RS232 Control

The RS232 port of switcher has two control methods.

1) Local control: Connect the RS232 port to control device (e.g.PC) to control the switcher by RS232 commands.
2) Bi-directional pass-through control: The RS232 port is used with the RS232 port of far-end HDBaseT receiver to control the third-party device (e.g. Projector).

RS232 Commands:

The command lists are used to control the switcher. The RS232 control software (e.g. docklight) needs to be installed on the control PC to send RS232 commands.

After installing the RS232 control software, please set the parameters of COM number, bound rate, data bit, stop bit and the parity bit correctly, and then you are able to send command in command sending area.

Baud rate: 9600

Data bit: 8

Stop bit: 1

Parity bit: none

Note:

- *All commands needs to be ended with "<CR><LF>".*
- *In the commands, "["and "]" are symbols for easy reading and do not need to be typed in actual operation.*
- *Type the command carefully, it is case-sensitive.*

System Commands

Command	Description	Command Example and Feedback
>GetFirewareVersion	Get the firmware version.	<V1.0.0
>SetFactoryReset	Factory Default	<FactoryReset_True
>SetReboot	System reboot.	<Reboot_EN
>SetHelp [Param]	Get the command details. [Param] = Any command. [Param] = Null (All commands)	>SetHelp SetAV
		<Select the input source >SetAV InParam,OutParam InParam = 1~6 1 - HDMI 1 2 - HDMI 2 3 - HDMI 3

Command	Description	Command Example and Feedback
		4 - DP 3 5 - HDMI 4 6 - TYPE-C 4 OutParam = A ~ D(NO THIS PARAMETER TO SET TO A)
>GetIpAddress	Get the IP to access GUI.	<IpAddress: 192.168.0.178 <SubNetMask: 255.255.255.0 <GateWay: 192.168.0.1
>SetKeyboardLock [Param]	Lock/unlock the front panel buttons. [Param] = EN,Dis EN - Lock Dis - Unlock (Default)	>SetKeyboardLock EN >SetKeyboardLock Dis <KeyboardLock True <KeyboardLock False
>GetKeyboardLock	Get the front buttons locking status.	<KeyboardLock True
>SetPowerOn [Param]	Enter/exit standby mode [Param] = EN,Dis EN - Exit standby (Default) Dis – Enter standby	>SetPowerOn EN >SetPowerOn Dis <PowerOn True <PowerOn False
>GetPowerOn	Get the system standby status.	<PowerOn True
>GetStatus	Get the system status.	<V1.0.0 <Video OUT A B C D IN 1 2 3 5 <AudioSource 1 <OutputResolution 8 ... ...

Signal Switching Commands

Command	Description	Command Example and Feedback
>SetAV [InParam],[OutParam]	Switch input source to output window. **[InParam]** = 1 ~ 6 1 - HDMI 1 2 - HDMI 2 3 - HDMI 3	>SetAV 3 >SetAV 1,A

Command	Description	Command Example and Feedback
	4 - DP 3 5 - HDMI 4 6 - USB-C 4 **[OutParam]** = A ~ D (No this parameter when switching input source to window A)	<AV 3,A <AV 1,A
>GetAV [OutParam]	Get the input source of window [OutParam]. [OutParam] = A~D (No this parameter when get input sources of all windows)	>GetAV >GetAV A
		<Video OUT A B C D IN 1 2 3 4 <AudioSource 1 <Video 1，A
>SetAutoSwitch [Param]	Enable/disable auto switching mode. [Param] = EN,Dis EN - Enable (Default) Dis - Disable	>SetAutoSwitch EN >SetAutoSwitch Dis
		<AutoSwitch True <AutoSwitch False
>GetAutoSwitch	Get the auto switching status.	<AutoSwitch True
>SetInput3Type [Param]	Select the input source for the third input channel. [Param] = H,Dp H - HDMI input Dp - DP input	>SetInput3Type H
		<Input3Type H
>GetInput3Type	Get the input source of the third input channel.	<Input3Type H
>SetInput4Type	Select the input source for the fourth input channel. [Param] = H, C H - HDMI input C – USB-C input	>SetInput4Type H
		<Input4Type H
>GetInput4Type	Get the input source for the fourth input channel.	<Input4Type H

