a60, 06752
INPUT_4 Hex Code, Decimal Code	0x1ac4, 06852
INPUT_5 Hex Code, Decimal Code	0x1b28, 06952
INPUT_6 Hex Code, Decimal Code	0x1b8c, 07052
INPUT_7 Hex Code, Decimal Code	0x1bf0, 07152
INPUT_8 Hex Code, Decimal Code	0x1c54, 07252
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_ACTIVE_PICTURE_CHANGES_CLEAR

Description	Clears the change count for active picture CRC for link 1 of the SDI signal
INPUT_1 Hex Code, Decimal Code	0x1999, 06553
INPUT_2 Hex Code, Decimal Code	0x19fd, 06653
INPUT_3 Hex Code, Decimal Code	0x1a61, 06753
INPUT_4 Hex Code, Decimal Code	0x1ac5, 06853
INPUT_5 Hex Code, Decimal Code	0x1b29, 06953
INPUT_6 Hex Code, Decimal Code	0x1b8d, 07053
INPUT_7 Hex Code, Decimal Code	0x1bf1, 07153
INPUT_8 Hex Code, Decimal Code	0x1c55, 07253
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_ACTIVE_PICTURE_CHECKSUM

Description	Displays the checksum of active picture data for link 1 of the SDI signal
INPUT_1 Hex Code, Decimal Code	0x199a, 06554
INPUT_2 Hex Code, Decimal Code	0x19fe, 06654
INPUT_3 Hex Code, Decimal Code	0x1a62, 06754
INPUT_4 Hex Code, Decimal Code	0x1ac6, 06854
INPUT_5 Hex Code, Decimal Code	0x1b2a, 06954
INPUT_6 Hex Code, Decimal Code	0x1b8e, 07054
INPUT_7 Hex Code, Decimal Code	0x1bf2, 07154
INPUT_8 Hex Code, Decimal Code	0x1c56, 07254
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_ACTIVE_PIXELS

Description	Displays the count of active pixels on input/ link 1
INPUT_1 Hex Code, Decimal Code	0x199b, 06555
INPUT_2 Hex Code, Decimal Code	0x19ff, 06655
INPUT_3 Hex Code, Decimal Code	0x1a63, 06755
INPUT_4 Hex Code, Decimal Code	0x1ac7, 06855
INPUT_5 Hex Code, Decimal Code	0x1b2b, 06955
INPUT_6 Hex Code, Decimal Code	0x1b8f, 07055
INPUT_7 Hex Code, Decimal Code	0x1bf3, 07155
INPUT_8 Hex Code, Decimal Code	0x1c57, 07255
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_ANC_ERROR_RATE

Description	Displays the ANC error rate in errors/s on input/link 1
INPUT_1 Hex Code, Decimal Code	0x199c, 06556
INPUT_2 Hex Code, Decimal Code	0x1a00, 06656
INPUT_3 Hex Code, Decimal Code	0x1a64, 06756
INPUT_4 Hex Code, Decimal Code	0x1ac8, 06856
INPUT_5 Hex Code, Decimal Code	0x1b2c, 06956
INPUT_6 Hex Code, Decimal Code	0x1b90, 07056
INPUT_7 Hex Code, Decimal Code	0x1bf4, 07156
INPUT_8 Hex Code, Decimal Code	0x1c58, 07256
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_ANC_ERROR_SECS

Description	Displays the time that ANC stream checksum has been correct in hours, minutes and seconds.
INPUT_1 Hex Code, Decimal Code	0x199d, 06557
INPUT_2 Hex Code, Decimal Code	0x1a01, 06657
INPUT_3 Hex Code, Decimal Code	0x1a65, 06757
INPUT_4 Hex Code, Decimal Code	0x1ac9, 06857
INPUT_5 Hex Code, Decimal Code	0x1b2d, 06957
INPUT_6 Hex Code, Decimal Code	0x1b91, 07057
INPUT_7 Hex Code, Decimal Code	0x1bf5, 07157
INPUT_8 Hex Code, Decimal Code	0x1c59, 07257
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_ANC_ERRORS

Description	Displays the value of ANC stream checksum errors on input/link 1
INPUT_1 Hex Code, Decimal Code	0x199e, 06558
INPUT_2 Hex Code, Decimal Code	0x1a02, 06658
INPUT_3 Hex Code, Decimal Code	0x1a66, 06758
INPUT_4 Hex Code, Decimal Code	0x1aca, 06858
INPUT_5 Hex Code, Decimal Code	0x1b2e, 06958
INPUT_6 Hex Code, Decimal Code	0x1b92, 07058
INPUT_7 Hex Code, Decimal Code	0x1bf6, 07158
INPUT_8 Hex Code, Decimal Code	0x1c5a, 07258
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CLEAR_ANC_ERRORS

Description	Clear all ANC errors on input/link 1
INPUT_1 Hex Code, Decimal Code	0x199f, 06559
INPUT_2 Hex Code, Decimal Code	0x1a03, 06659
INPUT_3 Hex Code, Decimal Code	0x1a67, 06759
INPUT_4 Hex Code, Decimal Code	0x1acb, 06859
INPUT_5 Hex Code, Decimal Code	0x1b2f, 06959
INPUT_6 Hex Code, Decimal Code	0x1b93, 07059
INPUT_7 Hex Code, Decimal Code	0x1bf7, 07159
INPUT_8 Hex Code, Decimal Code	0x1c5b, 07259
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CLEAR_CRC_C_ERRORS

Description	Clear all CRC-C errors (chrominance channel) on input/link 1
INPUT_1 Hex Code, Decimal Code	0x19a0, 06560
INPUT_2 Hex Code, Decimal Code	0x1a04, 06660
INPUT_3 Hex Code, Decimal Code	0x1a68, 06760
INPUT_4 Hex Code, Decimal Code	0x1acc, 06860
INPUT_5 Hex Code, Decimal Code	0x1b30, 06960
INPUT_6 Hex Code, Decimal Code	0x1b94, 07060
INPUT_7 Hex Code, Decimal Code	0x1bf8, 07160
INPUT_8 Hex Code, Decimal Code	0x1c5c, 07260
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CLEAR_CRC_Y_ERRORS

Description	Clear all CRC-Y/EDH-AP errors (luminance channel / active picture) on input/link 1
INPUT_1 Hex Code, Decimal Code	0x19a1, 06561
INPUT_2 Hex Code, Decimal Code	0x1a05, 06661
INPUT_3 Hex Code, Decimal Code	0x1a69, 06761
INPUT_4 Hex Code, Decimal Code	0x1acd, 06861
INPUT_5 Hex Code, Decimal Code	0x1b31, 06961
INPUT_6 Hex Code, Decimal Code	0x1b95, 07061
INPUT_7 Hex Code, Decimal Code	0x1bf9, 07161
INPUT_8 Hex Code, Decimal Code	0x1c5d, 07261
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CLEAR_FRAMER_ERRORS

Description	Clear all Framer errors on input/link 1
INPUT_1 Hex Code, Decimal Code	0x19a2, 06562
INPUT_2 Hex Code, Decimal Code	0x1a06, 06662
INPUT_3 Hex Code, Decimal Code	0x1a6a, 06762
INPUT_4 Hex Code, Decimal Code	0x1ace, 06862
INPUT_5 Hex Code, Decimal Code	0x1b32, 06962
INPUT_6 Hex Code, Decimal Code	0x1b96, 07062
INPUT_7 Hex Code, Decimal Code	0x1bfa, 07162
INPUT_8 Hex Code, Decimal Code	0x1c5e, 07262
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CRC_C_ERROR_RATE

Description	Displays the Chroma stream error rate in errors/s on input/link 1
INPUT_1 Hex Code, Decimal Code	0x19a3, 06563
INPUT_2 Hex Code, Decimal Code	0x1a07, 06663
INPUT_3 Hex Code, Decimal Code	0x1a6b, 06763
INPUT_4 Hex Code, Decimal Code	0x1acf, 06863
INPUT_5 Hex Code, Decimal Code	0x1b33, 06963
INPUT_6 Hex Code, Decimal Code	0x1b97, 07063
INPUT_7 Hex Code, Decimal Code	0x1bfb, 07163
INPUT_8 Hex Code, Decimal Code	0x1c5f, 07263
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CRC_C_ERROR_SECS

Description	Displays the time that the Chroma stream checksum has been correct in hours, minutes and seconds.
INPUT_1 Hex Code, Decimal Code	0x19a4, 06564
INPUT_2 Hex Code, Decimal Code	0x1a08, 06664
INPUT_3 Hex Code, Decimal Code	0x1a6c, 06764
INPUT_4 Hex Code, Decimal Code	0x1ad0, 06864
INPUT_5 Hex Code, Decimal Code	0x1b34, 06964
INPUT_6 Hex Code, Decimal Code	0x1b98, 07064
INPUT_7 Hex Code, Decimal Code	0x1bfc, 07164
INPUT_8 Hex Code, Decimal Code	0x1c60, 07264
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CRC_C_ERROR_TITLE

Description	Displays the titles for error counts for inputs 1-8 Y/C shows if EDH or CRC values displayed.
INPUT_1 Hex Code, Decimal Code	0x19a5, 06565
INPUT_2 Hex Code, Decimal Code	0x1a09, 06665
INPUT_3 Hex Code, Decimal Code	0x1a6d, 06765
INPUT_4 Hex Code, Decimal Code	0x1ad1, 06865
INPUT_5 Hex Code, Decimal Code	0x1b35, 06965
INPUT_6 Hex Code, Decimal Code	0x1b99, 07065
INPUT_7 Hex Code, Decimal Code	0x1bfd, 07165
INPUT_8 Hex Code, Decimal Code	0x1c61, 07265
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CRC_C_ERRORS

Description	Displays the value of Chroma stream CRC errors.
INPUT_1 Hex Code, Decimal Code	0x19a6, 06566
INPUT_2 Hex Code, Decimal Code	0x1a0a, 06666
INPUT_3 Hex Code, Decimal Code	0x1a6e, 06766
INPUT_4 Hex Code, Decimal Code	0x1ad2, 06866
INPUT_5 Hex Code, Decimal Code	0x1b36, 06966
INPUT_6 Hex Code, Decimal Code	0x1b9a, 07066
INPUT_7 Hex Code, Decimal Code	0x1bfe, 07166
INPUT_8 Hex Code, Decimal Code	0x1c62, 07266
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CRC_Y_ERROR_RATE

Description	Displays the Luminance stream error rate in errors/s on input/link 1
INPUT_1 Hex Code, Decimal Code	0x19a7 06567
INPUT_2 Hex Code, Decimal Code	0x1a0b 06667
INPUT_3 Hex Code, Decimal Code	0x1a6f 06767
INPUT_4 Hex Code, Decimal Code	0x1ad3 06867
INPUT_5 Hex Code, Decimal Code	0x1b37 06967
INPUT_6 Hex Code, Decimal Code	0x1b9b 07067
INPUT_7 Hex Code, Decimal Code	0x1bff 07167
INPUT_8 Hex Code, Decimal Code	0x1c63 07267
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CRC_Y_ERROR_SECS

Description	Displays the time that the Luminance stream checksum has been correct in hours, minutes and seconds.
INPUT_1 Hex Code, Decimal Code	0x19a8, 06568
INPUT_2 Hex Code, Decimal Code	0x1a0c, 06668
INPUT_3 Hex Code, Decimal Code	0x1a70, 06768
INPUT_4 Hex Code, Decimal Code	0x1ad4, 06868
INPUT_5 Hex Code, Decimal Code	0x1b38, 06968
INPUT_6 Hex Code, Decimal Code	0x1b9c, 07068
INPUT_7 Hex Code, Decimal Code	0x1c00, 07168
INPUT_8 Hex Code, Decimal Code	0x1c64, 07268
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CRC_Y_ERROR_TITLE

Description	Displays the titles for error counts for inputs 1-8 Y/C shows if EDH or CRC values displayed.
INPUT_1 Hex Code, Decimal Code	0x19a9, 06569
INPUT_2 Hex Code, Decimal Code	0x1a0d, 06669
INPUT_3 Hex Code, Decimal Code	0x1a71, 06769
INPUT_4 Hex Code, Decimal Code	0x1ad5, 06869
INPUT_5 Hex Code, Decimal Code	0x1b39, 06969
INPUT_6 Hex Code, Decimal Code	0x1b9d, 07069
INPUT_7 Hex Code, Decimal Code	0x1c01, 07169
INPUT_8 Hex Code, Decimal Code	0x1c65, 07269
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_CRC_Y_ERRORS

Description	Displays the value of Luminance stream CRC errors.
INPUT_1 Hex Code, Decimal Code	0x19aa, 06570
INPUT_2 Hex Code, Decimal Code	0x1a0e, 06670
INPUT_3 Hex Code, Decimal Code	0x1a72, 06770
INPUT_4 Hex Code, Decimal Code	0x1ad6, 06870
INPUT_5 Hex Code, Decimal Code	0x1b3a, 06970
INPUT_6 Hex Code, Decimal Code	0x1b9e, 07070
INPUT_7 Hex Code, Decimal Code	0x1c02, 07170
INPUT_8 Hex Code, Decimal Code	0x1c66, 07270
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_ERROR_TITLE

Description	Displays the titles for error counts for inputs 1-8 Y/C shows if EDH or CRC values displayed.
INPUT_1 Hex Code, Decimal Code	0x19ab, 06571
INPUT_2 Hex Code, Decimal Code	0x1a0f,06671
INPUT_3 Hex Code, Decimal Code	0x1a73, 06771
INPUT_4 Hex Code, Decimal Code	0x1ad7, 06871
INPUT_5 Hex Code, Decimal Code	0x1b3b, 06971
INPUT_6 Hex Code, Decimal Code	0x1b9f, 07071
INPUT_7 Hex Code, Decimal Code	0x1c03, 07171
INPUT_8 Hex Code, Decimal Code	0x1c67, 07271
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_1_FRAMER_ERRORS

Description	Displays the value of re-framer errors indicating the number of times an input has been re-synchronised.
INPUT_1 Hex Code, Decimal Code	0x19ac, 06572
INPUT_2 Hex Code, Decimal Code	0x1a10, 06672
INPUT_3 Hex Code, Decimal Code	0x1a74, 06772
INPUT_4 Hex Code, Decimal Code	0x1ad8, 06872
INPUT_5 Hex Code, Decimal Code	0x1b3c, 06972
INPUT_6 Hex Code, Decimal Code	0x1ba0, 07072
INPUT_7 Hex Code, Decimal Code	0x1c04, 07172
INPUT_8 Hex Code, Decimal Code	0x1c68, 07272
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

SDI Link 2 Information (Rx Only)

COM_INPUT_1_LINK_2_ACTIVE_PICTURE_CHANGES

Description	Displays the Active picture CRC change count for link 2 of the SDI signal
INPUT_1 Hex Code, Decimal Code	0x19ad, 06573
INPUT_2 Hex Code, Decimal Code	0x1a12, 06674
INPUT_3 Hex Code, Decimal Code	0x1a76, 06774
INPUT_4 Hex Code, Decimal Code	0x1ada, 06874
INPUT_5 Hex Code, Decimal Code	0x1b3d, 06973
INPUT_6 Hex Code, Decimal Code	0x1ba1, 07073
INPUT_7 Hex Code, Decimal Code	0x1c05, 07173
INPUT_8 Hex Code, Decimal Code	0x1c69, 07273
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_ACTIVE_PICTURE_CHANGES_CLEAR

Description	Clears the change count for active picture CRC for link 2 of the SDI signal
INPUT_1 Hex Code, Decimal Code	0x19ae, 06574
INPUT_2 Hex Code, Decimal Code	0x1a12, 06674
INPUT_3 Hex Code, Decimal Code	0x1a76, 06774
INPUT_4 Hex Code, Decimal Code	0x1ada, 06874
INPUT_5 Hex Code, Decimal Code	0x1b3e, 06974
INPUT_6 Hex Code, Decimal Code	0x1ba2, 07074
INPUT_7 Hex Code, Decimal Code	0x1c06, 07174
INPUT_8 Hex Code, Decimal Code	0x1c6a, 07274
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_ACTIVE_PICTURE_CHECKSUM

Description	Displays the checksum of active picture data for link 2 of the SDI signal
INPUT_1 Hex Code, Decimal Code	0x19af, 06575
INPUT_2 Hex Code, Decimal Code	0x1a13, 06675
INPUT_3 Hex Code, Decimal Code	0x1a77, 06775
INPUT_4 Hex Code, Decimal Code	0x1adb, 06875
INPUT_5 Hex Code, Decimal Code	0x1b3f, 06975
INPUT_6 Hex Code, Decimal Code	0x1ba3, 07075
INPUT_7 Hex Code, Decimal Code	0x1c07, 07175
INPUT_8 Hex Code, Decimal Code	0x1c6b, 07275
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_ACTIVE_PIXELS

Description	Displays the count of active pixels on input/ link 2
INPUT_1 Hex Code, Decimal Code	0x19b0, 06576
INPUT_2 Hex Code, Decimal Code	0x1a14, 06676
INPUT_3 Hex Code, Decimal Code	0x1a78, 06776
INPUT_4 Hex Code, Decimal Code	0x1adc, 06876
INPUT_5 Hex Code, Decimal Code	0x1b40, 06976
INPUT_6 Hex Code, Decimal Code	0x1ba4, 07076
INPUT_7 Hex Code, Decimal Code	0x1c08, 07176
INPUT_8 Hex Code, Decimal Code	0x1c6c, 07276
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_ANC_ERROR_RATE

Description	Displays the ANC error rate in errors/s on input/link 2
INPUT_1 Hex Code, Decimal Code	0x19b1, 06577
INPUT_2 Hex Code, Decimal Code	0x1a15, 06677
INPUT_3 Hex Code, Decimal Code	0x1a79, 06777
INPUT_4 Hex Code, Decimal Code	0x1add, 06877
INPUT_5 Hex Code, Decimal Code	0x1b41, 06977
INPUT_6 Hex Code, Decimal Code	0x1ba5, 07077
INPUT_7 Hex Code, Decimal Code	0x1c09, 07177
INPUT_8 Hex Code, Decimal Code	0x1c6d, 07277
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_ANC_ERROR_SECS

Description	Displays the time that ANC stream checksum has been correct in hours, minutes and seconds.
INPUT_1 Hex Code, Decimal Code	0x19b2 06578
INPUT_2 Hex Code, Decimal Code	0x1a16 06678
INPUT_3 Hex Code, Decimal Code	0x1a7a 06778
INPUT_4 Hex Code, Decimal Code	0x1ade 06878
INPUT_5 Hex Code, Decimal Code	0x1b42 06978
INPUT_6 Hex Code, Decimal Code	0x1ba6 07078
INPUT_7 Hex Code, Decimal Code	0x1c0a 07178
INPUT_8 Hex Code, Decimal Code	0x1c6e 07278
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_ANC_ERRORS

Description	Displays the value of ANC stream checksum errors on input/link 2
INPUT_1 Hex Code, Decimal Code	0x19b3, 06579
INPUT_2 Hex Code, Decimal Code	0x1a17, 06679
INPUT_3 Hex Code, Decimal Code	0x1a7b, 06779
INPUT_4 Hex Code, Decimal Code	0x1adf, 06879
INPUT_5 Hex Code, Decimal Code	0x1b43, 06979
INPUT_6 Hex Code, Decimal Code	0x1ba7, 07079
INPUT_7 Hex Code, Decimal Code	0x1c0b, 07179
INPUT_8 Hex Code, Decimal Code	0x1c6f, 07279
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CLEAR_ANC_ERRORS

Description	Clear all ANC errors on input/link 2
INPUT_1 Hex Code, Decimal Code	0x19b4, 06580
INPUT_2 Hex Code, Decimal Code	0x1a18, 06680
INPUT_3 Hex Code, Decimal Code	0x1a7c, 06780
INPUT_4 Hex Code, Decimal Code	0x1ae0, 06880
INPUT_5 Hex Code, Decimal Code	0x1b44, 06980
INPUT_6 Hex Code, Decimal Code	0x1ba8, 07080
INPUT_7 Hex Code, Decimal Code	0x1c0c, 07180
INPUT_8 Hex Code, Decimal Code	0x1c70, 07280
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CLEAR_CRC_C_ERRORS

Description	Clear all CRC-C errors (chrominance channel) on input/link 2
INPUT_1 Hex Code, Decimal Code	0x19b5, 06581
INPUT_2 Hex Code, Decimal Code	0x1a19, 06681
INPUT_3 Hex Code, Decimal Code	0x1a7d, 06781
INPUT_4 Hex Code, Decimal Code	0x1ae1, 06881
INPUT_5 Hex Code, Decimal Code	0x1b45, 06981
INPUT_6 Hex Code, Decimal Code	0x1ba9, 07081
INPUT_7 Hex Code, Decimal Code	0x1c0d, 07181
INPUT_8 Hex Code, Decimal Code	0x1c71, 07281
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CLEAR_CRC_Y_ERRORS

Description	Clear all CRC-Y/EDH-AP errors (luminance channel / active picture) on input/link 2
INPUT_1 Hex Code, Decimal Code	0x19b6, 06582
INPUT_2 Hex Code, Decimal Code	0x1a1a, 06682
INPUT_3 Hex Code, Decimal Code	0x1a7e, 06782
INPUT_4 Hex Code, Decimal Code	0x1ae2, 06882
INPUT_5 Hex Code, Decimal Code	0x1b46, 06982
INPUT_6 Hex Code, Decimal Code	0x1baa, 07082
INPUT_7 Hex Code, Decimal Code	0x1c0e, 07182
INPUT_8 Hex Code, Decimal Code	0x1c72, 07282
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CLEAR_FRAMER_ERRORS

Description	Clear all Framer errors on input/link 2
INPUT_1 Hex Code, Decimal Code	0x19b7, 06583
INPUT_2 Hex Code, Decimal Code	0x1a1b, 06683
INPUT_3 Hex Code, Decimal Code	0x1a7f, 06783
INPUT_4 Hex Code, Decimal Code	0x1ae3, 06883
INPUT_5 Hex Code, Decimal Code	0x1b47, 06983
INPUT_6 Hex Code, Decimal Code	0x1bab, 07083
INPUT_7 Hex Code, Decimal Code	0x1c0f, 07183
INPUT_8 Hex Code, Decimal Code	0x1c73, 07283
Valid Command Types	MSG_SET_VALUE
Values	1 = clear

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CRC_C_ERROR_RATE

Description	Displays the Chroma stream error rate in errors/s on input/link 2
INPUT_1 Hex Code, Decimal Code	0x19b8, 06584
INPUT_2 Hex Code, Decimal Code	0x1a1c, 06684
INPUT_3 Hex Code, Decimal Code	0x1a80, 06784
INPUT_4 Hex Code, Decimal Code	0x1ae4, 06884
INPUT_5 Hex Code, Decimal Code	0x1b48, 06984
INPUT_6 Hex Code, Decimal Code	0x1bac, 07084
INPUT_7 Hex Code, Decimal Code	0x1c10, 07184
INPUT_8 Hex Code, Decimal Code	0x1c74, 07284
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CRC_C_ERROR_SECS

Description	Displays the time that the Chroma stream checksum has been correct in hours, minutes and seconds.
INPUT_1 Hex Code, Decimal Code	0x19b9, 06585
INPUT_2 Hex Code, Decimal Code	0x1a1d, 06685
INPUT_3 Hex Code, Decimal Code	0x1a81, 06785
INPUT_4 Hex Code, Decimal Code	0x1ae5, 06885
INPUT_5 Hex Code, Decimal Code	0x1b49, 06985
INPUT_6 Hex Code, Decimal Code	0x1bad, 07085
INPUT_7 Hex Code, Decimal Code	0x1c11, 07185
INPUT_8 Hex Code, Decimal Code	0x1c75, 07285
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CRC_C_ERROR_TITLE

Description	Displays the titles for error counts for inputs 1-8 Y/C shows if EDH or CRC values displayed.
INPUT_1 Hex Code, Decimal Code	0x19ba, 06586
INPUT_2 Hex Code, Decimal Code	0x1a1e, 06686
INPUT_3 Hex Code, Decimal Code	0x1a82, 06786
INPUT_4 Hex Code, Decimal Code	0x1ae6, 06886
INPUT_5 Hex Code, Decimal Code	0x1b4a, 06986
INPUT_6 Hex Code, Decimal Code	0x1bae, 07086
INPUT_7 Hex Code, Decimal Code	0x1c12, 07186
INPUT_8 Hex Code, Decimal Code	0x1c76, 07286
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CRC_C_ERRORS

Description	Displays the value of Chroma stream CRC errors.
INPUT_1 Hex Code, Decimal Code	0x19bb, 06587
INPUT_2 Hex Code, Decimal Code	0x1a1f, 06687
INPUT_3 Hex Code, Decimal Code	0x1a83, 0678
INPUT_4 Hex Code, Decimal Code	0x1ae7, 06887
INPUT_5 Hex Code, Decimal Code	0x1b4b, 06987
INPUT_6 Hex Code, Decimal Code	0x1baf, 07087
INPUT_7 Hex Code, Decimal Code	0x1c13, 07187
INPUT_8 Hex Code, Decimal Code	0x1c77, 07287
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CRC_Y_ERROR_RATE

Description	Displays the Luminance stream error rate in errors/s on input/link 2
INPUT_1 Hex Code, Decimal Code	0x19bc, 06588
INPUT_2 Hex Code, Decimal Code	0x1a20, 06688
INPUT_3 Hex Code, Decimal Code	0x1a84, 06788
INPUT_4 Hex Code, Decimal Code	0x1ae8, 06888
INPUT_5 Hex Code, Decimal Code	0x1b4c, 06988
INPUT_6 Hex Code, Decimal Code	0x1bb0, 07088
INPUT_7 Hex Code, Decimal Code	0x1c14, 07188
INPUT_8 Hex Code, Decimal Code	0x1c78, 07288
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CRC_Y_ERROR_SECS

Description	Displays the time that the Luminance stream checksum has been correct in hours, minutes and seconds.
INPUT_1 Hex Code, Decimal Code	0x19bd, 06589
INPUT_2 Hex Code, Decimal Code	0x1a21, 06689
INPUT_3 Hex Code, Decimal Code	0x1a85, 06789
INPUT_4 Hex Code, Decimal Code	0x1ae9, 06889
INPUT_5 Hex Code, Decimal Code	0x1b4d, 06989
INPUT_6 Hex Code, Decimal Code	0x1bb1, 07089
INPUT_7 Hex Code, Decimal Code	0x1c15, 07189
INPUT_8 Hex Code, Decimal Code	0x1c79, 07289
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CRC_Y_ERROR_TITLE

Description	Displays the titles for error counts for inputs 1-8 Y/C shows if EDH or CRC values displayed.
INPUT_1 Hex Code, Decimal Code	0x19be, 06590
INPUT_2 Hex Code, Decimal Code	0x1a22, 06690
INPUT_3 Hex Code, Decimal Code	0x1a86, 06790
INPUT_4 Hex Code, Decimal Code	0x1aea, 06890
INPUT_5 Hex Code, Decimal Code	0x1b4e, 06990
INPUT_6 Hex Code, Decimal Code	0x1bb2, 07090
INPUT_7 Hex Code, Decimal Code	0x1c16, 07190
INPUT_8 Hex Code, Decimal Code	0x1c7a, 07290
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_CRC_Y_ERRORS

Description	Displays the value of Luminance stream CRC errors.
INPUT_1 Hex Code, Decimal Code	0x19bf, 06591
INPUT_2 Hex Code, Decimal Code	0x1a23, 06691
INPUT_3 Hex Code, Decimal Code	0x1a87, 06791
INPUT_4 Hex Code, Decimal Code	0x1aeb, 06891
INPUT_5 Hex Code, Decimal Code	0x1b4f, 06991
INPUT_6 Hex Code, Decimal Code	0x1bb3, 07091
INPUT_7 Hex Code, Decimal Code	0x1c17, 07191
INPUT_8 Hex Code, Decimal Code	0x1c7b, 07291
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_ERROR_TITLE

Description	Displays the titles for error counts for inputs 1-8 Y/C shows if EDH or CRC values displayed.
INPUT_1 Hex Code, Decimal Code	0x19c0, 06592
INPUT_2 Hex Code, Decimal Code	0x1a24, 06692
INPUT_3 Hex Code, Decimal Code	0x1a88, 06792
INPUT_4 Hex Code, Decimal Code	0x1aec, 06892
INPUT_5 Hex Code, Decimal Code	0x1b50, 06992
INPUT_6 Hex Code, Decimal Code	0x1bb4, 07092
INPUT_7 Hex Code, Decimal Code	0x1c18, 07192
INPUT_8 Hex Code, Decimal Code	0x1c7c, 07292
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_LINK_2_FRAMER_ERRORS

Description	Displays the value of re-framer errors indicating the number of times an input has been re-synchronised.
INPUT_1 Hex Code, Decimal Code	0x19c1, 06593
INPUT_2 Hex Code, Decimal Code	0x1a25, 06693
INPUT_3 Hex Code, Decimal Code	0x1a89, 06793
INPUT_4 Hex Code, Decimal Code	0x1aed, 06893
INPUT_5 Hex Code, Decimal Code	0x1b51, 06993
INPUT_6 Hex Code, Decimal Code	0x1bb5, 07093
INPUT_7 Hex Code, Decimal Code	0x1c19, 07193
INPUT_8 Hex Code, Decimal Code	0x1c7d, 07293
Valid Command Types	MSG_GET_VALUE

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

SMPTE 352 Payload Information (Rx Only)

COM_INPUT_1_PAYLOAD_1_LINE_1

Description	Displays the SMPTE 352 Payload ID information on Line 1 on the selected Rx analyser module input.
INPUT_1 Hex Code, Decimal Code	0x19c2, 06594
INPUT_2 Hex Code, Decimal Code	0x1a26, 06694
INPUT_3 Hex Code, Decimal Code	0x1a8a, 06794
INPUT_4 Hex Code, Decimal Code	0x1aee, 06894
INPUT_5 Hex Code, Decimal Code	0x1b52, 06994
INPUT_6 Hex Code, Decimal Code	0x1bb6, 07094
INPUT_7 Hex Code, Decimal Code	0x1c1a, 07194
INPUT_8 Hex Code, Decimal Code	0x1c7e, 07294
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_PAYLOAD_1_LINE_2

Description	Displays the SMPTE 352 Payload ID information on Line 2 on the selected Rx analyser module input.
INPUT_1 Hex Code, Decimal Code	0x19c3, 06595
INPUT_2 Hex Code, Decimal Code	0x1a27, 06695
INPUT_3 Hex Code, Decimal Code	0x1a8b, 06795
INPUT_4 Hex Code, Decimal Code	0x1aef, 06895
INPUT_5 Hex Code, Decimal Code	0x1b53, 06995
INPUT_6 Hex Code, Decimal Code	0x1bb7, 07095
INPUT_7 Hex Code, Decimal Code	0x1c1b, 07195
INPUT_8 Hex Code, Decimal Code	0x1c7f, 07295
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_PAYLOAD_2_LINE_1

Description	Displays the SMPTE 352 Payload ID information on Line 1 on the selected Rx analyser module input.
INPUT_1 Hex Code, Decimal Code	0x19c4, 06596
INPUT_2 Hex Code, Decimal Code	0x1a28, 06696
INPUT_3 Hex Code, Decimal Code	0x1a8c, 06796
INPUT_4 Hex Code, Decimal Code	0x1af0, 06896
INPUT_5 Hex Code, Decimal Code	0x1b54, 06996
INPUT_6 Hex Code, Decimal Code	0x1bb8, 07096
INPUT_7 Hex Code, Decimal Code	0x1c1c, 07196
INPUT_8 Hex Code, Decimal Code	0x1c80, 07296
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_INPUT_1_PAYLOAD_2_LINE_2

Description	Displays the SMPTE 352 Payload ID information on Line 2 on the selected Rx analyser module input.
INPUT_1 Hex Code, Decimal Code	0x19c5, 06597
INPUT_2 Hex Code, Decimal Code	0x1a29, 06697
INPUT_3 Hex Code, Decimal Code	0x1a8d, 06797
INPUT_4 Hex Code, Decimal Code	0x1af1, 06897
INPUT_5 Hex Code, Decimal Code	0x1b55, 06997
INPUT_6 Hex Code, Decimal Code	0x1bb9, 07097
INPUT_7 Hex Code, Decimal Code	0x1c1d, 07197
INPUT_8 Hex Code, Decimal Code	0x1c81, 07297
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

