Sound Control Technologies

RC-SDA4+™ Camera Bridge
Frequently Asked Questions
Tech Support: 203-854-5701

Q: What does the RC-SDA4+™ do?

A: This module, when paired with an RC4-CE™ camera end module, extends supported RS232 cameras up to 100m away over a single CAT cable. Full RS232 control, power, and HDMI are provided over the link. The RC-SDA4+™ converts video and analog audio to USB for soft-codec applications, and also converts computer PTZ camera commands (UVC) to RS232 signals for camera control. Dual video output paths from the video source are provided, as well as 2 independent RS232 control inputs to the attached camera.

Q: Does the RC-SDA4+™ actually translate between protocols?

A: It does! The RC-SDA4+™ can translate VISCA PTZ commands from 3rd party control systems (e.g., AMX, Crestron, Extron) into Poly PTZ camera protocol. It also does the opposite, converting Poly codec RS232 into PTZ commands for VISCA cameras.

Q: What VISCA commands can the RC-SDA4+™ translate to Poly?

A: The following table identifies which commands are translated:

Command Set	Command	VISCA Packet	Comments
Pan/Tilt	Left	81 01 06 01 vv ww 01 03 FF	vv: Pan Speed 01 (Slow) to 18 (Fast) ww: Tilt Speed 01 (Slow) to 14 (Fast)
	Right	81 01 06 01 vv ww 02 03 FF	
	Up	81 01 06 01 vv ww 03 01 FF	
	Down	81 01 06 01 vv ww 03 02 FF	
	Stop	81 01 06 01 vv ww 03 03 FF	
Zoom	Tele	81 01 04 07 2p FF	p: Zoom Speed. 0=Low, 7=High
	Wide	81 01 04 07 3p FF	
	Stop	81 01 04 07 00 FF	
Preset	Set	81 01 04 3F 01 0p FF	p: Preset number (=0 to 4)
	Recall	81 01 04 3F 02 0p FF	
Image Flip	On/Off	81 01 04 66 0p FF	p: 2=On, 3=Off
Power	On/Standby	81 01 04 00 0p FF	p: 2=On, 3=Standby

Q: What is the 3-pin RS232 terminal block used for?

A: This port is intended to connect to a VISCA camera controller or 3rd party control system to control the attached camera directly (camera control-code provided by others). When using a 3rd party control system make sure that the 3-pin terminal block mode is set to the same mode as the 3rd party protocol (Poly or VISCA). Additionally, there are commands specific to the RC-SDA4+™ that can be found in the "SCT Programming Guide" in the Support section of www.soundcontrol.net.

Q: I'm not using a Poly codec and my EagleEye Director 2 (EED2) goes to sleep after 3 minutes. What can I do?

A: The RC-SDA4+™ has an intrinsic "keep awake" mode (called Director-II mode) for the EED2. It allows for a soft-codec environment or using the EED2 with a video switcher front-

end to a video processor. DIP Switch 5 should be in the ON (UP) position and DIP switch 6 in the ON (UP) position to enable this mode.

Q: Can I use the EED2 in tracking mode? What if I don't want to?

A: First log into the EED2 web interface and make sure Tracking Mode is set to Frame Group or Frame Speaker. It cannot be set to Off. Then, in the RC-SDA4+™ when D2 mode is on it will enable auto tracking on the EED2 by default. If you prefer to disable tracking you can change the tracking parameter in the configuration file settings. Refer to the "RC-SDA4+ Config File Formatting Guide" in the Support section at www.soundcontrol.net for details.

Q: What is the microSD slot for?

A: The microSD slot on the RC-SDA4+™ allows for advanced configuration settings, field upgradable firmware, and diagnostics.

Q: What do the DIP switches do?

