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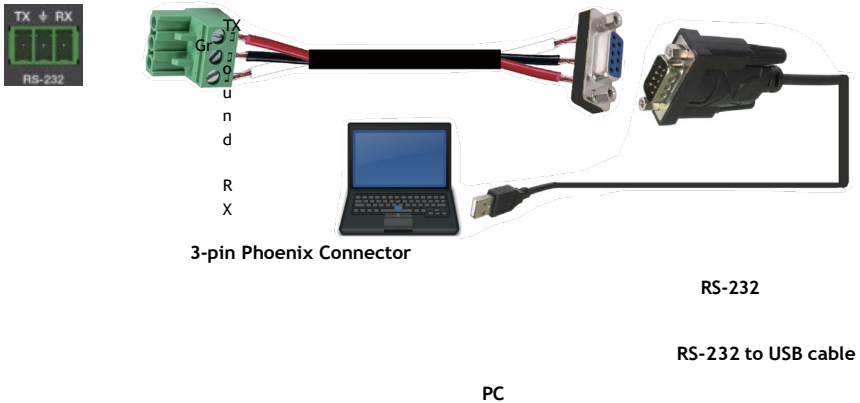
GERMANY

**API Guide for
ALF-SCK51TS-D**

Overview

The product also supports RS-232 command control and IP Control.

Connect the RS-232 port of the product to a PC with a 3-pin phoenix connector cable and an RS-232 to USB cable. The connection method is as follows.



Serial port protocol:

x,y XXX are parameters

baud rate: 115200 (default)

Data bits: 8

Stop bits: 1

Check bit: 0

TCP/IP

TCP/IP protocol port: 8000

Then open a Serial Command tool on PC to send ASCII commands to control the product. The ASCII command list about the product is shown as below.

Command	Command Description	Example	Feedback
q ipconfig!	Get the Current IP Configuration	q ipconfig!	IP Mode: Static IP: 192.168.1.72 Subnet Mask: 255.255.255.0 Gateway: 192.168.1.1 Mac address: 00:1C:91:03:80:01
q mac addr!	Get network MAC address	q mac addr!	@Mac address: 00:1C:91:03:80:01
s ip mode z!	Set network IP mode to static IP or DHCP, z=0~1 (z=0 Static, z=1 DHCP)	s ip mode 0!	@ip mode 0
q ip mode!	Get network IP mode	q ip mode!	@ip mode 0
s ip addr xxx.xxx.xxx.xxx!	Set network IP address	s ip addr 192.168.1.100!	@ip address: 192.168.1.100 DHCP on, Device can't config static address, set DHCP off first.
q ip addr!	Get network IP address	q ip addr!	@ip address:192.168.1. 100

s subnet xxx.xxx.xxx.xxx!	Set network subnet mask	s subnet 255.255.255.0!	@subnet: 255.255.255.0 DHCP on, Device can't config subnet mask, set DHCP off first.
q subnet!	Get network subnet mask	q subnet!	@subnet: 255.255.255.0
s gateway xxx.xxx.xxx.xxx!	Set network gateway	s gateway 192.168.1.1!	@gateway: 192.168.1.1 DHCP on, Device can't config gateway, set DHCP off first.
q gateway!	Get network gateway	q gateway!	'@gateway:192.168.1.1
s port x!	Set network port number x, where x=1~65535	s port 8000!	@port: 8000
q port!	Get network port number	q port!	@port: 8000
s telnet x!	Set network telnet port x, where x=1~65535	s telnet 23!	@telnet: 23
q telnet!	Get network telnet network port	q telnet!	@telnet: 24
s hostname x!	Set host name x	s hostname SCK51TS-D!	@hostname:SCK51TS-D
q hostname!	Get host name	q hostname!	@hostname:SCK51TS-D
s net reboot!	Reboot network modules	s net reboot!	'@The network is restarting. Please wait...
s admin password x!	Set admin login password x, where x=[16 characters max]	s admin password admin!	@admin password: admin
q admin password!	Get admin login password	q admin password!	@admin password: admin

s user password x!	Set user login password x, where x=[16 characters max]	s user password user!	@user password: user
q user password!	Get user login password	q user password!	@user password: user
help!	Get list of all commands	help!	<pre> ===== ===== ===== Device to respond with list of all API commands ===== ===== ===== </pre>
q type!	Get device model	q type!	@ALF-SCK51TS-D
q status!	Get device status	q status!	Feedback for command "q status!"