COM_STATUS_PAYLOAD_1_LINE_1

Description	Displays the SMPTE 352 Payload ID information on Line 1 of the Sx SDI input
STATUS Hex Code, Decimal Code	0x024e, 00590
Valid Command Types	MSG_GET_TEXT

COM_STATUS_PAYLOAD_1_LINE_2

Description	Displays the SMPTE 352 Payload ID information on Line 2 of the Sx SDI input
STATUS Hex Code, Decimal Code	0x024f, 00591
Valid Command Types	MSG_GET_TEXT

COM_STATUS_PAYLOAD_2_LINE_1

Description	Displays the SMPTE 352 Payload ID information on Line 1 of the Sx SDI input
STATUS Hex Code, Decimal Code	0x0251, 00593
Valid Command Types	MSG_GET_TEXT

COM_STATUS_PAYLOAD_2_LINE_2

Description	Displays the SMPTE 352 Payload ID information on Line 2 of the SX SDI input
STATUS Hex Code, Decimal Code	0x0252, 00594
Valid Command Types	MSG_GET_TEXT

Running Time Information (Rx Only)

COM_INPUT_1_RUNNING_TIME

Description	Displays the Length of time since last Error count reset.
INPUT_1 Hex Code, Decimal Code	0x19c6, 06598
INPUT_2 Hex Code, Decimal Code	0x1a2a, 06698
INPUT_3 Hex Code, Decimal Code	0x1a8e, 06798
INPUT_4 Hex Code, Decimal Code	0x1af2, 06898
INPUT_5 Hex Code, Decimal Code	0x1b56, 06998
INPUT_6 Hex Code, Decimal Code	0x1bba, 07098
INPUT_7 Hex Code, Decimal Code	0x1c1e, 07198
INPUT_8 Hex Code, Decimal Code	0x1c82, 07298
Valid Command Types	MSG_GET_TEXT

Where INPUT_1 = Analyser 1 SDI A, INPUT_2 = Analyser 1 SDI B, INPUT_3 = Analyser 2 SDI A, INPUT_4 = Analyser 2 SDI B, etc

Rx Module Slot Input / Output Information

COM_SLOT_2_ERROR_1

Description	Displays the input or output error status of Rx HDMI output menu first channel of the module slot.
SLOT_1 Hex Code, Decimal Code	??
SLOT_2 Hex Code, Decimal Code	0x0a8f 02703
SLOT_3 Hex Code, Decimal Code	0x0a91 02705
SLOT_4 Hex Code, Decimal Code	0x0a93 02707
Valid Command Types	MSG_GET_TEXT

COM_SLOT_1_ERROR_2

Description	Displays the input or output error status of Rx HDMI output menu second channel of the module slot.
SLOT_1 Hex Code, Decimal Code	0x0a8e, 02702
SLOT_2 Hex Code, Decimal Code	0x0a90, 02704
SLOT_3 Hex Code, Decimal Code	0x0a92, 02706
SLOT_4 Hex Code, Decimal Code	0x0a94, 02708
Valid Command Types	MSG_GET_TEXT

COM_SLOT_1_INFO_1

Description	Displays the input or output video format of Rx HDMI output menu for the first channel of the module slot.
SLOT_1 Hex Code, Decimal Code	0x0a99, 02713
SLOT_2 Hex Code, Decimal Code	0x0a9b, 02715
SLOT_3 Hex Code, Decimal Code	0x0a9d, 02717
SLOT_4 Hex Code, Decimal Code	0x0a9f, 02719
Valid Command Types	MSG_GET_TEXT

COM_SLOT_1_INFO_1_TITLE

Description	Displays the input or output name of Rx HDMI output menu or the first channel of the module slot..
SLOT_1 Hex Code, Decimal Code	0x0aa1, 02721
SLOT_2 Hex Code, Decimal Code	0x0aa4, 02724
SLOT_3 Hex Code, Decimal Code	0x0aa5, 02725
SLOT_4 Hex Code, Decimal Code	0x0aa7, 02727
Valid Command Types	MSG_GET_TEXT

COM_SLOT_1_INFO_2

Description	Displays the input or output video format of Rx HDMI output menu or the second channel of the module slot..
SLOT_1 Hex Code, Decimal Code	0x0a9a, 02714
SLOT_2 Hex Code, Decimal Code	0x0a9c, 02716
SLOT_3 Hex Code, Decimal Code	0x0a9e, 02718
SLOT_4 Hex Code, Decimal Code	0x0aa0, 02720
Valid Command Types	MSG_GET_TEXT

COM_SLOT_1_INFO_2_TITLE

Description	Displays the input or output name of Rx HDMI output menu or the second channel of the module slot..
SLOT_1 Hex Code, Decimal Code	0x0aa2, 02722
SLOT_2 Hex Code, Decimal Code	0x0aa3, 02723
SLOT_3 Hex Code, Decimal Code	0x0aa6, 02726
SLOT_4 Hex Code, Decimal Code	0x0aa8, 02728
Valid Command Types	MSG_GET_TEXT

Input Video Controls

Display Controls

COM_ANLYS_ACTIVE_PICTURE_ONLY

Description	Don't display ancillary data in blanking areas on waveform and picture
ANLYS Hex Code, Decimal Code	0x024a, 00586
ANLYS_2 Hex Code, Decimal Code	0x1f40, 08000
ANLYS_3 Hex Code, Decimal Code	0x1fa4, 08100
ANLYS_4 Hex Code, Decimal Code	0x2008, 08200
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = all data, 1 = active picture only

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ALL_LINES

Description	Select single or all lines on waveform and picture
ANLYS Hex Code, Decimal Code	0x0241, 00577
ANLYS_2 Hex Code, Decimal Code	0x1f41, 08001
ANLYS_3 Hex Code, Decimal Code	0x1fa5, 08101
ANLYS_4 Hex Code, Decimal Code	0x2009, 08201
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = selected line, 1 = all lines

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_FIELD

Description	Select field 1 or field 2 on waveform and picture for interlaced material
ANLYS Hex Code, Decimal Code	0x023e, 00574
ANLYS_2 Hex Code, Decimal Code	0x1f6c, 08044
ANLYS_3 Hex Code, Decimal Code	0x1fd0, 08144
ANLYS_4 Hex Code, Decimal Code	0x2034, 08244
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = field 1, 1 = field 2

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_LINE

Description	Select individual line to be displayed on waveform, vectorscope and data view
ANLYS Hex Code, Decimal Code	0x023f 00575
ANLYS_2 Hex Code, Decimal Code	0x1f70 08048
ANLYS_3 Hex Code, Decimal Code	0x1fd4 08148
ANLYS_4 Hex Code, Decimal Code	0x2038 08248
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -9999 Max = 9999 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_PICT_BLUE

Description	Only display blue component of picture.
ANLYS Hex Code, Decimal Code	0x024b, 00587
ANLYS_2 Hex Code, Decimal Code	0x1f74, 08052
ANLYS_3 Hex Code, Decimal Code	0x1fd8, 08152
ANLYS_4 Hex Code, Decimal Code	0x203c, 08252
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal picture, 1 = blue picture

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_PICT_CURSOR

Description	Display cursor on picture.
ANLYS Hex Code, Decimal Code	0x0245, 00581
ANLYS_2 Hex Code, Decimal Code	0x1f75, 08053
ANLYS_3 Hex Code, Decimal Code	0x1fd9, 08153
ANLYS_4 Hex Code, Decimal Code	0x203d, 08253
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = cursor off, 1 = cursor on

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_PICT_ZOOM

Description	Select zoom (1:1) mode for picture view
ANLYS Hex Code, Decimal Code	0x0243, 00579
ANLYS_2 Hex Code, Decimal Code	0x1f76, 08054
ANLYS_3 Hex Code, Decimal Code	0x1fda, 08154
ANLYS_4 Hex Code, Decimal Code	0x203e, 08254
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = zoom off, 1 = zoom on

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_REF_STD

Description	Shows the current system locking reference standard as a string
ANLYS Hex Code, Decimal Code	0x0234, 00564
Valid Command Types	MSG_GET_TEXT

COM_ANLYS_SAMPLE

Description	Select individual sample for cursor, waveform, vectorscope and data view.
ANLYS Hex Code, Decimal Code	0x0240, 00576
ANLYS_2 Hex Code, Decimal Code	0x1f77, 08055
ANLYS_3 Hex Code, Decimal Code	0x1fdb, 08155
ANLYS_4 Hex Code, Decimal Code	0x203f, 08255
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -9999 Max = 9999 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_SD_ASPECT_RATIO

Description	Set the aspect ratio of pciture monitor when viewing an SD signal
ANLYS Hex Code, Decimal Code	0x0249, 00585
ANLYS_2 Hex Code, Decimal Code	0x1f78, 08056
ANLYS_3 Hex Code, Decimal Code	0x1fdc, 08156
ANLYS_4 Hex Code, Decimal Code	0x2040, 08256
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	1 = 4:3 , 2 = 16:9

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

Sx Timing Measurement commands

COM_ANLYS_TIMING_DIFF

Description	Get the numeric difference between the graphical timing bars for input1/2
Hex Code, Decimal Code	0x0307 00775
Valid Command Types	MSG_GET_VALUE
Values	Min = -200 Max = 200 Divisor = 1

COM_ANLYS_TIMING_IN1

Description	Get the numeric of the graphical timing bars for input1
Hex Code, Decimal Code	0x0302 00770
Valid Command Types	MSG_GET_VALUE
Values	Min = -200 Max = 200 Divisor = 1

COM_ANLYS_TIMING_IN2

Description	Get the numeric of the graphical timing bars for input2
Hex Code, Decimal Code	0x0303 00771
Valid Command Types	MSG_GET_VALUE
Values	Min = -200 Max = 200 Divisor = 1

COM_ANLYS_TIMING_LINES_DIFF

Description	Get the numeric difference between the graphical timing bars for input1/2 in lines
Hex Code, Decimal Code	0x0304 00772
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

COM_ANLYS_TIMING_LINES_IN1

Description	Get the numeric difference between input 1 and external reference in lines.
Hex Code, Decimal Code	0x030d, 00781
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

COM_ANLYS_TIMING_LINES_IN2

Description	Get the numeric difference between input 2 and external reference in lines.
Hex Code, Decimal Code	0x030e, 00782
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

COM_ANLYS_TIMING_OFFSET_FROM_IN1

Description	Sets offset value from input 1 timing values
Hex Code, Decimal Code	0x0308, 00776
Valid Command Types	MSG_SET_VALUE
Values	1 = set value

COM_ANLYS_TIMING_OFFSET_FROM_IN2

Description	Sets offset value from input 2 timing values
Hex Code, Decimal Code	0x0309, 00777
Valid Command Types	MSG_SET_VALUE
Values	1 = set value

COM_ANLYS_TIMING_OFFSET_US

Description	Gets the Sample offset value used for all input timing calculations in microseconds
Hex Code, Decimal Code	0x030c, 00780
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 10

COM_ANLYS_TIMING_US_DIFF

Description	Gets the line timing difference between input 1/2 in microseconds
Hex Code, Decimal Code	0x0310, 00784
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1000

COM_ANLYS_TIMING_PIX_IN1

Description	Gets the timing difference between input 1 and external reference in samples
Hex Code, Decimal Code	0x0311, 00785
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

COM_ANLYS_TIMING_PIX_IN2

Description	Gets the timing difference between input 2 and external reference in samples
Hex Code, Decimal Code	0x0314, 00788
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

COM_ANLYS_TIMING_US_IN1

Description	Gets the line timing difference between input 1 and external reference in microseconds
Hex Code, Decimal Code	0x0313, 00787
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1000

COM_ANLYS_TIMING_US_IN2

Description	Gets the line timing difference between input 2 and external reference in microseconds
Hex Code, Decimal Code	0x0316, 00790
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1000

COM_ANLYS_TIMING_PIX_DIFF

Description	Gets the timing difference between input 1/2 in pixels.
Hex Code, Decimal Code	0x0318, 00792
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

Vectorscope Controls

COM_ANLYS_VECTOR_100_75

Description	Sets the vectorscope scale to 75%/100%
ANLYS Hex Code, Decimal Code	0x01b8, 00440
ANLYS_2 Hex Code, Decimal Code	0x1f79, 08057
ANLYS_3 Hex Code, Decimal Code	0x1fdd, 08157
ANLYS_4 Hex Code, Decimal Code	0x2041, 08257
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = 100%, 1 = 75%

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_VECTOR_SCOPE

Description	Gets details of the vectorscope display currently in use
ANLYS Hex Code, Decimal Code	0x01b9, 00441
ANLYS_2 Hex Code, Decimal Code	0x1f7a, 08058
ANLYS_3 Hex Code, Decimal Code	0x1fde, 08158
ANLYS_4 Hex Code, Decimal Code	0x2042, 08258
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_VECTORSCOPE_POS

Description	Sets which part of vectorscope displayed if in zoom mode
ANLYS Hex Code, Decimal Code	0x01ba, 00442
ANLYS_2 Hex Code, Decimal Code	0x1f7b 08059
ANLYS_3 Hex Code, Decimal Code	0x1fdf 08159
ANLYS_4 Hex Code, Decimal Code	0x2043 08259
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	0 = Center 1 = Cyan 2 = Yellow 3 = Green 4 = Magenta 5 = Red 6 = Blue

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_VECTORSCOPE_ZOOM

Description	Sets Vectorscope zoom mode
ANLYS Hex Code, Decimal Code	0x01bb, 00443
ANLYS_2 Hex Code, Decimal Code	0x1f7c, 08060
ANLYS_3 Hex Code, Decimal Code	0x1fe0, 08160
ANLYS_4 Hex Code, Decimal Code	0x2044, 08260
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	0 = zoom off 1 = x2 2 = x5 3 = x10

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

Waveform Monitor Controls

COM_ANLYS_WFM_CBCR_CURSOR_1

Description	Used to store/set Waveform monitor cb-cr amplitude cursor 1 value.
ANLYS Hex Code, Decimal Code	0x02b3, 00691
ANLYS_2 Hex Code, Decimal Code	0x1df1, 07665
ANLYS_3 Hex Code, Decimal Code	0x1df2, 07666
ANLYS_4 Hex Code, Decimal Code	0x1df3, 07667
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 1023 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CBCR_CURSOR_2

Description	Used to store/set Waveform monitor cb-cr amplitude cursor 2 value.
ANLYS Hex Code, Decimal Code	0x02b4, 00692
ANLYS_2 Hex Code, Decimal Code	0x1df4, 07668
ANLYS_3 Hex Code, Decimal Code	0x1df5, 07669
ANLYS_4 Hex Code, Decimal Code	0x1df6, 07670
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 1023 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CURSOR_1

Description	Sets the waveform monitor horizontal cursor 1 position
ANLYS Hex Code, Decimal Code	0x01c7, 00455
ANLYS_2 Hex Code, Decimal Code	0x1e0f, 07695
ANLYS_3 Hex Code, Decimal Code	0x1e10, 07696
ANLYS_4 Hex Code, Decimal Code	0x1e11, 07697
Valid Command Types	MSG_SET_VALUE
Values	Min = 0 Max = 1023 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CURSOR_1_VALUE

Description	Gets the waveform monitor horizontal cursor 1 position
ANLYS Hex Code, Decimal Code	0x02ae, 00686
ANLYS_2 Hex Code, Decimal Code	0x1de2, 07650
ANLYS_3 Hex Code, Decimal Code	0x1de3, 07651
ANLYS_4 Hex Code, Decimal Code	0x1de4, 07652
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CURSOR_2

Description	Sets the waveform monitor horizontal cursor 2 position
ANLYS Hex Code, Decimal Code	0x01d5, 00469
ANLYS_2 Hex Code, Decimal Code	0x1e12, 07698
ANLYS_3 Hex Code, Decimal Code	0x1e13, 07699
ANLYS_4 Hex Code, Decimal Code	0x1e14, 07700
Valid Command Types	MSG_SET_VALUE
Values	Min = 0 Max = 1023 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CURSOR_2_VALUE

Description	Gets the waveform monitor horizontal cursor 2 position
ANLYS Hex Code, Decimal Code	0x02af, 00687
ANLYS_2 Hex Code, Decimal Code	0x1de5, 07653
ANLYS_3 Hex Code, Decimal Code	0x1de6, 07654
ANLYS_4 Hex Code, Decimal Code	0x1de7, 07655
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CURSOR_12_DIFF

Description	Gets the difference between cursor 1 and 2
ANLYS Hex Code, Decimal Code	0x02b0, 00688
ANLYS_2 Hex Code, Decimal Code	0x1de8, 07656
ANLYS_3 Hex Code, Decimal Code	0x1de9, 07657
ANLYS_4 Hex Code, Decimal Code	0x1dea, 07658
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CURSOR_DIR

Description	Sets the waveform cursor mode
ANLYS Hex Code, Decimal Code	0x01bc, 00444
ANLYS_2 Hex Code, Decimal Code	0x1f7d, 08061
ANLYS_3 Hex Code, Decimal Code	0x1fe1, 08161
ANLYS_4 Hex Code, Decimal Code	0x2045, 08261
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = cursors off 1 = Picture cursors 2 = Amplitude cursors 3 = Time cursors 4 = Both Amplitude and Time cursors

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CURSOR_DIR_BUTTON

Description	Used to toggle between the waveform cursor modes
ANLYS Hex Code, Decimal Code	0x01bd, 00445
ANLYS_2 Hex Code, Decimal Code	0x1e24, 07716
ANLYS_3 Hex Code, Decimal Code	0x1e25, 07717
ANLYS_4 Hex Code, Decimal Code	0x1e26, 07718
Valid Command Types	MSG_SET_VALUE
Values	0 = reset toggle, 1 = toggle

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CURSOR_X_100

Description	Set the cursor movement to x100
ANLYS Hex Code, Decimal Code	0x01c4,00452
ANLYS_2 Hex Code, Decimal Code	0x1e18, 07704
ANLYS_3 Hex Code, Decimal Code	0x1e19, 07705
ANLYS_4 Hex Code, Decimal Code	0x1e1a, 07706
Valid Command Types	MSG_SET_VALUE
Values	0 = normal, 1 = x 100

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_CURSOR_X_10

Description	Set the cursor movement to x10
ANLYS Hex Code, Decimal Code	
ANLYS_2 Hex Code, Decimal Code	0x1e15, 07701
ANLYS_3 Hex Code, Decimal Code	0x1e16, 07702
ANLYS_4 Hex Code, Decimal Code	0x1e17, 07703
Valid Command Types	MSG_SET_VALUE
Values	0 = normal, 1 = x 10

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_H_CURSOR_SEL

Description	Select the waveform left / right cursor
ANLYS Hex Code, Decimal Code	0x01c0, 00448
ANLYS_2 Hex Code, Decimal Code	0x1e09, 07689
ANLYS_3 Hex Code, Decimal Code	0x1e0a, 07690
ANLYS_4 Hex Code, Decimal Code	0x1e0b, 07691
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = left cursor, 1 = right cursor

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_H_CURSOR_SEL_BUTTON

Description	Used to toggle between the waveform left and right cursors.
ANLYS Hex Code, Decimal Code	0x01c1, 00449
ANLYS_2 Hex Code, Decimal Code	0x1e1b, 07707
ANLYS_3 Hex Code, Decimal Code	0x1e1c, 07708
ANLYS_4 Hex Code, Decimal Code	0x1e1d, 07709
Valid Command Types	MSG_SET_VALUE
Values	0 = reset toggle, 1 = toggle

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_H_MAG

Description	Change waveform monitor horizontal magnification
ANLYS Hex Code, Decimal Code	0x01c6, 00454
ANLYS_2 Hex Code, Decimal Code	0x1f7e, 08062
ANLYS_3 Hex Code, Decimal Code	0x1fe2, 08162
ANLYS_4 Hex Code, Decimal Code	0x2046, 08262
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal, 1 = x2, 2 = x5

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_LUMA_CURSOR_1

Description	Used to store/set Waveform monitor luminance amplitude cursor 1 value.
ANLYS Hex Code, Decimal Code	0x02b1, 00689
ANLYS_2 Hex Code, Decimal Code	0x1deb, 07659
ANLYS_3 Hex Code, Decimal Code	0x1dec, 07660
ANLYS_4 Hex Code, Decimal Code	0x1ded, 07661
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 1023 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_LUMA_CURSOR_2

Description	Used to store/set Waveform monitor luminance amplitude cursor 2 value.
ANLYS Hex Code, Decimal Code	0x02b2, 00690
ANLYS_2 Hex Code, Decimal Code	0x1dee, 07662
ANLYS_3 Hex Code, Decimal Code	0x1def, 07663
ANLYS_4 Hex Code, Decimal Code	0x1df0, 07664
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 1023 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_MODE

Description	Set waveform monitor mode
ANLYS Hex Code, Decimal Code	0x01cb, 00459
ANLYS_2 Hex Code, Decimal Code	0x1f80, 08064
ANLYS_3 Hex Code, Decimal Code	0x1fe4, 08164
ANLYS_4 Hex Code, Decimal Code	0x2048, 08264
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = YCbCr 1 = Y 2 = Cb 3 = Cr 4 = GBR 5 = Red 6 = Green 7 = Blue 8 = RGB

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_SETUP

Description	Show Sx waveform monitor setup dialogue.
Hex Code, Decimal Code	0x01ce 00462
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = display dialogue

COM_ANLYS_WFM_TIMING_CURSOR_1

Description	Used to store/set the waveform timing cursor 1.
ANLYS Hex Code, Decimal Code	0x02b5, 00693
ANLYS_2 Hex Code, Decimal Code	0x1df7, 07671
ANLYS_3 Hex Code, Decimal Code	0x1df8, 07672
ANLYS_4 Hex Code, Decimal Code	0x1df9, 07673
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -5000 Max = 5000 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_TIMING_CURSOR_2

Description	Used to store/set the waveform timing cursor 2.
ANLYS Hex Code, Decimal Code	0x02b6, 00694
ANLYS_2 Hex Code, Decimal Code	0x1dfa, 07674
ANLYS_3 Hex Code, Decimal Code	0x1dfb, 07675
ANLYS_4 Hex Code, Decimal Code	0x1dfc, 07676
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -5000 Max = 5000 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_V_CURSOR_SEL

Description	Used to store/set the waveform amplitude cursors
ANLYS Hex Code, Decimal Code	0x01d0, 00464
ANLYS_2 Hex Code, Decimal Code	0x1e0c, 07692
ANLYS_3 Hex Code, Decimal Code	0x1e0d, 07693
ANLYS_4 Hex Code, Decimal Code	0x1e0e ,07694
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = none, 1 = cursor 1 (C), 2 = cursor 2 (D)

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_V_CURSOR_SEL_BUTTON

Description	Used to toggle between the waveform amplitude cursors.
ANLYS Hex Code, Decimal Code	0x01d1, 00465
ANLYS_2 Hex Code, Decimal Code	0x1e1e, 07710
ANLYS_3 Hex Code, Decimal Code	0x1e1f, 07711
ANLYS_4 Hex Code, Decimal Code	0x1e20, 07712
Valid Command Types	MSG_SET_VALUE
Values	0 = reset toggle, 1 = toggle

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_V_MAG

Description	Change waveform monitor vertical magnification
ANLYS Hex Code, Decimal Code	0x01d4, 00468
ANLYS_2 Hex Code, Decimal Code	0x1f82, 08066
ANLYS_3 Hex Code, Decimal Code	0x1fe6, 08166
ANLYS_4 Hex Code, Decimal Code	0x204a, 08266
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = normal, 1 = x2, 2 = x5, 3 = x10

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_WFM_V_SCALE

Description	Set Sx waveform monitor vertical scale
Hex Code, Decimal Code	0x01cd, 00461
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = %, 1 = Decimal, 2 = Hex

Eye Measurement Commands (SxE and Rx Eye modules)

COM_EYE_AMPLITUDE

Description	Eye amplitude (Inputs with Eye module only)
EYE Hex Code, Decimal Code	0x00cc, 00204
EYE_2 Hex Code, Decimal Code	0x0e9c, 03740
EYE_3 Hex Code, Decimal Code	0x0e9d, 03741
EYE_4 Hex Code, Decimal Code	0x0e9e, 03742
Valid Command Types	MSG_GET_VALUE,

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_CABLE_LENGTH

Description	Displays calculated SxE Cable Length
Hex Code, Decimal Code	0x00d1, 00209
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

COM_EYE_CABLE_TYPE

Description	Select cable type used for cable length measurement (SxE only)
Hex Code, Decimal Code	0x00bb, 00187
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	0 = Belden 8281, 1 = Belden 1505, 2 = B1694A, 3 = Belden 1855A, 4 = Canare L-5CFB, 5 = Image 1000

COM_EYE_CLEAR_WAVEFORM

Description	Used to clear Eye waveform if persistence used
EYE Hex Code, Decimal Code	0x00be, 00190
EYE_2 Hex Code, Decimal Code	0x0ec4, 03780
EYE_3 Hex Code, Decimal Code	0x0ec5, 03781
EYE_4 Hex Code, Decimal Code	0x0ec6, 03782
Valid Command Types	MSG_SET_VALUE,
Values	1 = clear

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_COLOUR

Description	Used to set eye colour
EYE Hex Code, Decimal Code	0x00d4, 00212
EYE_2 Hex Code, Decimal Code	0x0eb0, 03760
EYE_3 Hex Code, Decimal Code	0x0eb1, 03761
EYE_4 Hex Code, Decimal Code	0x0eb2, 03762
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	0 = Yellow (single bit) 1 = Green 2 = GreenHi 3 = GreenHi2 4 = Blue 5 = BlueHi 6 = BlueHi2

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_DIFF_TIME

Description	Get difference between rise and fall time in picoseconds (Inputs with Eye Option only)
EYE Hex Code, Decimal Code	0x00cb, 00203
EYE_2 Hex Code, Decimal Code	0x0ed8, 03800
EYE_3 Hex Code, Decimal Code	0x0ed9, 03801
EYE_4 Hex Code, Decimal Code	0x0eda, 03802
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_FALL_TIME

Description	Get eye fall time in picoseconds (Inputs with Eye Option only)
EYE Hex Code, Decimal Code	0x00ca, 00202
EYE_2 Hex Code, Decimal Code	0x0eec, 03820
EYE_3 Hex Code, Decimal Code	0x0eed, 03821
EYE_4 Hex Code, Decimal Code	0x0eee, 03822
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_LOCKED

Description	Displays a value greater than zero when eye display has locked to video.
EYE Hex Code, Decimal Code	0x00d3, 00211
EYE_2 Hex Code, Decimal Code	0x0fa0, 04000
EYE_3 Hex Code, Decimal Code	0x0fa1, 04001
EYE_4 Hex Code, Decimal Code	0x0fa2, 04002
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

COM_EYE_NUM_EYES

Description	Set number of eyes displayed (Inputs with Eye Option only)
EYE Hex Code, Decimal Code	0x00c1, 00193
EYE_2 Hex Code, Decimal Code	0x0fb4, 04020
EYE_3 Hex Code, Decimal Code	0x0fb5, 04021
EYE_4 Hex Code, Decimal Code	0x0fb6 ,04022
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 20 Divisor = 1

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_OVERSHOOT_BOT

Description	Eye amplitude undershoot percentage (Inputs with Eye Option only)
EYE Hex Code, Decimal Code	0x00cf, 00207
EYE_2 Hex Code, Decimal Code	0x0f78, 03960
EYE_3 Hex Code, Decimal Code	0x0f79, 03961
EYE_4 Hex Code, Decimal Code	0x0f7a, 03962
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_OVERSHOOT_TOP

Description	Eye amplitude overshoot percentage (Inputs with Eye Option only)
EYE Hex Code, Decimal Code	0x00ce, 00206
EYE_2 Hex Code, Decimal Code	0x0f8c, 03980
EYE_3 Hex Code, Decimal Code	0x0f8d, 03981
EYE_4 Hex Code, Decimal Code	0x0f8e, 03982
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_PERSISTENCE

Description	Used to set eye persistence
EYE Hex Code, Decimal Code	0x00c2, 00194
EYE_2 Hex Code, Decimal Code	0x0fc8, 04040
EYE_3 Hex Code, Decimal Code	0x0fc9, 04041
EYE_4 Hex Code, Decimal Code	0x0fca, 04042
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	0 = Infinite, 1 = 40 milliseconds

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_RISE_TIME

Description	Get eye rise time in picoseconds (Inputs with Eye Option only)
EYE Hex Code, Decimal Code	0x00cd, 00205
EYE_2 Hex Code, Decimal Code	0x0f00, 03840
EYE_3 Hex Code, Decimal Code	0x0f01, 03841
EYE_4 Hex Code, Decimal Code	0x0f02, 03842
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

COM_EYE_RUN

Description	Run/Stop the collection of Eye persistence data (SxE only)
Hex Code, Decimal Code	0x00c3, 00195
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = stop, 1 = run

COM_EYE_SETUP

Description	Displays Eye Setup menu on the SxE and Rx2000 front panel if Eye module installed
Hex Code, Decimal Code	0x00d5, 00213
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = display menu

COM_EYE_SHOW_HISTOGRAM

Description	Specify which histograms to show
EYE Hex Code, Decimal Code	0x00c4, 00196
EYE_2 Hex Code, Decimal Code	0x0f3c 03900
EYE_3 Hex Code, Decimal Code	0x0f3d 03901
EYE_4 Hex Code, Decimal Code	0x0f3e 03902
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	0 = None 1 = Amplitude 2 = Timing 3 = Both

Where EYE refers to SxE or Rx Eye analyser, EYE_2 refers to Rx Eye analyser 2, etc

Jitter Measurement Controls

COM_JITTER_1_LEVEL

Description	Gets the UI jitter value from the "Jitter 1" meter (alignment jitter by default)
JITTER_1 Hex Code, Decimal Code	0x0272, 00626
JITTER_2_1 Hex Code, Decimal Code	0x0e60, 03680
JITTER_3_1 Hex Code, Decimal Code	0x0e61, 03681
JITTER_4_1 Hex Code, Decimal Code	0x0e62, 03682
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 100

Where JITTER_1 refers to SxE or Rx Eye analyser 1, JITTER_2_1 refers to Rx Eye analyser 2, etc

COM_JITTER_1_MODE

Description	Sets the filter used by the "Jitter 1" meter (alignment jitter by default)
JITTER_1 Hex Code, Decimal Code	0x026c, 00620
JITTER_2_1 Hex Code, Decimal Code	0x0e4c, 03660
JITTER_3_1 Hex Code, Decimal Code	0x0e4d, 03661
JITTER_4_1 Hex Code, Decimal Code	0x0e4e, 03662
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = Timing 1 = Alignment 2 = 10Hz 3 = 100Hz 4 = 1kHz, 5 = 10kHz 6 = 100kHz

Where JITTER_1 refers to SxE or Rx Eye analyser 1, JITTER_2_1 refers to Rx Eye analyser 2, etc

COM_JITTER_2_LEVEL

Description	Gets the UI jitter value from the "Jitter 2" meter (alignment jitter by default)
JITTER_2 Hex Code, Decimal Code	0x0273, 00627
JITTER_2_2 Hex Code, Decimal Code	0x0e88, 03720
JITTER_3_2 Hex Code, Decimal Code	0x0e89, 03721
JITTER_4_2 Hex Code, Decimal Code	0x0e8a, 03722
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 100

Where JITTER_1 refers to SxE or Rx Eye analyser 1, JITTER_2_1 refers to Rx Eye analyser 2, etc

COM_JITTER_2_MODE

Description	Sets the filter used by the "Jitter 2" meter (alignment jitter by default)
JITTER_2 Hex Code, Decimal Code	0x026d, 00621
JITTER_2_2 Hex Code, Decimal Code	0x0e74, 03700
JITTER_3_2 Hex Code, Decimal Code	0x0e75, 03701
JITTER_4_2 Hex Code, Decimal Code	0x0e76, 03702
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = Timing 1 = Alignment 2 = 10Hz 3 = 100Hz 4 = 1kHz, 5 = 10kHz 6 = 100kHz

Where JITTER_2 refers to SxE or Rx Eye analyser 1, JITTER_2_2 refers to Rx Eye analyser 2, etc

