Application Programming Interface

Product Model	SW-130-TX
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Contents

Overview

The following contains the connection info and commands to control the SW-130-TX In-Wall HDBaseT switcher. By following the content contained in this document the switcher can be controlled and configured via a 3rd party RS-232 control system.

Before You Begin

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

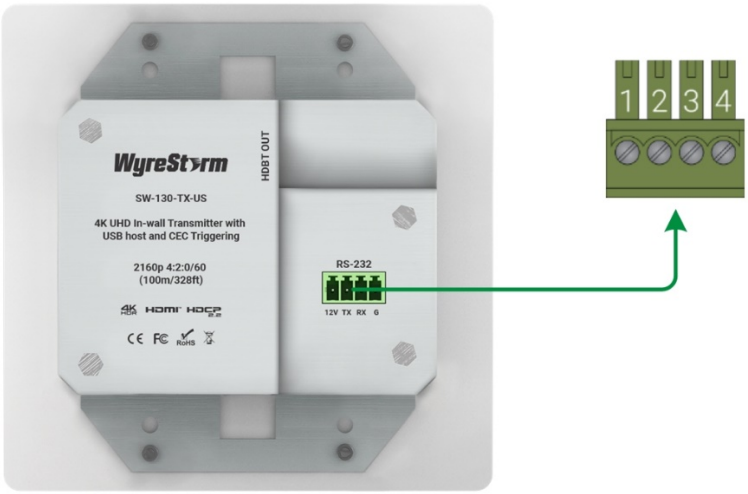
Connected and operational SW-130-TX ☐
Control System and Control System Documentation ☐
PC or Mac for Configuring Product ☐

Wiring and Communication Configuration

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

RS-232 Connection

The following wiring diagram shows the pinout 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 functionally to ensure that the connect connections can be made.



WyreStorm Connector			3rd Party Device
Pin 1	12V DC Out	No Connection	Reserved
Pin 2	TX (Transmit)	---> To --->	RX (Receive)
Pin 3	RX (Receive)	---> To --->	TX (Transmit)
Pin 4	G (Ground)	---> To --->	G (Ground)

RS-232 Port Settings

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

Command Overview

Command Delimiter for Sent Commands

When sending commands using the RS-232 API channel, all command lines sent from the 3rd-party controller to the switcher should end with a specific character. This signifies when the command is processed by the switcher. 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	0D 0A	\r\n	13 10

> 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.

Switching Inputs

Switching Video Inputs	
Command structure: **SET SW <INPUT>**	**<INPUT>** = hdmi1 | hdmi2 | usbc
Response Syntax: **SW <INPUT>**	
Example Command: **SET SW hdmi1**	
Example Response: **SW hdmi1**	

Query Active Input	
Command structure: **GET SW**	
Response Syntax: **<INPUT>**	
Example Command: **GET SW**	
Example Response: **hdmi1**	

Controlling Display Power via CEC

CEC Display Power	
Command structure: **SET CEC_PWR <PRM>**	**<PRM>** = on | off
Response Syntax: **CEC_PWR <PRM>**	
Example Command: **SET CEC_PWR on**	
Example Response: **CEC_PWR on**	

Set CEC Auto Trigger	
Command structure: **SET AUTOCEC_M <PRM>**	**<PRM>** = on | off
Response Syntax: **AUTOCEC_M <PRM>**	
Example Command: **SET AUTOCEC_M on**	
Example Response: **AUTOCEC_M on**	

The switcher can automatically send a CEC Power On command through its output when an input signal is detected. CEC Power Off commands can also automatically be sent after a predetermined amount of time passes and when a signal detection is lost. See "Set CEC Auto Power Off Delay" section for details.

Query CEC Auto Trigger	
Command structure: **GET AUTOCEC_M**	
Response Syntax: **AUTOCEC_M <PRM>**	
Example Command: **GET AUTOCEC_M**	
Example Response: **AUTOCEC_M on**	

Set CEC Auto Power Off Delay	
Command structure: **SET AUTOCEC_D <PRM>**	**<PRM>** = 1~30
Response Syntax: **AUTOCEC_D <PRM>**	
Example Command: **SET AUTOCEC_D 5**	
Example Response: **AUTOCEC_D 5**	

Note: <PRM> is in minutes. A value of 5 is equal to a 5-minute delay.

Query CEC Auto Power Off Delay	
Command structure: **GET AUTOCEC_D**	
Response Syntax: **AUTOCEC_D <PRM>**	
Example Command: **GET AUTOCEC_D**	
Example Response: **AUTOCEC_D 5**	

Note: <PRM> is in minutes. A value of 5 is equal to a 5-minute delay.

Troubleshooting

Enable Long Reach Mode	
Command structure: **SET LR_FN <PRM>**	**<PRM>** = on | off
Response Syntax: **LR_FN <PRM>**	
Example Command: **SET LR_FN on**	
Example Response: **LR_FN on**	

Query Firmware Version	
Command: **GET SW_VERSION**	**<PRM>** = current installed firmware version
Response Syntax: **<PRM>**	

Reboot Switcher	
Command: **REBOOT**	**No Parameters**
Response: **REBOOT**	

Restore Factory Defaults	
Command: **RESET**	**No Parameters**
Response: **RESET**	

Contacting Technical Support

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

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

Document Revision History

V1.0 – June 2020	
All	Initial release of document

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