



SP-0108-SCL 4K HDR 1:8 HDMI Splitter

Application Programming Interface

Document Revision	V1.0
Document Date	May 2022
Supported Firmware	Refer to Supported Product Firmware/Software for details.

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1. Overview

This API (Application Programming Interface) document provides the necessary connections, configurations and commands needed in order to control the SP-0108-SCL

1.1 Supported Product Firmware/Software

The following products and firmware versions are supported by this version of the API. The firmware versions listed are the minimum supported at time of publication, firmware may be higher except where otherwise noted.

Product	Status Since Last Doc Rev	Supported Product Versions
SP-0108-SCL	New	v1 or higher

1.2 Before You Begin

Verify that the following items are on hand and that all documentation is reviewed before continuing.

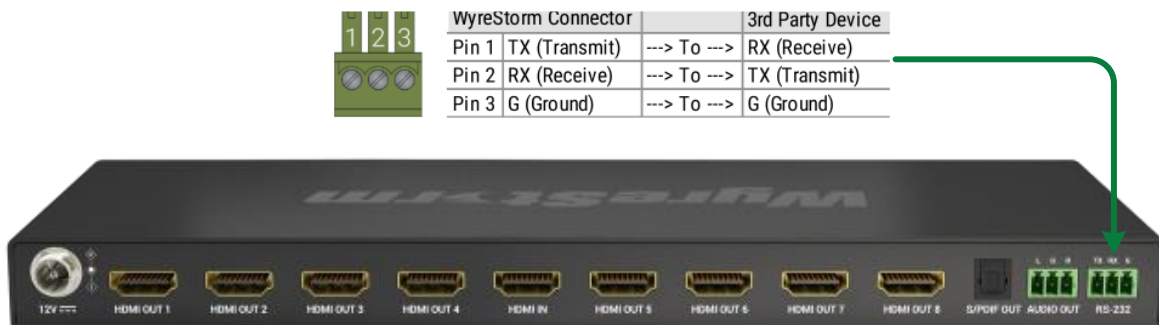
- Operational SP-0108-SCL HDMI Splitter
- Control System and Control System Documentation.....

2. Wiring and Communication Configuration

WyreStorm recommends that all wiring for the installation is run and terminated prior to making connections to the switcher. Read through this section in its entirety before running or terminating the wires to ensure proper operation and to avoid damaging equipment.

2.1 RS-232 Connections

The following wiring diagrams show the pinouts for the WyreStorm device. While not shown, connect the TX (transmit) to RX (receive) pins at the control system or PC side of the cable. Most control systems and computers are configured for Digital Terminal Equipment (DTE) where pin 2 is RX and pin 3 is TX. This can vary from device to device, refer to the documentation for the connected device for pin functionality to ensure that the correct connections can be made.



RS-232 Port Settings

Baud rate:	115200 bps
Data Bits:	8bits
Parity:	None
Stop Bits:	1bit
Flow Control:	None

3. Command Overview

When sending commands using the IPv4 / Telnet API channel, or when using the RS-232 API channel, all command lines sent from the 3rd-party controller to the matrix should end with a specific character. This signifies when the command is processed by the matrix. This is usually specified in 3rd-party control software as the “command delimiter,” “stop character,” or “line terminator.”

Accepted delimiter characters are:

Character	Shorthand	Hex Notation	Escape Notation	Decimal Notation
Line Feed	LF	0A	\n	10
Carriage Return + Line Feed	CR LF	0D0A	\r\n	33 10

Please note, most 3rd-party control software will either append these characters automatically or an option to specify them will be present.

It is important that the last delimiter character is LF and not CR.

4. Downscaler Settings

Enable/Disable Output Downscaler

Command structure:

SET DOWNSCALER <OUTPUT> <PRM>

Response Syntax:

DOWNSCALER <OUTPUT> <PRM>

Example Command:

SET DOWNSCALER out1 on

Example Response:

DOWNSCALER out1 on

<OUTPUT> = out1~out8 | all

<PRM> = on | off

Note: Both dipswitch and API command are capable of setting downscaler, however, whichever method was used **last** will take precedence. If it is desired to control the downscaler with the dipswitches and the dipswitch is already on the desired setting, e.g., setting output 3 downscaler on, but dipswitch 3 is already set to the on position, simply set dipswitch 3 to off and then back to the on position and the downscaler will take effect.

Query Downscaler Status

Command structure:

GET DOWNSCALER <OUTPUT> <PRM>

Response Syntax:

DOWNSCALER <OUTPUT> <PRM>

Example Command:

GET DOWNSCALER out1

Example Response:

DOWNSCALER out1 on

<OUTPUT> = out1~out8 | all

<PRM> = on | off

5. Audio Output Mute

Set Audio Output Mute

Command structure:
SET AUDOUT_MUTE <PRM>

Response Syntax:
AUDOUT_MUTE <PRM>

Example Command:
SET AUDOUT_MUTE on

Example Response:
AUDOUT_MUTE on

<PRM> = on~off (on=mute, off=unmute)

Note: Both digital and analog outputs are affected.