q fw version!	Get firmware version	q fw version!	Device to respond with fw version MCU XXX Web XXX Scaler XXXXXXXX- XX FPGA XXX RX XXXX
s power z!	Set power on/off, z=0~1(0-off, 1-on)	s power 1!	@power 1
q power!	Get power on/off	q power!	@power 1
s reboot!	Reboot the device	s reboot!	@reboot... System Initializing... Initialization Finished! MCU XXX Web XXX Scaler XXXXXXXX- XX FPGA XXX RX XXX

s reset!	Reste to factory defaults	s reset!	@reset to factory defaults
s lock x!	Set lock or unlock the buttons of the front panel x=0: Unlock x=1: Lock	s lock 1!	@lock 1
q lock!	Get the buttons lock or unlock status of the front panel	q lock!	@lock 1
s beep x!	Enable or disable buzzer function x=0: Disable x=1: Enable	s beep 1!	@beep 1
q beep!	Get the status of the buzzer	q beep!	@beep [0~1]
s ir x!	Set IR x, where x=0~1 x=0: Off x=1: On	s ir 1!	@ir 1
q ir!	Get IR on/off status	q ir!	@ir 1

s UsbcAccessNetwork x!	Set USB-C access network feature x, where x=0~1 x=0: Off x=1: On	s UsbcAccessNetwork 1!	@UsbcAccessNetwork 1
q UsbcAccessNetwork!	Get USB-C access network feature on/off	q UsbcAccessNetwork!	@UsbcAccessNetwork 1
s fan speed x!	Set fan speed x, where x=0~4 x=0: Auto x=1: 25% x=2: 50% x=3: 75% x=4: 100%	s fan speed x!	@fan speed 0
q fan speed!	Get fan speed	q fan speed!	@fan speed 0
q temp!	Get device internal temperature	q temp!	@temp: 65C
s inp x EDID y!	Set input EDID x(0~5) y(1~16)	s edid in 1 to 2!	@edid in 1, 2

<p>to be set to device capabilities, for SCK51TS-D or future devices:</p> <p>x=0: All inputs x=1: Input 1 (USB-C 1) x=2: Input 2 (USB-C 2) x=3: Input 3 (HDMI 3) x=4: Input 4 (HDMI 4) x=5: Input 5 (HDMI 5)</p> <p>y=1: Auto (HDBT or HDMI or HDBT and HDMI) y=2: Copy HDMI Out y=3: Copy HDBT Out y=4: 4K2K60 444 Stereo 2.0 y=5: 4K2K30 444 Stereo 2.0 y=6: 1080p Stereo 2.0 y=7: 720p Stereo 2.0 y=8: 1920x1200 Stereo 2.0 y=9: 1680x1050 Stereo 2.0 y=10: 1600x1200 Stereo 2.0 y=11: 1440x900 Stereo 2.0</p>		
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	<p>y=12: 1360x768 Stereo 2.0</p> <p>y=13: 1440x900 Stereo 2.0</p> <p>y=14: 1024x768 Stereo 2.0</p> <p>y=15: User Defined 1</p> <p>y=16: User Defined 2</p>		
q inp x EDID!	<p>Get input EDID mode x, where x=0~5 (or number of inputs for future devices)</p> <p>x=0: All inputs</p> <p>x=1: Input 1 (USB-C 1)</p> <p>x=2: Input 2 (USB-C 2)</p> <p>x=3: Input 3 (HDMI 3)</p> <p>x=4: Input 4 (HDMI 4)</p> <p>x=5: Input 5 (HDMI 5)</p>	q inp 0 EDID!	<p>@edid in 1, 1</p> <p>@edid in 2, 1</p> <p>@edid in 3, 1</p> <p>@edid in 4, 1</p> <p>@edid in 5, 1</p>
q inp x EDID data!	<p>Get input x EDID data, where x=1~5 (or number of inputs for future devices)</p> <p>x=0: All inputs</p> <p>x=1: Input 1 (USB-C 1)</p> <p>x=2: Input 2 (USB-C 2)</p> <p>x=3: Input 3 (HDMI 3)</p> <p>x=4: Input 4 (HDMI 4)</p> <p>x=5: Input 5 (HDMI 5)</p>	q inp 0 EDID data!	<p>@edid in 1, data <00 FF FF.....></p> <p>@edid in 2, data <00 FF FF.....></p> <p>@edid in 3, data <00 FF FF.....></p> <p>@edid in 4, data <00 FF FF.....></p> <p>@edid in 5, data <00 FF FF.....></p>