Audio Setting Commands

Command	Description	Command Example and Feedback
>SetMicAudioMute [Param]	Mute/Unmute microphone audio. [Param] = EN, Dis EN - Mute. Dis - Unmute (Default)	>SetMicAudioMute EN >SetMicAudioMute Dis
		<MicAudioMute True <MicAudioMute False
>GetMicAudioMute	Get the microphone audio mute status	<MicAudioMute False
>SetMicVOL [Param]	Set the microphone audio volume to [Param]. [Param] = 0~60 (Default: 60)	>SetMicVOL 6
		<MicVOL 6
>GetMicVOL	Get the microphone audio volume.	<MicVOL 6

Command	Description	Command Example and Feedback
>SetSourceAudioMute [Param]	Mute/Unmute source audio. [Param] = EN, Dis EN - Mute. Dis - Unmute (Default)	>SetSourceAudioMute EN >SetSourceAudioMute Dis <SourceAudioMute True <SourceAudioMute False
>GetSourceAudioMute	Get the source audio mute status	<SourceAudioMute True
>SetSourceVOL [Param]	Set the source audio volume to [Param]. [Param] = 0~60 (Default: 60)	>SetSourceVOL 6 <SourceVOL 6
>GetSourceVOL	Get the source audio volume.	<SourceVOL 60
>SetAudioSource [Param]	Set the source audio of ouput to [Param]. [Param] = 1~5. 1 – HDMI 1 (Default) 2 – HDMI 2 3 – HDMI/DP 3 4 – HDMI/USB-C 4 5 – LINE IN	>SetAudioSource 2 <AudioSource 2
>GetAudioSource	Get the source audio of ouput.	<AudioSource 1
>SetAudioMix [Param]	Enable/Disable audio mixing. [Param] = EN, Dis EN - Enable (Default) Dis - Disable	>SetAudioMix EN <AudioMix True
>GetAudioMix	Get audio mixing status.	<AudioMix True
>SetFullModeAudioSwitch [Param]	Set whether the audio follows video switching in full screen mode. [Param] = EN, Dis EN - Enable (Default) Dis - Disable	>SetFullModeAudioSwitch EN <FullModeAudioSwitch True
>GetFullModeAudioSwitch	Get whether the audio follows video switching in full screen mode.	<FullModeAudioSwitch True
>SetAudioDelay [Param]	Set the delay time of audio output to [Param]. [Param] = 0 ~ 170 (ms) (Default: 0).	>SetAudioDelay 20 <AudioDelay 20
>GetAudioDelay	Get the delay time of audio output.	<AudioDelay 20

Function Setting Commands

Command	Description	Command Example and Feedback
>SetRS232Baudrate [Param]	Set the baud rate of RS232 port to [Param]. [Param] = 1 ~ 5 1 - 115200 2 - 57600	>SetRS232Baudrate 5 <RS232Baudrate 5

Command	Description	Command Example and Feedback
	3 - 38400 4 - 19200 5 - 9600 (Default)	
>GetRS232Baudrate	Get the baud rate of RS232 port.	<RS232Baudrate 5
>SetOutputResolution [Param]	Set the output resolution to [Param]. [Param] = 1 ~ 8 1 - 1024x768@60Hz 2 - 1280x720@60Hz 3 - 1360x768@60Hz 4 - 1600x1200@60Hz 5 - 1920x1080@60Hz 6 - 1920x1200@60Hz 7 - 3840x2160@30Hz (Default) 8 - AUTO	>SetOutputResolution 4 <OutputResolution 4
>GetOutputResolution	Get the output resolution.	<OutputResolution 4
>GetInputResolution [Param]	Get the input resolution. [Param] = 1~4. 1 - HDMI 1 2 - HDMI 2 3 - HDMI/DP 3 4 - HDMI/USB-C 4	>GetInputResolution 1 <InputResolution: 1 1920x1080 60Hz
>SetHdcpHdmiOutput [Param]	Set the HDCP mode of output port [Param] = 1 ~ 3 1 - HDCP 1.4 (Default) 2 - HDCP 2.2 3 - OFF	>SetHdcpHdmiOutput 1 <HdcpHdmiOutput 1
>GetHdcpHdmiOutput	Get the HDCP mode of output port.	<HdcpHdmiOutput 1
>SetInPortEdid [Param1],[Param2]	Set the EDID of input soure. [Param1] = 1 ~ 6 1 - HDMI 1 2 - HDMI 2 3 - HDMI 3 4 - DP 3 5 - HDMI 4 6 - USB-C 4 [Param2] = 1 ~ 5 1 - 1920x1080 60HZ PCM 2CH 2 - 3840x2160 30HZ PCM 2CH (Default) 3 - BYPASS HDMI 4 - BYPASS HDBT 5 - USER	>SetInPortEdid 1,1 <InPortEdid 1,1