COM_JITTER_FILTER_1_VALUE

Description	Gets currently selected filter setting for Jitter Meter 1 as text
JITTER Hex Code, Decimal Code	0x0275, 00629
JITTER_2 Hex Code, Decimal Code	0x0e24, 03620
JITTER_3 Hex Code, Decimal Code	0x0e25, 03621
JITTER_4 Hex Code, Decimal Code	0x0e26, 03622
Valid Command Types	MSG_GET_TEXT

Where JITTER refers to SxE or Rx Eye analyser 1, JITTER_2 refers to Rx Eye analyser 2, etc

COM_JITTER_FILTER_2_VALUE

Description	Gets currently selected filter setting for Jitter Meter 2 as text
JITTER Hex Code, Decimal Code	0x0277, 00631
JITTER_2 Hex Code, Decimal Code	0x0e38, 03640
JITTER_3 Hex Code, Decimal Code	0x0e39, 03641
JITTER_4 Hex Code, Decimal Code	0x0e3a, 03642
Valid Command Types	MSG_GET_TEXT

Where JITTER refers to SxE or Rx Eye analyser 1, JITTER_2 refers to Rx Eye analyser 2, etc

COM_JITTER_H_SCALE

Description	Sets the Jitter menu Horizontal scale
JITTER Hex Code, Decimal Code	0x0270, 00624
JITTER_2 Hex Code, Decimal Code	0x0dc0, 03520
JITTER_3 Hex Code, Decimal Code	0x0dc1, 03521
JITTER_4 Hex Code, Decimal Code	0x0dc2, 03522
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	1 = 2H 2 = 1V 3 = Frame

Where JITTER refers to SxE or Rx Eye analyser 1, JITTER_2 refers to Rx Eye analyser 2, etc

COM_JITTER_PERSISTENCE

Description	Used to set jitter screen persistence
JITTER Hex Code, Decimal Code	0x026e, 00622
JITTER_2 Hex Code, Decimal Code	0x0de8, 03560
JITTER_3 Hex Code, Decimal Code	0x0de9, 03561
JITTER_4 Hex Code, Decimal Code	0x0dea, 03562
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	0 = Infinite, 1 = 40 milliseconds

Where JITTER refers to SxE or Rx Eye analyser 1, JITTER_2 refers to Rx Eye analyser 2, etc

COM_JITTER_RESET

Description	Used to set jitter screen persistence
JITTER Hex Code, Decimal Code	0x027a, 00634
JITTER_2 Hex Code, Decimal Code	0x0dfc, 03580
JITTER_3 Hex Code, Decimal Code	0x0dfd, 03581
JITTER_4 Hex Code, Decimal Code	0x0dfe, 03582
Valid Command Types	MSG_SET_VALUE,
Values	1 = clear screen

Where JITTER refers to SxE or Rx Eye analyser 1, JITTER_2 refers to Rx Eye analyser 2, etc

COM_JITTER_RUN

Description	Run/Stop the collection jitter persistence data (SxE only)
Hex Code, Decimal Code	0x027b 00635
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = stop, 1 = run

Where JITTER refers to SxE or Rx Eye analyser 1, JITTER_2 refers to Rx Eye analyser 2, etc

COM_JITTER_V_SCALE

Description	Sets the Jitter menu Vertical scale
JITTER Hex Code, Decimal Code	0x0271 00625
JITTER_2 Hex Code, Decimal Code	0x0dac 03500
JITTER_3 Hex Code, Decimal Code	0x0dad 03501
JITTER_4 Hex Code, Decimal Code	0x0dae 03502
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = 0.1 UI/Division 1 = 0.2 UI/Division 2 = 0.5 UI/Division 3 = 1.0 UI/Division

Where JITTER refers to SxE or Rx Eye analyser 1, JITTER_2 refers to Rx Eye analyser 2, etc

Video Input Status

COM_STATUS_ACTIVE_PIXELS_A

Description	Displays the count of active pixels on link A of the selected input
STATUS Hex Code, Decimal Code	0x02ac, 00684
STATUS_2 Hex Code, Decimal Code	0x1968, 06504
STATUS_3 Hex Code, Decimal Code	0x1ca2, 07330
STATUS_4 Hex Code, Decimal Code	0x1d06, 07430
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS refers to the Sx analyser or Rx analyser module 1, STATUS_2 refers to Rx Eye analyser module 2, etc

COM_STATUS_ACTIVE_PIXELS_B

Description	Displays the count of active pixels on link B of the selected input
STATUS Hex Code, Decimal Code	0x02ad 00685
STATUS_2 Hex Code, Decimal Code	??
STATUS_3 Hex Code, Decimal Code	??
STATUS_4 Hex Code, Decimal Code	??
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS refers to the Sx analyser or Rx analyser module 1, STATUS_2 refers to Rx Eye analyser module 2, etc

COM_STATUS_ALL_LINES_A

Description	Displays the count of all lines on link A of the selected input
STATUS Hex Code, Decimal Code	0x02a8, 00680
STATUS_2 Hex Code, Decimal Code	0x1966, 06502
STATUS_3 Hex Code, Decimal Code	0x1ca3, 07331
STATUS_4 Hex Code, Decimal Code	0x1d07, 07431
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS refers to the Sx analyser or Rx analyser module 1, STATUS_2 refers to Rx Eye analyser module 2, etc

COM_STATUS_ALL_LINES_B

Description	Displays the count of all lines on link B of the selected input
STATUS Hex Code, Decimal Code	0x02a9, 00681
STATUS_2 Hex Code, Decimal Code	??
STATUS_3 Hex Code, Decimal Code	??
STATUS_4 Hex Code, Decimal Code	??
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS refers to the Sx analyser or Rx analyser module 1, STATUS_2 refers to Rx Eye analyser module 2, etc

COM_STATUS_ALL_PIXELS_A

Description	Displays the count of all lines on link A of the selected input
STATUS Hex Code, Decimal Code	0x02aa, 00682
STATUS_2 Hex Code, Decimal Code	0x1967, 06503
STATUS_3 Hex Code, Decimal Code	0x1ca4, 07332
STATUS_4 Hex Code, Decimal Code	0x1d08, 07432
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS refers to the Sx analyser or Rx analyser module 1, STATUS_2 refers to Rx Eye analyser module 2, etc

COM_STATUS_ALL_PIXELS_B

Description	Displays the count of all lines on link A of the selected input
STATUS Hex Code, Decimal Code	0x02ab, 00683
STATUS_2 Hex Code, Decimal Code	??
STATUS_3 Hex Code, Decimal Code	??
STATUS_4 Hex Code, Decimal Code	??
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS_1 refers to is INPUT_1, STATUS_2 refers to INPUT_2, etc

COM_STATUS_CLEAR_AES_ERRORS

Description	Clear all CRC/EDH errors on Sx analyser input
Hex Code, Decimal Code	0x0352 00850
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

COM_STATUS_CLEAR_ALL_ERRORS

Description	Clears all errors on the selected analyser input.
STATUS Hex Code, Decimal Code	0x01a9, 00425
STATUS_1 Hex Code, Decimal Code	0x0a21, 02593
STATUS_2 Hex Code, Decimal Code	0x0a5a, 02650
STATUS_3 Hex Code, Decimal Code	0x1ca5, 07333
STATUS_4 Hex Code, Decimal Code	0x1d09, 07433
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CLEAR_CRC_ANC_ERRORS

Description	Clear ANC CRC errors on Sx analyser input
Hex Code, Decimal Code	0x01aa 00426
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

COM_STATUS_CLEAR_CRC_ANC_ERRORS_B

Description	Clear ANC CRC errors on link B of the SX SDI input
STATUS Hex Code, Decimal Code	0x01b3 00435
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

COM_STATUS_CLEAR_CRC_CRCB_ERRORS

Description	Clear all CRC-CrCb/EDH-FF of the SX SDI input
STATUS Hex Code, Decimal Code	0x01ab 00427
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

COM_STATUS_CLEAR_CRC_CRCB_ERRORS_B

Description	Clear all CRC-CrCb/EDH-FF errors on link B of the SX SDI input
STATUS Hex Code, Decimal Code	0x01b4 00436
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

COM_STATUS_CLEAR_CRC_Y_ERRORS

Description	Clear all CRC-Y/EDH-AP errors on the SX SDI input
STATUS Hex Code, Decimal Code	0x01ac 00428
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

COM_STATUS_CLEAR_CRC_Y_ERRORS_B

Description	Clear all CRC-Y/EDH-AP errors on link B of the SX SDI input
STATUS Hex Code, Decimal Code	0x01b5 00437
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

COM_STATUS_FRAMER_ERRORS

Description	This indicates if SDI input framing sync lost
STATUS Hex Code, Decimal Code	0x034e, 00846
STATUS_1 Hex Code, Decimal Code	0x0a44, 02628
STATUS_2 Hex Code, Decimal Code	0x0a7c, 02684
STATUS_3 Hex Code, Decimal Code	0x1cd2, 07378
STATUS_4 Hex Code, Decimal Code	0x1d36, 07478
Valid Command Types	MSG_GET_VALUE
Values	Divisor = 1

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CLEAR_FRAMER_ERRORS_B

Description	Clear re-sync error count of the SX SDI input
STATUS Hex Code, Decimal Code	0x0351, 00849
STATUS_1 Hex Code, Decimal Code	0x0a45, 02629
STATUS_2 Hex Code, Decimal Code	0x0a7d, 02685
STATUS_3 Hex Code, Decimal Code	0x1cd3, 07379
STATUS_4 Hex Code, Decimal Code	0x1d37, 07479
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_ANC_ERROR_RATE

Description	Displays the ANC error rate in errors/s on analyser input
STATUS Hex Code, Decimal Code	0x034a 00842
STATUS_1 Hex Code, Decimal Code	0x0a22 02594
STATUS_2 Hex Code, Decimal Code	0x0a5b 02651
STATUS_3 Hex Code, Decimal Code	0x1cae 07342
STATUS_4 Hex Code, Decimal Code	0x1d12 07442
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_ANC_ERROR_RATE_B

Description	Displays the ANC error rate in errors/s on link B of the analyser input
STATUS Hex Code, Decimal Code	0x034b, 00843
STATUS_1 Hex Code, Decimal Code	0x0a23, 02595
STATUS_2 Hex Code, Decimal Code	0x0a5c, 02652
STATUS_3 Hex Code, Decimal Code	0x1caf, 07343
STATUS_4 Hex Code, Decimal Code	0x1d13, 07443
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_ANC_ERROR_SECS

Description	Displays the time that ANC stream checksum has been correct in hours, minutes and seconds.
STATUS Hex Code, Decimal Code	0x01e7, 00487
STATUS_1 Hex Code, Decimal Code	0x0a24, 02596
STATUS_2 Hex Code, Decimal Code	0x0a5d, 02653
STATUS_3 Hex Code, Decimal Code	0x1cb0, 07344
STATUS_4 Hex Code, Decimal Code	0x1d14, 07444
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_ANC_ERROR_SECS_B

Description	Displays the time that ANC stream checksum of Link B has been correct in hours, minutes and seconds.
STATUS Hex Code, Decimal Code	0x01e9, 00489
STATUS_1 Hex Code, Decimal Code	0x0a25, 02597
STATUS_2 Hex Code, Decimal Code	0x0a5e, 02654
STATUS_3 Hex Code, Decimal Code	0x1cb1, 07345
STATUS_4 Hex Code, Decimal Code	0x1d15, 07445
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_1_CRC_ANC_ERRORS

Description	Displays the value of ANC stream checksum errors
STATUS_1 Hex Code, Decimal Code	0x0a27, 02599
STATUS_2 Hex Code, Decimal Code	0x0a60, 02656
STATUS_3 Hex Code, Decimal Code	??
STATUS_4 Hex Code, Decimal Code	??
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_ANC_ERRORS_B

Description	Displays the Value of ANC stream checksum errors
STATUS Hex Code, Decimal Code	0x01af, 00431
STATUS_1 Hex Code, Decimal Code	0x0a28, 02600
STATUS_2 Hex Code, Decimal Code	0x0a61, 02657
STATUS_3 Hex Code, Decimal Code	0x1cb3, 07347
STATUS_4 Hex Code, Decimal Code	0x1d17, 07447
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_CRCB_ERROR_RATE

Description	Displays the CrCb error rate in errors/s on the analyser input
STATUS Hex Code, Decimal Code	0x0348, 00840
STATUS_1 Hex Code, Decimal Code	0x0a29, 02601
STATUS_2 Hex Code, Decimal Code	0x0a62, 02658
STATUS_3 Hex Code, Decimal Code	0x1cb4, 07348
STATUS_4 Hex Code, Decimal Code	0x1d18, 07448
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_CRCB_ERROR_RATE_B

Description	Displays the CRC-CrCb error rate in errors/s on Link B of the analyser input
STATUS Hex Code, Decimal Code	0x0349, 00841
STATUS_1 Hex Code, Decimal Code	0x0a2a, 02602
STATUS_2 Hex Code, Decimal Code	0x0a63, 02659
STATUS_3 Hex Code, Decimal Code	0x1cb5, 07349
STATUS_4 Hex Code, Decimal Code	0x1d19, 07449
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_CRCB_ERROR_SECS

Description	Displays the time that CRC-CrCb/EDH-FF stream checksum has been correct in hours, minutes and seconds.
STATUS Hex Code, Decimal Code	0x01e6, 00486
STATUS_1 Hex Code, Decimal Code	0x0a2b, 02603
STATUS_2 Hex Code, Decimal Code	0x0a64, 02660
STATUS_3 Hex Code, Decimal Code	0x1cb6, 07350
STATUS_4 Hex Code, Decimal Code	0x1d1a, 07450
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_CRCB_ERROR_SECS_B

Description	Displays the time that CRC-CrCb/EDH-FF stream checksum has been correct in hours, minutes and seconds for Link B.
STATUS Hex Code, Decimal Code	0x01ea, 00490
STATUS_1 Hex Code, Decimal Code	0x0a2c, 02604
STATUS_2 Hex Code, Decimal Code	0x0a65, 02661
STATUS_3 Hex Code, Decimal Code	0x1cb7, 07351
STATUS_4 Hex Code, Decimal Code	0x1d1b, 07451
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_CRCB_ERRORS

Description	Displays the value of EDH FFor CRC-Cr/Cb errors
STATUS Hex Code, Decimal Code	0x01a4, 00420
STATUS_1 Hex Code, Decimal Code	0x0a2d, 02605
STATUS_2 Hex Code, Decimal Code	0x0a66, 02662
STATUS_3 Hex Code, Decimal Code	0x1cb8, 07352
STATUS_4 Hex Code, Decimal Code	0x1d1c, 07452
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_CRCB_ERRORS_B

Description	Displays the value of EDH FFor CRC-Cr/Cb errors for Link B
STATUS Hex Code, Decimal Code	0x01ad, 00429
STATUS_1 Hex Code, Decimal Code	0x0a2e, 02606
STATUS_2 Hex Code, Decimal Code	0x0a67, 02663
STATUS_3 Hex Code, Decimal Code	0x1cb9, 07353
STATUS_4 Hex Code, Decimal Code	0x1d1d, 07453
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_Y_ERROR_RATE

Description	Displays the Y luminance error rate in errors/s on the analyser input
STATUS Hex Code, Decimal Code	0x034c, 00844
STATUS_1 Hex Code, Decimal Code	0x0a2f ,02607
STATUS_2 Hex Code, Decimal Code	0x0a68, 02664
STATUS_3 Hex Code, Decimal Code	0x1cba, 07354
STATUS_4 Hex Code, Decimal Code	0x1d1e 07454
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_Y_ERROR_RATE_B

Description	Displays the Y luminance error rate in errors/s on the analyser input Link B
STATUS Hex Code, Decimal Code	0x034d, 00845
STATUS_1 Hex Code, Decimal Code	0x0a30, 02608
STATUS_2 Hex Code, Decimal Code	0x0a69, 02665
STATUS_3 Hex Code, Decimal Code	0x1cbb, 07355
STATUS_4 Hex Code, Decimal Code	0x1d1f, 07455
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_Y_ERROR_SECS

Description	Displays the time that the Luminance stream checksum has been correct in hours, minutes and seconds.
STATUS Hex Code, Decimal Code	0x01e5, 00485
STATUS_1 Hex Code, Decimal Code	0x0a31, 02609
STATUS_2 Hex Code, Decimal Code	0x0a6a, 02666
STATUS_3 Hex Code, Decimal Code	0x1cbc, 07356
STATUS_4 Hex Code, Decimal Code	0x1d20, 07456
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_Y_ERROR_SECS_B

Description	Displays the time that the Luminance stream checksum has been correct in hours, minutes and seconds for Link B.
STATUS Hex Code, Decimal Code	0x01eb, 00491
STATUS_1 Hex Code, Decimal Code	0x0a32, 02610
STATUS_2 Hex Code, Decimal Code	0x0a6b, 02667
STATUS_3 Hex Code, Decimal Code	0x1cbd, 07357
STATUS_4 Hex Code, Decimal Code	0x1d21, 07457
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_Y_ERRORS

Description	Displays the EDH AP or CRC-Luma errors
STATUS Hex Code, Decimal Code	0x01a5, 00421
STATUS_1 Hex Code, Decimal Code	0x0a33, 02611
STATUS_2 Hex Code, Decimal Code	0x0a6c, 02668
STATUS_3 Hex Code, Decimal Code	0x1cbe, 07358
STATUS_4 Hex Code, Decimal Code	0x1d22, 07458
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_CRC_Y_ERRORS_B

Description	Displays the EDH AP or CRC-Luma errors for LInk B
STATUS Hex Code, Decimal Code	0x01ae, 00430
STATUS_1 Hex Code, Decimal Code	0x0a34, 02612
STATUS_2 Hex Code, Decimal Code	0x0a6d, 02669
STATUS_3 Hex Code, Decimal Code	0x1cbf, 07359
STATUS_4 Hex Code, Decimal Code	0x1d23, 07459
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_AP_CALC_FIELD_1

Description	Used to display EDH AP (Active Picture) status for field 1
STATUS Hex Code, Decimal Code	0x01d6 00470
STATUS_1 Hex Code, Decimal Code	0x0a35 02613
STATUS_2 Hex Code, Decimal Code	0x0a6e 02670
STATUS_3 Hex Code, Decimal Code	0x1cc4 07364
STATUS_4 Hex Code, Decimal Code	0x1d28 07464
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_AP_CALC_FIELD_2

Description	Used to display EDH AP (Active Picture) status for field 2
STATUS Hex Code, Decimal Code	0x01d7, 00471
STATUS_1 Hex Code, Decimal Code	0x0a36, 02614
STATUS_2 Hex Code, Decimal Code	0x0a6f, 02671
STATUS_3 Hex Code, Decimal Code	0x1cc5, 07365
STATUS_4 Hex Code, Decimal Code	0x1d29, 07465
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_AP_RX_FIELD_1

Description	Used to display EDH AP (Active Picture) status for field 1
STATUS Hex Code, Decimal Code	0x01d8, 00472
STATUS_1 Hex Code, Decimal Code	0x0a37, 02615
STATUS_2 Hex Code, Decimal Code	0x0a70, 02672
STATUS_3 Hex Code, Decimal Code	0x1cc6,07366
STATUS_4 Hex Code, Decimal Code	0x1d2a, 07466
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_AP_RX_FIELD_2

Description	Used to display EDH AP (Active Picture) status for field 2
STATUS Hex Code, Decimal Code	0x01d9, 00473
STATUS_1 Hex Code, Decimal Code	0x0a38, 02616
STATUS_2 Hex Code, Decimal Code	0x0a71, 02673
STATUS_3 Hex Code, Decimal Code	0x1cc7, 07367
STATUS_4 Hex Code, Decimal Code	0x1d2b, 07467
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_EDA_FLAGS

Description	Used to display EDH EDA (Error Detected Already) status
STATUS Hex Code, Decimal Code	0x01da, 00474
STATUS_1 Hex Code, Decimal Code	0x0a39, 02617
STATUS_2 Hex Code, Decimal Code	0x0a72, 02674
STATUS_3 Hex Code, Decimal Code	0x1cc8, 07368
STATUS_4 Hex Code, Decimal Code	0x1d2c, 07468
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_EDH_FLAGS

Description	Used to display EDH (Error Detection Handling) status
STATUS Hex Code, Decimal Code	0x01db, 00475
STATUS_1 Hex Code, Decimal Code	0x0a3a, 02618
STATUS_2 Hex Code, Decimal Code	0x0a73, 02675
STATUS_3 Hex Code, Decimal Code	0x1cc9, 07369
STATUS_4 Hex Code, Decimal Code	0x1d2d, 07469
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_FF_CALC_FIELD_1

Description	Used to display EDH FF (Full Field) status for field 1
STATUS Hex Code, Decimal Code	0x01dc, 00476
STATUS_1 Hex Code, Decimal Code	0x0a3b, 02619
STATUS_2 Hex Code, Decimal Code	0x0a74, 02676
STATUS_3 Hex Code, Decimal Code	0x1cca, 07370
STATUS_4 Hex Code, Decimal Code	0x1d2e, 07470
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_FF_CALC_FIELD_2

Description	Used to display EDH FF (Full Field) status for field 2
STATUS Hex Code, Decimal Code	0x01dd, 00477
STATUS_1 Hex Code, Decimal Code	0x0a3c, 02620
STATUS_2 Hex Code, Decimal Code	0x0a75, 02677
STATUS_3 Hex Code, Decimal Code	0x1ccb, 07371
STATUS_4 Hex Code, Decimal Code	0x1d2f, 07471
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_FF_RX_FIELD_1

Description	Used to display EDH FF (Full Field) status for field 1
STATUS Hex Code, Decimal Code	0x01de, 00478
STATUS_1 Hex Code, Decimal Code	0x0a3d, 02621
STATUS_2 Hex Code, Decimal Code	0x0a76, 02678
STATUS_3 Hex Code, Decimal Code	0x1ccc, 07372
STATUS_4 Hex Code, Decimal Code	0x1d30, 07472
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_FF_RX_FIELD_2

Description	Used to display EDH FF (Full Field) status for field 2
STATUS Hex Code, Decimal Code	0x01df, 00479
STATUS_1 Hex Code, Decimal Code	0x0a3e, 02622
STATUS_2 Hex Code, Decimal Code	0x0a77, 02679
STATUS_3 Hex Code, Decimal Code	0x1ccd, 07373
STATUS_4 Hex Code, Decimal Code	0x1d31, 07473
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_IDA_FLAGS

Description	Used to display EDH IDA (Internal Error Detected Already) flag status
STATUS Hex Code, Decimal Code	0x01e1, 00481
STATUS_1 Hex Code, Decimal Code	0x0a40, 02624
STATUS_2 Hex Code, Decimal Code	0x0a79, 02681
STATUS_3 Hex Code, Decimal Code	0x1ccf, 07375
STATUS_4 Hex Code, Decimal Code	0x1d33, 07475
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_IDH_FLAGS

Description	Used to display EDH IDH (Internal Error Detected Here) flag status
STATUS Hex Code, Decimal Code	0x01e2, 00482
STATUS_1 Hex Code, Decimal Code	0x0a41, 02625
STATUS_2 Hex Code, Decimal Code	0x0a7a, 02682
STATUS_3 Hex Code, Decimal Code	0x1cd0, 07376
STATUS_4 Hex Code, Decimal Code	0x1d34, 07476
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_EDH_UES_FLAGS

Description	Used to display EDH UES (Unknown Error Status) flag status
STATUS Hex Code, Decimal Code	0x01e3, 00483
STATUS_1 Hex Code, Decimal Code	0x0a42, 02626
STATUS_2 Hex Code, Decimal Code	0x0a7b, 02683
STATUS_3 Hex Code, Decimal Code	0x1cd1, 07377
STATUS_4 Hex Code, Decimal Code	0x1d35, 07477
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_FRAMER_ERRORS

Description	Displays the value of re-framer errors indicating the number of times an input has been re-synchronised.
STATUS Hex Code, Decimal Code	0x034e, 00846
STATUS_1 Hex Code, Decimal Code	0x0a44, 02628
STATUS_2 Hex Code, Decimal Code	0x0a7c, 02684
STATUS_3 Hex Code, Decimal Code	0x1cd2, 07378
STATUS_4 Hex Code, Decimal Code	0x1d36, 07478
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_FRAMER_ERRORS_B

Description	Displays the value of re-framer errors indicating the number of times Link B of the input has been re-synchronised.
STATUS Hex Code, Decimal Code	0x034f, 00847
STATUS_1 Hex Code, Decimal Code	0x0a45, 02629
STATUS_2 Hex Code, Decimal Code	0x0a7d, 02685
STATUS_3 Hex Code, Decimal Code	0x1cd3, 07379
STATUS_4 Hex Code, Decimal Code	0x1d37, 07479
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_1_LINK_1_CRC_C_ERROR_TITLE

Description	Displays the titles for error counts for inputs 1-8 Y/C shows if EDH or CRC values displayed.
STATUS Hex Code, Decimal Code	??
STATUS_1 Hex Code, Decimal Code	0x0a46, 02630
STATUS_2 Hex Code, Decimal Code	??
STATUS_3 Hex Code, Decimal Code	??
STATUS_4 Hex Code, Decimal Code	??
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_1_LINK_2_CRC_ANC_ERROR_TITLE

Description	Displays the titles for error counts for inputs 1-8 Y/C shows if EDH or CRC values displayed.
STATUS Hex Code, Decimal Code	0x01ec, 00492
STATUS_1 Hex Code, Decimal Code	0x0a26, 02598
STATUS_2 Hex Code, Decimal Code	0x0a5f, 02655
STATUS_3 Hex Code, Decimal Code	0x1cdf, 07391
STATUS_4 Hex Code, Decimal Code	0x1d43, 07491
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

COM_STATUS_1_LINK_2_CRC_CBCR_TITLE

Description	Displays the titles for CRC-CrCb field changes on SD/HD - payload 2
STATUS Hex Code, Decimal Code	??
STATUS_1 Hex Code, Decimal Code	0x0a20 02592
STATUS_2 Hex Code, Decimal Code	??
STATUS_3 Hex Code, Decimal Code	??
STATUS_4 Hex Code, Decimal Code	??
Valid Command Types	MSG_GET_TEXT

Where STATUS is Sx analyser input, STATUS_1 is Rx analyser module 1, STATUS_2 is Rx analyser module 2, etc

Input Audio Commands

Audio Group Status

COM_ANLYS_AUDIO_GROUP_1_STATUS

Description	This displays the audio data types of the 4 channels in the group.
ANLYS Hex Code, Decimal Code	0x0253, 00595
ANLYS_2 Hex Code, Decimal Code	0x1f53, 08019
ANLYS_3 Hex Code, Decimal Code	0x1fb7, 08119
ANLYS_4 Hex Code, Decimal Code	0x201b, 08219
Valid Command Types	MSG_GET_TEXT
Values	P = PCM E = Dolby E, D = Dolby Digital + = Dolby Digital Plus

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_AUDIO_GROUP_2_STATUS

Description	This displays the audio data types of the 4 channels in the group.
ANLYS Hex Code, Decimal Code	0x0254, 00596
ANLYS_2 Hex Code, Decimal Code	0x1f54, 08020
ANLYS_3 Hex Code, Decimal Code	0x1fb8, 08120
ANLYS_4 Hex Code, Decimal Code	0x201c, 08220
Valid Command Types	MSG_GET_TEXT
Values	P = PCM E = Dolby E, D = Dolby Digital + = Dolby Digital Plus

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_AUDIO_GROUP_3_STATUS

Description	This displays the audio data types of the 4 channels in the group.
ANLYS Hex Code, Decimal Code	0x0255, 00597
ANLYS_2 Hex Code, Decimal Code	0x1f55, 08021
ANLYS_3 Hex Code, Decimal Code	0x1fb9, 08121
ANLYS_4 Hex Code, Decimal Code	0x201d, 08221
Valid Command Types	MSG_GET_TEXT
Values	P = PCM E = Dolby E, D = Dolby Digital + = Dolby Digital Plus

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_AUDIO_GROUP_4_STATUS

Description	This displays the audio data types of the 4 channels in the group.
ANLYS Hex Code, Decimal Code	0x0256, 00598
ANLYS_2 Hex Code, Decimal Code	0x1f56, 08022
ANLYS_3 Hex Code, Decimal Code	0x1fba, 08122
ANLYS_4 Hex Code, Decimal Code	0x201e, 08222
Valid Command Types	MSG_GET_TEXT
Values	P = PCM E = Dolby E, D = Dolby Digital + = Dolby Digital Plus

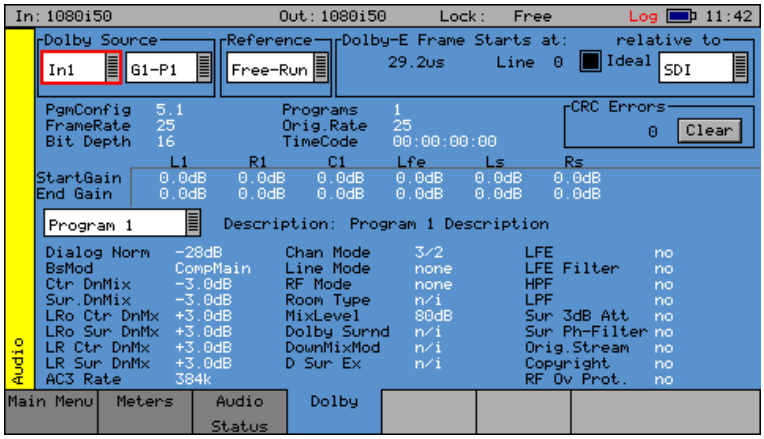
Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_AUDIO_STATUS

Description	This displays which audio groups detected as a string.
ANLYS Hex Code, Decimal Code	0x0233, 00563
ANLYS_2 Hex Code, Decimal Code	0x1f57 08023
ANLYS_3 Hex Code, Decimal Code	0x1fbb 08123
ANLYS_4 Hex Code, Decimal Code	0x201f 08223
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

Dolby Metadata Analysis



The Dolby Metadata Analysis option allows display of the Dolby E, Dolby D and Dolby D+ meta-data present in the selected audio stream and determines whether the Dolby-E packet is timed correctly on the SDI video stream.