Output Settings

s outp res x!	Set Output x Resolution, where x=1~15, or number of resolution settings for future device) x=1: Auto x=2: 3840x2160p60 x=3: 3840x2160p50 x=4: 4096x2160p60 x=5: 4096x2160p50 x=6: 3840x2160p30 x=7: 3840x2160p25 x=8: 1920x1200p60RB x=9: 1920x1080p60 x=10: 1920x1080p50 x=11: 1360x768p60 x=12: 1280x800p60 x=13: 1280x720p60 x=14: 1280x720p50 x=15: 1024x768p60	s outp res !!	@outp res 1
q outp res!	Get output resolution	q outp res!	@outp res 1

set outp x hdcp y!	Set output x (x=0~2) hdcp y (y=1~3), or number of outputs and HDCP settings for future devices) x=0: All outputs x=1: HDMI output x=2: HDBT output y=1: Auto y=2: HDCP 1.4 y=3: HDCP 2.2	s outp 0 hdcp 1!	@hdcp outp 1, 1 @hdcp outp 2, 1
q outp x hdcp!	Get HDCP status for output x, where x=0~2 or any number of outputs fro future devices x=0: All outputs x=1: HDMI output x=2: HDBT output	q outp 0 hdcp!	@hdcp outp 1, 1 @hdcp outp 2, 1
s outp x avmute y!	Set outout avmute x avmute y, where x=0 and y=0~1. for SCK51TS-D and any future devices. x=0: All outputs y=0: avmute off y=1: avmute on	s outp 0 avmute 0!	@avmute outp 0, 0
q outp x avmute!	Get output x avmute on/off status x=0: All outputs	q outp 0 avmute!	@avmute outp 0, 0

s outp x freeze y!	Set output freeze x freeze y, where x=0 and y=0~1. for SCK51TS-D and any future devices. x=0: All outputs y=0: Freeze off y=1: Freeze on	s outp 0 freeze 0!	@freeze outp 0, 0
q outp x freeze!	Get output x freeze on/off status x=0: All outputs	q outp 0 freeze!	@freeze outp 0, 0
s outp x itc y!	Set output itc video mode x itc y, where x=0 and y=1~2. for SCK51TS-D and any future devices. x=0: All outputs y=1: Video mode y=2: PC mode	s outp 0 itc 1!	@itc outp 0, 1
q outp x itc!	Get output x itc video mode status x=0: All outputs	q outp 0 itc!	@itc outp 0, 1

Audio Settings

s main in audio x!	<p>Set Main input audio x, where x=1~6 or any number of inputs for future devices.</p> <p>x=1: Window 1 x=2: Input 1 (USB-C 1) x=3: Input 2 (USB-C 2) x=4: Input 3 (HDMI 3) x=5: Input 4 (HDMI 4) x=6: Input 5 (HDMI 5)</p>	s main in audio 1!	@main in audio 1
q main in audio!	<p>Get Main input audio x, where x=1~6 or any number of inputs for future devices.</p>	q main in audio!	@main in audio 1
s outp x audio y!	<p>Set output x (x=0~3) audio source from y (y=1~3), or any number outputs and audio sources for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT out x=2: Line Out x=3: Dante Out</p> <p>y=1: Main in (HDMI/USB-C) y=2: Line in y=3: Dante in</p>	s outp 0 audio 1!	@outp audio 0, 1

