Sound Control Technologies

MDC6™ Serial Hub
Frequently Asked Questions
Tech Support: 203-854-5701

Q: What does the MDC6 do?

A: The **MDC6** aggregates RS-232 serial communication from multiple SCT products to a single codec connection. It automatically manages heartbeat, diagnostic, and control data to supported codecs.

Q: Why would I want to do that?

A: One example would be using an RTK-AM1 table kit and an RC5+ camera extension kit in a conference room with a Cisco codec system. The MDC6 would sit between the RTK-AM1 and RC5+ receivers and the codec. SCT device status would show up natively on the Cisco web interface, and the Cisco touch panel would allow switching of the RTK-AM1 video inputs.

Q: How does it connect to the codec?

A: The **MDC6** connects to Cisco codecs with an RS-232 to USB data cable. The Diag RS-232 port is used for this and is fixed at 115,200/N/8/1. Future firmware releases may add support for additional codecs via RS-232 or IP.

Q: What is the 3rd party RS-232 port for?

A: This port is reserved for future use.

Q: What are the Ethernet ports for?

A: The two Ethernet ports are for future codec support and IP based firmware updates.

Q: What is the USB port for?

A: The USB A port is reserved for future use.

Q: What is the Control pushbutton for?

A: The Control pushbutton is reserved for future use.

Q: What do the LEDs indicate?

A: The LEDs provide a good way to tell if the system is wired correctly and operating normally. Refer to the chart below for details.

LED LABEL	ACTIVE STATUS	INDICATES
Power	Solid Green	Good Power
Status*	Blinking Green	Good MCU Firmware
RS-232 Activity	Blinking Green	Associated port is transmitting data
	Blinking Red	Associated port is receiving data
Comm	Solid Green	Communication established with codec

*Status blink pattern changes when performing firmware update or writing the log file. Refer to the "MDC6 Firmware/Log Guide" under the Support page at www.soundcontrol.net for details.

Q: What do the DIP switches do?

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

Switch	Function	OFF	ON
1	Codec Communications on Diag RS-232 Port	Disabled	Enabled
2	Codec Type	Cisco	n/a
3	Transparent Mode	Off	On[1]
4	Reserved	-	-
5	Reserved	-	-
6	Reserved	-	-
7	Reserved	-	-
8	Use microSD Configuration File	Disabled[2]	Enable

[1]When DIP 3 is on DIP switches 1 and 2 are ignored.

[2]Default settings are used when Configuration File is disabled (See details below).

Q: What is Transparent Mode? (Firmware v2.0 or higher)

A: In typical operation the **MDC6™** is designed to communicate with other SCT devices, and as such uses a proprietary protocol within data messages. Transparent Mode disables all of this and simply retransmits incoming data on the Diag RS-232 port to all six device RS-232 ports. Likewise, any incoming data on the six device ports is retransmitted out of the Diag port. This may be useful in applications where an RS-232 repeater is needed.

All ports are fixed at 115,200, N, 8, 1.

Note: Transparent mode

Q: What are the default settings when the Configuration File is disabled? (DIP switch 8 Off)

A: The following settings are used when the **MDC6™** DIP switch 8 is off:

These settings are only applicable when Cisco Codec Communications are Enabled:

Parameter	Default Value
Heartbeat timeout interval	30 seconds
SCT device name reported to codec	SCT MDC6

Q: Are there any special settings when integrating with a Cisco codec?

A: After logging into the Cisco web interface, navigate to Settings, SerialPort and verify the following parameters:

BaudRate = 115200
LoginRequired = Off
Mode = On

Be sure to click Save if you make any changes on this page.

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.