Sound Control Technologies

RC-SDA5+™ Camera Bridge
Frequently Asked Questions
Tech Support: 203-854-5701

Q: What does the RC-SDA5+™ do?

A: This module, when paired with an RC5-CE™ module, extends supported Ethernet cameras up to 100m away over a single CAT cable. Full IP control, power, and HDMI are provided over the link. The RC-SDA5+™ converts video and analog audio to USB for soft-codec applications, and also converts computer PTZ camera commands (UVC) to IP for camera control. Dual video output paths from the video source are provided, as well as an RS232 control input.

Q: Is the RC-SDA5+™ plug and play?

A: No, due to the IP communication features of the RC-SDA5+™, a configuration file is required to set up the parameters of the source and target devices. It is also necessary to define the IP settings of the RC-SDA5+™ itself. For full details on how to construct a configuration file see the "RC-SDA5+ Config File Formatting Guide" in the Support section of www.soundcontrol.net.

Q: What control protocol translations are supported?

A: The RC-SDA5+™ supports the following protocol translations:

Source Protocol	Destination Protocols		
	VISCA IP	Panasonic IP	Cisco IP Camera*
VISCA RS232	Supported	Supported	Supported
VISCA IP	Pass-Through	Not Supported	Not Supported
Panasonic IP	Not Supported	Pass-Through	Not Supported
UVC (USB)	Supported	Supported	Supported

*Cisco IP Camera support requires a Cisco codec

Q: How does control of a Cisco IP camera work?

A: Integrating control of a Cisco IP camera (except a Webex PTZ 4K) requires that the camera is also connected to a Cisco codec. The RC-SDA5+™ actually communicates to the codec in this scenario, and the codec in turn controls the attached camera. The Webex PTZ 4K camera supports VISCA over IP so a codec is not required.

Q: Do I have to configure the Cisco codec in any particular way?

A: During deployment you will have to create a new user via the admin web interface of the codec. Assign this user the roles of "User" and "Integrator" and make note of the Username and Passphrase you assign (16 characters maximum). You will need these credentials when creating the configuration file.
Finally, under "Settings", "Network Services", ensure that the HTTP mode is set to "HTTP+HTTPS".

Q: What VISCA commands can the RC-SDA5+™ translate to IP?

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 target IP device. The port is fixed at 9600, 8/N/1 and supports the VISCA commands listed above. Additionally, there are SCT commands specific to the RC-SDA5+™ that can be found in the "SCT Programming Guide" in the Support section of www.soundcontrol.net.

Q: What is the microSD slot for?

A: The microSD slot on the RC-SDA5+™ is used for loading the configuration file, field upgrading 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	Sleep Mode	Mute Video	Park Camera
3	Reserved		
4	Reserved		
5	Reserved		
6	Reserved		
7	Reserved		
8	Reserved		

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. If the Camera button is held more than 5 seconds, power is disconnected from the attached RC5-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-SDA5+™?

A: Attach the USB 3.0 Unified port from the RC-SDA5+™ 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-SDA5+ microSD Function Guide" at www.soundcontrol.net for details.

Q: What do the LEDs indicate?

A: The LEDs on both the RC-SDA5+ HE™ and RC5-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-SDA5+ 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
RC5-CE		Solid Green	Good Unit Power

	Camera Interface	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-SDA5+ Firmware/Log Guide" under the Support page at www.soundcontrol.net for details.

Q: How can I find the MAC address of the RC-SDA5+™?

A: The MAC address is written to the SDA5+_LOG.txt file as described in the "RC-SDA5+ Firmware/Log Guide".

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.