q outp x audio!	<p>Get output x (x=0~3) audio source, or any number of outputs for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT out x=2: Line Out x=3: Dante Out</p>	q outp 0 audio!	<p>@outp audio 1, 1 @outp audio 2, 1 @outp audio 3, 1</p>
s inp x audio vol+!	<p>Increase input x audio level, where x=0~3 or any number of inputs for future devices.</p> <p>x=0: All inputs (HDMI/USB-C, Line, Dante) x=1: Main In (HDMI/USB-C) x=2: Line In x=3: Dante In</p>	s inp 0 audio vol+!	<p>@inp audio 1, vol+ @inp audio 2, vol+ @inp audio 3, vol+</p>
s inp x audio vol-!	<p>Decrease input x audio level, where x=0~3 or any number of inputs for future devices.</p> <p>x=0: All inputs (HDMI/USB-C, Line, Dante) x=1: Main In (HDMI/USB-C) x=2: Line In x=3: Dante In</p>	s inp 0 audio vol-!	<p>@inp audio 1, vol- @inp audio 2, vol- @inp audio 3, vol-</p>

s inp x audio vol y!	<p>Set input x audio level y, where x=0~3 and y=0~100 or any number of inputs and volume level range for future devices.</p> <p>x=0: All inputs (HDMI/USB-C, Line, Dante) x=1: Main In (HDMI/USB-C) x=2: Line In x=3: Dante In</p>	s inp 0 audio vol 50!	<p>@inp audio 1, vol50 @inp audio 2, vol50 @inp audio 3, vol50</p>
q inp x audio vol!	<p>Get input x audio level, where x=0~3 or any number of inputs for future devices.</p> <p>x=0: All inputs (HDMI/USB-C, Line, Dante) x=1: Main In (HDMI/USB-C) x=2: Line In x=3: Dante In</p>	q inp 0 audio vol!	<p>@inp audio 1, vol50 @inp audio 2, vol50 @inp audio 3, vol51</p>

s inp x audiomute y!	<p>Set input x audio mute y, where x=0~3 and y=0~1 or any number of inputs for future devices.</p> <p>x=0: All inputs (HDMI/USB-C, Line, Dante) x=1: Main In (HDMI/USB-C) x=2: Line In x=3: Dante In y=0: Mute Off y=1: Mute On</p>	s inp 0 audiomute 0!	@inp audiomute 1, 0 '@inp audiomute 2, 0 '@inp audiomute 3, 0
q inp x audiomute!	<p>Get input x audio mute, where x=0~3 or any number of inputs for future devices.</p> <p>x=0: All inputs (HDMI/USB-C, Line, Dante) x=1: Main In (HDMI/USB-C) x=2: Line In x=3: Dante In</p>	q inp 0 audiomute!	@inp audiomute 1, 0 '@inp audiomute 2, 0 '@inp audiomute 3, 0

s master member x y z!	Set master output member (x/y/z=0~1) x=0: Exclude HDMI/HDBT Out x=1: Include HDMI/HDBT Out y=0: Exclude Line Out y=1: Include Line Out z=0: Exclude Dante Out z=1: Include Dante Out	s master member 1 1 1!	@master member 111
q master member!	Get master output member	q master member!	@master member 111
s master audio vol+!	Increase master output audio volume	s master audio vol+!	@master audio volume 50
s master audio vol-!	Decrease master output audio volume	s master audio vol-!	@master audio volume 50
s master audio vol x!	Set master output audio volume value (x=0~100)	s master audio vol 50!	@master audio volume 50
q master audio vol!	Get master output audio volume value	q master audio vol!	@master audio volume 50
s master audio mute x!	Set master output audio mute on/off (x=0~1) x=0: Mute off x=1: Mute on	s master audio mute 1!	@master audio mute 1
q master audio mute!	Get master output audio mute on/off status	q master audio mute!	@master audio mute 1

s outp x audio vol+!	<p>Increase output x audio level, where x=0~3 or any number of outputs for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p>	s outp 0 audio vol+!	<p>@outp audio 1, vol+ @outp audio 2, vol+ @outp audio 3, vol+</p>
s outp x audio vol-!	<p>Decrease output x audio level, where x=0~3 or any number of outputs for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p>	s outp 0 audio vol-!	<p>@outp audio 1, vol- @outp audio 2, vol- @outp audio 3, vol-</p>
s outp x audio vol y!	<p>Set output x audio level y, where x=0~3 and y=0~100 or any number of outputs and volume level range for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p>	s outp 0 audio vol 50!	<p>@outp audio 1, vol50 @outp audio 2, vol50 @outp audio 3, vol50</p>