Command	Description	Command Example and Feedback
>GetInPortEdid [Param]	Get the EDID of input source. [Param] = 1 ~ 6 1 - HDMI 1 2 - HDMI 2 3 - HDMI 3 4 - DP 3 5 - HDMI 4 6 - USB-C 4	>GetInPortEdid 1 <InPortEdid 1,1
>SetUpdateEdid_EN	Upload the user-defined EDID.	<User edid ready,Please send edid data in 10s. <SetUpdateEdid_True/False / <Time out to send edid
>SetMvMode [Param]	Set multiview mode. [Param] = 1 ~ 20 1 - 1 WINDOWS Full 2 - 2 WINDOWS PBP 3 - 3 WINDOWS 2U1D 4 - 4 WINDOWS SAME SIZE (Default) 5 - 2 WINDOWS PIP LU 6 - 2 WINDOWS PIP LD 7 - 2 WINDOWS PIP RU 8 - 2 WINDOWS PIP RD 9 - 4 WINDOWS PBP 3L1R 10 - 4 WINDOWS PBP 1L3R 11 - 4 WINDOWS PBP 3U1D 12 - 4 WINDOWS PBP 1U3D 13 - 4 WINDOWS PIP 1F3L 14 - 4 WINDOWS PIP 1F3R 15 - 4 WINDOWS PIP 1F3U 16 - 4 WINDOWS PIP 1F3D 17 - USER CONFIG 1 18 - USER CONFIG 2 19 - USER CONFIG 3 20 - USER CONFIG 4	>SetMvMode 1 <MvMode 1
>GetMvMode	Get multiview mode	<MvMode 1
>SetSwapSrouce	Swap input source of window.	<Video OUT A B C D IN 2 5 1 3 <AudioSource 1
>SetResizeWin	Resize display windows.	<ResizeWin

Command	Description	Command Example and Feedback
>SetAutoCec [Param]	Set whether to automatically send CEC commands after signal detection. [Param] = EN, Dis EN - Enable (Default) Dis - Disable	>SetAutoCec EN <AutoCec True
>GetAutoCec	Get whether to automatically send CEC commands after signal detection.	<AutoCec True
>SetAutoCommand [Param]	Set whether to automatically send RS232 commands after signal detection. [Param] = EN, Dis EN - Enable (Default) Dis - Disable	>SetAutoCommand EN <AutoCommand True
>GetAutoCommand	Get whether to automatically send RS232 commands after signal detection.	<AutoCommand True
>SetAutoStandby [Param]	Enable/disable auto standby after no signal detection. [Param] = EN, Dis EN - Enable Dis - Disable (Default)	>SetAutoStandby EN <AutoStandby True
>GetAutoStandby	Get auto standby setting status.	<AutoStandby True
>SetAutoRelay [Param]	Enable/Disable auto power off function of relay. [Param] = EN, Dis EN - Enable Dis - Disable (Default)	>SetAutoRelay EN <AutoRelay True
>GetAutoRelay	Get auto power off setting status of relay.	<AutoRelay True
>SetPanelCEC [Param]	Set the delay time to send CEC, RS232 and standby commands after removing input signal removed. [Param] = 0~1800 (s) (Default: 600s)	>SetPanelCEC 9 <PanelCEC 9
>GetPanelCEC	Get the delay time to send CEC, RS232 and standby commands after removing input signal removed.	<PanelCEC 9
>SetOffMsgLoopCnt [Param]	Set the number of times of sending Display Off command. [Param] = 1 ~ 2 (Default: 1)	>SetOffMsgLoopCnt 1 <OffMsgLoopCnt 1
>GetOffMsgLoopCnt	Get the number of times of sending Display Off command.	<OffMsgLoopCnt 1
>SetOffMsgLoopDelay Time [Param]	Set the delay time of sending Display Off command. [Param] = 5 ~ 100 (1=100ms) (Default: 10)	>SetOffMsgLoopDelayTime 5 <OffMsgLoopDelayTime 5
>GetOffMsgLoopDelay Time	Get the delay time of sending Display Off command.	<OffMsgLoopDelayTime 5