COM_ANLYS_DOLBY_SOURCE

Description	This selects the source audio pair for the Dolby metadata decoder and audio meters.
ANLYS Hex Code, Decimal Code	0x0604, 01540
ANLYS_2 Hex Code, Decimal Code	0x1f6a, 08042
ANLYS_3 Hex Code, Decimal Code	0x1fce, 08142
ANLYS_4 Hex Code, Decimal Code	0x2032, 08242
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	1 = G1P1 2 = G1P2 3 = G2P1 4 = G2P2 5 = G3P1 6 = G3P2 7 = G4P1 8 = G4P2

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_RELATIVE_NOMINAL

Description	This enables the Ideal check box and makes Dolby E timing relative to normal values
ANLYS Hex Code, Decimal Code	0x0609, 01545
ANLYS_2 Hex Code, Decimal Code	0x1f69, 08041
ANLYS_3 Hex Code, Decimal Code	0x1fcd,08141
ANLYS_4 Hex Code, Decimal Code	0x2031, 08241
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUES, MSG_GET_TEXT
Values	0 = off, 1 = on

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_REF_SOURCE

Description	This selects the timing reference source for Dolby-E start of frame.
ANLYS Hex Code, Decimal Code	0x0608, 01544
ANLYS_2 Hex Code, Decimal Code	0x1f68, 08040
ANLYS_3 Hex Code, Decimal Code	0x1fcc, 08140
ANLYS_4 Hex Code, Decimal Code	0x2030, 08240
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUES, MSG_GET_TEXT
Values	0 = Analyser SDI, 1 = External Reference

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_REF_SOURCE_INFO

Description	This gives overview of Dolby reference including offset (on Main menu).
ANLYS Hex Code, Decimal Code	0x060a, 01546
ANLYS_2 Hex Code, Decimal Code	??
ANLYS_3 Hex Code, Decimal Code	??
ANLYS_4 Hex Code, Decimal Code	??
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_OVERVIEW

Description	This gets the Dolby-E overview data as a string.
ANLYS Hex Code, Decimal Code	0x0605, 01541
ANLYS_2 Hex Code, Decimal Code	0x1f62, 08034
ANLYS_3 Hex Code, Decimal Code	0x1fc6, 08134
ANLYS_4 Hex Code, Decimal Code	0x202a, 08234
Valid Command Types	MSG_GET_ITEM_STRINGS

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_PGM_CONFIG

Description	This gets Text for Dolby Program Configuration.
ANLYS Hex Code, Decimal Code	0x060f, 01551
ANLYS_2 Hex Code, Decimal Code	0x1f63, 08035
ANLYS_3 Hex Code, Decimal Code	0x1fc7, 08135
ANLYS_4 Hex Code, Decimal Code	0x202b, 08235
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_ERRORS

Description	This gets Dolby CRC error count
ANLYS Hex Code, Decimal Code	0x05ac, 01452
ANLYS_2 Hex Code, Decimal Code	0x1f60, 08032
ANLYS_3 Hex Code, Decimal Code	0x1fc4, 08132
ANLYS_4 Hex Code, Decimal Code	0x2028, 08232
Valid Command Types	MSG_GET_VALUE

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_CLEAR_ERRORS

Description	Clear Dolby CRC errors on analyser input
ANLYS Hex Code, Decimal Code	0x05ab, 01451
ANLYS_2 Hex Code, Decimal Code	0x1f5e, 08030
ANLYS_3 Hex Code, Decimal Code	0x1fc2, 08130
ANLYS_4 Hex Code, Decimal Code	0x2026, 08230
Valid Command Types	MSG_SET_VALUE
Values	1 = clear errors

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_PGM_GAINS

Description	This gets the Dolby-E Program Channel gains stored as grid.
ANLYS Hex Code, Decimal Code	0x060e, 01550
ANLYS_2 Hex Code, Decimal Code	0x1f65 08037
ANLYS_3 Hex Code, Decimal Code	0x1fc9 08137
ANLYS_4 Hex Code, Decimal Code	0x202d 08237
Valid Command Types	MSG_GET_ITEM_STRINGS

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_PGM_SOURCE

Description	This selects which Dolby Program to display status for
ANLYS Hex Code, Decimal Code	0x0606, 01542
ANLYS_2 Hex Code, Decimal Code	0x1f66, 08038
ANLYS_3 Hex Code, Decimal Code	0x1fca, 08138
ANLYS_4 Hex Code, Decimal Code	0x202e, 08238
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Program 1 1 = Program 2 2 = Program 3 3 = Program 4

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_PGM_DESCRIPTION

Description	This gets Text for Dolby Program Description.
ANLYS Hex Code, Decimal Code	0x060d, 01549
ANLYS_2 Hex Code, Decimal Code	0x1f64, 08036
ANLYS_3 Hex Code, Decimal Code	0x1fc8, 08136
ANLYS_4 Hex Code, Decimal Code	0x202c, 08236
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_PGM_STATUS

Description	This gets the Dolby Program Status as a string.
ANLYS Hex Code, Decimal Code	0x0607, 01543
ANLYS_2 Hex Code, Decimal Code	0x1f67, 08039
ANLYS_3 Hex Code, Decimal Code	0x1fcb, 08139
ANLYS_4 Hex Code, Decimal Code	0x202f, 08239
Valid Command Types	MSG_GET_ITEM_STRINGS

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_LINES

Description	This displays the Dolby-E start timing.
ANLYS Hex Code, Decimal Code	0x060b, 01547
ANLYS_2 Hex Code, Decimal Code	0x1f61, 08033
ANLYS_3 Hex Code, Decimal Code	0x1fc5, 08133
ANLYS_4 Hex Code, Decimal Code	0x2029, 08233
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_US

Description	This displays the Dolby-E start timing in microseconds.
ANLYS Hex Code, Decimal Code	0x060c, 01548
ANLYS_2 Hex Code, Decimal Code	0x1f6b, 08043
ANLYS_3 Hex Code, Decimal Code	0x1fcf, 08143
ANLYS_4 Hex Code, Decimal Code	0x2033, 08243
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT
Values	Divisor = 10

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_D_INDEPEND_STREAM_SRC

Description	This selects the Independent stream selection for Dolby D and D+ streams.
ANLYS Hex Code, Decimal Code	0x0610, 01552
ANLYS_2 Hex Code, Decimal Code	0x1f91, 08081
ANLYS_3 Hex Code, Decimal Code	0x1ff5, 08181
ANLYS_4 Hex Code, Decimal Code	0x2059, 08281
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = Main 1, 1 = Main 2

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_D_DEPEND_STREAM_SRC

Description	This selects the Dependent stream selection for Dolby D and D+ streams.
ANLYS Hex Code, Decimal Code	0x0611, 01553
ANLYS_2 Hex Code, Decimal Code	0x1f92, 08082
ANLYS_3 Hex Code, Decimal Code	0x1ff6, 08182
ANLYS_4 Hex Code, Decimal Code	0x205a, 08282
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = Independent 1, 1 = Dependent

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_D_STATUS

Description	This displays meta data for Dolby-D and D+ streams as a string
ANLYS Hex Code, Decimal Code	0x0612, 01554
ANLYS_2 Hex Code, Decimal Code	0x1f93, 08083
ANLYS_3 Hex Code, Decimal Code	0x1ff7, 08183
ANLYS_4 Hex Code, Decimal Code	0x205b, 08283
Valid Command Types	MSG_GET_ITEM_STRINGS

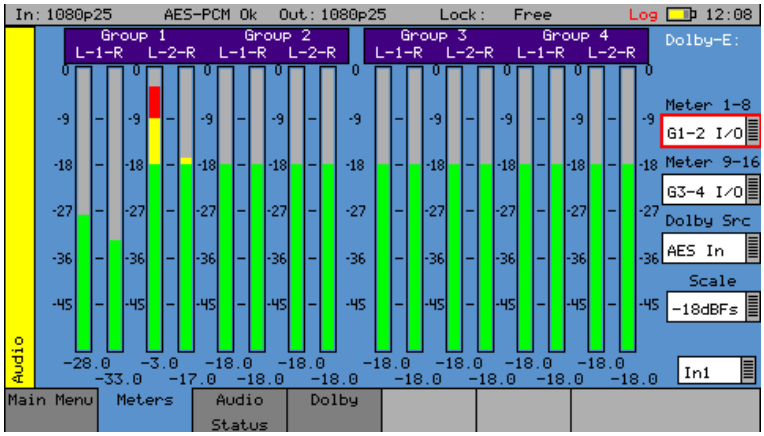
Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DOLBY_D_TYPE

Description	This displays the Type of Dolby-D stream D/D+
ANLYS Hex Code, Decimal Code	0x0613, 01555
ANLYS_2 Hex Code, Decimal Code	0x1f94, 08084
ANLYS_3 Hex Code, Decimal Code	0x1ff8, 08184
ANLYS_4 Hex Code, Decimal Code	0x205c, 08284
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

Sx Audio Meters



The Sx Audio Meters menu displays up to 16 audio channels. The source for each block of 8 meters may be independently set to allow simultaneous metering of 8 inputs and 8 outputs or all 16 channels in an embedded SDI stream.

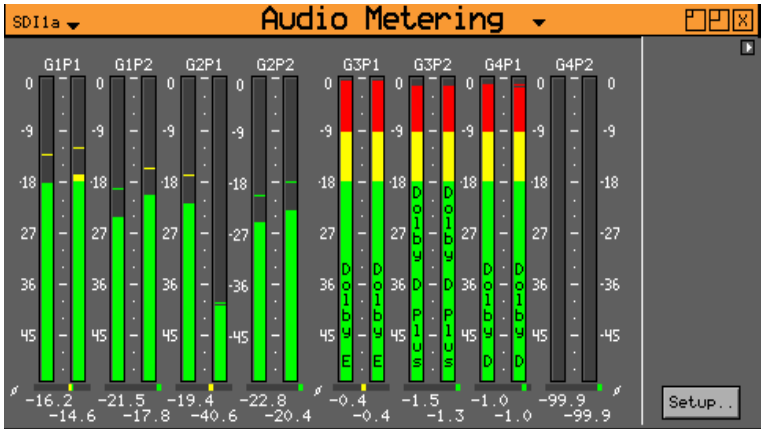
COM_ANLYS_METER_1_8_SOURCE_TYPE

Description	This selects the meter source for Sx “Meter 1-8”.
ANLYS Hex Code, Decimal Code	0x0151, 00337
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = G1-2 I/O 1 = G1-2 In 2 = G1-2 Out 3 = G3-4 I/O 4 = G3-4 In 5 = G3-4 Out 6 = AES / Analogue (SxTAG Only) 7 = Dolby

COM_ANLYS_METER_9_16_SOURCE_TYPE

Description	This selects the meter source for Sx “Meter 9-16”.
ANLYS Hex Code, Decimal Code	0x0152 00338
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = G1-2 I/O 1 = G1-2 In 2 = G1-2 Out 3 = G3-4 I/O 4 = G3-4 In 5 = G3-4 Out 6 = AES / Analogue (SxTAG Only) 7 = Dolby

Rx Audio Meters



The Rx Audio Metering window is accessed by clicking on an Analyzer slot on the monitor output task bar and selecting “Audio Meters”. This will create a new window panel for the selected input.

Note that where the Meters are displaying Dolby encoded audio data this will be labelled.

COM_ANLYS_METER_1_SOURCE

Description	This selects the meter source for the Rx “Meter 1”
ANLYS Hex Code, Decimal Code	0x04b0, 01200
ANLYS_2 Hex Code, Decimal Code	0x04ba, 01210
ANLYS_3 Hex Code, Decimal Code	0x04c4, 01220
ANLYS_4 Hex Code, Decimal Code	0x04ce, 01230
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = Meter off 1 = G1P1 2 = G1P2 3 = G2P1 4 = G2P2 5 = G3P1 6 = G3P2 7 = G4P1 8 = G4P2

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_METER_2_SOURCE

Description	This selects the meter source for the Rx “Meter 2”
ANLYS Hex Code, Decimal Code	0x04b1, 01201
ANLYS_2 Hex Code, Decimal Code	0x04bb, 01211
ANLYS_3 Hex Code, Decimal Code	0x04c5, 01221
ANLYS_4 Hex Code, Decimal Code	0x04cf, 01231
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_METER_1_SOURCE

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_METER_3_SOURCE

Description	This selects the meter source for the Rx "Meter 3"
ANLYS Hex Code, Decimal Code	0x04b2, 01202
ANLYS_2 Hex Code, Decimal Code	0x04bc, 01212
ANLYS_3 Hex Code, Decimal Code	0x04c6, 01222
ANLYS_4 Hex Code, Decimal Code	0x04d0, 01232
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_METER_1_SOURCE

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_METER_4_SOURCE

Description	This selects the meter source for the Rx "Meter 4"
ANLYS Hex Code, Decimal Code	0x04b3, 01203
ANLYS_2 Hex Code, Decimal Code	0x04bd, 01213
ANLYS_3 Hex Code, Decimal Code	0x04c7, 01223
ANLYS_4 Hex Code, Decimal Code	0x04d1, 01233
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_METER_1_SOURCE

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_METER_5_SOURCE

Description	This selects the meter source for the Rx "Meter 5"
ANLYS Hex Code, Decimal Code	0x04b4, 01204
ANLYS_2 Hex Code, Decimal Code	0x04be, 01214
ANLYS_3 Hex Code, Decimal Code	0x04c8, 01224
ANLYS_4 Hex Code, Decimal Code	0x04d2, 01234
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_METER_1_SOURCE

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_METER_6_SOURCE

Description	This selects the meter source for the Rx "Meter 6"
ANLYS Hex Code, Decimal Code	0x04b5, 01205
ANLYS_2 Hex Code, Decimal Code	0x04bf 01215
ANLYS_3 Hex Code, Decimal Code	0x04c9 01225
ANLYS_4 Hex Code, Decimal Code	0x04d3 01235
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_METER_1_SOURCE

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_METER_7_SOURCE

Description	This selects the meter source for the Rx "Meter 7"
ANLYS Hex Code, Decimal Code	0x04b6, 01206
ANLYS_2 Hex Code, Decimal Code	0x04c0, 01216
ANLYS_3 Hex Code, Decimal Code	0x04ca, 01226
ANLYS_4 Hex Code, Decimal Code	0x04d4, 01236
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_METER_1_SOURCE

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_METER_8_SOURCE

Description	This selects the meter source for the Rx "Meter 7"
ANLYS Hex Code, Decimal Code	0x04b7, 01207
ANLYS_2 Hex Code, Decimal Code	0x04c1, 01217
ANLYS_3 Hex Code, Decimal Code	0x04cb, 01227
ANLYS_4 Hex Code, Decimal Code	0x04d5, 01237
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_METER_1_SOURCE

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_METER_BALLISTICS

Description	This selects the meter ballistics used for all Rx audio meters
ANLYS Hex Code, Decimal Code	0x013f 00319
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = PPM-I 1 = PPM-II 2 = Vu 3 = Vu-Fr 4 = Fast

COM_ANLYS_METER_CLEAR_PEAK

Description	This clears all Peak values on Rx audio meters.
ANLYS Hex Code, Decimal Code	0x03af, 00943
Valid Command Types	MSG_SET_VALUE,
Values	1 = Clear

COM_ANLYS_METER_DBFS_LEVEL

Description	This sets the nominal level for dBFs audio meter scales on Rx audio meters.
ANLYS Hex Code, Decimal Code	0x03ac, 00940
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	-18 or -20

COM_ANLYS_METER_LEVEL

Description	This sets the scale used on the Rx audio meters.
ANLYS Hex Code, Decimal Code	0x0153, 00339
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	0 = dBFs 1 = BBC 2 = BBCM 3 = DIN45406 4 = NordicN9

COM_ANLYS_METER_PEAK_HOLD

Description	This enables the peak hold for Rx audio meters.
ANLYS Hex Code, Decimal Code	0x03ad, 00941
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	0 = off, 1 = on

COM_ANLYS_METER_PEAK_HOLD_TIME

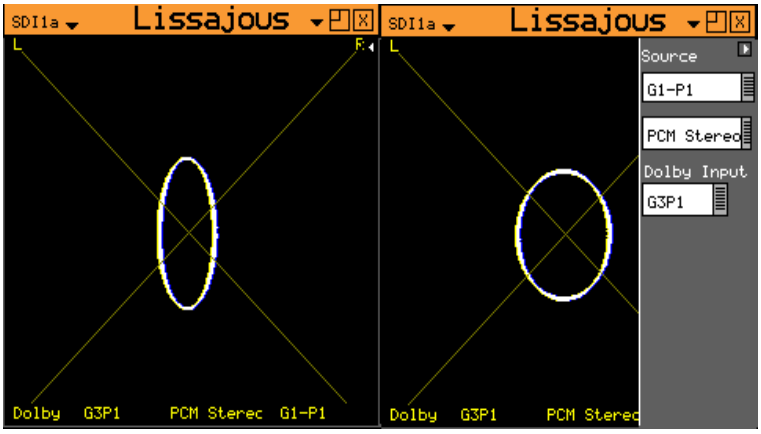
Description	This enables the peak hold time for Rx audio meters.
ANLYS Hex Code, Decimal Code	0x03ae, 00942
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE MSG_GET_TEXT
Values	0 = 0.1 Seconds 1 = 0.2 Seconds 2 = 0.4 Seconds 3 = 0.8 Seconds 4 = 1 Second 5 = 2 Seconds 6 = 4 Seconds 7 = 8 Seconds 8 = 10 Seconds 9 = Infinite

COM_ANLYS_METER_PIN_CONTROLS

Description	This shows / hides the menus on the Rx HDMI monitor audio meters.
ANLYS Hex Code, Decimal Code	0x161c, 05660
ANLYS_2 Hex Code, Decimal Code	0x161d, 05661
ANLYS_3 Hex Code, Decimal Code	0x161e, 05662
ANLYS_4 Hex Code, Decimal Code	0x161f, 05663
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	0 = hide menu, 1 = show menu

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

Lissajous Controls



The Rx Lissajous window displays the phase relationship between the audio channels of the selected audio pair.

COM_ANLYS_LISSAJOUS_SOURCE

Description	This selects the audio pair to be displayed on the Rx Lissajous instrument.
LISSAJOUS Hex Code, Decimal Code	0x1d50, 07504
LISSAJOUS_2 Hex Code, Decimal Code	0x1d51, 07505
LISSAJOUS_3 Hex Code, Decimal Code	0x1d52, 07506
LISSAJOUS_4 Hex Code, Decimal Code	0x1d53, 07507
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	1 = G1P1 2 = G1P2 3 = G2P1 4 = G2P2 5 = G3P1 6 = G3P2 7 = G4P1 8 = G4P2

Where LISSAJOUS refers to the Analyser in slot 1, LISSAJOUS_2 refers to the Analyser in slot 2, etc.

COM_ANLYS_LISSAJOUS_DOLBY_MODE

Description	This selects the mixed-down audio output of the Dolby Decode module as the audio pair to be displayed on the Rx Lissajous instrument.
LISSAJOUS Hex Code, Decimal Code	0x1d60, 07520
LISSAJOUS_2 Hex Code, Decimal Code	0x1d61, 07521
LISSAJOUS_3 Hex Code, Decimal Code	0x1d62, 07522
LISSAJOUS_4 Hex Code, Decimal Code	0x1d63, 07523
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = PCM Audio, 1 = Dolby Mix Down

Where LISSAJOUS refers to the Analyser in slot 1, LISSAJOUS_2 refers to the Analyser in slot 2, etc.

COM_ANLYS_LISSAJOUS_GAIN

Description	This sets the gain of the lissajous display on the Rx Lissajous instrument.
LISSAJOUS Hex Code, Decimal Code	0x1d54, 07508
LISSAJOUS_2 Hex Code, Decimal Code	0x1d55, 07509
LISSAJOUS_3 Hex Code, Decimal Code	0x1d56, 07510
LISSAJOUS_4 Hex Code, Decimal Code	0x1d57, 07511
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = 5dBFs 1 = 1dBFs 2 = 2dBFs 3 = 3dBFs

Where LISSAJOUS refers to the Analyser in slot 1, LISSAJOUS_2 refers to the Analyser in slot 2, etc.

COM_ANLYS_LISSAJOUS_SCOPE

Description	This reports the graticule used by the Rx Lissajous instrument.
LISSAJOUS Hex Code, Decimal Code	0x1d4c, 07500
LISSAJOUS_2 Hex Code, Decimal Code	0x1d4d, 07501
LISSAJOUS_3 Hex Code, Decimal Code	0x1d4e, 07502
LISSAJOUS_4 Hex Code, Decimal Code	0x1d4f, 07503
Valid Command Types	MSG_GET_TEXT

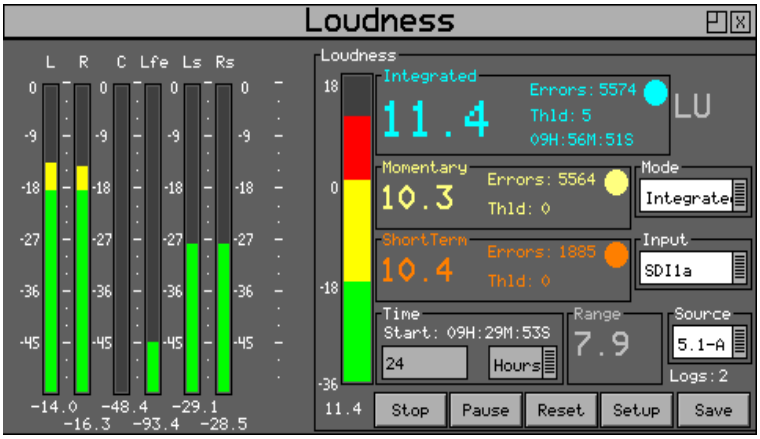
Where LISSAJOUS refers to the Analyser in slot 1, LISSAJOUS_2 refers to the Analyser in slot 2, etc.

COM_ANLYS_LISSAJOUS_PIN_CONTROLS

Description	This shows / hides the menus on the Rx Lissajous instrument.
LISSAJOUS Hex Code, Decimal Code	0x1612, 05650
LISSAJOUS_2 Hex Code, Decimal Code	0x1613, 05651
LISSAJOUS_3 Hex Code, Decimal Code	0x1614, 05652
LISSAJOUS_4 Hex Code, Decimal Code	0x1615, 05653
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	0 = hide menu, 1 = show menu

Where LISSAJOUS refers to the Analyser in slot 1, LISSAJOUS_2 refers to the Analyser in slot 2, etc.

Loudness Controls



The Rx "Loudness" window allow the loudness of the selected stereo audio pair or 5.1 surround audio group to be monitored and measured. The Rx system provides a single Loudness meter as standard and an additional 3 Loudness meters are available as an option. .

COM_LOUDNESS_SETUP

Description	This opens the setup menu on the Rx Loudness instrument.
LOUDNESS Hex Code, Decimal Code	0x18b0, 06320
LOUDNESS_2 Hex Code, Decimal Code	0x18e6, 06374
LOUDNESS_3 Hex Code, Decimal Code	0x190f, 06415
LOUDNESS_4 Hex Code, Decimal Code	0x1938, 06456
Valid Command Types	MSG_SET_VALUE,
Values	1 = open setup menu

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_STANDARD

Description	This displays the loudness standard for the Rx Loudness instrument.
Hex Code, Decimal Code	0x18b7, 06327
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,,
Values	0 = LU, 1 = ITU, 2 = EBU

COM_LOUDNESS_STANDARD_SETUP

Description	This displays the loudness standard for the Rx Loudness instrument in the Setup menu.
Hex Code, Decimal Code	0x18b8 06328
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,,
Values	0 = LU, 1 = ITU, 2 = EBU

COM_LOUDNESS_SETUP_OK

Description	This closes the setup menu on the Rx Loudness instrument and saves changes.
Hex Code, Decimal Code	0x18b3, 06323
Valid Command Types	MSG_SET_VALUE,
Values	1 = close setup menu

COM_LOUDNESS_SETUP_CANCEL

Description	This closes the setup menu on the Rx Loudness instrument without saving changes.
Hex Code, Decimal Code	0x18b1, 06321
Valid Command Types	MSG_SET_VALUE,
Values	1 = close setup menu

COM_LOUDNESS_SETUP_CLOSE

Description	This closes the setup menu on the Rx Loudness instrument.
Hex Code, Decimal Code	0x18b2, 06322
Valid Command Types	MSG_SET_VALUE,
Values	1 = close setup menu

COM_LOUDNESS_SETUP_TFT

Description	This opens the setup menu for the Rx Loudness instrument on the Rx 2000 front panel display.
LOUDNESS Hex Code, Decimal Code	0x18bf, 06335
LOUDNESS_2 Hex Code, Decimal Code	0x18c0, 06336
LOUDNESS_3 Hex Code, Decimal Code	0x18c1, 06337
LOUDNESS_4 Hex Code, Decimal Code	0x18c2, 06338
Valid Command Types	MSG_SET_VALUE,
Values	1 = open setup menu

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_SAVE_TFT

Description	This opens the loudness save menu for the Rx Loudness instrument on the Rx 2000 front panel display.
LOUDNESS Hex Code, Decimal Code	0x18c3, 06339
LOUDNESS_2 Hex Code, Decimal Code	0x18c4, 06340
LOUDNESS_3 Hex Code, Decimal Code	0x18c5, 06341
LOUDNESS_4 Hex Code, Decimal Code	0x18c6, 06342
Valid Command Types	MSG_SET_VALUE,
Values	1 = open setup menu

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_INTEGRATED_THLD

Description	This sets the integrated threshold value on Rx Loudness instrument.
LOUDNESS Hex Code, Decimal Code	0x184d, 06221
LOUDNESS_2 Hex Code, Decimal Code	0x18dc, 06364
LOUDNESS_3 Hex Code, Decimal Code	0x1905, 06405
LOUDNESS_4 Hex Code, Decimal Code	0x192e, 06446
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -46 Max = 24 Divisor = 1

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_INTEGRATED_THLD_SETUP

Description	This sets the integrated threshold value on Rx Loudness instrument setup menu.
LOUDNESS Hex Code, Decimal Code	0x1a2c, 06700
LOUDNESS_2 Hex Code, Decimal Code	0x1a2d, 06701
LOUDNESS_3 Hex Code, Decimal Code	0x1a2e, 06702
LOUDNESS_4 Hex Code, Decimal Code	0x1a2f, 06703
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -46 Max = 24 Divisor = 1

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_ALERT_INTEGRATED

Description	This is the Loudness integrated alert alarm. It is used to show that an integrated value has exceeded the set integrated threshold value.
LOUDNESS Hex Code, Decimal Code	0x1838, 06200
LOUDNESS_2 Hex Code, Decimal Code	0x18c7, 06343
LOUDNESS_3 Hex Code, Decimal Code	0x18f0, 06384
LOUDNESS_4 Hex Code, Decimal Code	0x1919, 06425
Valid Command Types	MSG_GET_VALUE,

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_ALERT_INTEGRATED_COUNT

Description	This is the Loudness integrated alert count. It shows the number of times the integrated value has exceeded the set integrated threshold value
LOUDNESS Hex Code, Decimal Code	0x1839, 06201
LOUDNESS_2 Hex Code, Decimal Code	0x18c8, 06344
LOUDNESS_3 Hex Code, Decimal Code	0x18f1, 06385
LOUDNESS_4 Hex Code, Decimal Code	0x191a, 06426
Valid Command Types	MSG_GET_VALUE,

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_ALERT_INTEGRATED_TIME

Description	This displays the last time the loudness integrated value exceeded the set integrated threshold value
LOUDNESS Hex Code, Decimal Code	0x183a, 06202
LOUDNESS_2 Hex Code, Decimal Code	0x18c9, 06345
LOUDNESS_3 Hex Code, Decimal Code	0x18f2, 06386
LOUDNESS_4 Hex Code, Decimal Code	0x191b, 06427
Valid Command Types	MSG_GET_TEXT,
Values	Hours: Minutes: Seconds

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_MOMENTARY_THLD

Description	This sets the momentary threshold value on Rx Loudness instrument.
LOUDNESS Hex Code, Decimal Code	0x18ab, 06315
LOUDNESS_2 Hex Code, Decimal Code	0x18e1, 06369
LOUDNESS_3 Hex Code, Decimal Code	0x190a, 06410
LOUDNESS_4 Hex Code, Decimal Code	0x1933, 06451
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -46 Max = 24 Divisor = 1

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_MOMENTARY_THLD_SETUP

Description	This sets the momentary threshold value on Rx Loudness instrument setup menu.
LOUDNESS Hex Code, Decimal Code	0x1a30, 06704
LOUDNESS_2 Hex Code, Decimal Code	0x1a31, 06705
LOUDNESS_3 Hex Code, Decimal Code	0x1a32, 06706
LOUDNESS_4 Hex Code, Decimal Code	0x1a33, 06707
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -46 Max = 24 Divisor = 1

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_ALERT_MOMETARY

Description	This is the Loudness momentary alert alarm. It is used to show that an momentary value has exceeded the set momentary threshold value.
LOUDNESS Hex Code, Decimal Code	0x183b, 06203
LOUDNESS_2 Hex Code, Decimal Code	0x18ca, 06346
LOUDNESS_3 Hex Code, Decimal Code	0x18f3, 06387
LOUDNESS_4 Hex Code, Decimal Code	0x191c, 06428
Valid Command Types	MSG_GET_VALUE,

COM_LOUDNESS_ALERT_MOMETARY_COUNT

Description	This is the Loudness momentary alert count. It shows the number of times the momentary value has exceeded the set momentary threshold value
LOUDNESS Hex Code, Decimal Code	0x183c, 06204
LOUDNESS_2 Hex Code, Decimal Code	0x18cb, 06347
LOUDNESS_3 Hex Code, Decimal Code	0x18f4, 06388
LOUDNESS_4 Hex Code, Decimal Code	0x191d, 06429
Valid Command Types	MSG_GET_VALUE,

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_SHORT_TERM_THLD

Description	This sets the short term threshold value on Rx Loudness instrument.
LOUDNESS Hex Code, Decimal Code	0x18b5, 06325
LOUDNESS_2 Hex Code, Decimal Code	0x18e8, 06376
LOUDNESS_3 Hex Code, Decimal Code	0x1911, 06417
LOUDNESS_4 Hex Code, Decimal Code	0x193a, 06458
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -46 Max = 24 Divisor = 1

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_SHORT_TERM_THLD_SETUP

Description	This sets the short term threshold value on Rx Loudness instrument setup menu.
LOUDNESS Hex Code, Decimal Code	0x1a34, 06708
LOUDNESS_2 Hex Code, Decimal Code	0x1a35, 06709
LOUDNESS_3 Hex Code, Decimal Code	0x1a36, 06710
LOUDNESS_4 Hex Code, Decimal Code	0x1a37, 06711
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -46 Max = 24 Divisor = 1

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_ALERT_SHORT_TERM

Description	This is the Loudness short term alert alarm. It is used to show that an short term value has exceeded the set short term threshold value.
LOUDNESS Hex Code, Decimal Code	0x183d, 06205
LOUDNESS_2 Hex Code, Decimal Code	0x18cc, 06348
LOUDNESS_3 Hex Code, Decimal Code	0x18f5, 06389
LOUDNESS_4 Hex Code, Decimal Code	0x191e, 06430
Valid Command Types	MSG_GET_VALUE,

COM_LOUDNESS_ALERT_SHORT_TERM_COUNT

Description	This is the Loudness short term alert count. It shows the number of times the short term value has exceeded the set short term threshold value
LOUDNESS Hex Code, Decimal Code	0x183e, 06206
LOUDNESS_2 Hex Code, Decimal Code	0x18cd, 06349
LOUDNESS_3 Hex Code, Decimal Code	0x18f6, 06390
LOUDNESS_4 Hex Code, Decimal Code	0x191f ,06431
Valid Command Types	MSG_GET_VALUE,

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_TIME_PERIOD

Description	This sets the time period between saves of the loudness log. The time period is either hours or minutes set by COM_LOUDNESS_TIME_PERIOD_FORMAT value
LOUDNESS Hex Code, Decimal Code	0x18bc, 06332
LOUDNESS_2 Hex Code, Decimal Code	0x18ed, 06381
LOUDNESS_3 Hex Code, Decimal Code	0x1916, 06422
LOUDNESS_4 Hex Code, Decimal Code	0x193f, 06463
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	Min = 0 Max = 86400 Divisor = 1

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_TIME_PERIOD_FORMAT

Description	This sets whether the time period format is hours or minutes for the COM_LOUDNESS_TIME_PERIOD command.
LOUDNESS Hex Code, Decimal Code	0x18bd, 06333
LOUDNESS_2 Hex Code, Decimal Code	0x18ee, 06382
LOUDNESS_3 Hex Code, Decimal Code	0x1917, 06423
LOUDNESS_4 Hex Code, Decimal Code	0x1940, 06464
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	0 = Hours, 1 = Minutes

COM_LOUDNESS_LOG_COUNT

Description	This displays number of loudness logs currently saved on the RX system
LOUDNESS Hex Code, Decimal Code	0x184e, 06222
Valid Command Types	MSG_GET_VALUE,

COM_LOUDNESS_METER

Description	This displays current level of the integrated, momentary or short term meter for the currently selected loudness mode.
LOUDNESS Hex Code, Decimal Code	0x1851, 06225
LOUDNESS_2 Hex Code, Decimal Code	0x18dd, 06365
LOUDNESS_3 Hex Code, Decimal Code	0x1906, 06406
LOUDNESS_4 Hex Code, Decimal Code	0x192f, 06447
Valid Command Types	MSG_GET_VALUE,

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_METER_VALUE

Description	This displays current loudness meter value
LOUDNESS Hex Code, Decimal Code	0x18a8, 06312
LOUDNESS_2 Hex Code, Decimal Code	0x18de, 06366
LOUDNESS_3 Hex Code, Decimal Code	0x1907, 06407
LOUDNESS_4 Hex Code, Decimal Code	0x1930, 06448
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 10

Where LOUDNESS refers to Analyser 1, LOUDNESS_2 refers to Analyser 2, etc

COM_LOUDNESS_METER_DB_1

Description	This displays the value of loudness meter audio channel 1 in 0.1dBs
METER Hex Code, Decimal Code	0x1882, 06274
METER_2 Hex Code, Decimal Code	0x188a, 06282
METER_3 Hex Code, Decimal Code	0x1892, 06290
METER_4 Hex Code, Decimal Code	0x189a, 06298
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 10

Where METER indicates Loudness instance 1 and METER_2 indicates Loudness instance 2

COM_LOUDNESS_METER_DB_2

Description	This displays the value of loudness meter audio channel 2 in 0.1dBs
METER Hex Code, Decimal Code	0x1883, 06275
METER_2 Hex Code, Decimal Code	0x188b, 06283
METER_3 Hex Code, Decimal Code	0x1893, 06291
METER_4 Hex Code, Decimal Code	0x189b, 06299
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 10

Where METER indicates Loudness instance 1 and METER_2 indicates Loudness instance 2

COM_LOUDNESS_METER_DB_3

Description	This displays the value of loudness meter audio channel 3 in 0.1dBs
METER Hex Code, Decimal Code	0x1885, 06277
METER_2 Hex Code, Decimal Code	0x188c, 06284
METER_3 Hex Code, Decimal Code	0x1894, 06292
METER_4 Hex Code, Decimal Code	0x189c, 06300
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 10

Where METER indicates Loudness instance 1 and METER_2 indicates Loudness instance 2

COM_LOUDNESS_METER_DB_4

Description	This displays the value of loudness meter audio channel 4 in 0.1dBs
METER Hex Code, Decimal Code	0x1884, 06276
METER_2 Hex Code, Decimal Code	0x188d, 06285
METER_3 Hex Code, Decimal Code	0x1895, 06293
METER_4 Hex Code, Decimal Code	0x189d, 06301
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 10

Where METER indicates Loudness instance 1 and METER_2 indicates Loudness instance 2

COM_LOUDNESS_METER_DB_5

Description	This displays the value of loudness meter audio channel 5 in 0.1dBs
METER Hex Code, Decimal Code	0x1886, 06278
METER_2 Hex Code, Decimal Code	0x188e, 06286
METER_3 Hex Code, Decimal Code	0x1896, 06294
METER_4 Hex Code, Decimal Code	0x189e, 06302
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 10

Where METER indicates Loudness instance 1 and METER_2 indicates Loudness instance 2

COM_LOUDNESS_METER_DB_6

Description	This displays the value of loudness meter audio channel 6 in 0.1dBs
METER Hex Code, Decimal Code	0x1887, 06279
METER_2 Hex Code, Decimal Code	0x188f, 06287
METER_3 Hex Code, Decimal Code	0x1897, 06295
METER_4 Hex Code, Decimal Code	0x189f, 06303
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 10

Where METER indicates Loudness instance 1 and METER_2 indicates Loudness instance 2

COM_LOUDNESS_METER_DB_7

Description	This displays the value of loudness meter audio channel 7 in 0.1dBs
METER Hex Code, Decimal Code	0x1888, 06280
METER_2 Hex Code, Decimal Code	0x1890, 06288
METER_3 Hex Code, Decimal Code	0x1898, 06296
METER_4 Hex Code, Decimal Code	0x18a0, 06304
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 10

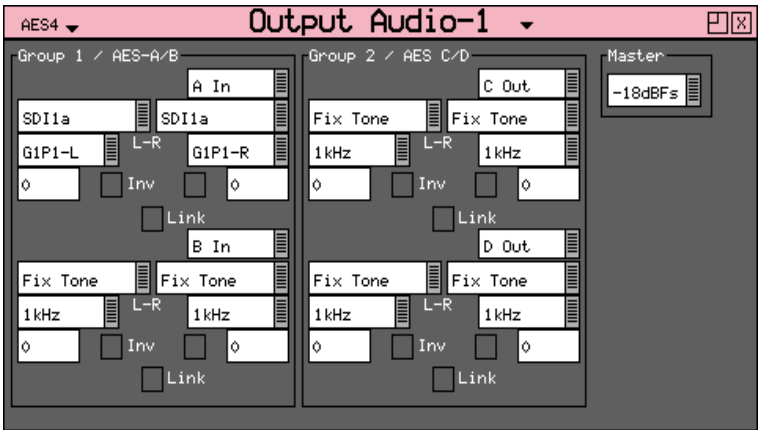
Where METER indicates Loudness instance 1 and METER_2 indicates Loudness instance 2

COM_LOUDNESS_METER_DB_8

Description	This displays the value of loudness meter audio channel 8 in 0.1dBs
METER Hex Code, Decimal Code	0x1889, 06281
METER_2 Hex Code, Decimal Code	0x1861, 06241
METER_3 Hex Code, Decimal Code	0x1869, 06249
METER_4 Hex Code, Decimal Code	0x1871, 06257
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 10

Where METER indicates Loudness instance 1 and METER_2 indicates Loudness instance 2

AES Input Analysis



The PHRXM-4AGE module has 4 bi directional AES digital audio pairs (“IO_A”, “IO_B”, “IO_C” and “IO_D”).