A: The following chart shows the functions of the 8 position DIP switch:

Switch	Function	OFF	ON
1	Audio Out Source (3-Pin Terminal Block)	USB Audio Port	USB Unified Port
2	3-Pin (RS232) Mode*	9600, 8/N/1 (VISCA Protocol)	9600, 8/E/1 (POLY Protocol)
3	3-Pin (RS232) Listen Mode	RS232 responses from the camera are Disabled	RS232 responses from the camera are Enabled
4	Codec DB9 (RS232) Mode*	9600, 8/N/1 (VISCA Protocol)	9600, 8/E/1 (POLY Protocol)
5	Attached RC4-CE™ (RS232) Mode*	9600, 8/N/1 (VISCA Protocol)	9600, 8/E/1 (POLY Protocol)
6	Poly Director-II Mode	Disabled	"Keep Alive" Enabled
7	Camera Supports Auto-Tracking	No	Yes
8	Setting Mode	DIP Switches 1-7	Configuration File

* Select setting that matches the native protocol of the device attached to each port.

Q: What exactly is "Setting Mode" (DIP switch 8)?

A: When DIP switch 8 is OFF (DOWN), the RC-SDA4+™ settings are determined by DIP switches 1-7. When DIP switch 8 is ON (UP), the RC-SDA4+™ settings are determined by a configuration file loaded by the installer. DIP switches 1-7 are ignored in this mode. The configuration file allows for more advanced settings. Refer to the "RC-SDA4+ Config File Formatting Guide" in the Support section of www.soundcontrol.net for details.

Q: What does the Camera button do?

A: A momentary press of the Camera button will send a camera power on command to the attached camera. Additionally, an auto-tracking on command will be sent to the attached camera when "Attached RC4-CE™ RS232 mode" is Poly and "Poly Director-II mode" is enabled *or* when "attached RC4-CE™ RS232 mode" is VISCA and "Camera supports auto-tracking mode" is enabled (Yes). If the Camera button is held more than 5 seconds, power is disconnected from the attached RC4-CE™ as long as the button continues to be held. This allows the user to remotely restart the linked camera.

Q: How do I configure my soft client (Zoom, WebEx, Teams) for use with the RC-SDA4+™?

A: Attach the USB 3.0 Unified port from the RC-SDA4+™ to the host PC using the included RCC-M003-1.0M cable. On the soft client select the following devices:

Function	USB Descriptor as shown on host PC
Camera	SCT USB Video Device with Control
Speaker	Headphones (SCT USB Unified Audio)
Microphone	Microphone (SCT USB Unified Audio)

Q: Do I need to connect both USB ports?

A: In most cases, no. The USB 3.0 Unified port provides camera video *and* audio in/out capabilities. The USB 2.0 Audio port can optionally be used if a secondary PC host is needed for audio routing.

Q: What does the Program button do?

A: The Program button is used to load configuration files, initiate firmware upgrades and write log files to the microSD card. Refer to the "RC-SDA4+ microSD Function Guide" at www.soundcontrol.net for details.

Q: What do the LEDs indicate?

A: The LEDs on both the RC-SDA4+ HE™ and RC4-CE™ provide a good way to tell if the system is wired correctly and operating normally. Refer to the chart below for details.

Module	LED LABEL	LED STATUS	INDICATES
RC-SDA4+ HE	Activity	Solid Amber	Good Unit Power & Link Power is On
		Solid Green	Good Unit Power & Link Power is Off
	Function	Blinking Green*	Good Firmware
	HDCP	Blinking Green	Non-HDCP Video is Present on SCTLink
		Solid Green	HDCP Video is Present on SCTLink
		Off	No Video is Present on SCTLink
	OK/Link	Alternating Red/Green	Good Link
		Blinking Red	No Link
RC4-CE	Camera Interface	Solid Green	Good Unit Power
		Solid Red	Faulty Unit Power
		Off	No Power

*FW blink pattern changes when performing firmware update or writing the log file. Refer to the "RC-SDA4+ Firmware/Log Guide" under the Support page at www.soundcontrol.net for details.

Q: I'm installing in a secure environment. Are there any options to be in compliance?

A: Some secure environments don't allow memory card slots on devices. In the Tech Support Downloads section of www.soundcontrol.net there is a special version of Secure firmware that will completely and permanently disable the microSD slot. Note: This is not reversible.