q outp x audio vol!	<p>Get output x audio level y, where x=0~3 or any number of outputs for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p>	q outp 0 audio vol!	<p>@outp audio 1, vol50 @outp audio 2, vol50 @outp audio 3, vol51</p>
s outp x audiomute y!	<p>Set output x audio mute y, where x=0~3 and y=0~1 or any number of outputs for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out y=0: Mute Off y=1: Mute On</p>	s outp 0 audiomute 0!	<p>@outp audiomute 1, 0 @outp audiomute 2, 0 @outp audiomute 3, 0</p>

q outp x audiomute!	<p>Get output x audio mute, where x=0~3 or any number of outputs for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p>	q outp 0 audiomute!	<p>@outp audiomute 1, 0 '@outp audiomute 2, 0 '@outp audiomute 3, 0</p>
s outp x audiomix y!	<p>Set output x audio mix y, where x=0~3 and y=1~4 or any number of outputs and audio mix capabilities for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p> <p>y=1: Stereo y=2: Left y=3: Right y=4: Left and Right</p>	s outp 0 audiomix 1!	<p>@outp audiomix 1, 1 '@outp audiomix 2, 1 '@outp audiomix 3, 1</p>

q outp x audiomix!	<p>Get output x audio mix, where x=0~3 or any number of outputs for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p>	q outp 0 audiomix!	<p>@outp audiomix 1, 1 @outp audiomix 2, 1 @outp audiomix 3, 1</p>
s outp x audiodelay y!	<p>Set output x audio delay y, where x=0~3 and y=0~50 or any number of outputs and audio delay capabilities for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p> <p>y=0: 0ms ~ y=50: 50ms</p>	s outp 0 audiodelay 1!	<p>@outp audiodelay 1, 0 @outp audiodelay 2, 0 @outp audiodelay 3, 0</p>

q outp x audiodelay!	<p>Get output x audio delay, where x=0~3 or any number of outputs for future devices.</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p>	q outp 0 audiodelay!	<p>@outp audiodelay 1, 0 @outp audiodelay 2, 0 @outp audiodelay 3, 0</p>
s outp x audio eq y val z!	<p>Set output x audio GEQ Index y to value z, where x=0~3, y=1~31 and z=0~20. Or any number of Outputs, EQ index and EQ values for future devices</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p> <p>y=1~31: EQ Index z=0~20: EQ Value</p>	s outp 0 audio eq 1 val 20!	<p>@outp 1 audio eqindex 1 eqvalue 20 @outp 2 audio eqindex 1 eqvalue 20 @outp 3 audio eqindex 1 eqvalue 20</p>

q outp x audio eq y val!	<p>Get output x audio GEQ Index y to value, where x=0~3, y=1~31. Or any number of Outputs, EQ index for future devices</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p> <p>y=1~31: EQ Index</p>	q outp 0 audio eq 1 val!	<p>@outp 1 audio eqindex 1 eqvalue 20</p> <p>@outp 2 audio eqindex 1 eqvalue 20</p> <p>@outp 3 audio eqindex 1 eqvalue 20</p>
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<p>s outp x audio eqpreset y!</p>	<p>Set output x audio GEQ to preset y, where x=0~3, and y=1~6. Or any number of Outputs, and GEQ presets for future devices</p> <p>x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out</p> <p>y=1: Flat y=2: Custom Setting 1 y=3: Custom Setting 2 y=4: Custom Setting 3 y=5: Custom Setting 4 y=6: Custom Setting 5</p>	<p>s outp 0 audio eqpreset 1!</p>	<p>@outp 1 audio eqpreset 1 @outp 2 audio eqpreset 1 @outp 3 audio eqpreset 1</p>
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q outp x audio eqpreset!	Get output x audio GEQ to preset y, where x=0~3. Or any number of Outputs for future devices x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out	q outp 0 audio eqpreset!	@outp 1 audio eqpreset 1 @outp 2 audio eqpreset 1 @outp 3 audio eqpreset 1
s outp x audio eq reset!	Reset output x audio GEQ, where x=0~3. Or any number of Outputs, for future devices x=0: All outputs (HDMI/HDBT, Line and Dante) x=1: HDMI/HDBT Out x=2: Line Out x=3: Dante Out	s outp 0 audio eq reset!	@outp 1 audio eq reset @outp 2 audio eq reset @outp 3 audio eq reset