Command	Description	Command Example and Feedback
>SetInputMsgDelayTime [Param]	Set the delay time of sending Display Input Select command. [Param] = 1 ~ 100 (s) (Default: 3)	>SetInputMsgDelayTime 10
		<InputMsgDelayTime 10
>GetInputMsgDelayTime	Get the delay time of sending Display Input Select command.	<InputMsgDelayTime 10
>SetDisplayOn [Param]	Power on/off the display device. (Send RS232 and CEC commands at the same time). [Param] = EN, Dis EN - Power on Dis - Power off	>SetDisplayOn EN >SetDisplayOn Dis
		<DisplayOn True <DisplayOn False
>SetHdbtPOCOn [Param]	Enable or disable PoC. [Param] = EN, Dis EN - Enable (Default) Dis - Disable	>SetHdbtPOCOn EN
		<HdbtPOCOn True
>GetHdbtPOCOn	Get PoC status.	<HdbtPOCOn True

CEC Commands

Command	Description	Command Example and Feedback
>SetCecSrcMenu [Param]	Send CEC MENU command to source device. [Param] = 1 ~ 4 1 - HDMI 1 2 - HDMI 2 3 - HDMI 3 4 - HDMI 4	>SetCecSrcMenu 1
		<CecSrcMenu 1
>SetCecSrcUp [Param]	Send CEC UP command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcUp 1
		<CecSrcUp 1
>SetCecSrcDown [Param]	Send CEC DOWN command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcDown 1
		<CecSrcDown 1
>SetCecSrcLeft [Param]	Send CEC LEFT command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcLeft 1
		<CecSrcLeft 1
>SetCecSrcRight [Param]	Send CEC RIGHT command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcRight 1
		<CecSrcRight 1
>SetCecSrcBack [Param]	Send CEC BACK command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcBack 1
		<CecSrcBack1
>SetCecSrcEnter [Param]	Send CEC ENTER command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcEnter 1
		<CecSrcEnter 1
		>SetCecSrcOn 1

Command	Description	Command Example and Feedback
>SetCecSrcOn [Param]	Send CEC ON command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	<CecSrcOn 1
>SetCecSrcOff [Param]	Send CEC OFF command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcOff 1
		<CecSrcOff 1
>SetCecSrcStop [Param]	Send CEC STOP command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcStop 1
		<CecSrcStop 1
>SetCecSrcPlay [Param]	Send CEC PLAY command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcPlay 1
		<CecSrcPlay 1
>SetCecSrcPause [Param]	Send CEC PAUSE command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcPause 1
		<CecSrcPause 1
>SetCecSrcPrev [Param]	Send CEC PREV command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcPrev 1
		<CecSrcPrev 1
>SetCecSrcNext [Param]	Send CEC NEXT command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcNext 1
		<CecSrcNext 1
>SetCecSrcRewind [Param]	Send CEC REWIND command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcRewind 1
		<CecSrcRewind 1
>SetCecSrcFastForward [Param]	Send CEC Fast-forward command to source device. [Param] = 1 ~ 4 (HDMI 1~4)	>SetCecSrcFastForward 1
		<CecSrcFastForward 1
>SetCecDisplayOn [Param]	Send CEC ON command to display device. [Param] = 1 ~ 2 (1 - HDMI, 2 - HDBT)	>SetCecDisplayOn 1
		<CecDisplayOn 1
>SetCecDisplayOff [Param]	Send CEC OFF command to display device. [Param] = 1 ~ 2 (1 - HDMI, 2 - HDBT)	>SetCecDisplayOff 1
		<CecDisplayOff 1
>SetCecDisplaySource [Param]	Send CEC SOURCE command to display device. [Param] = 1 ~ 2 (1 - HDMI, 2 - HDBT)	>SetCecDisplaySource 1
		<CecDisplaySource 1
>SetCecDisplayMute [Param]	Send CEC MUTE command to display device. [Param] = 1 ~ 2 (1 - HDMI, 2 - HDBT)	>SetCecDisplayMute 1
		<CecDisplayMute 1
>SetCecDisplayVol+ [Param]	Send CEC VOLUME UP command to display device. [Param] = 1 ~ 2 (1 - HDMI, 2 - HDBT)	>SetCecDisplayVol+ 1
		<CecDisplayVol+ 1
>SetCecDisplayVol- [Param]	Send CEC VOLUME DOWN command to display device. [Param] = 1 ~ 2 (1 - HDMI, 2 - HDBT)	>SetCecDisplayVol- 1
		<CecDisplayVol- 1

