



ReThink

There's a better way.

RAV-SW-2x1HU100-TxRx
RS-232 Control Commands

RAV-SW-2x1HU100-TxRx 2x1 HDMI and USB-C Auto Switcher over HDBaseT

Kratos family of switchers



RS-232 Connection

Baud rate: 115,200 (Fixed)

Data bits: 8

Stop bits: 1

Parity: None

Flow control: None

Connect the RS-232 port of the product to a PC or control system with a 3-pin phoenix connector cable or connect the SERVICE port of the product to a PC with a Micro USB cable.

RS-232 Commands

ASCII Commands				
RS-232 Communication Protocol Baud rate: 115200; Data bit: 8; Stop bit:1; Parity bit: none. The end mark of command is "<CR><LF>".				
Command Code	Function Description	Example	Feedback	Default
help	Get the list of all commands	help	Help Info FW Version:TX 1.00.02 RX 1.00.02 000. help 001. r fw version 002. s reboot 003. s reset 004. r status 005. s tx input x 006. r tx input 007. s tx autoswitch x 008. r tx autoswitch 009. s tx autoswitch mode x 010. r tx autoswitch mode 011. s rx downscale x 012. r rx downscale 013. s tx audio mute x 014. r tx audio mute 015. s rx audio mute x 016. r rx audio mute 017. s edid x to y	

			018. r edid x 019. r edid data x 020. s user edid x <y> 021. r user edid x =====	
r fw version	Get the firmware version	r fw version	TX 1.0.0 RX 1.0.0	
s reboot	Reboot the device	s reboot	Reboot... System Initializing... Initialization Finished! TX 1.0.0 RX 1.0.0	
s reset	Reset to factory defaults	s reset	Sure to RESET to default settings? Type "Yes" after next prompt to confirm...	
Command Code	Function Description	Example	Feedback	Default
r status	Get system status	r status	Input: USB-C Video: 1920x1080p60 Audio: 48K PCM 2CH HDCP: 1.4 USB Host: Connected HDBT Link: ON HDBT Signal: ON EDID: DIP_00 (Copy display's EDID)	
s tx input x	Set TX input video x = USBC, HDMI, AVMUTE, OFF	s tx input USBC	Set tx input from USBC	USBC
r tx input	Get TX input port	r tx input	USBC	
s tx autoswitch x	Set TX auto-switching on/off x = ON, OFF	s tx autoswitch ON	Set tx autoswitch ON	ON

r tx autoswitch	Get TX auto-switching status	r tx autoswitch	ON	
s tx autoswitch mode x	Set TX auto-switching mode x = 0: 5V detection 1: signal detection	s tx autoswitch mode 1	Set tx autoswitch mode 1: signal detection	1: signal detection
r tx autoswitch mode	Get TX auto-switching mode status	r tx autoswitch mode	TMD5	
s rx downscale x	Set RX downscaling mode, x= AUTO: automatically according to display's capability ON: force 4K to 1080p OFF: bypass video	s rx downscale AUTO	Set rx downscale AUTO	AUTO
r rx downscale	Get RX downscaling mode	r rx downscale	AUTO	
s tx audio mute x	Set TX de-embedding audio mute on/off x = ON, OFF	s tx audio mute ON	Set tx audio mute ON	OFF
r tx audio mute	Get TX de-embedding audio mute status	r tx audio mute	OFF	
s rx audio mute x	Set RX de-embedding audio mute on/off x = ON, OFF	s rx audio mute ON	Set rx audio mute ON	OFF
r rx audio mute	Get RX de-embedding audio mute status	r rx audio mute	OFF	
Command Code	Function Description	Example	Feedback	Default
s edid x to y	Set input ports EDID x = USBC, HDMI, ALL y = 00 - EDID dip switch (default) 01 - 1920x1080@60 8bit Stereo 02 - WUXGA 1920x1200 03 - 1920x1080@60 8bit High Definition Audio 04 - 3840x2160@60Hz 4:2:0 Deep Color Stereo	s edid USBC to 00	Set edid USBC to 00 - EDID dipswitch (default)	00

	Audio 05 - 3840x2160@60Hz Deep Color Stereo Audio 06 - 3840x2160@30Hz 8bit Stereo Audio 07 - 3840x2160@60Hz Deep Colour High Definition Audio 08 - 3840x2160@60Hz Deep Colour HDR LPCM 6CH 09 - copy EDID from RX HDMI output 10 - User Defined 1 11 - User Defined 2			
r edid x	Get input ports EDID x = USBC, HDMI	r edid USBC	00 - EDID dipswitch (default)	
r edid data x	Get input ports EDID data x = USBC, HDMI	r edid data USBC	USBC EDID <00 FF FF FF....>	
s user edid x <y>	Set user defined EDID x = 1 (User Defined 1) x = 2 (User Defined 2) y = 00 FF FF FF (y is 256 bytes EDID data)	s user edid 1 <00 FF FF FF....>	User edid 1 is loaded	
r user edid x	Get user defined EDID x = 1 (User Defined 1) x = 2 (User Defined 2)	r user edid 1	User edid 1 <00 FF FF FF....>	
s hdbt update	Set Micro USB (UART) to HDBT UART for FW update	s hdbt update	Hdbt update	

Note: The API command "s hdbt update" is for internal use only.