Single Screen Settings

s autoswitch x!	Enable/disable auto switch feature, where x=0~1 x=0: Auto switch off x=1: Auto switch on	s autoswitch 0!	@autoswitch 0
q autoswitch!	Get auto switch feature	q autoswitch!	@autoswitch 0

s inp source x!	Route input source to output, where x=1~5 x=1: Input 1 (USB-C 1) x=2: Input 2 (USB-C 2) x=3: Input 3 (HDMI 3) x=4: Input 4 (HDMI 4) x=5: Input 5 (HDMI 5)	s inp source 1!	@inp source 1
q inp source!	Get selected input source	q inp source!	@inp source 1
s fallback inp x!	Set fallback input source, where x=0~5 x=0: Next Input x=1: Input 1 (USB-C 1) x=2: Input 2 (USB-C 2) x=3: Input 3 (HDMI 3) x=4: Input 4 (HDMI 4) x=5: Input 5 (HDMI 5)	s fallback inp 0!	@inp fallback 0
q fallback inp!	Get fallback input source	q fallback inp!	@inp fallback 0

Multiview Settings

s multiview x!	<p>Set multiview display mode, where x=1~5</p> <p>x=1: Single x=2: PIP x=3: PBP x=4: Triple x=5: Quad</p>	s multiview 1!	@multiview 1
q multiview!	Get multiview display mode	q multiview!	@multiview 1
s window x in y!	<p>Set window x from y, where x=0~4 and y=1~5</p> <p>x=0: All windows x=1: Window 1 x=2: Window 2 x=3: Window 3 x=4: Window 4</p> <p>y=1: Input 1 (USB-C 1) y=2: Input 2 (USB-C 2) y=3: Input 3 (HDMI 3) y=4: Input 3 (HDMI 4) y=5: Input 3 (HDMI 5)</p>	s window 1 in 1!	@window in 1, 1

q window x in!	Get window x from y, where x=0~4 x=0: All windows x=1: Window 1 x=2: Window 2 x=3: Window 3 x=4: Window 4	q window 0 in!	@window in 1, 1 @window in 2, 1 @window in 3, 1 @window in 4, 1
s PIP position x!	Set PIP window position x, where x=1~4 x=1: Left Top x=2: Left Bottom x=3: Right Top x=4: Right Bottom	s PIP position 4!	@pip position 4
q PIP position!	Get PIP window position	q PIP position!	@pip position 4
s PIP size x!	Set PIP window size x, where x=1~3 x=1: Small x=2: Medium x=3: Large	s PIP size 3!	@pip size 3
q PIP size!	Get PIP window size	q PIP size!	@pip size 3

s PBP mode x!	Set PBP window display mode x, where x=1~2 x=1: PBP Mode 1 x=2: PBP Mode 2	s PBP mode 1!	@PBP mode 1
q PBP mode!	Get PBP window display mode	q PBP mode!	@PBP mode 1
s PBP aspect x!	Set PBP window display aspect ratio x, where x=1~2 x=1: Full Screen x=2: 16:9	s PBP aspect 1!	@PBP aspect 1
q PBP aspect!	Get PBP window display aspect ratio	q PBP aspect!	@PBP aspect 1
s triple mode x!	Set triple window display mode x, where x=1~2 x=1: Triple Mode 1 x=2: Triple Mode 2	s triple mode 1!	@triple mode 1
q triple mode!	Get triple window display mode	q triple mode!	@triple mode 1
s triple aspect x!	Set triple window display aspect ratio x, where x=1~2 x=1: Full Screen x=2: 16:9	s triple aspect 1!	@triple aspect 1
q triple aspect!	Get triple window display aspect ratio	q triple aspect!	@triple aspect 1

