

Extend Simple Remote Protocol

To allow easy control via third party systems processors incorporate a simple serial control protocol. This allows processors to receive serial string from third party systems such as Crestron/Serial control panel to adjust level, mute and recall programs.

Design your control command.

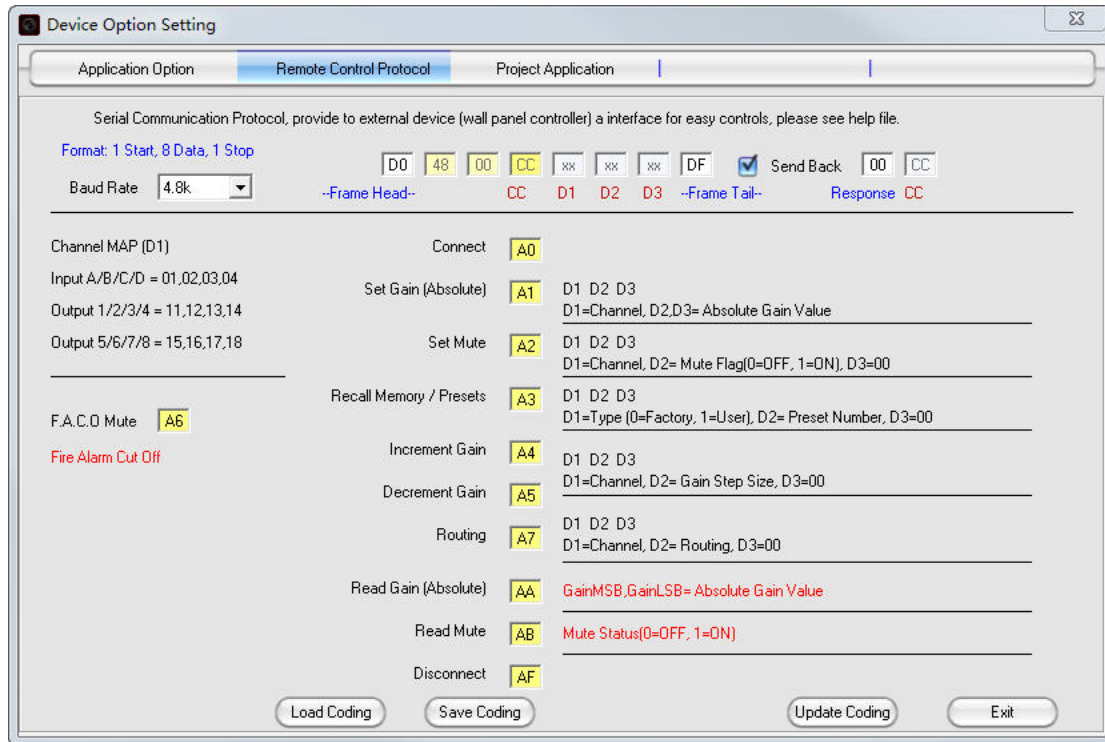


Figure 1

After modification, click “update coding” button to finish setup, and exit remote control software.



when display  icon, means keypad will be locked.

push “ENTER” button three seconds, icon will disappear, keypad return active status.

- 1、 Change device setting in interface protocol menu.

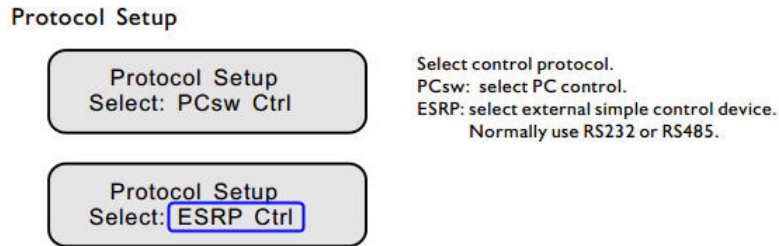


Figure 2

- 2、 Instruction Overview.

Blue digital content is factory setting.

(480, DeviceID=48. 460, DeviceID=46, 440, DeviceID=44)

(360, DeviceID=36. 260, DeviceID=26, 240, DeviceID=24)

48 00 (RS232, ID=00)

48 01 (RS485, ID=01), 48 09 (RS485, ID=9).