These are controlled by the COM_GEN_AUDIO_PAIR#_ ON command.

See Appendix A for details

COM_AES_1_1_CLEAR_AES_ERRORS

Description	This clears the AES error counter on Input A of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0ab5, 02741
AES_2 Hex Code, Decimal Code	0x0ac5, 02757
AES_3 Hex Code, Decimal Code	0x0ad1, 02769
AES_4 Hex Code, Decimal Code	0x0add, 02781
Valid Command Types	MSG_SET_VALUE,
Values	1 = clear errors

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_1_ERRORS

Description	This gets the number of AES errors detected on Input A of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0ab6, 02742
AES_2 Hex Code, Decimal Code	0x0ac6, 02758
AES_3 Hex Code, Decimal Code	0x0ad2, 02770
AES_4 Hex Code, Decimal Code	0x0ade, 02782
Valid Command Types	MSG_GET_VALUE,

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_1_ERRORS_SEC

Description	This gets the time elapsed since last AES error detected on Input A of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0ab7, 02743
AES_2 Hex Code, Decimal Code	0x0ac7, 02759
AES_3 Hex Code, Decimal Code	0x0ad3, 02771
AES_4 Hex Code, Decimal Code	0x0adf, 02783
Valid Command Types	MSG_GET_TEXT,

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_2_CLEAR_AES_ERRORS

Description	This clears the AES error counter on Input B of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0ab8, 02744
AES_2 Hex Code, Decimal Code	0x0ac8, 02760
AES_3 Hex Code, Decimal Code	0x0ad4, 02772
AES_4 Hex Code, Decimal Code	0x0ae0, 02784
Valid Command Types	MSG_SET_VALUE,
Values	1 = clear errors

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_2_ERRORS

Description	This gets the number of AES errors detected on Input B of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0ab9, 02745
AES_2 Hex Code, Decimal Code	0x0ac9, 02761
AES_3 Hex Code, Decimal Code	0x0ad5, 02773
AES_4 Hex Code, Decimal Code	0x0ad5, 02773
Valid Command Types	MSG_GET_VALUE,

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_2_ERRORS_SEC

Description	This gets the time elapsed since last AES error detected on Input B of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0aba, 02746
AES_2 Hex Code, Decimal Code	0x0aca, 02762
AES_3 Hex Code, Decimal Code	0x0ad6, 02774
AES_4 Hex Code, Decimal Code	0x0ae2, 02786
Valid Command Types	MSG_GET_TEXT,

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_3_CLEAR_AES_ERRORS

Description	This clears the AES error counter on Input C of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0abb, 02747
AES_2 Hex Code, Decimal Code	0x0acb, 02763
AES_3 Hex Code, Decimal Code	0x0ad7, 02775
AES_4 Hex Code, Decimal Code	0x0ae3, 02787
Valid Command Types	MSG_SET_VALUE,
Values	1 = clear errors

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_3_ERRORS

Description	This gets the number of AES errors detected on Input C of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0abc, 02748
AES_2 Hex Code, Decimal Code	0x0acc, 02764
AES_3 Hex Code, Decimal Code	0x0ad8, 02776
AES_4 Hex Code, Decimal Code	0x0ae4, 02788
Valid Command Types	MSG_GET_VALUE,

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_3_ERRORS_SEC

Description	This gets the time elapsed since last AES error detected on Input C of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0abd, 02749
AES_2 Hex Code, Decimal Code	0x0acd, 02765
AES_3 Hex Code, Decimal Code	0x0ad9, 02777
AES_4 Hex Code, Decimal Code	0x0ae5, 02789
Valid Command Types	MSG_GET_TEXT,

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_4_CLEAR_AES_ERRORS

Description	This clears the AES error counter on Input D of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0abe, 02750
AES_2 Hex Code, Decimal Code	0x0ace, 02766
AES_3 Hex Code, Decimal Code	0x0ada, 02778
AES_4 Hex Code, Decimal Code	0x0ae6, 02790
Valid Command Types	MSG_SET_VALUE,
Values	1 = clear errors

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_4_ERRORS

Description	This gets the number of AES errors detected on Input D of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0abf, 02751
AES_2 Hex Code, Decimal Code	0x0acf, 02767
AES_3 Hex Code, Decimal Code	0x0adb, 02779
AES_4 Hex Code, Decimal Code	0x0ae7, 02791
Valid Command Types	MSG_GET_VALUE,

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_4_ERRORS_SEC

Description	This gets the time elapsed since last AES error detected on Input D of the 4AES module in a Rx chassis.
AES_1 Hex Code, Decimal Code	0x0ac0, 02752
AES_2 Hex Code, Decimal Code	0x0ad0, 02768
AES_3 Hex Code, Decimal Code	0x0adc, 02780
AES_4 Hex Code, Decimal Code	0x0ae8, 02792
Valid Command Types	MSG_GET_TEXT,

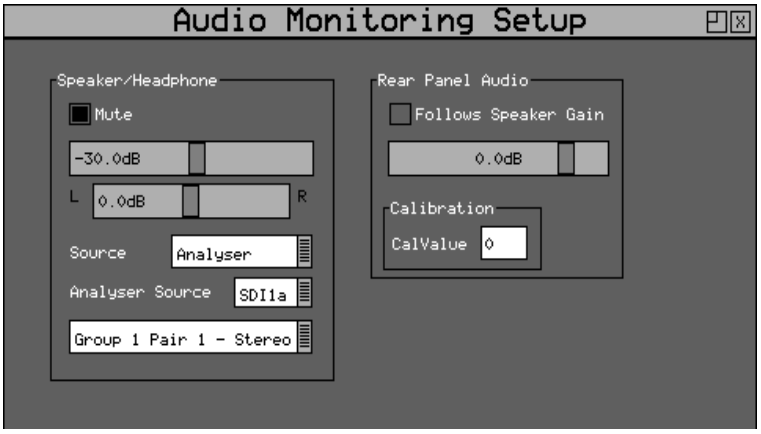
Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

COM_AES_1_ERROR_GROUP

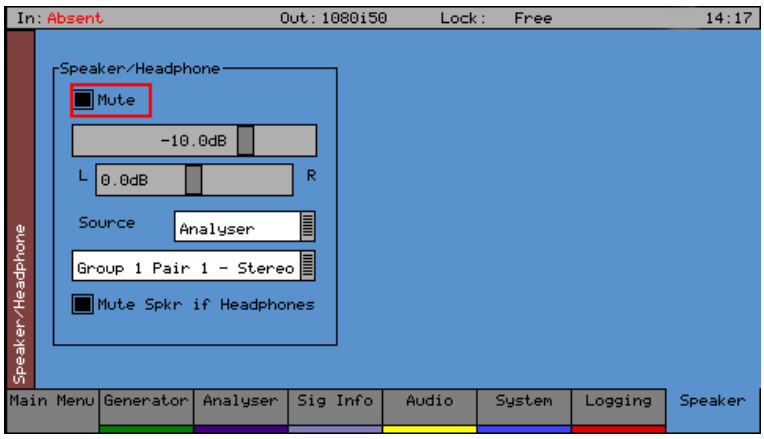
Description	Group Box containing AES error counters
AES_1 Hex Code, Decimal Code	0x0ac1, 02753
AES_2 Hex Code, Decimal Code	0x0ac2 02754
AES_3 Hex Code, Decimal Code	0x0ac3 02755
AES_4 Hex Code, Decimal Code	0x0ac4 02756
Valid Command Types	?????

Where AES_1 refers to a 4AES module fitted in slot 1 of a Rx chassis

Audio Monitoring



The Rx Audio Monitoring Setup window controls which audio pair that can be heard on the loud speakers and headphone output of the Rx instrument.



The Sx Speaker menu controls which audio pair that can be heard on the loud speakers and headphone output of the Sx instrument.

COM_SPKR_MUTE

Description	This mutes the Rx or Sx speaker / headphone output
Hex Code, Decimal Code	0x021e, 00542
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = on, 1 = mute audio

COM_SPKR_MUTE_ON_PHONES

Description	This mutes the Rx or Sx speaker if headphones are plugged in.
Hex Code, Decimal Code	0x021f, 00543
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_SPKR_LEVEL

Description	This sets the Rx or Sx speaker / headphone level.
Hex Code, Decimal Code	0x021d, 00541
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -160 Max = 30 Divisor = 2

COM_SPKR_BALANCE

Description	This sets the Rx or Sx speaker /headphone balance.
Hex Code, Decimal Code	0x021c, 00540
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -20 Max = 20 Divisor = 2

COM_SPKR_SOURCE

Description	This set the Sx or Rx speaker / headphone source
Hex Code, Decimal Code	0x0220, 00544
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Analyser Input, 1 = Generator Output (Sx Only) 2 = AES Audio Input 3 = AES Audio Output (Sx Only)

COM_SPKR_SOURCE_INP

Description	This sets the Sx or Rx speaker / headphones source pair / channel from the Analyser SDI embedded input
Hex Code, Decimal Code	0x0221, 00545
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = G1P1, 1 = G1P2 2 = G2P1 3 = G2P2 4 = G3P1 5 = G3P2 6 = G4P1 7 = G4P2

COM_SPKR_SOURCE_OUT

Description	This sets the Sx or Rx speaker / headphones source pair / channel from the Generator SDI embedded output
Hex Code, Decimal Code	0x0222, 00546
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = G1P1, 1 = G1P2 2 = G2P1 3 = G2P2 4 = G3P1 5 = G3P2 6 = G4P1 7 = G4P2

COM_REAR_MUTE

Description	This mutes the Rx rear panel audio output
Hex Code, Decimal Code	0x022c, 00556
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = on, 1 = mute audio

COM_REAR_LEVEL

Description	This sets the Rx rear panel audio output level.
Hex Code, Decimal Code	0x0224, 00548
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -160 Max = 30 Divisor = 2

COM_REAR_SOURCE

Description	This set the Rx rear panel audio source
Hex Code, Decimal Code	0x0228, 00552
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Analyser Input, 2 = AES Audio Input

COM_REAR_SOURCE_INP

Description	This sets the Rx rear panel audio output from the Analyser SDI embedded input
Hex Code, Decimal Code	0x0229, 00553
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = G1P1, 1 = G1P2 2 = G2P1 3 = G2P2 4 = G3P1 5 = G3P2 6 = G4P1 7 = G4P2

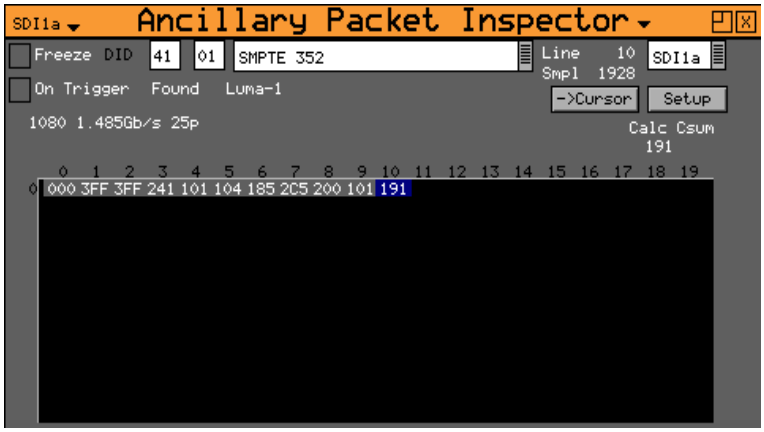
Dolby Audio Monitoring

COM_REAR_DOLBY_LISTEN_MODE

Description	This selects PCM or decoded Dolby audio for the speaker output
Hex Code, Decimal Code	0x022d, 00557
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = PCM Audio 1 = Dolby Downmix (Dolby Decoder module)

Input - ANC Commands

ANC Inspector Commands



The Ancillary Inspector window is accessed by clicking on an Analyzer slot on the monitor output task bar and selecting “ANC Inspector”. This will create a new window panel for the selected input.

Note that in the following tables ANLYS indicates the Sx analyser or Rx analyser module in slot 1 and ANLYS_2 indicates the Rx analyser module in slot 2.

COM_ANLYS_ANC_DID_TYPE

Description	This provides a list of known ANC packets
ANLYS Hex Code, Decimal Code	0x025a, 00602
ANLYS_2 Hex Code, Decimal Code	0x1f46, 08006
ANLYS_3 Hex Code, Decimal Code	0x1faa, 08106
ANLYS_4 Hex Code, Decimal Code	0x200e, 08206
Valid Command Types	MSG_GET_ITEM_STRING

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ANC_DID

Description	This selects the DID value to display the corresponding ANC packet in the SDI data stream
ANLYS Hex Code, Decimal Code	0x0258, 00600
ANLYS_2 Hex Code, Decimal Code	0x1f45, 08005
ANLYS_3 Hex Code, Decimal Code	0x1fa9, 08105
ANLYS_4 Hex Code, Decimal Code	0x200d, 08205
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	DID value entered as decimal

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ANC_CALC_CHECKSUM

Description	This displays the checksum of the detected ANC packet
ANLYS Hex Code, Decimal Code	0x025d, 00605
ANLYS_2 Hex Code, Decimal Code	0x1f42, 08002
ANLYS_3 Hex Code, Decimal Code	0x1fa6, 08102
ANLYS_4 Hex Code, Decimal Code	0x200a, 08202
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ANC_DATA

Description	This gets a data grid containing the packet values of the detected DID
ANLYS Hex Code, Decimal Code	0x025b, 00603
ANLYS_2 Hex Code, Decimal Code	0x1f44, 08004
ANLYS_3 Hex Code, Decimal Code	0x1fa8, 08104
ANLYS_4 Hex Code, Decimal Code	0x200c, 08204
Valid Command Types	MSG_GET_ITEM_VALUES

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ANC_COPY_TO_CURSOR

Description	This copies the Line/Sample number for the detected ANC packet to Picture Cursor values
ANLYS Hex Code, Decimal Code	0x0264, 00612
ANLYS_2 Hex Code, Decimal Code	0x1f43, 08003
ANLYS_3 Hex Code, Decimal Code	0x1fa7, 08103
ANLYS_4 Hex Code, Decimal Code	0x200b, 08203
Valid Command Types	MSG_SET_VALUES
Values	1 = copy values

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ANC_FREEZE

Description	This enables the Freeze check box and freezes the display.
ANLYS Hex Code, Decimal Code	0x0262, 00610
ANLYS_2 Hex Code, Decimal Code	0x1f47, 08007
ANLYS_3 Hex Code, Decimal Code	0x1fab, 08107
ANLYS_4 Hex Code, Decimal Code	0x200f, 08207
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ANC_FREEZE_ON_ERROR

Description	This enables the On Trigger check box and freezes the display when error detected.
ANLYS Hex Code, Decimal Code	0x0263, 00611
ANLYS_2 Hex Code, Decimal Code	0x1f48, 08008
ANLYS_3 Hex Code, Decimal Code	0x1fac, 08108
ANLYS_4 Hex Code, Decimal Code	0x2010, 08208
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ANC_INP_SEL

Description	On the Sx unit this selects the input stream for the ANC Status
Hex Code, Decimal Code	0x025f, 00607
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Inp1, 1 = Inp1Lk1, 2 = Inp1Lk2, 3 = Inp2

COM_ANLYS_ANC_INSPECT_INP_SEL

Description	On the Rx unit this selects the analyser input to be routed to the ANC inspector instrument.
ANLYS Hex Code, Decimal Code	0x0260, 00608
ANLYS_2 Hex Code, Decimal Code	0x1f49, 08009
ANLYS_3 Hex Code, Decimal Code	0x1fad, 08109
ANLYS_4 Hex Code, Decimal Code	0x2011, 08209
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = System Input 1, 1 = System Input 2

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ANC_SAMPLE_NO

Description	This displays the sample number on which the detected ANC packet was found
ANLYS Hex Code, Decimal Code	0x0266, 00614
ANLYS_2 Hex Code, Decimal Code	0x1f4f, 08015
ANLYS_3 Hex Code, Decimal Code	0x1fb3, 08115
ANLYS_4 Hex Code, Decimal Code	0x2017, 08215
Valid Command Types	MSG_GET_VALUE

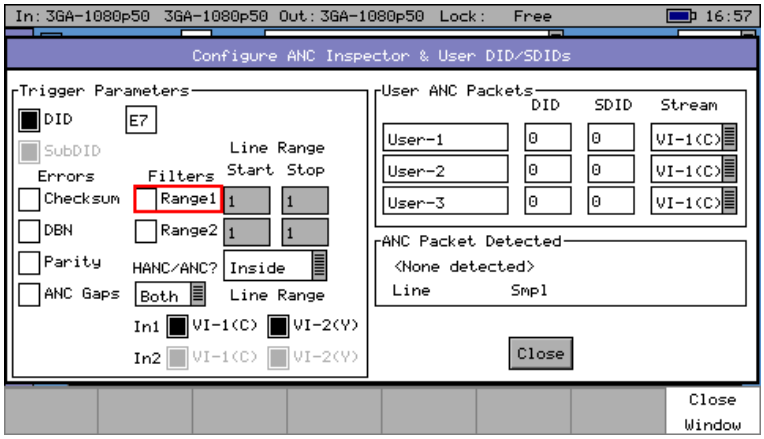
Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_ANC_TRIGGER_REASON

Description	This displays the where the ANC Packet was found
ANLYS Hex Code, Decimal Code	0x025c, 00604
ANLYS_2 Hex Code, Decimal Code	0x1f52, 08018
ANLYS_3 Hex Code, Decimal Code	0x1fb6, 08118
ANLYS_4 Hex Code, Decimal Code	0x201a, 08218
Valid Command Types	MSG_GET_TEXT

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

ANC Triggers



Ancillary packets can be detected using the trigger parameters in the ANC Inspector setup window.

COM_ANC_TRIGGER_DID

Description	This enables the DID trigger check box. Note that the DID value is defined by the COM_ANLYS_ANC_DID command
ANC Hex Code, Decimal Code	0x05fd, 01533
ANC_2 Hex Code, Decimal Code	0x179b, 06043
ANC_3 Hex Code, Decimal Code	0x17af, 06063
ANC_4 Hex Code, Decimal Code	0x17c3, 06083
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_SDID

Description	This enables the SDID trigger check box.
ANC Hex Code, Decimal Code	0x05fe, 01534
ANC_2 Hex Code, Decimal Code	0x17a5, 06053
ANC_3 Hex Code, Decimal Code	0x17b9, 06073
ANC_4 Hex Code, Decimal Code	0x17cd, 06093
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_CHECKSUM

Description	This enables the Checksum trigger check box.
ANC Hex Code, Decimal Code	0x05f3, 01523
ANC_2 Hex Code, Decimal Code	0x1799, 06041
ANC_3 Hex Code, Decimal Code	0x17ad, 06061
ANC_4 Hex Code, Decimal Code	0x17c1, 06081
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_DBN

Description	This enables the DBN trigger check box.
ANC Hex Code, Decimal Code	0x05f4, 01524
ANC_2 Hex Code, Decimal Code	0x179a, 06042
ANC_3 Hex Code, Decimal Code	0x17ae, 06062
ANC_4 Hex Code, Decimal Code	0x17c2, 06082
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_PARITY

Description	This enables the ANC Parity trigger check box.
ANC Hex Code, Decimal Code	0x05f5, 01525
ANC_2 Hex Code, Decimal Code	0x179d, 06045
ANC_3 Hex Code, Decimal Code	0x17b1, 06065
ANC_4 Hex Code, Decimal Code	0x17c5, 06085
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_ANC_GAPS

Description	This enables the ANC Gaps trigger check box.
ANC Hex Code, Decimal Code	0x05f6, 01526
ANC_2 Hex Code, Decimal Code	0x1798, 06040
ANC_3 Hex Code, Decimal Code	0x17ac, 06060
ANC_4 Hex Code, Decimal Code	0x17c0, 06080
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_RANGE

Description	This setups up the Include/Exclude lines in specified ranges.
ANC Hex Code, Decimal Code	0x05f7, 01527
ANC_2 Hex Code, Decimal Code	0x179e, 06046
ANC_3 Hex Code, Decimal Code	0x17b2, 06066
ANC_4 Hex Code, Decimal Code	0x17c6, 06086
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = inside, 1 = outside

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_RANGE1

Description	This enables the Range 1 trigger check box.
ANC Hex Code, Decimal Code	0x05eb, 01515
ANC_2 Hex Code, Decimal Code	0x179e, 06046
ANC_3 Hex Code, Decimal Code	0x17b2, 06066
ANC_4 Hex Code, Decimal Code	0x17c6, 06086
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_RANGE1_START

Description	This sets the Range 1 trigger start value.
ANC Hex Code, Decimal Code	0x05ec, 01516
ANC_2 Hex Code, Decimal Code	0x17a0, 06048
ANC_3 Hex Code, Decimal Code	0x17b4, 06068
ANC_4 Hex Code, Decimal Code	0x17c8, 06088
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 2047 Divisor = 1

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_RANGE1_STOP

Description	This sets the Range 1 trigger stop value.
ANC Hex Code, Decimal Code	0x05ed, 01517
ANC_2 Hex Code, Decimal Code	0x17a1, 06049
ANC_3 Hex Code, Decimal Code	0x17b5, 06069
ANC_4 Hex Code, Decimal Code	0x17c9, 06089
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 2047 Divisor = 1

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_RANGE2

Description	This enables the Range 2 trigger check box.
ANC Hex Code, Decimal Code	0x05ee, 01518
ANC_2 Hex Code, Decimal Code	0x17a2, 06050
ANC_3 Hex Code, Decimal Code	0x17b6, 06070
ANC_4 Hex Code, Decimal Code	0x17ca, 06090
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_RANGE2_START

Description	This sets the Range 2 trigger start value.
ANC Hex Code, Decimal Code	0x05ef, 01519
ANC_2 Hex Code, Decimal Code	0x17a3, 06051
ANC_3 Hex Code, Decimal Code	0x17b7, 06071
ANC_4 Hex Code, Decimal Code	0x17cb, 06091
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 2047 Divisor = 1

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_RANGE2_STOP

Description	This sets the Range 2 trigger stop value.
ANC Hex Code, Decimal Code	0x05f0, 01520
ANC_2 Hex Code, Decimal Code	0x17a4, 06052
ANC_3 Hex Code, Decimal Code	0x17b8, 06072
ANC_4 Hex Code, Decimal Code	0x17cc, 06092
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 1 Max = 2047 Divisor = 1

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_HANC_VANC

Description	This enables the HANC/VANC trigger selection.
ANC Hex Code, Decimal Code	0x05f1, 01521
ANC_2 Hex Code, Decimal Code	0x179c, 06044
ANC_3 Hex Code, Decimal Code	0x17b0, 06064
ANC_4 Hex Code, Decimal Code	0x17c4, 06084
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Both, 1 = HANC, 2 = VANC

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_VI_A1

Description	This enables the VI A1 trigger check box to allow searches with the Chroma ANC packets.
ANC Hex Code, Decimal Code	0x05ff, 01535
ANC_2 Hex Code, Decimal Code	0x17a6, 06054
ANC_3 Hex Code, Decimal Code	0x17ba, 06074
ANC_4 Hex Code, Decimal Code	0x17ce, 06094
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_VI_A2

Description	This enables the VI A2 trigger check box to allow searches with the Luma ANC packets.
ANC Hex Code, Decimal Code	0x0600, 01536
ANC_2 Hex Code, Decimal Code	0x17a7, 06055
ANC_3 Hex Code, Decimal Code	0x17bb, 06075
ANC_4 Hex Code, Decimal Code	0x17cf, 06095
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_VI_B1

Description	This enables the VI B1 trigger check box to allow searches with the Chroma ANC packets.
ANC Hex Code, Decimal Code	0x0601, 01537
ANC_2 Hex Code, Decimal Code	0x17a8, 06056
ANC_3 Hex Code, Decimal Code	0x17bc, 06076
ANC_4 Hex Code, Decimal Code	0x17d0 06096
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

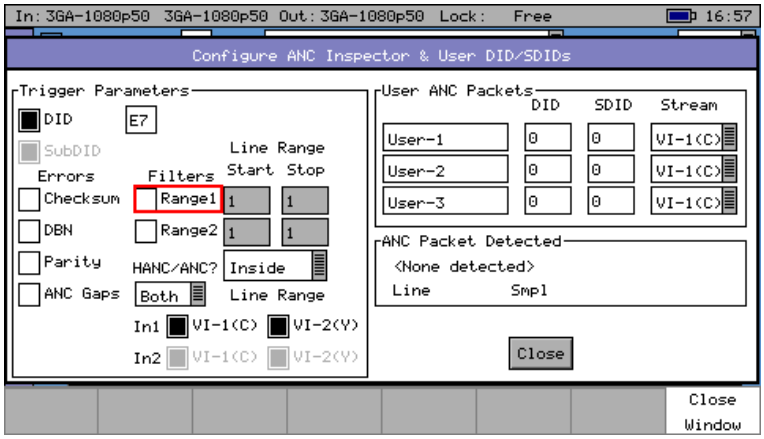
Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

COM_ANC_TRIGGER_VI_B2

Description	This enables the VI B2 trigger check box to allow searches with the Luma ANC packets.
ANC Hex Code, Decimal Code	0x0602, 01538
ANC_2 Hex Code, Decimal Code	0x17a9, 06057
ANC_3 Hex Code, Decimal Code	0x17bd, 06077
ANC_4 Hex Code, Decimal Code	0x17d1, 06097
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

Where ANC indicates the Sx analyser or Rx analyser module in slot 1 and ANC_2 indicates the Rx analyser module in slot 2.

User Defined Ancillary Packets



User defined ancillary packets can be setup for use with the ANC Status and ANC Inspector windows.

COM_ANLYS_ANC_PACKET_USER_SETUP

Description	This ANC User DID/SDID configure Dialogue on the Sx or Rx 2000 front panel.
Hex Code, Decimal Code	0x0514, 01300
Valid Command Types	MSG_SET_VALUE,
Values	1 = display menu

COM_ANLYS_ANC_PACKET_USER_SETUP_HDMI

Description	This ANC User DID/SDID configure Dialogue on the Rx HDMI menu display.
Hex Code, Decimal Code	0x0fdd, 04061
Valid Command Types	MSG_SET_VALUE,
Values	1 = display menu

COM_ANC_PACKET_USER_1_NAME

Description	This sets the name for the user defined ANC Packet 1.
Hex Code, Decimal Code	0x05dd, 01501
Valid Command Types	MSG_SET_TEXT, MSG_GET_TEXT

COM_ANC_PACKET_USER_1_DID

Description	This sets the DID value for the user defined ANC Packet 1.
Hex Code, Decimal Code	0x05dc, 01500
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 255 Divisor = 1

COM_ANC_PACKET_USER_1_SDID

Description	This sets the SDID value for the user defined ANC Packet 1.
Hex Code, Decimal Code	0x05de, 01502
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 255 Divisor = 1

COM_ANC_PACKET_USER_1_STREAM

Description	This sets the stream type for the user defined ANC Packet 1.
Hex Code, Decimal Code	0x05df, 01503
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Luma, 1 = Chroma, 2 = Both

COM_ANC_PACKET_USER_2_NAME

Description	This sets the name for the user defined ANC Packet 2.
Hex Code, Decimal Code	0x05e1, 01505
Valid Command Types	MSG_SET_TEXT, MSG_GET_TEXT

COM_ANC_PACKET_USER_2_DID

Description	This sets the DID value for the user defined ANC Packet 2.
Hex Code, Decimal Code	0x05e0, 01504
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 255 Divisor = 1

COM_ANC_PACKET_USER_2_SDID

Description	This sets the SDID value for the user defined ANC Packet 2.
Hex Code, Decimal Code	0x05e2, 01506
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 255 Divisor = 1

COM_ANC_PACKET_USER_2_STREAM

Description	This sets the stream type for the user defined ANC Packet 2.
Hex Code, Decimal Code	0x05e3, 01507
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Luma, 1 = Chroma, 2 = Both

COM_ANC_PACKET_USER_3_NAME

Description	This sets the name for the user defined ANC Packet 3.
Hex Code, Decimal Code	0x05e5, 01509
Valid Command Types	MSG_SET_TEXT, MSG_GET_TEXT

COM_ANC_PACKET_USER_3_DID

Description	This sets the DID value for the user defined ANC Packet 3.
Hex Code, Decimal Code	0x05e4, 01508
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 255 Divisor = 1

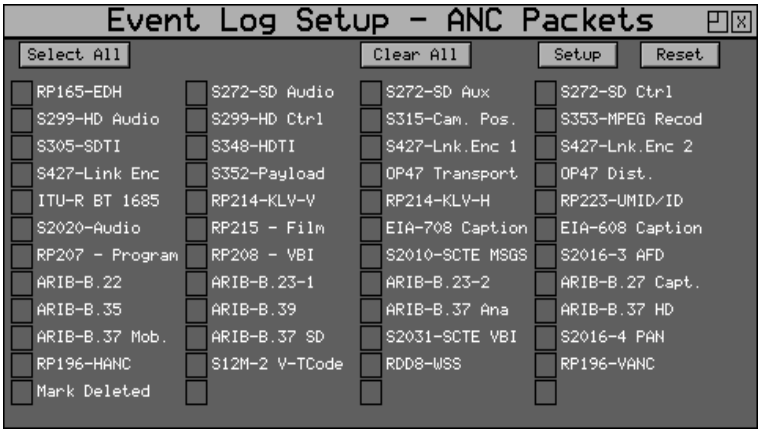
COM_ANC_PACKET_USER_3_SDID

Description	This sets the SDID value for the user defined ANC Packet 3.
Hex Code, Decimal Code	0x05e6, 01510
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 255 Divisor = 1

COM_ANC_PACKET_USER_3_STREAM

Description	This sets the stream type for the user defined ANC Packet 3.
Hex Code, Decimal Code	0x05e7, 01511
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Luma, 1 = Chroma, 2 = Both

Logging ANC Errors



The ANC Packet Logging window allows any status changes (eg Present, Checksum Error, Missing, Parity Error) for the selected packets to be logged in the system's event log.

