Sound Control Technologies

RM-C200™ Microphone Extension
Frequently Asked Questions
Tech Support: 203-854-5701

Q: What does the RM-C200™ do?

A: The RM-C200™ provides a literal extension of up to 3 Clockaudio CRM-200S-RF RGB table microphones to a Cisco WebEx Codec or DSP/Control system.

All microphone logic and microphone power is maintained throughout the system.

Q: Are the microphones mixed together?

A: The microphone paths on the RM-C200-TX™ are not mixed. They correspond to the individual outputs on the RM-C200-RX™.

Q: What are the connections on the RM-C200-TX™ Transmitter?

A: There are three 4-pin terminal block connectors designed to connect to the audio wires on up to 3 Clockaudio CRM-200S-RF RGB microphones. In addition, there is a DIP switch enabled +12VDC output pin for future applications. There are also three RJ45 connectors designed to connect to Clockaudio TS-C1 interface boxes that come with the microphones. Refer to the application guides and design guides at www.soundcontrol.net for further details.

Q: What are the connections on the RM-C200-RX™ Receiver?

A: There are three 4-pin terminal block connectors that carry mic signals to a Cisco codec or audio DSP/control system. The pinout for these connectors are as follows:

PIN	SIGNAL	DESCRIPTION
1	Mic +	Balanced Mic + audio signal
2	Mic -	Balanced Mic – audio signal
3	GND	Mic ground
4	Mute Control	Cisco codec mute control

There are also three 6-pin terminal block connectors that carry mic logic signals to/from a DSP/control system. The pinout for these connectors are as follows:

PIN	SIGNAL	DESCRIPTION
1	Reed Switch (output)	Low indicates contacts closed on Mic. TX (MIC active)
2	Touch Switch (output)	Low indicates switch closed on Mic. on TX (button pressed)
3	GND	Signal Ground
4	Red LED (input)	Low illuminates Mic. LED on TX
5	Green LED (input)	Low illuminates Mic. LED on TX
6	Blue LED (input)	Low illuminates Mic. LED on TX

Q: Are there configuration settings for using a Cisco codec vs. a DSP/Control system?

A: Yes, DIP switch 1 on the Receiver sets the RM-C200™ for the proper mode.

In Cisco Codec Mode all mute logic is passed through the 4-pin connector(s) on the Receiver. The 6-pin connectors on the Receiver are not used in this mode.

In DSP/Control Port Mode the 6-pin connectors on the Receiver are enabled and can be used for Mic/LED logic. In this mode the mic mute pins on the Receiver 4-pin connectors are not used.

Q: Is there any way to simplify the control requirements in DSP/Control Mode?

A: There are two control operating modes the system can be set to, depending on your control requirements. This is set by DIP switch 2 on the Receiver.

In Multiple Control Port Mode, all 3 microphones are independently controlled in a one-to-one relationship.

In Single Control Port Mode, mic logic for all three mics is handled by the "Mic 1 Logic" 6-pin connector. "Mic 2 Logic" and "Mic 3 Logic" connectors are not used in this mode, simplifying DSP/Control requirements.

Q: What do the DIP switches on the RM-C200-TX™ do?

A: The following charts show the functions of the 8 position DIP switch on the Transmitter:

Switch 1	Switch 2	Mic Channel 1 Gain	+12VDC Output
OFF	OFF	Line Level (No Gain)	On
ON	OFF	Low	Off
OFF	ON	Medium	Off
ON	ON	High	Off

Switch 3	Switch 4	Mic Channel 2 Gain	+12VDC Output
OFF	OFF	Line Level (No Gain)	On
ON	OFF	Low	Off
OFF	ON	Medium	Off
ON	ON	High	Off

Switch 5	Switch 6	Mic Channel 3 Gain	+12VDC Output
OFF	OFF	Line Level (No Gain)	On
ON	OFF	Low	Off
OFF	ON	Medium	Off
ON	ON	High	Off

Switch	OFF	ON
7	Reserved for future use – Keep in the OFF position	
8	Reserved for future use – Keep in the OFF position	

Q: What do the DIP switches on the RM-C200-RX™ do?

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

Switch	OFF	ON
1	Cisco Codec Mode	DSP/Control Mode
2	Multiple Control Port Mode	Single Control Port Mode

3	Reserved for Future Use
4	Reserved for Future Use
5	Reserved for Future Use
6	Reserved for Future Use
7	Reserved for Future Use
8	Reserved for future use – Keep in the OFF position

Q: What do the LEDs indicate?

A: The LEDs on both the RM-C200-TX™ and RM-C200-RX™ provide a good way to tell if the system is wired correctly and operating normally. Refer to the charts below for details.

RM-C200-TX/RX (All modes)

LED LABEL	LED STATUS	INDICATES
Power	Solid Green	Good Power
Status	Blinking Green/Red/Amber	Good Link
FW	Blinking Green	Good Firmware

RM-C200-TX (All modes)

LED LABEL	LED STATUS	INDICATES
Mic 1-3	Solid Green	Mic Connected and Unmuted
	Solid Red	Mic Connected and Muted
	Off	Mic Not Connected

RM-C200-RX (Cisco Codec Mode)

The following LEDs will only illuminate When the codec is in a call or on the microphone test page.

LED LABEL	LED STATUS	INDICATES
Mic 1-3	Solid Green	Codec Receiving Unmute Signal*
	Solid Red	Codec Receiving Mute Signal*

*If mic is in retracted state then RX Mic LEDs will always be green.

RM-C200-RX (DSP/Control Mode)

LED LABEL	LED STATUS
Mic 1-3	LEDs follow the red and green signals on the associated 6-pin terminal blocks (Pins 4 & 5) which are driven by the DSP/Control system.