Query Audio Output Mute

Command structure:
GET AUDOUT_MUTE

Response Syntax:
AUDOUT_MUTE <PRM>

Example Command:
GET AUDOUT_MUTE

Example Response:
AUDOUT_MUTE on

<PRM> =on~off (on=mute, off=unmute)

6. Controlling Display Power via CEC

IMPORTANT! Display must be compatible with CEC and enabled to use this function.

Send CEC Display Power	
Command structure: SET CEC_PWR <OUTPUT> <PRM>	<OUTPUT> = out1~out8 all <PRM> = on off Note: Sends the default hex commands to power on/off display (40 04 and FF 36)
Response Syntax: CEC_PWR <OUTPUT> <PRM>	
Example Command: SET CEC_PWR out1 on	
Example Response: CEC_PWR out1 on	

Set CEC Auto Display Power	
Command structure: SET AUTOCEC_FN <OUTPUT> <PRM>	<OUTPUT> = out1 ~ out8 all <PRM> = on off Note: Sends the default hex commands to power on/off display upon source detection (40 04 and FF 36)
Response Syntax: AUTOCEC_FN <OUTPUT> <PRM>	
Example Command: SET AUTOCEC_FN out1 on	
Example Response: AUTOCEC_FN out1 on	

Query CEC Auto Display Power	
Command structure: GET AUTOCEC_FN <OUTPUT>	<OUTPUT> = out1 ~ out8 <PRM> = on off
Response Syntax: AUTOCEC_FN <OUTPUT> <PRM>	
Example Command: GET AUTOCEC_FN out1	
Example Response: AUTOCEC_FN out1 on	

Set CEC Power Off Delay	
Command structure: SET AUTOCEC_D <OUTPUT> <PRM>	<OUTPUT> = out1 ~ out8 all <PRM> = 1 ~ 30 Note: Power off timer starts upon loss of source signal Note 2: Delay times are represented in minutes Note 3: Default delay time is 2 minutes
Response Syntax: AUTOCEC_D <OUTPUT> <PRM>	
Example Command: SET AUTOCEC_D out1 5	
Example Response: AUTOCEC_D out1 5	

Query CEC Power Off Delay

Command structure:
GET AUTOCEC_D <OUTPUT>

Response Syntax:
AUTOCEC_D <OUTPUT> <PRM>

Example Command:
SET AUTOCEC_D out1

Example Response:
AUTOCEC_D out1 5

<OUTPUT> = out1 ~ out8 | all
<PRM> = 1 ~ 30

Note: Delay times are represented in minutes

7. EDID Settings

Program Custom EDID to Input

Command structure:
SET EDID_W <PRM1> <PRM2>

Response Syntax:
EDID_W: <PRM1> <PRM3>

Example Command:
SET EDID_W block0 XX...XX

Example Response:
EDID_W block0 ok

<PRM1> = block0 ~ block1
<PRM2> = one block of 256 bytes EDID ASCII data **w/ spaces** (HEX data must be converted to ASCII)
<PRM3> = ok, error (error= check sum error)

Query EDID

Command structure:
GET EDID <PRM>

Response Syntax:
EDID <PRM>

Example Command:
GET EDID out1

Example Response:
EDID out1 XX...XX

<PRM> = out1 ~ out8 | custom | in1

Note: "out1 ~ out8" query's the EDID from the respective output. "Custom" represents the EDID last programmed by user. "in1" represents the current EDID given to the source.

Copy Output EDID

Command structure:
SET CP_EDID <OUTPUT>

Response Syntax:
CP_EDID <OUTPUT>

Example Command:
SET_CPEDID out1

Example Response:
CP_EDID out1 successful

<Output> = out1 ~ out8

8. Troubleshooting

Query Firmware

Command:

GET VER

<PRM1> = module1

Response Syntax:

<PRM1> <PRM2>

<PRM2> = module firmware version

System Reboot

Command:

REBOOT

Response Syntax:

REBOOT

Restore Factory Defaults

Command:

RESET

Response:

RESET

List of API Commands

Command:

HELP

<PRM> = Gets full list of API commands

Response:

HELP <PRM>

9. Contacting Technical Support

Should further clarification of the content in this document or assistance on troubleshooting be required, please contact WyreStorm technical support.

Phone: UK: +44 (0) 1793 230 343 | ROW: 844.280.WYRE (9973)

Contact Request: <http://wyrestorm.com/contact-tech-support>

10. Document Revision History

V1.0 – May 2022

New Splitter Model	SP-0108-SCL
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