COM_ANLYS_ANC_PACKET_LOG_ACTIVE

Description	This enables the check boxes for all of the currently present ANC Packets on all SDI inputs.
Hex Code, Decimal Code	0x0579, 01401
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_ANLYS_ANC_PACKET_LOG_USER_1

Description	This enables the User 1 packet check box.
Hex Code, Decimal Code	0x05a8, 01448
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_ANLYS_ANC_PACKET_LOG_USER_2

Description	This enables the User 2 packet check box.
Hex Code, Decimal Code	0x05a9, 01449
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

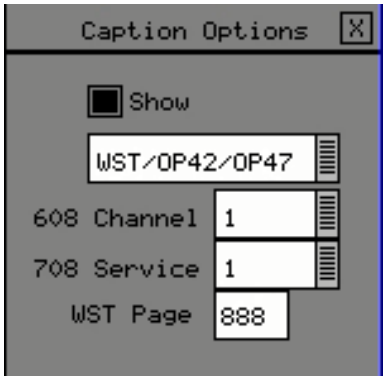
COM_ANLYS_ANC_PACKET_LOG_USER_3

Description	This enables the User 3 packet check box.
Hex Code, Decimal Code	0x05aa, 01450
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_ANLYS_ANC_PACKET_CLEAR_ERRORS

Description	This clears all ANC packet status errors
Hex Code, Decimal Code	0x0515, 01301
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = on

Closed Caption Commands



If the closed caption option is installed on the Rx system, the Caption Options menu allows the selection of WST/ OP42/OP47, EIA 608 and EIA 706 subtitles.

The 608 Channel numeric value allows the specific 608 closed caption channel to be selected.

The 708 Service numeric value allows the specific 708 service to be selected .

The WST Page value allows the appropriate World Subtitle page to be selected.

COM_ANLYS_CAPTION_HDMI_SETUP

Description	This displays the closed caption setup menu on the Rx HDMI monitor output
ANLYS Hex Code, Decimal Code	0x0285, 00645
ANLYS_2 Hex Code, Decimal Code	0x1f8e, 08078
ANLYS_3 Hex Code, Decimal Code	0x1ff2, 08178
ANLYS_4 Hex Code, Decimal Code	0x2056, 08278
Valid Command Types	MSG_SET_VALUE,
Values	1 = enable

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_CAPTION_TFT_SETUP

Description	This displays the closed caption setup menu on the Rx 2000 front panel
ANLYS Hex Code, Decimal Code	0x0286, 00646
ANLYS_2 Hex Code, Decimal Code	0x1f8f, 08079
ANLYS_3 Hex Code, Decimal Code	0x1ff3, 08179
ANLYS_4 Hex Code, Decimal Code	0x2057, 08279
Valid Command Types	MSG_SET_VALUE,
Values	1 = enable

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_CAPTION_ENABLE

Description	This displays the selected closed caption type on the Picture instrument
ANLYS Hex Code, Decimal Code	0x0282, 00642
ANLYS_2 Hex Code, Decimal Code	0x1f8b, 08075
ANLYS_3 Hex Code, Decimal Code	0x1fef, 08175
ANLYS_4 Hex Code, Decimal Code	0x2053, 08275
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = hide, 1 = show

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_CAPTION_TYPE

Description	This selects the type of closed caption to be decoded and displayed 608/708 or WST(Teletext)
ANLYS Hex Code, Decimal Code	0x0283, 00643
ANLYS_2 Hex Code, Decimal Code	0x1f8c, 08076
ANLYS_3 Hex Code, Decimal Code	0x1ff0, 08176
ANLYS_4 Hex Code, Decimal Code	0x2054, 08276
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = WST/OP42/OP47 1 = 608 (in 708) 2 = 708

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_CAPTION_608_CHANNEL

Description	This selects the 608 closed caption channel
ANLYS Hex Code, Decimal Code	0x0281, 00641
ANLYS_2 Hex Code, Decimal Code	0x1f89, 08073
ANLYS_3 Hex Code, Decimal Code	0x1fed, 08173
ANLYS_4 Hex Code, Decimal Code	0x2051, 08273
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Channel 1 1 = Channel 2 2 = Channel 3 3 = Channel 4

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_CAPTION_708_SERVICE

Description	This selects the 708 closed caption service
ANLYS Hex Code, Decimal Code	0x0280, 00640
ANLYS_2 Hex Code, Decimal Code	0x1f8a, 08074
ANLYS_3 Hex Code, Decimal Code	0x1fee, 08174
ANLYS_4 Hex Code, Decimal Code	0x2052, 08274
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Service 1 1 = Service 2 2 = Service 3 3 = Service 4 4 = Service 5 5 = Service 6 6 = Service 7

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

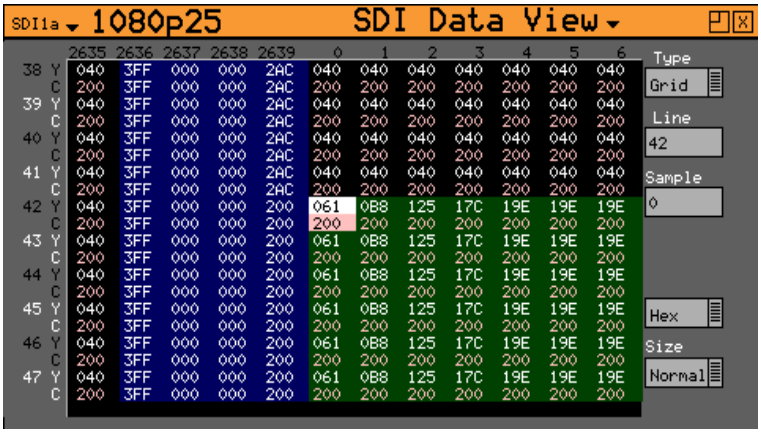
COM_ANLYS_CAPTION_WST_PAGE

Description	This selects the WST teletext page to display.
ANLYS Hex Code, Decimal Code	0x0284, 00644
ANLYS_2 Hex Code, Decimal Code	0x1f8d, 08077
ANLYS_3 Hex Code, Decimal Code	0x1ff1, 08177
ANLYS_4 Hex Code, Decimal Code	0x2055, 08277
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 100, Max = 899, Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

Note that the number of pages is typically limited to those numbered 100 to 199, 200 to 299, etc up to 800 to 899. In Europe the common practice is to use pages 888, 889 and 890. In Australia however page 801 is used.

Data View Instrument Commands



The Rx Instrument with an Analyser Module installed and SDI analysis option can display the selected input in the form of a data array.

The Sx Instrument with the SDI Data Stream Analysis option has an equivalent Data View

COM_ANLYS_DATA_TYPE

Description	This selects the data view mode
ANLYS Hex Code, Decimal Code	0x0242, 00578
ANLYS_2 Hex Code, Decimal Code	0x1f5c, 08028
ANLYS_3 Hex Code, Decimal Code	0x1fc0, 08128
ANLYS_4 Hex Code, Decimal Code	0x2024, 08228
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Grid 1 = Stream 2 = Composite 3 = Split

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_LINE

Description	Select individual line to be displayed on waveform, vectorscope and data view. This positions the data array vertically
ANLYS Hex Code, Decimal Code	0x023f 00575
ANLYS_2 Hex Code, Decimal Code	0x1f70 08048
ANLYS_3 Hex Code, Decimal Code	0x1fd4 08148
ANLYS_4 Hex Code, Decimal Code	0x2038 08248
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -9999 Max = 9999 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_SAMPLE

Description	Select individual sample for cursor, waveform, vectorscope and data view. This positions the data array horizontally.
ANLYS Hex Code, Decimal Code	0x0240, 00576
ANLYS_2 Hex Code, Decimal Code	0x1f77, 08055
ANLYS_3 Hex Code, Decimal Code	0x1fdb, 08155
ANLYS_4 Hex Code, Decimal Code	0x203f, 08255
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -9999 Max = 9999 Divisor = 1

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DATA_FORMAT

Description	This selects the data numeric format (Hex/ Decimal)
ANLYS Hex Code, Decimal Code	0x0246, 00582
ANLYS_2 Hex Code, Decimal Code	0x1f5a, 08026
ANLYS_3 Hex Code, Decimal Code	0x1fbe, 08126
ANLYS_4 Hex Code, Decimal Code	0x2022, 08226
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = HEX, 1 = Decimal

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DATA_BIT_FORMAT

Description	This selects the data view bit depth.
ANLYS Hex Code, Decimal Code	0x0247, 00583
ANLYS_2 Hex Code, Decimal Code	0x1f58, 08024
ANLYS_3 Hex Code, Decimal Code	0x1fbc, 08124
ANLYS_4 Hex Code, Decimal Code	0x2020, 08224
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Normal (10-bit), 1 = 8-bit

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DATA_UNPACK

Description	This unpacks picture data when in 3G-A/B packed modes and displays as YCbCr/RGB.
ANLYS Hex Code, Decimal Code	0x023b, 00571
ANLYS_2 Hex Code, Decimal Code	0x1f5d, 08029
ANLYS_3 Hex Code, Decimal Code	0x1fc1, 08129
ANLYS_4 Hex Code, Decimal Code	0x2025, 08229
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = unpack

Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

COM_ANLYS_DATA_DISPLAY

Description	This gets the currently displayed data array as a string. This is a 12 sample x 5 line array of luminance and chrominance data.
ANLYS Hex Code, Decimal Code	0x023c, 00572
ANLYS_2 Hex Code, Decimal Code	0x1f59, 08025
ANLYS_3 Hex Code, Decimal Code	0x1fbd, 08125
ANLYS_4 Hex Code, Decimal Code	0x2021, 08225
Valid Command Types	MSG_GET_ITEM_STRINGS

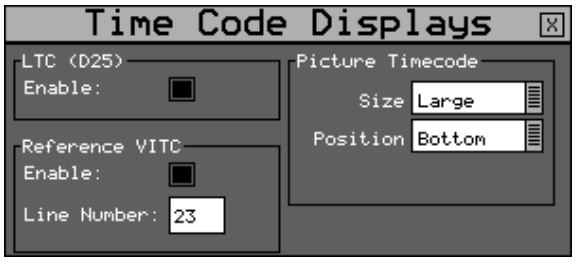
Where ANLYS refers to Sx analyser input, ANLYS_2 refers to Rx analyser module 2, ANLYS_3 refers to Rx analyser module 3 etc

Note that the position of the data array within the SDI data stream is controlled by the COM_ANLYS_LINE and COM_ANLYS_SAMPLE values.

COM_ANLYS_DATA_INP_SEL

Description	On the Sx this controls the SDI input link to display
Hex Code, Decimal Code	0x023a, 00570
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = unpack

LTC and VITC Controls



The Rx system supports both LTC via the GPIO connector on the rear panel and VITC from the 625i/525i studio locking reference signal

These time codes can be displayed on the HDMI monitor output.

COM_ANLYS_TC_ENABLE_LTC

Description	This displays longitudinal time code on HDMI monitor status bar
Hex Code, Decimal Code	0x2153, 08531
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_ANLYS_TC_ENABLE_VITC

Description	This displays vertical interval time code on HDMI monitor status bar
Hex Code, Decimal Code	0x2156, 08534
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_ANLYS_TC_VITC_LINENO

Description	This selects the Line number to scan for reference VITC time code
Hex Code, Decimal Code	0x2159, 08537
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Typically line 23

PHABRIX® broadcast excellence

C Logging

Logging

System Architecture

Overview

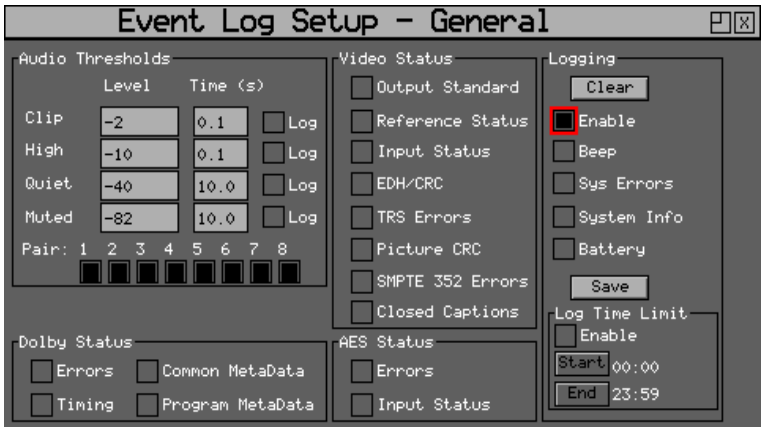
The PHABRIX Remote Control Protocol can be used to control both the Sx hand held range of instruments and the Rx rack mount range of instruments. The Sx range on has a single analyser and a single generator whereas the Rx range can have up to 4 analysers and generator modules in any combination.

The event log records events from all analysers and generators.

Logging

Event Capture

Log Setup Commands



The Log Setup menu allows specific events to be tracked by the Sx and Rx instruments. The events to be logged are set up on this page by checking the appropriate 'Log' check boxes.

Audio Threshold Controls

COM_ANLYS_LOG_CLIP_LEVEL

Description	This sets the audio level that is considered to be the 'clipping' level.
Hex Code, Decimal Code	0x01ff, 00511
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100, Max = 0, Divisor = 1

COM_ANLYS_LOG_CLIP_FRAMES

Description	This sets the number of frames for the 'clipping audio' event to be logged.
Hex Code, Decimal Code	0x01fe, 00510
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 100, Divisor = 10

COM_ANLYS_LOG_CLIP_ENABLE

Description	This enables 'audio clipping' events to be included in the event log.
Hex Code, Decimal Code	0x01fd, 00509
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_HIGH_LEVEL

Description	This sets the audio level that is considered to be the 'high' level.
Hex Code, Decimal Code	0x01f9, 00505
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100, Max = 0, Divisor = 1

COM_ANLYS_LOG_HIGH_FRAMES

Description	This sets the number of frames for the 'high audio' event to be logged.
Hex Code, Decimal Code	0x01f8, 00504
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 100, Divisor = 10

COM_ANLYS_LOG_HIGH_ENABLE

Description	This enables 'high audio' events to be included in the event log.
Hex Code, Decimal Code	0x01f7, 00503
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_MUTED_LEVEL

Description	This sets the audio level that is considered to be the 'muted' level.
Hex Code, Decimal Code	0x01f6, 00502
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100, Max = 0, Divisor = 1

COM_ANLYS_LOG_MUTED_FRAMES

Description	This sets the number of frames for the 'muted audio' event to be logged.
Hex Code, Decimal Code	0x01f5, 00501
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 100, Divisor = 10

COM_ANLYS_LOG_MUTED_ENABLE

Description	This enables 'muted audio' events to be included in the event log.
Hex Code, Decimal Code	0x01f4, 00500
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_QUIET_LEVEL

Description	This sets the audio level that is considered to be the 'quiet' level.
Hex Code, Decimal Code	0x01fc, 00508
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -100, Max = 0, Divisor = 1

COM_ANLYS_LOG_QUIET_FRAMES

Description	This sets the number of frames for the 'quiet audio' event to be logged.
Hex Code, Decimal Code	0x01fb, 00507
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 100, Divisor = 10

COM_ANLYS_LOG_QUIET_ENABLE

Description	This enables 'quiet audio' events to be included in the event log.
Hex Code, Decimal Code	0x01fa, 00506
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_AUDIO_PAIR_1

Description	This selects which audio pairs are to be logged.
PAIR_1 Hex Code, Decimal Code	0x069a, 01690
PAIR_2 Hex Code, Decimal Code	0x069b, 01691
PAIR_3 Hex Code, Decimal Code	0x069c, 01692
PAIR_4 Hex Code, Decimal Code	0x069d, 01693
PAIR_5 Hex Code, Decimal Code	0x069e, 01694
PAIR_6 Hex Code, Decimal Code	0x069f, 01695
PAIR_7 Hex Code, Decimal Code	0x06a0, 01696
PAIR_8 Hex Code, Decimal Code	0x06a1, 01697
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

Video Status Controls

COM_GEN_LOG_OUT_STD_ENABLE

Description	This enables output standard changes to be included in the event log.
Hex Code, Decimal Code	0x0203, 00515
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_REF_STATUS_ENABLE

Description	This enables locking reference status changes to be included in the event log.
Hex Code, Decimal Code	0x0201, 00513
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_INP_STATUS_ENABLE

Description	This enables input status changes to be included in the event log.
Hex Code, Decimal Code	0x0200, 00512
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_EDHCRC_ENABLE

Description	This enables input EDH/CRC changes to be included in the event log.
Hex Code, Decimal Code	0x0202, 00514
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_TRS_ERRORS_ENABLE

Description	This enables input TRS placement error messages to be included in the event log.
Hex Code, Decimal Code	0x0216, 00534
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_ACTIVE_PICTURE_CRC_ENABLE

Description	This enables input active picture CRC changes to be included in the event log.
Hex Code, Decimal Code	0x0215, 00533
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_SMPTE_352_ERRORS_ENABLE

Description	This enables input SMPTE 352 data inconsistencies to be included in the event log.
Hex Code, Decimal Code	0x021b, 00539
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_CAPTIONS_ENABLE

Description	This enables input caption status changes to be included in the event log.
Hex Code, Decimal Code	0x018a, 00394
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_ASPECT_ENABLE

Description	This enables input aspect ratio status (WSS/VI/AFD changes to be included in the event log.
Hex Code, Decimal Code	0x0189, 00393
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

Logging Controls

COM_ANLYS_LOG_ENABLE

Description	This enables Sx and Rx event logging.
Hex Code, Decimal Code	0x0193, 00403
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = logging off, 1 = logging on

COM_ANLYS_LOG_BEEP

Description	This causes the Sx and Rx to beep when an event is added to the event log.
Hex Code, Decimal Code	0x0196, 00406
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_ANLYS_LOG_SYSTEM_ERRORS

Description	This allow Sx and Rx internal system errors to be included in the event log.
Hex Code, Decimal Code	0x018f, 00399
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_SYSTEM_INFO

Description	This allow Sx and Rx internal system information to be included in the event log.
Hex Code, Decimal Code	0x018e, 00398
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_SAVE

Description	This saves the current event log as a text file.
Hex Code, Decimal Code	0x0195, 00405
Valid Command Types	MSG_SET_VALUE,
Values	1 = save

COM_ANLYS_LOG_CSV

Description	On the Sx this saves the current event log as a CSV file.
Hex Code, Decimal Code	0x018b, 00395
Valid Command Types	MSG_SET_VALUE,
Values	1 = save

COM_ANLYS_LOG_TIME_LIMIT

Description	This enables logging to occur for a specified period of time. Defined by the COM_ANLYS_LOG_START_TIME and COM_ANLYS_LOG_SET_END_TIME values
Hex Code, Decimal Code	0x019c, 00412
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_ANLYS_LOG_START_TIME

Description	This sets the start time for logging to take place. Used in conjunction with the COM_ANLYS_LOG_TIME_LIMIT function.
Hex Code, Decimal Code	0x019e, 00414
Valid Command Types	MSG_SET_TEXT, MSG_GET_TEXT
Values	00:00 (hours:minutes)

COM_LOG_START_TIME_HOURS

Description	This sets the start hours for logging to take place. Used in conjunction with the COM_ANLYS_LOG_TIME_LIMIT function.
Hex Code, Decimal Code	0x0217, 00535
Valid Command Types	MSG_SET_VALUE, MSG_GET_GET
Values	Min = 0, Max = 23, Divisor = 1

COM_LOG_START_TIME_MINUTES

Description	This sets the start hours for logging to take place. Used in conjunction with the COM_ANLYS_LOG_TIME_LIMIT function.
Hex Code, Decimal Code	0x0218, 00536
Valid Command Types	MSG_SET_VALUE, MSG_GET_GET
Values	Min = 0, Max = 23, Divisor = 1

COM_ANLYS_LOG_SET_END_TIME

Description	This sets the end time for logging to take place. Used in conjunction with the COM_ANLYS_LOG_TIME_LIMIT function.
Hex Code, Decimal Code	0x019f, 00415
Valid Command Types	MSG_SET_TEXT, MSG_GET_TEXT
Values	00:00 (hours:minutes)

COM_LOG_END_TIME_HOURS

Description	This sets the end hours for logging to take place. Used in conjunction with the COM_ANLYS_LOG_TIME_LIMIT function.
Hex Code, Decimal Code	0x0219, 00537
Valid Command Types	MSG_SET_VALUE, MSG_GET_GET
Values	Min = 0, Max = 23, Divisor = 1

COM_LOG_END_TIME_MINUTES

Description	This sets the end minutes for logging to take place. Used in conjunction with the COM_ANLYS_LOG_TIME_LIMIT function.
Hex Code, Decimal Code	0x021a, 00538
Valid Command Types	MSG_SET_VALUE, MSG_GET_GET
Values	Min = 0, Max = 59, Divisor = 1

Dolby Status Controls

COM_ANLYS_LOG_DOLBY_COMMON_META_DATA_ENABLE

Description	This logs any changes to Dolby common metadata.
Hex Code, Decimal Code	0x0692, 01682
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_DOLBY_ERRORS_ENABLE

Description	This logs any Dolby errors
Hex Code, Decimal Code	0x0690, 01680
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_DOLBY_PROGRAM_META_DATA_ENABLE

Description	This logs any changes to Dolby program metadata.
Hex Code, Decimal Code	0x0693, 01683
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_DOLBY_TIMING_ENABLE

Description	This logs any errors in Dolby-E timing.
Hex Code, Decimal Code	0x0691, 01681
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

AES Status Controls

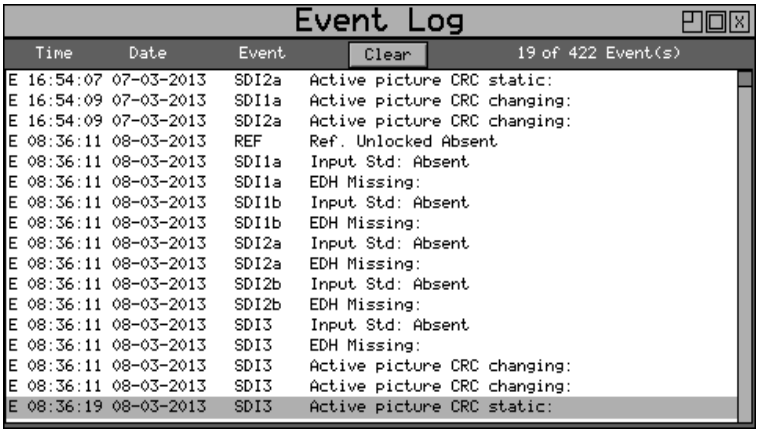
COM_ANLYS_LOG_AES_ERRORS_ENABLE

Description	This allows AES errors detected to be included in the event log.
Hex Code, Decimal Code	0x020e, 00526
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_AES_STATUS_ENABLE

Description	This allows AES input status changes to be included in the event log.
Hex Code, Decimal Code	0x020f, 00527
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

Event Log Controls



The Event Log is where events, that have triggers setup in the Log Setup menu, are recorded.

COM_LOGGING_TAB_SELECT

Description	On the Sx instrument or Rx 2000 front panel, this function displays the Event log.
Hex Code, Decimal Code	0x0007, 00007
Valid Command Types	MSG_SET_VALUE,
Values	1 = display menu

COM_ANLYS_LOG_VIEW

Description	This gets the events in event log as a string.
Hex Code, Decimal Code	0x0190, 00400
Valid Command Types	MSG_GET_ITEM_STRINGS, MSG_GET_TEXT

COM_ANLYS_LOG_SIZE

Description	This displays the number of events in the event log.
Hex Code, Decimal Code	0x0192, 00402
Valid Command Types	MSG_GET_TEXT

COM_ANLYS_LOG_MARK

Description	This inserts a line marker in the event log.
Hex Code, Decimal Code	0x019a ,00410
Valid Command Types	MSG_SET_VALUE,
Values	1 = insert marker

COM_ANLYS_LOG_CLEAR

Description	This clears the Sx event log and requires manual confirmation for example using COM_CHECK_YES.
Hex Code, Decimal Code	0x0191, 00401
Valid Command Types	MSG_SET_VALUE,
Values	1 = clear log

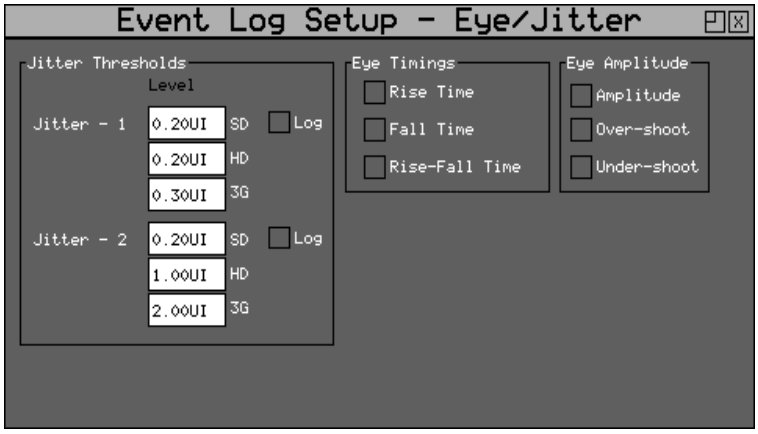
COM_ANLYS_LOG_CLEAR_HDMI

Description	This clears the Rx event log on the HDMI monitor output and requires manual confirmation for example using COM_CHECK_YES.
Hex Code, Decimal Code	0x01a1, 00417
Valid Command Types	MSG_SET_VALUE,
Values	1 = clear log

COM_ANLYS_LOG_FORCE_CLEAR

Description	This clears the Sx and Rx event log without confirmation.
Hex Code, Decimal Code	0x019b, 00411
Valid Command Types	MSG_SET_VALUE,
Values	1 = clear log

Eye Log Controls



The Eye Log Setup menu allows specific Eye and Jitter events to be tracked by the Rx instrument. The events to be logged are set up on this page by checking the appropriate 'Log' check boxes.

The SxE instrument has an equivalent menu can controls.

COM_ANLYS_LOG_JITTER_1_ENABLE

Description	This allows levels of jitter above the Jitter 1 levels to be recorded in the event log. Only available for inputs with physical layer analysis.
Hex Code, Decimal Code	0x0205, 00517
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_JITTER_1_SD_LEVEL

Description	This sets the SD jitter threshold level above which events will be recorded in the event log.
Hex Code, Decimal Code	0x0204, 00516
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 250, Divisor = 100

COM_ANLYS_LOG_JITTER_1_HD_LEVEL

Description	This sets the HD jitter threshold level above which events will be recorded in the event log.
Hex Code, Decimal Code	0x0210, 00528
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 250, Divisor = 100

COM_ANLYS_LOG_JITTER_1_3G_LEVEL

Description	This sets the 3G jitter threshold level above which events will be recorded in the event log.
Hex Code, Decimal Code	0x0211, 00529
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 250, Divisor = 100

COM_ANLYS_LOG_JITTER_2_ENABLE

Description	This allows levels of jitter above the Jitter 2 levels to be recorded in the event log. Only available for inputs with physical layer analysis.
Hex Code, Decimal Code	0x0207, 00519
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_JITTER_2_SD_LEVEL

Description	This sets the SD jitter threshold level above which events will be recorded in the event log.
Hex Code, Decimal Code	0x0206, 00518
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 250, Divisor = 100

COM_ANLYS_LOG_JITTER_2_HD_LEVEL

Description	This sets the HD jitter threshold level above which events will be recorded in the event log.
Hex Code, Decimal Code	0x0212, 00530
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 250, Divisor = 100

COM_ANLYS_LOG_JITTER_2_3G_LEVEL

Description	This sets the 3G jitter threshold level above which events will be recorded in the event log.
Hex Code, Decimal Code	0x0213, 00531
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 250, Divisor = 100

COM_ANLYS_LOG_EYE_RISE_TIME

Description	This allows out of specification rise time events to be recorded in the event log.
Hex Code, Decimal Code	0x020c, 00524
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_EYE_FALL_TIME

Description	This allows out of specification fall time events to be recorded in the event log.
Hex Code, Decimal Code	0x0208, 00520
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_EYE_DIFF_TIME

Description	This allows out of specification risetime / fall time difference events to be recorded in the event log.
Hex Code, Decimal Code	0x0209, 00521
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_EYE_AMPLITUDE

Description	This allows out of specification signal amplitude events to be recorded in the event log.
Hex Code, Decimal Code	0x020a, 00522
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_EYE_OVERSHOOT

Description	This allows out of specification signal overshoot events to be recorded in the event log.
Hex Code, Decimal Code	0x020d, 00525
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

COM_ANLYS_LOG_EYE_UNDERSHOOT

Description	This allows out of specification signal undershoot events to be recorded in the event log.
Hex Code, Decimal Code	0x020b, 00523
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = not logged, 1 = logged

D System

System Architecture

Overview

The PHABRIX Remote Control Protocol can be used to control both the Sx hand held range of instruments and the Rx rack mount range of instruments. The Sx range on has a single analyser and a single generator whereas the Rx range can have up to 4 analysers and generator modules in any combination.