Example base on RS232.

All commands are 8 bytes length.

All commands data in this document is in HEX format.

Step 1. Connect.

Header	DeviceID	RemotelID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A0	00	00	00	DF

Step 2. Send Command.

Absolute Gain.

Header	DeviceID	RemotelID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A1	D1	D2	D3	DF

D1 is channel number: InputA-D (01,02,03,04), Output1-8(11,12,13,14,15,16,17,18) .

D2 D3 is absolute gain value.

00 00 (-40dB), 00 01 (-39.9dB)... 01 90 (+0.0dB)...01 CC (+6.0dB) ...02 26 (+15.0dB).

NOTE: Input gain max value: 01 CC (+6.0dB), Output gain max value: 02 26 (+15.0dB).

Mute.

Header	DeviceID	RemotelID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A2	D1	D2	00	DF

D1 is channel number: InputA-D (01,02,03,04), Output1-8(11,12,13,14,15,16,17,18) .

D2 is mute status: 00(Mute Off), 01(Mute On).

Load Preset.

Header	DeviceID	RemotelID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A3	D1	D2	00	DF

D1 is program type: Factory(00), User(01) .

D2 is program number: (01,02,03.....1E) to maximum available number.

Increase Gain.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A4	D1	D2	00	DF

Decrease Gain.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A5	D1	D2	00	DF

D1 is channel number: InputA-D (01,02,03,04), Output1-8(11,12,13,14,15,16,17,18) .

D2 is gain change step: 01(0.1dB), 02(0.2dB)...0A(1.0dB)...1E(3.0dB).

Set Routing.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A7	D1	D2	00	DF

D1 is channel number: Output1-8(11,12,13,14,15,16,17,18) .

D2 is routing status: 01(Input A), 02(Input B), 04(Input C), 08(Input D)。

03(Input A+B), 05(Input A+C), 06(Input B+C), 07(Input A+B+C),

09(Input A+D),0A(Input B+D), 0B(Input A+B+D), 0C(Input C+D),

0D(Input A+C+D), 0E(Input B+C+D)。

Read Absolute Gain.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	AA	D1	00	00	DF

D1 is channel number: InputA-D (01,02,03,04), Output1-8(11,12,13,14,15,16,17,18) .

Device will send back 2 bytes data:

00 00 (-40dB), 00 01 (-39.9dB)... 01 90 (+0.0dB)...01 CC (+6.0dB) ...02 26 (+15.0dB)。

Read Mute Status.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	AB	D1	00	00	DF

D1 is channel number: InputA-D (01,02,03,04), Output1-8(11,12,13,14,15,16,17,18) .

Device will send back 1 byte data: 00=Mute Off, 01=Mute On.

F.A.C.O Mute.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A6	00	00	00	DF

This command will MUTE all output channel.

Step 3. Disconnect (exit ESRP connection).

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	AF	00	00	00	DF

Example:

Input A Mute On.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A2	01	01	00	DF

Input A Mute Off.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A2	01	00	00	DF

Output 1 Mute On.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A2	11	01	00	DF

Output 1 Mute Off.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A2	11	00	00	DF

Note: if you want to confirm if device have receive data correctly, and respond command. In remote control software, active“Send back” settting. And setup a byte data of response. Example (response data is “56”).

Connect.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	A0	00	00	00	DF

Device will send 2 bytes: 56, A0.

Disconnect.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	AF	00	00	00	DF

Device will send 2 bytes: 56, AF.

Read Absolute Gain.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	AA	01	00	00	DF

Device will send 4 bytes: 56, AA, xx, xx.

Read Mute Status.

Header	DeviceID	RemoteID	Command	Data 1	Data 2	Data 3	End
D0	48	00	AB	01	00	00	DF

Device will send 3 bytes: 56, AB, xx(00/01).

NOTE:

If device has been locked by user, and some command will be limited and skip.

Example:

If user lock on, and input or output gain CHANGE or DISPLAY locked, change gain command and read gain value command will be not working.

If user lock on, and input or output mute CHANGE locked, mute command will be not working, but F.A.C.O command still work.

If user lock on, and recall preset memory locked, load program command will be not working.

If you have question, Contact us.