s quad mode x!	Set quad window display mode x, where x=1~2 x=1: Quad Mode 1 x=2: Quad Mode 2	s quad mode 1!	@quad mode 1
q quad mode!	Get quad window display mode	q quad mode!	@quad mode 1
s quad aspect x!	Set quad window display aspect ratio x, where x=1~2 x=1: Full Screen x=2: 16:9	s quad aspect 1!	@quad aspect 1
q quad aspect!	Get quad window display aspect ratio	q quad aspect!	@quad aspect 1

s window x border y!	Set the border y mode of the specified window x, where y=0~9 and x=0~4 x=0: All Windows x=1: Window 1 x=2: Window 2 x=3: Window 3 x=4: Window 4 y=0: Off y=1: Black y=2: Red y=3: Green y=4: Blue y=5: Yellow y=6: Magenta y=7: Cyan y=8: White y=9: Gray	s window 0 border 0!	@window border 1, 0 @window border 2, 0 @window border 3, 0 @window border 4, 0
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q window x border!1	Get the border y mode of the specified window x, where x=0~4 x=0: All Windows x=1: Window 1 x=2: Window 2 x=3: Window 3 x=4: Window 4	q window 0 border!	@window border 1, 0 @window border 2, 0 @window border 3, 0 @window border 4, 0
s rx input x!	Set Rx input source (x=1~2), where x=1: HDBT In x=2: HDMI in source select	s rx input 1!	@rx input 1
q rx input!	Query source selection/input of Rx	q rx input!	@rx input 1
s rx autoswitch x!	select Rx input auto/manual switch x (0~1) x=0, Rx autoswitch off x=1, Rx autoswitch on	s rx autoswitch 0!	@rx autoswitch 1
q rx autoswitch!	Query Rx input auto/manual switch	q rx autoswitch!	@rx autoswitch 1
s rx switchdetect x!	Set Rx switch detection mode x, where x=1~2 x=1, TMDS x=2, 5v	s rx switchdetect 1!	@rx switchdetect 1

q rx switchdetect!	Query Rx switch detection mode	q rx switchdetect!	@rx switchdetect 1
s rx usbpower x!	Set RX 2 USB device ports 5V power mode (x=0~2) x=0: Force off x=1: Force on x=2: Follow	s rx usbpower 2!	@rx usbpower 2
q rx usbpower!	Query RX 2 USB device ports 5V power mode	q rx usbpower!	@rx usbpower 2
q rx hdmi 5v!	Query HDMI input power	q rx hdmi 5v!	@rx hdmi 5v 1 (where 1=5v power, 0= no power)
q rx host 5v!	Query Rx host 5v power	q rx host 5v!	@rx host 5v 1 (where 1=5v power, 0= no power)
s cec power on!	Set CEC power on command	s cec power on!	@CEC power on
s cec power off!	Set CEC power off command	s cec power off!	
s autopower on CEC x!	Set display auto power on via CEC, x(0~1), where x=0 Auto Power on via CEC is off x=1 Auto Power on via CEC is on	s autopower on CEC 1!	@autopower on CEC 1
q autopower on CEC!	Query display auto power on via CEC	q autopower on CEC!	@autopower on CEC 1
s rx autopower on RS232 x!	Set display auto power on via RS232 on Rx, x(0~1), where x=0: Auto power on via RS232 on Rx is off x=1: Auto power on	s rx autopower on RS232 1!	@rx autopower on RS232 1

	via RS232 on Rx is on		
q rx autopower on RS232!	Query display auto power on via RS232 on Rx	q rx autopower on RS232!	@rx autopower on RS232 1
s autopower off CEC x!	Set display auto power off via CEC, x(0~1), where x=0: Auto Power off via CEC is off x=1: Auto Power on via CEC is on	s autopower off CEC 1!	@autopower off CEC 1
q autopower off CEC!	Query display auto power off via CEC	q autopower off CEC!	@autopower off CEC 1
s rx autopower off RS232 x!	Set display auto power off via RS232 on Rx, x(0~1), where x=0 Auto Power off via RS232 on Rx is off x=1 Auto Power on via RS232 on Rx is On	s rx autopower off RS232 1!	@rx autopower off RS232 1
q rx autopower off RS232!	Query display auto power off via RS232 on Rx	q rx autopower off RS232!	@rx autopower off RS232 1
s autopower off CEC timer x!	Set display auto power off via CEC x(0~6), where x=1: 5 sec x=2: 10 sec x=3: 30 sec x=4: 1 min x=5: 5 min x=6: 10 min	s autopower off CEC timer 5!	@autopower off CEC timer 5