Remote Menu Navigation

COM_CHECK_YES

Description	This used to answer Yes on dialogues that ask Yes/No question
Hex Code, Decimal Code	0x0411, 01041
Valid Command Types	MSG_SET_VALUE,
Values	1 = yes

COM_CHECK_NO

Description	This used to answer No on dialogues that ask Yes/No question
Hex Code, Decimal Code	0x0412, 01042
Valid Command Types	MSG_SET_VALUE,
Values	1 = no

COM_DIALOG_MAIN

Description	On the Sx this is used to hide top window and show video full-screen
Hex Code, Decimal Code	0x0001, 00001
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = menu, 1 = picture

COM_MAIN_TAB_SELECT

Description	On the Sx and Rx 2000 front panel this allows the main menu tab to be selected
Hex Code, Decimal Code	0x0002, 00002
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Main Menu 1 = Generator 2 = Analyser 3 = Sig Info 4 = Audio 5 = System 6 = Logging 7 = Speaker

COM_GENERATOR_TAB_SELECT

Description	On the Sx and Rx 2000 front panel this allows the Generator sub-tab to be selected
Hex Code, Decimal Code	0x0003, 00003
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = Video Out 2 = GenLock 3 = Audio Group 1/2 4 = Audio Group 3/4 5 = Dolby

COM_MONITOR_TAB_SELECT

Description	On the Sx and Rx 2000 front panel this allows the Analyser sub-tab to be selected
Hex Code, Decimal Code	0x0004, 00004
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = Picture 2 = 3 = Signal Data 4 = Waveform Monitor 5 = Vectorscope 6 = Eye Pattern 7 = Jitter Display

COM_STATUS_TAB_SELECT

Description	On the Sx and Rx 2000 front panel this allows the Signal Info sub-tab to be selected
Hex Code, Decimal Code	0x0005, 00005
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = Video Status 2 = Misc Status 3 = Video Timing 4 = ANC Status 5 = ANC Inspector

COM_AUDIO_TAB_SELECT

Description	On the Sx and Rx 2000 front panel this allows the Audio sub-tab to be selected
Hex Code, Decimal Code	0x0008, 00008
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = Meters 2 = Audio Status 3 = Dolby 4 = AES Eye (SxTAG only)

COM_SETUP_TAB_SELECT

Description	On the Sx and Rx 2000 front panel this allows the System sub-tab to be selected
Hex Code, Decimal Code	0x0006, 00006
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = Memories/Presets 2 = Command Scripts (Sx only) 3 = Network 4 = Misc 5 = Untils 6 = Engineer 7 = HDMI / SDI Output (Rx 2000 only)

COM_LOGGING_TAB_SELECT

Description	On the Sx and Rx 2000 front panel this allows the Logging sub-tab to be selected.
Hex Code, Decimal Code	0x0007, 00007
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = Events 2 = Log Setup 3 = Log Eye Jitter 4 = Log ANC Status 5 = 6 = Add Mark in Log 7 = Clear Log

COM_REMOTE_TAB_SELECT

Description	On the Sx and Rx 2000 front panel this Sets which display tab is selected using a single command.
Hex Code, Decimal Code	0x0177, 00375
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Full screen picture 1 = Main Menu 2 = Generator - Video Out 3 = Generator - Genlock 4 = Generator - Audio Group 1/2 5 = Generator - Audio Group 3/4 6 = Generator - Dolby 9 = Analyser - Picture 10 = Sig Info - Video Timing 11 = Analyser - Signal Data 12 = Analyser - Waveform 13 = Analyser - Vectorscope 16 = Sig Info - Video Status 17 = Sig Info - Misc Status 19 = Sig Info - ANC Inspector 20 = Sig Info - ANC Status 22 = Audio - Meters 23 = Audio - Audio Status 24 = Audio - Dolby 25 = Audio - AES Eye (SxTAG only) 29 = System - Memories 30 = System - Command Scripts (Sx only) 31 = System - Network 32 = System - Misc 33 = System - Utils 34 = System - Engineer 36 =Logging - Events 37 = Logging - Log Setup 39 = Logging - Log ANC Status 41 = Speaker

COM_RX2000_IN_SELECT

Description	On Rx 2000 front panel this selects which input source is shown on the front panel
Hex Code, Decimal Code	0x03d5, 00981
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	

Deprecated Function

COM_RX2000_ANC_INSPECT_INP_SEL

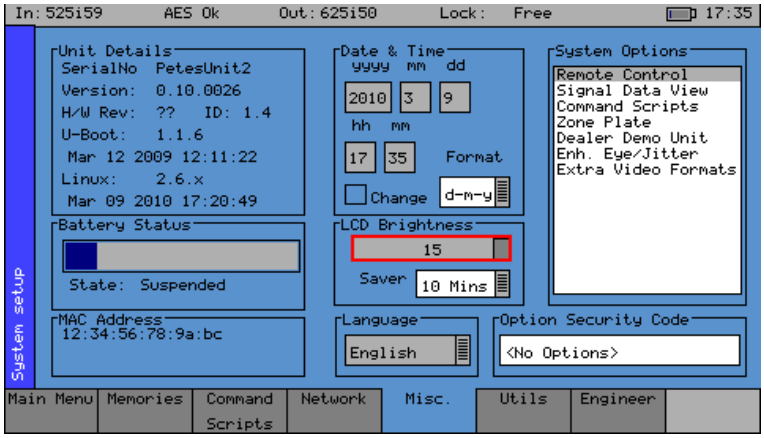
Description	On Rx 2000 this select which analyser front panel controls are connected to.
Hex Code, Decimal Code	0x03d6, 00982
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Analyser 1 SDI Input A 1 = Analyser 1 FIB Input A 2 = Analyser 1 SDI Input B 3 = Analyser 1 FIB Input B 4 = Analyser 2 SDI Input A 5 = Analyser 2 FIB Input A 6 = Analyser 2 SDI Input B 7 = Analyser 2 FIB Input B 8 = Analyser 3 SDI Input A 9 = Analyser 3 FIB Input A 10 = Analyser 3 SDI Input B 11 = Analyser 3 FIB Input B 12 = Analyser 4 SDI Input A 13 = Analyser 4 FIB Input A 14 = Analyser 4 SDI Input B 15 = Analyser 4 FIB Input B

COM_REMOTE_DISABLE_KEYBOARD

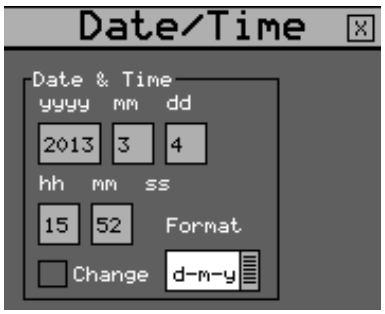
Description	This can be used to stop keyboard access (turned off when unit re-booted)
Hex Code, Decimal Code	0x016c, 00364
Valid Command Types	MSG_SET_VALUE
Values	1 = Disable

System Configuration

System Date and Time



The Sx instrument's Misc menu shows serial numbers, Sx instrument MAC address, version information and battery state. It also allows the date and time to be set.



The Rx instrument's Date/Time Setup window is used to set the date and time of the unit.

COM_INFO_DATE_TIME

Description	This displays current full system time.
Hex Code, Decimal Code	0x00fc, 00252
Valid Command Types	MSG_GET_TEXT

COM_INFO_DATE_EDIT

Description	This allows the date to be edited
Hex Code, Decimal Code	0x00f7, 00247
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_INFO_DATE_FULL_DATE

Description	This displays current full system date in a user defined format specified by the COM_INFO_DATE_FORMAT function.
Hex Code, Decimal Code	0x010a, 00266
Valid Command Types	MSG_GET_TEXT

COM_INFO_DATE_FORMAT

Description	This defines the date format used by the COM_INFO_DATE_FULL_DATE function.
Hex Code, Decimal Code	0x00f8, 00248
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = Day-Month-Year 1 = Month-Day-Year 2 = Year-Month-Day

COM_INFO_DATE_DATE

Description	This sets the system's day of the month.
Hex Code, Decimal Code	0x00ff, 00255
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	Min = 1, Max = 31, Divisor = 1

COM_INFO_DATE_MONTH

Description	This sets the system's month of the year.
Hex Code, Decimal Code	0x00fe, 00254
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	Min = 1, Max = 12, Divisor = 1

COM_INFO_DATE_YEAR

Description	This sets the system's year.
Hex Code, Decimal Code	0x00fd, 00253
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	

COM_INFO_DATE_HOUR

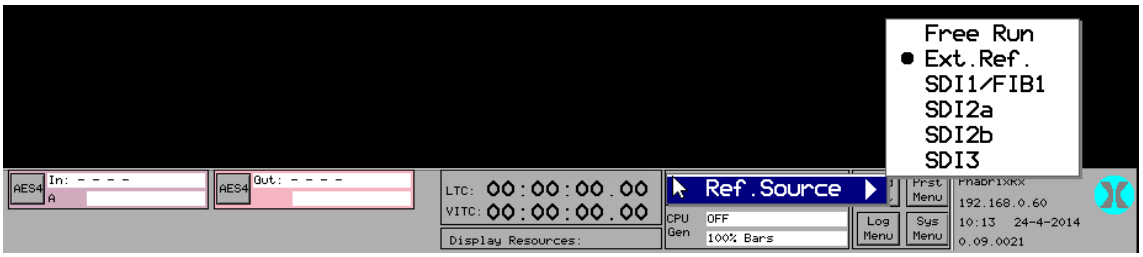
Description	This sets the system's hour.
Hex Code, Decimal Code	0x00f9, 00249
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	Min = 0, Max = 23, Divisor = 1

COM_INFO_DATE_MIN

Description	This sets the system's minutes.
Hex Code, Decimal Code	0x00fa, 00250
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	Min = 0, Max = 59, Divisor = 1

System Reference Controls

The System Reference defines the video source that the Rx system is synchronised to and affects all of the Rx outputs.



The System Reference can be set to one of the following depending on the type of modules installed within the Rx chassis:

Free Run - where the Rx system uses its own internal locking reference.

Ext. Ref - where the Rx system is locked to an analogue studio reference signal connected to the “Ref” input on the CPU module.

SDI# - where the Rx system is locked to the SDI input on a single input Analyser module fitted in module slot 1.

FIB# - where the Rx system is locked to SFP optical input on a single input Analyser module fitted in module slot 1.

COM_SYS_REF_SOURCE

Description	This sets the reference source for the Rx system.
Hex Code, Decimal Code	0x0c3b, 03131
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	0 = Free Run 1 = External Reference 2 = First SDI/FIB Input 3 = Second SDI/FIB Input 4 = Third SDI/FIB Input etc

HDMI Output Commands (Rx Only)

COM_SDI_ENABLE

Description	This is used to show/hide CPU SDI setup data.
Hex Code, Decimal Code	0x0b3b, 02875
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	

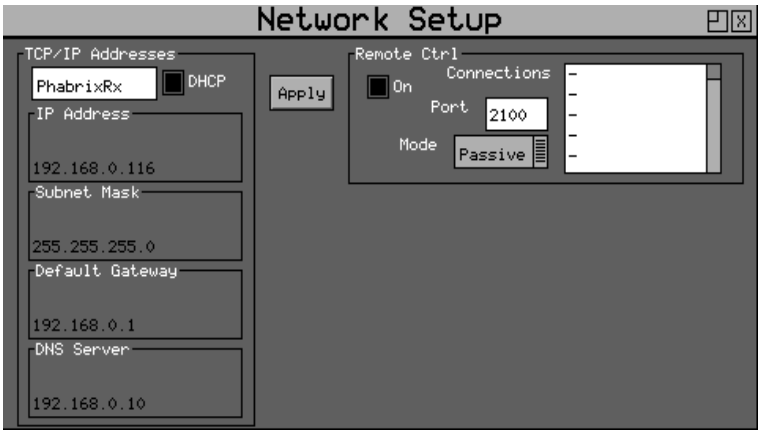
Deprecated Function

COM_SDI_LINKTYPE

Description	This is used to set the CPU SDI output format if instrumentation on SDI out
Hex Code, Decimal Code	0x0b3c, 02876
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE,
Values	

Deprecated Function

Network Configuration Controls



The Sx and Rx Instruments are fully network compatible and has a complete network interface to allow control of any Sx or Rx instrument from any other unit. The Network menu allows the Rx instrument to be configured as part of a network.

The Sx instrument has a corresponding window.

Caution changing network connection setting using the remote control is not advised as it may disconnect the remote control connection.

COM_NETWORK_NAME

Description	This gets or sets the unit's network name.
Hex Code, Decimal Code	0x0169, 00361
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_NETWORK_DHCP_IP

Description	This displays the DHCP allocated IP address for the unit.
Hex Code, Decimal Code	0x0157, 00343
Valid Command Types	MSG_GET_TEXT

COM_NETWORK_DHCP_MASK

Description	This displays the DHCP allocated Subnet mask address for the unit.
Hex Code, Decimal Code	0x0158, 00344
Valid Command Types	MSG_GET_TEXT

COM_NETWORK_DHCP_GATEWAY

Description	This displays the DHCP allocated gateway address for the unit.
Hex Code, Decimal Code	0x0156, 00342
Valid Command Types	MSG_GET_TEXT

COM_NETWORK_DHCP_DNS

Description	This displays the DHCP allocated DNS server address for the unit.
Hex Code, Decimal Code	0x0155, 00341
Valid Command Types	MSG_GET_TEXT

COM_NETWORK_SETUP

Description	This displays the Network setup dialogue on the Sx instrument or Rx 2000 front panel.
Hex Code, Decimal Code	0x016a, 00362
Valid Command Types	MSG_SET_VALUE
Values	1 = display menu

COM_NETWORK_SETUP_HDMI

Description	This displays the Network setup dialogue on the Rx HDMI monitor output.
Hex Code, Decimal Code	0x0fe2, 04066
Valid Command Types	MSG_SET_VALUE
Values	1 = display menu

?? Broken

COM_NETWORK_APPLY

Description	This applies the currently setup network settings.
Hex Code, Decimal Code	0x016b, 00363
Valid Command Types	MSG_SET_VALUE
Values	1 = apply settings

Note that this will cause the unit to disconnect from the network and reconnect using the new network settings. This will disconnect the active remote control session.

COM_NETWORK_SETUP_APPLY

Description	This applies the currently setup network settings in the Network dialogue on the Sx instrument or Rx 2000 front panel.
Hex Code, Decimal Code	0x0179, 00377
Valid Command Types	MSG_SET_VALUE
Values	1 = apply settings

COM_NETWORK_DHCP

Description	This turns on/off DHCP mode (Don't use from remote control).
Hex Code, Decimal Code	0x0154, 00340
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_NETWORK_IP_1

Description	This sets the value of the first part of the static IP address.
Hex Code, Decimal Code	0x0161, 00353
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_IP_2

Description	This sets the value of the second part of the static IP address.
Hex Code, Decimal Code	0x0162, 00354
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_IP_3

Description	This sets the value of the third part of the static IP address.
Hex Code, Decimal Code	0x0163, 00355
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_IP_4

Description	This sets the value of the fourth part of the static IP address.
Hex Code, Decimal Code	0x0164, 00356
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_MASK_1

Description	This sets the value of the first part of the static subnet mask address.
Hex Code, Decimal Code	0x0165, 00357
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_MASK_2

Description	This sets the value of the second part of the static subnet mask address.
Hex Code, Decimal Code	0x0166, 00358
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_MASK_3

Description	This sets the value of the third part of the static subnet mask address.
Hex Code, Decimal Code	0x0167, 00359
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_MASK_4

Description	This sets the value of the fourth part of the static subnet mask address.
Hex Code, Decimal Code	0x0168, 00360
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_GATEWAY_1

Description	This sets the value of the first part of the static gateway address.
Hex Code, Decimal Code	0x015d, 00349
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_GATEWAY_2

Description	This sets the value of the second part of the static gateway address.
Hex Code, Decimal Code	0x015e, 00350
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_GATEWAY_3

Description	This sets the value of the third part of the static gateway address.
Hex Code, Decimal Code	0x015f, 00351
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_GATEWAY_4

Description	This sets the value of the third part of the static gateway address.
Hex Code, Decimal Code	0x0160, 00352
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_DNS_1

Description	This sets the value of the first part of the static DNS server address.
Hex Code, Decimal Code	0x0159, 00345
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_DNS_2

Description	This sets the value of the second part of the static DNS server address.
Hex Code, Decimal Code	0x015a, 00346
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

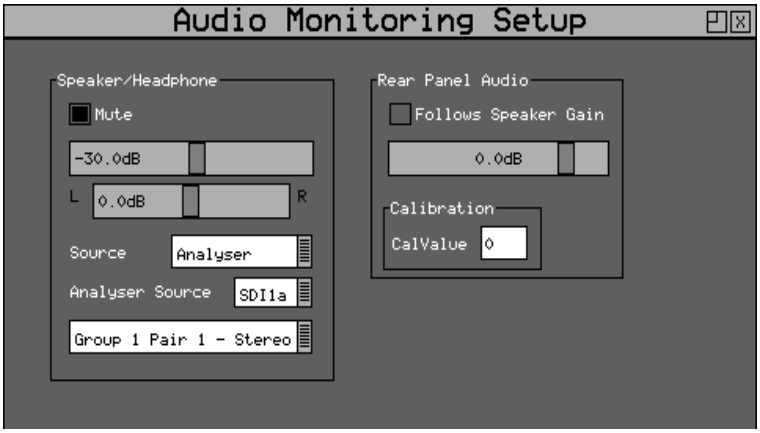
COM_NETWORK_DNS_3

Description	This sets the value of the third part of the static DNS server address.
Hex Code, Decimal Code	0x015b, 00347
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

COM_NETWORK_DNS_4

Description	This sets the value of the third part of the static DNS server address.
Hex Code, Decimal Code	0x015c, 00348
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 255, Divisor = 1

Rear Panel Configuration



The Rx instrument provides analogue audio via the GPIO connector on the rear of the unit.

The audio pair to be output via this connector is selected using the following commands

COM_REAR_MUTE

Description	This mutes the rear panel audio output.
Hex Code, Decimal Code	0x022c, 00556
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = mute off, 1 = mute on

COM_REAR_LEVEL

Description	This sets the rear panel audio level.
Hex Code, Decimal Code	0x0224, 00548
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = -160, Max = 30, Divisor = 2

COM_INFO_GRATICULE_BRIGHTNESS

Description	On the Rx range this sets the waveform and vectorscope graticule brightness.
Hex Code, Decimal Code	0x010b, 00267
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 100, Divisor = 1

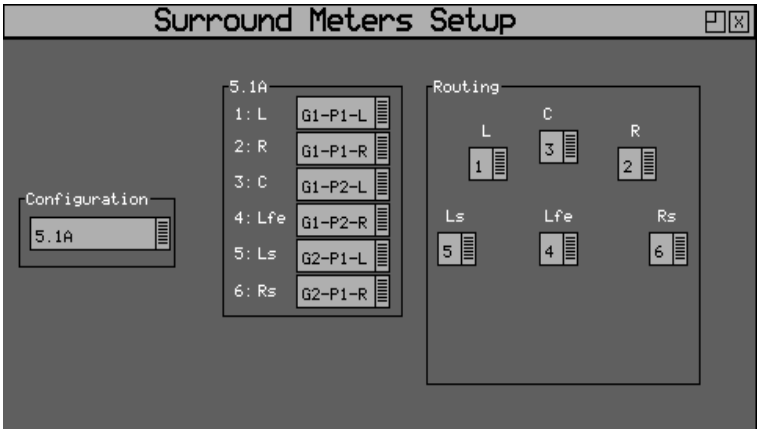
COM_INFO_LCD_BRIGHTNESS

Description	On the Sx range and Rx 2000 front panel this sets the LCD brightness.
Hex Code, Decimal Code	0x010f ,00271
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0, Max = 15, Divisor = 1

COM_INFO_SCREEN_SAVER

Description	On the Sx range and Rx 2000 front panel this sets the LCD screen saver mode.
Hex Code, Decimal Code	0x0115, 00277
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Off 1 = 5 Minutes 2 = 10 Minutes 3 = 30 Minutes

Audio Surround Sound Configuration



The Rx instrument allows the Loudness measurement and logging of 5.1 surround sound audio. The specific audio channel configuration for 5.1 is setup in the Surround Meters Setup menu.

This menu is used to route specific embedded SDI audio channels to the 5.1 channels.

COM_ANLYS_SUR_CONFIG

Description	This selects the Rx surround sound configuration page.
Hex Code, Decimal Code	0x22e7, 08935
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = 5.1A, 1 = 5.1B

COM_ANLYS_SUR_51A_METER_1_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (L) for the 5.1 A configuration. Note that G1-P1-L is the default.
Hex Code, Decimal Code	0x2260, 08800
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = G1-P1-L 1 = G1-P1-R 2 = G1-P2-L 3 = G1-P2-R 4 = G2-P1-L 5 = G2-P1-R 6 = G2-P2-L 7 = G2-P2-R 8 = G3-P1-L 9 = G3-P1-R 10 = G3-P2-L 11 = G3-P2-R 12 = G4-P1-L 13 = G4-P1-R 14 = G4-P2-L 15 = G4-P2-R

COM_ANLYS_SUR_51A_METER_2_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (R) for the 5.1 A configuration. Note that G1-P1-R is the default.
Hex Code, Decimal Code	0x2261 08801
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	COM_ANLYS_SUR_51A_METER_1_VALUE

COM_ANLYS_SUR_51A_METER_3_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (C) for the 5.1 A configuration. Note that G1-P2-L is the default.
Hex Code, Decimal Code	0x2262, 08802
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	COM_ANLYS_SUR_51A_METER_1_VALUE

COM_ANLYS_SUR_51A_METER_4_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (Lfe) for the 5.1 A configuration. Note that G1-P2-R is the default.
Hex Code, Decimal Code	0x2263, 08803
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	COM_ANLYS_SUR_51A_METER_1_VALUE

COM_ANLYS_SUR_51A_METER_5_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (Ls) for the 5.1 A configuration. Note that G2-P1-L is the default.
Hex Code, Decimal Code	0x2264, 08804
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	COM_ANLYS_SUR_51A_METER_1_VALUE

COM_ANLYS_SUR_51A_METER_6_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (Rs) for the 5.1 A configuration. Note that G2-P1-R is the default.
Hex Code, Decimal Code	0x2265, 08805
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	COM_ANLYS_SUR_51A_METER_1_VALUE

COM_ANLYS_SUR_51B_METER_1_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (L) for the 5.1 B configuration. Note that G2-P2-L is the default.
Hex Code, Decimal Code	0x2267, 08807
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	COM_ANLYS_SUR_51A_METER_1_VALUE

COM_ANLYS_SUR_51B_METER_2_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (R) for the 5.1 B configuration. Note that G2-P2-R is the default.
Hex Code, Decimal Code	0x2268, 08808
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_SUR_51B_METER_1

COM_ANLYS_SUR_51B_METER_3_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (C) for the 5.1 B configuration. Note that G3-P1-L is the default.
Hex Code, Decimal Code	0x2269, 08809
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_SUR_51B_METER_1

COM_ANLYS_SUR_51B_METER_4_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (Lfe) for the 5.1 B configuration. Note that G3-P1-R is the default.
Hex Code, Decimal Code	0x226a, 08810
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_SUR_51B_METER_1

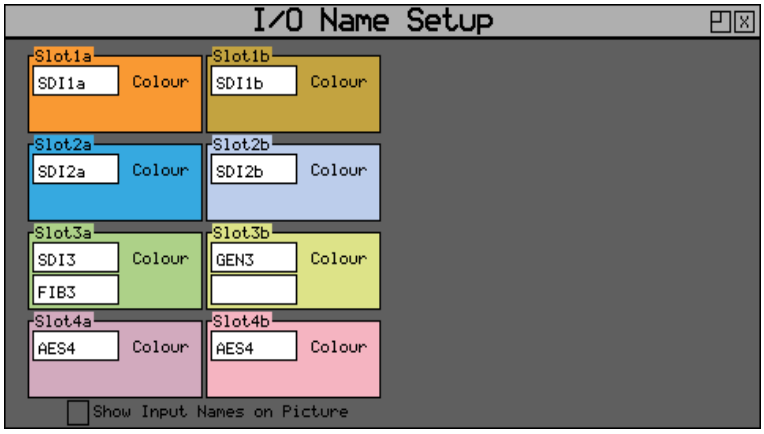
COM_ANLYS_SUR_51B_METER_5_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (Ls) for the 5.1 B configuration. Note that G3-P2-L is the default.
Hex Code, Decimal Code	0x226b, 08811
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_SUR_51B_METER_1

COM_ANLYS_SUR_51B_METER_6_VALUE

Description	This sets the audio channel from the SDI input to be used for meter 1 (Rs) for the 5.1 B configuration. Note that G3-P2-R is the default.
Hex Code, Decimal Code	0x226c, 08812
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	See COM_ANLYS_SUR_51B_METER_1

Input/Output Name Configuration



Names can be given to the Rx Module inputs and outputs to make them easier to recognise in a fixed installation.

Each module has 2 parts, part A and part B which can be analyser inputs or generator outputs depending on the type of module.

Some modules have both SDI and SFP fibre connections.

COM_HDMI_SLOT1A_SDI_NAME

Description	This gets or sets the stored name for the SDI input/output connection on the A connection of the module in Slot 1
Hex Code, Decimal Code	0x0b6c, 02924
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT1B_SDI_NAME

Description	This gets or sets the stored name for the SDI input/output connection on the B connection of the module in Slot 1
Hex Code, Decimal Code	0x0b76, 02934
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT1A_FIB_NAME

Description	This gets or sets the stored name for the SFP input/output connection on the A connection of the module in Slot 1
Hex Code, Decimal Code	0x0b69, 02921
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT1B_FIB_NAME

Description	This gets or sets the stored name for the SFP input/output connection on the B connection of the module in Slot 1
Hex Code, Decimal Code	0x0b73, 02931
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT2A_SDI_NAME

Description	This gets or sets the stored name for the SDI input/output connection on the A connection of the module in Slot 2
Hex Code, Decimal Code	0x0b94, 02964
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT2B_SDI_NAME

Description	This gets or sets the stored name for the SDI input/output connection on the B connection of the module in Slot 2
Hex Code, Decimal Code	0x0b9e, 02974
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT2A_FIB_NAME

Description	This gets or sets the stored name for the SFP input/output connection on the A connection of the module in Slot 2
Hex Code, Decimal Code	0x0b91, 02961
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT2B_FIB_NAME

Description	This gets or sets the stored name for the SFP input/output connection on the A connection of the module in Slot 2
Hex Code, Decimal Code	0x0b9b, 02971
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT3A_SDI_NAME

Description	This gets or sets the stored name for the SDI input/output connection on the A connection of the module in Slot 3
Hex Code, Decimal Code	0x0bbc, 03004
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT3B_SDI_NAME

Description	This gets or sets the stored name for the SDI input/output connection on the B connection of the module in Slot 3
Hex Code, Decimal Code	0x0bc6, 03014
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT3A_FIB_NAME

Description	This gets or sets the stored name for the SFP input/output connection on the A connection of the module in Slot 3
Hex Code, Decimal Code	0x0bb9, 03001
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT3B_FIB_NAME

Description	This gets or sets the stored name for the SFP input/output connection on the B connection of the module in Slot 3
Hex Code, Decimal Code	0x0bc3, 03011
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT4A_SDI_NAME

Description	This gets or sets the stored name for the SDI input/output connection on the A connection of the module in Slot 4
Hex Code, Decimal Code	0x0be4, 03044
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT4B_SDI_NAME

Description	This gets or sets the stored name for the SDI input/output connection on the B connection of the module in Slot 4
Hex Code, Decimal Code	0x0bee, 03054
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

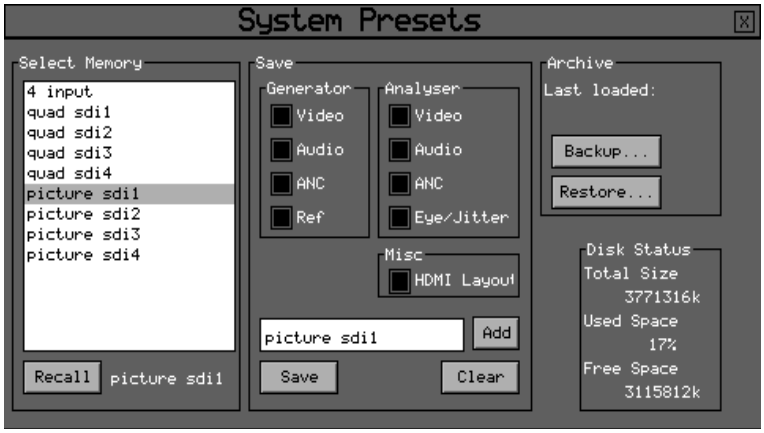
COM_HDMI_SLOT4A_FIB_NAME

Description	This gets or sets the stored name for the SFP input/output connection on the A connection of the module in Slot 4
Hex Code, Decimal Code	0x0be1, 03041
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

COM_HDMI_SLOT4B_FIB_NAME

Description	This gets or sets the stored name for the SFP input/output connection on the B connection of the module in Slot 4
Hex Code, Decimal Code	0x0beb, 03051
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

Presets / Memories



The Rx Instrument settings for Generator, Analyzer and HDMI® monitor output can be saved and recalled as required as presets

The Sx instrument settings for Generator and Analyser can be saved and recalled as required as memories.

COM_MEMORY_SHOW_DIALOG

Description	On the Rx, this displays the dialogue to allow memory presets to be created.
Hex Code, Decimal Code	0x0fe4, 04068
Valid Command Types	MSG_SET_VALUE,
Values	1 = display dialogue

Deprecated Function

COM_MEMORY_GEN_VIDEO_1

Description	This check box enables generator video parameters to be saved within the preset.
Hex Code, Decimal Code	0x0131, 00305
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_MEMORY_GEN_AUDIO

Description	This check box enables generator audio parameters to be saved within the preset.
Hex Code, Decimal Code	0x0133, 00307
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_MEMORY_GEN_ANC

Description	This check box enables generator ancillary parameters to be saved within the preset.
Hex Code, Decimal Code	0x0134, 00308
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_MEMORY_GEN_REF

Description	This check box enables generator reference parameters to be saved within the preset.
Hex Code, Decimal Code	0x0132, 00306
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_MEMORY_ANLYS_VIDEO

Description	This check box enables analyser video parameters to be saved within the preset.
Hex Code, Decimal Code	0x0136, 00310
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_MEMORY_ANLYS_AUDIO

Description	This check box enables analyser audio parameters to be saved within the preset.
Hex Code, Decimal Code	0x0137, 00311
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_MEMORY_ANLYS_ANC

Description	This check box enables analyser ancillary parameters to be saved within the preset.
Hex Code, Decimal Code	0x0138, 00312
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_MEMORY_ANLYS_EYE_JITTER

Description	This check box enables analyser eye/jitter parameters to be saved within the preset.
Hex Code, Decimal Code	0x0139, 00313
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_MEMORY_MISC_EXT_LCD

Description	This check box enables Rx HDMI layout to be saved within the preset.
Hex Code, Decimal Code	0x013c, 00316
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = off, 1 = on

COM_MEMORY_SEL

Description	This selects the memory from the Select Memory list to save/recall.
Hex Code, Decimal Code	0x0122, 00290
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = First memory in list 1 = Second memory in list etc

COM_MEMORY_RECALL

Description	This recalls and loads the currently selected memory in the Select Memory list.
Hex Code, Decimal Code	0x0125, 00293
Valid Command Types	MSG_SET_VALUE,
Values	1 = recall memory

COM_MEMORY_SAVE

Description	This saves the currently selected memory in the Select Memory list.
Hex Code, Decimal Code	0x0123, 00291
Valid Command Types	MSG_SET_VALUE,
Values	1 = save memory

COM_MEMORY_SAVE_LAYOUT

Description	This saves the current Rx HDMI instrument layout as layout preset
Hex Code, Decimal Code	0x0fe3, 04067
Valid Command Types	MSG_GET_TEXT
Values	1 = save layout

COM_MEMORY_ADD

Description	This adds a new memory with the same name as the currently selected memory in the Select Memory list but with a +.
Hex Code, Decimal Code	0x012a, 00298
Valid Command Types	MSG_SET_VALUE,
Values	1 = add memory

COM_MEMORY_NAME

Description	This gets or sets the name of the currently selected memory in the Select Memory list.
Hex Code, Decimal Code	0x0126, 00294
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT

Note that this requires the COM_MEMORY_SAVE function to save the changed name.