Special Commands

Note: *The below commands don't need ending mark.*

Command	Description	Command Example and Feedback
>SetDisplayInputSendChar_[Param]:XXXX	Set the ASCII "Display Input Select" command "XXXX" to be sent to display device when power on the switcher. [Param] = 1~5 (Baud rate of RS232 port) 1 - 115200 2 - 57600 3 - 38400 4 - 19200 5 - 9600 XXXX= ASCII data to be sent (Up to 48 characters).	>SetDisplayInputSendChar_5:1234567 <Baudrate: 9600 <Display input select to send:1234567
>SetDisplayInputSendHex_[Param]:XX XX	Set the HEX "Display Input Select" command "XX XX" to be sent to display device when power on the switcher. [Param] = 1~5 (Baud rate of RS232 port) 1 - 115200 2 - 57600 3 - 38400 4 - 19200 5 - 9600 XX XX= HEX data to be sent (X = 0~9, A~F and up to 20 XX).	>SetDisplayInputSendHex_5:30 31 32 33 <Baudrate: 9600 <Display input select to send HEX:30 31 32 33
>SetPowerOnSendChar_[Param]:XXXX	Set the ASCII "Power On" command "XXXX" to be sent to display device when power on the switcher. [Param] = 1~5 (Baud rate of RS232 port) 1 - 115200 2 - 57600 3 - 38400 4 - 19200 5 - 9600 XXXX= ASCII data to be sent (Up to 48 characters).	>SetPowerOnSendChar_5:1234567 <Baudrate: 9600 <Power on to send:1234567
>SetPowerOnSendHex_[Param]:XX XX	Set the HEX "Power On" command "XX XX" to be sent to display device when power on the switcher. [Param] = 1~5 (Baud rate of RS232 port) 1 - 115200	>SetPowerOnSendHex_5:30 31 32 33

Command	Description	Command Example and Feedback
	2 - 57600 3 - 38400 4 - 19200 5 - 9600 XX XX= HEX data to be sent (X = 0~9, A~F and up to 20 XX).	<Baudrate: 9600 <Power on to send HEX:30 31 32 33
>SetSleepSendChar_[Param]:XXXX	Set the ASCII “Power Off” command "XXXX" to be sent to display device when the switcher enter standby mode. [Param] = 1~5 (Baud rate of RS232 port) 1 - 115200 2 - 57600 3 - 38400 4 - 19200 5 - 9600 XXXX= ASCII data to be sent (Up to 48 characters).	>SetSleepSendChar_5:ABCDEFG
		<Baudrate: 9600 <Enter sleep to send:ABCDEFG
>SetSleepSendHex_[Param]:XX XX	Set the HEX “Power Off” command "XX XX" to be sent to display device when the switcher enter standby mode. [Param] = 1~5 (Baud rate of RS232 port) 1 - 115200 2 - 57600 3 - 38400 4 - 19200 5 - 9600 XX XX= HEX data to be sent (X = 0~9, A~F and up to 20 XX).	>SetSleepSendHex_5:41 42 43 44
		<Baudrate: 9600 <Enter sleep to send HEX:41 42 43 44