q autopower off CEC timer!	Query display auto power off via CEC	q autopower off CEC timer!	@rx autopower off CEC timer 5
s rx autopower off RS232 timer x!	Set display auto power off via RS232 on Rx x(0~6), where x=1: 5 sec, x=2: 10 sec, x=3: 30 sec, x=4: 1 min, x=5: 5 min, x=6: 10 min	s rx autopower off RS232 timer 5!	@rx autopower off RS232 timer 5
q rx autopower off RS232 timer!	Query display auto power off via RS232 on Rx	q rx autopower off RS232 timer!	@rx autopower off RS232 timer 5
s uart dl y out x!	Set desired data length for UART commands on output x to y where out x = 1~Z datalength y: 1=8bit, 2=7bit	s uart dl 1 out 1!	@uart dl out 1, 1
s uart br y out x!	Set desired baudrate for UART commands on output x to y where out x = 1~Z baudrate y: y=1-8, 1: 115200(Default) 2: 57600, 3: 56000, 4:38400 5:19200, 6:14400, 7:9600, 8:4800	s uart br 1 out 1!	@uart br out 1, 1

s uart pt y out x!	Set desired parity for UART commands on output x to y where out x = 1~Z baudrate y=1-3, 1:none 2:odd 3:even	s uart pt 1 out 1!	@uart pt out 1, 1
s uart out x type z send y!	Send data y from x hdbt uart, z=0 ascii, z=1 hex, x= 1~number of outputs, y = send data	s uart out 1 type 0 send ~0000 1\x0D\x0A!	@uart send out 1, 0, ~0000 1\x0D\x0A
q uart out x!	Query uart settings on output x, where x=1~Z	q uart out 1!	@uart out 1, 1, 1, 1
s UsbSwitchMode x!	Set USB switch mode (x=1~3) x=1: Auto mode (detect USB 5V then switch) x=2: Manual mode x=3: Follow video (HDMI 3 bind with USB Host 3)	s UsbSwitchMode 1!	@usb switch mode 3
q UsbSwitchMode!	Get USB switch mode	q UsbSwitchMode!	@usb switch mode 3
s UsbManual x!	Set USB manual switch (x=1~3) x=1: USB-C 1 x=2: USB-C 2 x=3: USB Host 3	s UsbManual 3!	@usb manual 1
q UsbSwitchStatus!	Get USB switch status	q UsbSwitchStatus!	@usb switch status 1

s UsbPower x!	Set TX 2 USB device ports 5V power mode (x=0~2) x=0: Force off x=1: Force on x=2: Follow	s UsbPower 2!	@usb power 2
q UsbPower!	Get TX 2 USB device ports 5V power mode	q UsbPower!	@usb power 2
s serial x setting y!	Set serial port x setting to y, where x=0: All RS-232 (Local and HDBT) x=1: Local RS-232 x=2: HDBT RS-232 y= [Baudrate]-[Databits][Parity][Stop bits] Baudrate: 115200/57600/56000/38400/19200/9600/4800/2400 Data bits: 7/8 Parity: n(non), e(even), o(odd) Stop Bits: 1/2	s serial 1 setting 115200-8n1!	@serial setting 1, 115200-8n1
q serial x setting!	Get serial port setting x, where x=0~2 x=0: All RS-232 (Local and HDBT) x=1: Local RS-232 x=2: HDBT RS-232	q serial 1 setting!	@serial setting 1, 115200-8n1

s save ps x!	Save all current settings on device to the specified preset (except network settings) x, x=1~5	s save ps 1!	@save ps 1
s recall ps x!	Recall saved preset x, x=1~5	s recall ps 1!	@recall ps 1
s clear ps x!	Clear stored preset x, x=1~5	s clear ps 1!	@clear ps 1
s save ps x name y!	Set preset x name to y, where x=1~5 and y=(16 characters max)	s save ps 1 name Meetingroom 1!	@ps1 name: Meetingroom 1
q ps x name!	Get preset x name, x=1~5	q ps 1 name!	@ps1 name: Meetingroom 1