COM_MEMORY_CLEAR

Description	This deletes the currently selected memory in the Select Memory list.
Hex Code, Decimal Code	0x0128, 00296
Valid Command Types	MSG_SET_VALUE,
Values	1 = add memory

COM_MEMORY_LAST_RECALL

Description	This displays the name of the last recalled memory
Hex Code, Decimal Code	0x0127, 00295
Valid Command Types	MSG_GET_TEXT

COM_MEMORY_STORE_CHANGED

Description	This indicates the presence of the disk icon in the bottom right of the screen while a preset is being automatically saved.
Hex Code, Decimal Code	0x013e, 00318
Valid Command Types	MSG_GET_VISIBLE

COM_MEMORY_BACKUP

Description	This displays the Backup dialogue on the Sx instrument or Rx2000 front panel to allow the current system memories to be backed-up to or restored from a file.
Hex Code, Decimal Code	0x012e, 00302
Valid Command Types	MSG_SET_VALUE,
Values	1 = display

COM_MEMORY_BACKUP_HDMI

Description	This displays the Backup dialogue on the Rx HDMI monitor output to allow the current system memories to be backed-up to or restored from a file.
Hex Code, Decimal Code	0x0fe0, 04064
Valid Command Types	MSG_SET_VALUE,
Values	1 = display

COM_MEMORY_BACKUP_FILELIST

Description	This gets a list of archive files on the unit.
Hex Code, Decimal Code	0x0129, 00297
Valid Command Types	MSG_GET_ITEM_STRINGS, MSG_GET_TEXT,

COM_MEMORY_BACKUP_FILENAME

Description	This gets or sets the name of the archive file to be backed-up or restored.
Hex Code, Decimal Code	0x012b, 00299
Valid Command Types	MSG_GET_TEXT, MSG_SET_TEXT,

COM_MEMORY_BACKUP_SAVE

Description	This backs-up the current system preset memories using the currently selected Filename defined by the COM_MEMORY_BACKUP_FILENAME function.
Hex Code, Decimal Code	0x0130, 00304
Valid Command Types	MSG_SET_VALUE,
Values	1 = save

COM_MEMORY_BACKUP_DATE

Description	This displays the date of the currently selected archive file.
Hex Code, Decimal Code	0x012f, 00303
Valid Command Types	MSG_GET_TEXT,
Values	1 = display

COM_MEMORY_RESTORE

Description	This displays the Restore dialogue on the Sx instrument or Rx2000 front panel to allow the current system memories to be backed-up to or restored from a file.
Hex Code, Decimal Code	0x0124, 00292
Valid Command Types	MSG_SET_VALUE,
Values	1 = display

COM_MEMORY_RESTORE_HDMI

Description	This displays the Restore dialogue on the Rx HDMI monitor output to allow the current system memories to be backed-up to or restored from a file.
Hex Code, Decimal Code	0x0fe1, 04065
Valid Command Types	MSG_SET_VALUE,
Values	1 = display

COM_MEMORY_BACKUP_LOAD

Description	This restores an all memories using the currently selected archive file defined by the . COM_MEMORY_BACKUP_FILENAME function.
Hex Code, Decimal Code	0x012d, 00301
Valid Command Types	MSG_SET_VALUE,
Values	1 = restore backup

COM_SYSTEM_RECALL_PRESET_01

Description	This is used to recall a specific preset.
PRESET_01 Hex Code, Decimal Code	0x1004, 04100
PRESET_02 Hex Code, Decimal Code	0x1005, 04101
PRESET_03 Hex Code, Decimal Code	0x1006, 04102
PRESET_04 Hex Code, Decimal Code	0x1007, 04103
PRESET_05 Hex Code, Decimal Code	0x1008, 04104
PRESET_06 Hex Code, Decimal Code	0x1009, 04105
PRESET_07 Hex Code, Decimal Code	0x100a, 04106
PRESET_08 Hex Code, Decimal Code	0x100b, 04107
PRESET_09 Hex Code, Decimal Code	0x100c, 04108
PRESET_10 Hex Code, Decimal Code	0x100d, 04109
Valid Command Types	MSG_SET_VALUE,
Values	1 = select preset

COM_SYSTEM_RECALL_PRESET_11

Description	This is used to recall a specific preset.
PRESET_11 Hex Code, Decimal Code	0x100e, 04110
PRESET_12 Hex Code, Decimal Code	0x100f, 04111
PRESET_13 Hex Code, Decimal Code	0x1010, 04112
PRESET_14 Hex Code, Decimal Code	0x1011, 04113
PRESET_15 Hex Code, Decimal Code	0x1012, 04114
PRESET_16 Hex Code, Decimal Code	0x1013, 04115
PRESET_17 Hex Code, Decimal Code	0x1014, 04116
PRESET_18 Hex Code, Decimal Code	0x1015, 04117
PRESET_19 Hex Code, Decimal Code	0x1016, 04118
PRESET_20 Hex Code, Decimal Code	0x1017, 04119
Valid Command Types	MSG_SET_VALUE,
Values	1 = select preset

COM_SYSTEM_RECALL_PRESET_21

Description	This is used to recall a specific preset.
PRESET_21 Hex Code, Decimal Code	0x1018, 04120
PRESET_22 Hex Code, Decimal Code	0x1019, 04121
PRESET_23 Hex Code, Decimal Code	0x101a, 04122
PRESET_24 Hex Code, Decimal Code	0x101b, 04123
PRESET_25 Hex Code, Decimal Code	0x101c, 04124
PRESET_26 Hex Code, Decimal Code	0x101d, 04125
PRESET_27 Hex Code, Decimal Code	0x101e, 04126
PRESET_28 Hex Code, Decimal Code	0x101f, 04127
PRESET_29 Hex Code, Decimal Code	0x1020, 04128
PRESET_30 Hex Code, Decimal Code	0x1021, 04129
Valid Command Types	MSG_SET_VALUE,
Values	1 = select preset

COM_SYSTEM_RECALL_PRESET_31

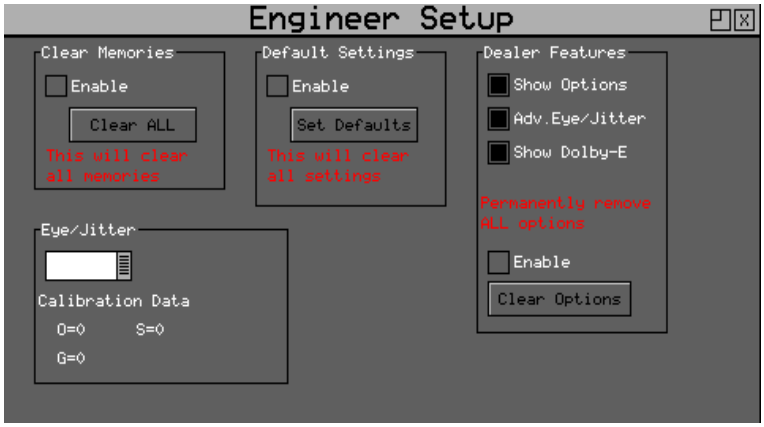
Description	This is used to recall a specific preset.
PRESET_31 Hex Code, Decimal Code	0x1022, 04130
PRESET_32 Hex Code, Decimal Code	0x1023, 04131
PRESET_33 Hex Code, Decimal Code	0x1024, 04132
PRESET_34 Hex Code, Decimal Code	0x1025, 04133
PRESET_35 Hex Code, Decimal Code	0x1026, 04134
PRESET_36 Hex Code, Decimal Code	0x1027, 04135
PRESET_37 Hex Code, Decimal Code	0x1028, 04136
PRESET_38 Hex Code, Decimal Code	0x1029, 04137
PRESET_39 Hex Code, Decimal Code	0x102a, 04138
PRESET_40 Hex Code, Decimal Code	0x102b, 04139
Valid Command Types	MSG_SET_VALUE,
Values	1 = select preset

COM_SYSTEM_RECALL_PRESET_41

Description	This is used to recall a specific preset.
PRESET_41 Hex Code, Decimal Code	0x102c, 04140
PRESET_42 Hex Code, Decimal Code	0x102d, 04141
PRESET_43 Hex Code, Decimal Code	0x102e, 04142
PRESET_44 Hex Code, Decimal Code	0x102f, 04143
PRESET_45 Hex Code, Decimal Code	0x1030, 04144
PRESET_46 Hex Code, Decimal Code	0x1031, 04145
PRESET_47 Hex Code, Decimal Code	0x1032, 04146
PRESET_48 Hex Code, Decimal Code	0x1033, 04147
PRESET_49 Hex Code, Decimal Code	0x1034, 04148
PRESET_50 Hex Code, Decimal Code	0x1035, 04149
Valid Command Types	MSG_SET_VALUE,
Values	1 = select preset

COM_SYSTEM_RECALL_PRESET_51

Description	This is used to recall a specific preset.
PRESET_51 Hex Code, Decimal Code	0x1036, 04150
PRESET_52 Hex Code, Decimal Code	0x1037, 04151
PRESET_53 Hex Code, Decimal Code	0x1038, 04152
PRESET_54 Hex Code, Decimal Code	0x1039, 04153
PRESET_55 Hex Code, Decimal Code	0x103a, 04154
PRESET_56 Hex Code, Decimal Code	0x103b, 04155
PRESET_57 Hex Code, Decimal Code	0x103c, 04156
PRESET_58 Hex Code, Decimal Code	0x103d, 04157
PRESET_59 Hex Code, Decimal Code	0x103e, 04158
PRESET_60 Hex Code, Decimal Code	0x103f, 04159
Valid Command Types	MSG_SET_VALUE,
Values	1 = select preset



The Engineer menu is used to manage the Rx instrument and allows the current preset memories to be cleared

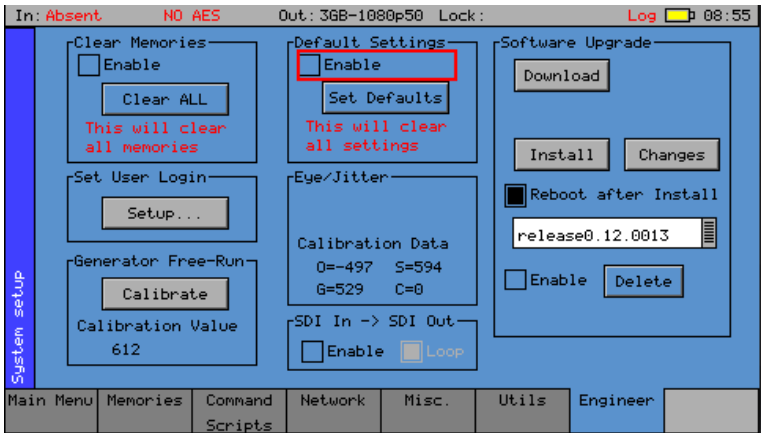
COM_INFO_ENABLE_CLEAR_MEM

Description	This enables preset memories to be cleared.
Hex Code, Decimal Code	0x0104, 00260
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = disable, 1 = enable

COM_INFO_CLEAR_MEMORIES

Description	This clears all preset memories (if enable set).
Hex Code, Decimal Code	0x0105, 00261
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = disable, 1 = enable

System User (Sx Only)



User access can be setup for the Sx instrument by adding users to the system. With User log-in enabled, a log-in screen will be displayed when the Sx instrument is turned ON.

COM_SYS_CURRENT_USER

Description	This Name of current user as a string (Sx only).
Hex Code, Decimal Code	0x0680, 01664
Valid Command Types	MSG_GET_TEXT

COM_SYS_LOG_IN

Description	This is used to log in to Sx at startup.
Hex Code, Decimal Code	0x0672, 01650
Valid Command Types	MSG_SET_TEXT
Value	username

COM_SYS_LOG_OUT

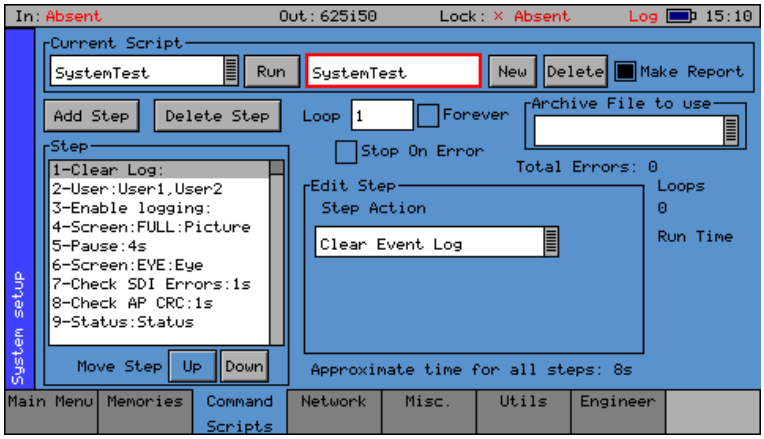
Description	This is used to Log Out from Unit
Hex Code, Decimal Code	0x067a, 01658
Valid Command Types	MSG_SET_VALUE,
Values	1 = log out

Note use the COM_CHECK_YES or COM_CHECK_NO command to confirm or cancel logout

COM_SYS_LOG_IN_PROMPT_INSERT_LINE

Description	This is used to Insert line of comments before current line in login prompt.
Hex Code, Decimal Code	0x067f, 01663
Valid Command Types	MSG_SET_TEXT
Value	For example “Please Login”

Scripts (Sx Only)



The Command Scripts menu allows the Sx instrument to run pre-defined scripts.

Command scripts are text files with an file extension of .cmd. They are formatted with one step per line. The line is formatted as StepTime, StepAction, StepParameters

COM_SCRIPTS_CURRENT_SCRIPT

Description	This is used to select command script to be run from the list
Hex Code, Decimal Code	0x06b3, 01715
Valid Command Types	MSG_SET_VALUE,
Values	0 = first list entry 1 = second list entry etc

COM_SCRIPTS_ARCHIVE_FILE

Description	This is used to select the Archive file to load from the list before the command script is run.
Hex Code, Decimal Code	0x06b2, 01714
Valid Command Types	MSG_SET_VALUE,
Values	0 = first list entry 1 = second list entry etc

COM_SCRIPTS_RUN_SCRIPT

Description	This is used run the currently to selected command script
Hex Code, Decimal Code	0x06bf, 01727
Valid Command Types	MSG_SET_VALUE,
Values	1 = run script

COM_SYS_STATUS

Description	This is used display the command script's running status
Hex Code, Decimal Code	0x01ee, 00494
Valid Command Types	MSG_GET_TEXT
Values	"script" is returned if running

COM_SCRIPTS_LOOP_FOREVER

Description	This is used run the command script in a continuous loop.
Hex Code, Decimal Code	0x06bd, 01725
Valid Command Types	MSG_SET_VALUE,
Values	0 = disable 1 = enable

COM_SCRIPTS_LOOPS

Description	This shows number of times a command script has looped.
Hex Code, Decimal Code	0x06c4, 01732
Valid Command Types	MSG_GET_VALUE,

COM_SCRIPTS_LOOP_COUNT

Description	This shows number of of loops to run.
Hex Code, Decimal Code	0x06c1, 01729
Valid Command Types	MSG_GET_VALUE,
Values	Min = 1, Max = 100000, Divisor = 1

COM_SCRIPTS_LOOP_TIME

Description	This shows how long a command script has been running.
Hex Code, Decimal Code	0x06c2, 01730
Valid Command Types	MSG_GET_TEXT,

COM_SCRIPTS_CONTINUE

Description	This is continue button on the dialogue while script running
Hex Code, Decimal Code	0x06c6, 01734
Valid Command Types	MSG_SET_VALUE,
Values	1 = continue

COM_SCRIPTS_MAKE_REPORT

Description	If this is checked an HTML report will be created by the script
Hex Code, Decimal Code	0x06af, 01711
Valid Command Types	MSG_SET_VALUE,
Values	1 = enable

COM_SCRIPTS_DIALOG_TIMEOUT

Description	This shows time left for pause or check errors commands.
Hex Code, Decimal Code	0x06c3, 01731
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 1

COM_SCRIPTS_TOTAL_STEP_TIME

Description	This shows the total time for all script steps to run once.
Hex Code, Decimal Code	0x06b1, 01713
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 1

COM_SCRIPTS_TOTAL_ERRORS

Description	This shows the total number of errors during command script.
Hex Code, Decimal Code	0x03ec, 01004
Valid Command Types	MSG_GET_VALUE,
Values	Divisor = 1

COM_SCRIPTS_NEW_SCRIPT

Description	This creates a new command script.
Hex Code, Decimal Code	0x06be, 01726
Valid Command Types	MSG_SET_VALUE,
Values	1 = create script

COM_SCRIPTS_EDIT_STEP_ADD

Description	This is used to add a new step in the currently selected command script below the currently selected line set using the COM_SCRIPTS_EDIT_STEP_NO command.
Hex Code, Decimal Code	0x06b6, 01718
Valid Command Types	MSG_SET_VALUE,
Values	1 = add step

COM_SCRIPTS_EDIT_STEP_NO

Description	This is used to edit an existing step in the currently selected command script
Hex Code, Decimal Code	0x06ba, 01722
Valid Command Types	MSG_SET_VALUE,
Values	0 = first line 1 = second line 2 = third line etc

COM_SCRIPTS_EDIT_STEP_FUNCTION

Description	This is used to select the action for selected command script step
Hex Code, Decimal Code	0x06b8, 01720
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Recall Memory 1 = Prompt User 2 = Clear Event Log 3 = Disable Logging 4 = Enable Logging 5 = Clear Error Counts 6 = Add Log Note 7 = Pause 8 = Save Status 9 = Select Tab 10 = Screen Dump 11 = Select User 12 = Check SDI CRC 13 = Check AP CRC 14 = Check Meter Levels 15 = Check Meters Off 16 = Check AES input

COM_SCRIPTS_EDIT_STEP_MEMORY

Description	This is used to choose the memory for selected command script step if the COM_SCRIPTS_EDIT_STEP_FUNCTION command is set to 0.
Hex Code, Decimal Code	0x06b9, 01721
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = first memory 1 = second memory 2 = third memor etc

COM_SCRIPTS_EDIT_STEP_TIME

Description	This is used to set the time for a selected command script step for example if the COM_SCRIPTS_EDIT_STEP_FUNCTION command is set to 7 (pause).
Hex Code, Decimal Code	0x06bc, 01724
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	Min = 0 Max = 7200 Divisor = 1

COM_SCRIPTS_EDIT_STEP_TEXT

Description	This is used to set Text for a selected command script step for example if the COM_SCRIPTS_EDIT_STEP_FUNCTION command is set to 1 (Prompt User).
Hex Code, Decimal Code	0x06bb, 01723
Valid Command Types	MSG_SET_TEXT, MSG_GET_TEXT

COM_SCRIPTS_EDIT_STEP_TEXT_LABEL

Description	This is used to label a selected command script step.
Hex Code, Decimal Code	0x06b0, 01712
Valid Command Types	MSG_SET_TEXT, MSG_GET_TEXT

COM_SCRIPTS_EDIT_STEP_INPUT

Description	This is used to set the input for a selected command script step for example if the COM_SCRIPTS_EDIT_STEP_FUNCTION command is set to 12 (Check SDI CRC).
Hex Code, Decimal Code	0x03ea, 01002
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	??

COM_SCRIPTS_EDIT_STEP_TAB

Description	This is used to specifies which tab is selected when saving image or selecting tab for a selected command script step for example if the COM_SCRIPTS_EDIT_STEP_FUNCTION command is set to 9 (Select Tab).
Hex Code, Decimal Code	0x03e8, 01000
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	0 = Full-screen picture 1 = Analyser Picture 2 = Audio Meters 3 = Signal Data 4 = Waveform 5 = Vectorscope 6 = Eye Diagram 7 = Jitter Analysis 8 = Command Scripts 9 = Event Log 10 = Loudness (not available) 11 = Main Menu

COM_SCRIPTS_EDIT_MOVE_STEP_DOWN

Description	This moves the currently selected step down in currently selected command script.
Hex Code, Decimal Code	0x06c8, 01736
Valid Command Types	MSG_SET_VALUE,
Values	1 = move down

COM_SCRIPTS_EDIT_MOVE_STEP_UP

Description	This moves the currently selected step up in currently selected command script.
Hex Code, Decimal Code	0x06c7, 01735
Valid Command Types	MSG_SET_VALUE,
Values	1 = move up

COM_SCRIPTS_EDIT_STEP_DELETE

Description	This deletes the currently selected step in currently selected command script.
Hex Code, Decimal Code	0x06b7, 01719
Valid Command Types	MSG_SET_VALUE,
Values	1 = delete

COM_SCRIPTS_DELETE_SCRIPT

Description	This deletes the currently selected command script.
Hex Code, Decimal Code	0x06b4, 01716
Valid Command Types	MSG_SET_VALUE,
Values	1 = delete

COM_SCRIPTS_SETUP

Description	This is used by GUI to setup which fields to add to status report.
Hex Code, Decimal Code	0x06ae, 01710
Valid Command Types	
Values	

Note that this command is for PHABRIX use only

System Status

System Status Commands

COM_SYS_EVENT_STATUS

Description	This displays the last log event if new log events are present.
Hex Code, Decimal Code	0x0194, 00404
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT
Value	Divisor = 10

COM_SYS_INFO_CENTIGRADE

Description	This displays the Unit Temperature in Centigrade.
Hex Code, Decimal Code	0x0294, 00660
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT
Value	Divisor = 10

COM_SYS_INFO_FAHRENHEIT

Description	This displays the Unit Temperature in Fahrenheit.
Hex Code, Decimal Code	0x0295, 00661
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT
Value	Divisor = 10

COM_SYS_INFO_ERROR_COUNTS

Description	This displays a Grid of system error/message counts.
Hex Code, Decimal Code	0x02a2, 00674
Valid Command Types	MSG_GET_ITEM_STRINGS

COM_SYS_INFO_ERROR_SLOTS

Description	This displays which slots have errors.
Hex Code, Decimal Code	0x02c2, 00706
Valid Command Types	MSG_GET_ITEM_STRINGS

COM_SYS_INFO_FAN_STATE

Description	This displays the state of the system's fan.
Hex Code, Decimal Code	0x029b, 00667
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT
Value	0 = OK, 1 = Fail

COM_SYS_INFO_VOLTAGE

Description	This displays a Grid of board/module voltages
Hex Code, Decimal Code	0x02c6, 00710
Valid Command Types	MSG_GET_ITEM_STRINGS

Battery Status (Sx Only)

COM_INFO_BATTERY_LEVEL

Description	This displays the battery level.
Hex Code, Decimal Code	0x00f0, 00240
Valid Command Types	MSG_GET_VALUE
Values	Min = 0, Max = 100, Divisor = 1

COM_INFO_BATTERY_STATE

Description	This displays the battery charge status.
Hex Code, Decimal Code	0x00f1, 00241
Valid Command Types	MSG_GET_TEXT

COM_INFO_BATTERY_LOG

Description	This displays the battery level.
Hex Code, Decimal Code	0x00f6, 00246
Valid Command Types	MSG_SET_VALUE
Values	1 = Log battery value

System Version Commands

COM_INFO_SERIAL_NO

Description	This displays the Unit serial number.
Hex Code, Decimal Code	0x0116, 00278
Valid Command Types	MSG_GET_TEXT

COM_INFO_HW_REVISION

Description	On Sx this displays the Unit's hardware modification level.
Hex Code, Decimal Code	0x0102, 00258
Valid Command Types	MSG_GET_TEXT

COM_INFO_VERSION

Description	This displays the system's Current software version.
Hex Code, Decimal Code	0x011d, 00285
Valid Command Types	MSG_GET_TEXT

COM_INFO_OPTIONS

Description	This displays the system's installed software options as a string.
Hex Code, Decimal Code	0x0111, 00273
Valid Command Types	MSG_GET_ITEM_STRINGS

COM_INFO_BOOT_VERSION

Description	This displays the system's U-Boot version.
Hex Code, Decimal Code	0x00f3, 00243
Valid Command Types	MSG_GET_TEXT

COM_INFO_BOOT_DATE

Description	This displays the system's U-Boot release data.
Hex Code, Decimal Code	0x00f2, 00242
Valid Command Types	MSG_GET_TEXT

COM_INFO_OS_RELEASE

Description	This displays the system's Linux version.
Hex Code, Decimal Code	0x0114, 00276
Valid Command Types	MSG_GET_TEXT

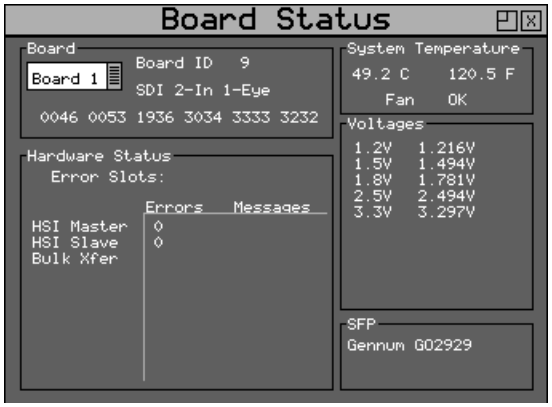
COM_INFO_OS_DATE

Description	This displays the system's Linux release date.
Hex Code, Decimal Code	0x0113, 00275
Valid Command Types	MSG_GET_TEXT

COM_INFO_MAC_ADDRESS

Description	This displays the MAC address for the unit.
Hex Code, Decimal Code	0x0110, 00272
Valid Command Types	MSG_GET_TEXT

Board Status



The Board Status window displays the current status of the hardware modules on the HDMI® monitor output. This can then be used to inspect which Modules have been installed in the Rx instrument.

COM_SYS_INFO_BOARD_SELECT

Description	This selects which module to display voltage readings for
Hex Code, Decimal Code	0x02c4, 00708
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE, MSG_GET_TEXT
Values	0 = Front Board 1 = CPU Module 2 = Board 1 (Module in Slot 1) 3 = Board 2 (Module in Slot 2) 4 = Board 3 (Module in Slot 3) 5 = Board 4 (Module in Slot 4) 6 = Mezzanine (Dolby Decoder module)

COM_SYS_INFO_BOARD_DESCRIPTION

Description	This displays description of currently selected module in slot.
Hex Code, Decimal Code	0x0299, 00665
Valid Command Types	MSG_GET_TEXT

COM_INFO_BOARD_ID

Description	This displays board ID and revision of the currently selected module.
Hex Code, Decimal Code	0x0103, 00259
Valid Command Types	MSG_GET_TEXT

COM_SYS_INFO_BOARD_ID

Description	This displays board ID of the currently selected module.
Hex Code, Decimal Code	0x0298, 00664
Valid Command Types	MSG_GET_TEXT

COM_SYS_INFO_BOARD_SFP_NAME

Description	This displays name of SFP plugged in to cage of the currently selected module in Slot
Hex Code, Decimal Code	0x02c1, 00705
Valid Command Types	MSG_GET_TEXT

COM_SYS_INFO_BOARD_UID

Description	This displays the UID of the currently selected module in Slot
Hex Code, Decimal Code	0x029a, 00666
Valid Command Types	MSG_GET_TEXT

COM_SYS_SLOT1_BOARD_ID

Description	This displays Board Id for slot 1 used to check compatibility when recalling presets
Hex Code, Decimal Code	0x02cb, 00715
Valid Command Types	MSG_GET_VALUE

COM_SYS_SLOT2_BOARD_ID

Description	This displays Board Id for slot 2 used to check compatibility when recalling presets
Hex Code, Decimal Code	0x02cc, 00716
Valid Command Types	MSG_GET_VALUE

COM_SYS_SLOT3_BOARD_ID

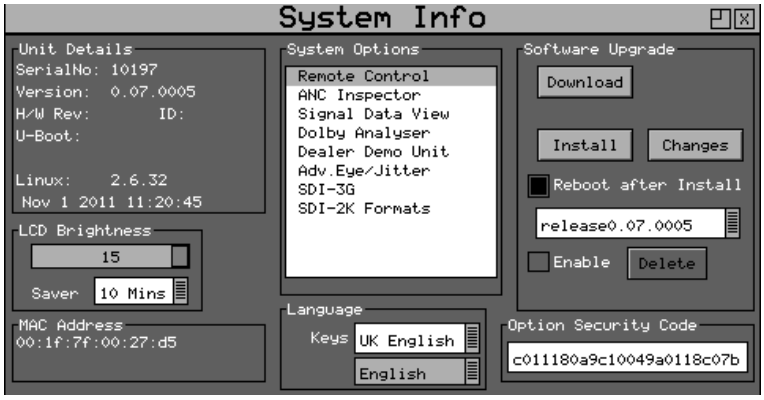
Description	This displays Board Id for slot 3 used to check compatibility when recalling presets
Hex Code, Decimal Code	0x02cd, 00717
Valid Command Types	MSG_GET_VALUE

COM_SYS_SLOT4_BOARD_ID

Description	This displays Board Id for slot 3 used to check compatibility when recalling presets
Hex Code, Decimal Code	0x02ce, 00718
Valid Command Types	MSG_GET_VALUE

System Maintenance

Software Maintenance



The Rx System Info window displays the system software status and options that are installed on the HDMI® monitor output.

COM_INFO_VERSION

Description	This displays the system's current installed software version.
Hex Code, Decimal Code	0x011d, 00285
Valid Command Types	MSG_GET_TEXT

COM_INFO_SW_DOWNLOAD

Description	This causes the system to download the latest software from the internet.
Hex Code, Decimal Code	0x0118, 00280
Valid Command Types	MSG_SET_VALUE
Values	1 = Download

COM_INFO_SW_VERSION

Description	This selects the version of software to be installed from the list.
Hex Code, Decimal Code	0x011c, 00284
Valid Command Types	MSG_SET_VALUE, MSG_GET_VALUE
Values	1 = First Version in list 2 = Second Version in list 3 = etc

COM_INFO_SW_INSTALL

Description	This installs the currently selected software version set by the COM_INFO_SW_VERSION command for the Sx and Rx 2000 front panel.
Hex Code, Decimal Code	0x0119, 00281
Valid Command Types	MSG_SET_VALUE
Values	1 = Install

COM_INFO_SW_HDMI_INSTALL

Description	This installs the currently selected software version set by the COM_INFO_SW_VERSION command for the Rx 2000 HDMI monitor output.
Hex Code, Decimal Code	0x010c, 00268
Valid Command Types	MSG_SET_VALUE
Values	1 = Install

COM_INFO_SW_PROGRESS

Description	On the Sx this displays the download/install software progress.
Hex Code, Decimal Code	0x011a, 00282
Valid Command Types	MSG_GET_TEXT

COM_INFO_SW_FILE_LINES

Description	On Sx this displays the List box containing ReadMe.txt file after Show Changes dialogue opened.
Hex Code, Decimal Code	0x011e, 00286
Valid Command Types	MSG_GET_TEXT

COM_INFO_ENABLE_SETUP_DELETE

Description	This enables the software delete function COM_INFO_SETUP_DELETE.
Hex Code, Decimal Code	0x0108, 00264
Valid Command Types	MSG_SET_VALUE
Values	1 = Enable

COM_INFO_SETUP_DELETE

Description	This deletes the currently selected software version set by the COM_INFO_SW_VERSION command after COM_INFO_ENABLE_SETUP_DELETE as been selected.
Hex Code, Decimal Code	0x0109, 00265
Valid Command Types	MSG_SET_VALUE
Values	1 = Enable

File System Commands

COM_DISK_FREE_SPACE

Description	This displays free disk space in Kilobytes.
Hex Code, Decimal Code	0x06a4, 01700
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT
Values	Divisor = 1

COM_DISK_TOTAL_SPACE

Description	This displays total disk space in Kilobytes.
Hex Code, Decimal Code	0x06a5, 01701
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT
Values	Divisor = 1

COM_DISK_USED_SPACE

Description	This displays used disk space as a percentage of disk space used.
Hex Code, Decimal Code	0x06a6, 01702
Valid Command Types	MSG_GET_VALUE, MSG_GET_TEXT
Values	Divisor = 1

COM_FILE_DATE

Description	This displays the date of Filename selected in File Select Dialogue.
Hex Code, Decimal Code	0x073c, 01852
Valid Command Types	
Values	

Deprecated Function

COM_FILE_FILELIST

Description	This displays the List of files in File Select Dialogue.
Hex Code, Decimal Code	0x073b, 01851
Valid Command Types	
Values	

Deprecated Function

COM_FILE_FILENAME

Description	This displays Filename selected in File Select Dialogue.
Hex Code, Decimal Code	0x073a, 01850
Valid Command Types	
Values	

Deprecated Function

COM_FILE_LOAD

Description	This performs a Load File function in the File Select Dialogue.
Hex Code, Decimal Code	0x073f, 01855
Valid Command Types	
Values	

Deprecated Function

COM_FILE_SAVE

Description	This performs a Save File function in the File Select Dialogue.
Hex Code, Decimal Code	0x073e, 01854
Valid Command Types	
Values	

Deprecated Function

COM_FILE_DELETE

Description	This performs a Delete File function in the File Select Dialogue.
Hex Code, Decimal Code	0x0740, 01856
Valid Command Types	
Values	

Deprecated Function

COM_REMOTE_CONNECTIONS

Description	This displays a List of all current remote control connections
Hex Code, Decimal Code	0x0176, 00374
Valid Command Types	
Values	

Deprecated Function

Screen Capture

COM_SYS_SCREEN_DUMP_FILE

Description	On the Sx and Rx 2000 front panel when a screen capture is peformed this will display the filename of the last captured screen
Hex Code, Decimal Code	0x01ed, 00493
Valid Command Types	MSG_GET_TEXT