

Protocol Specs		Pin Connections	
Baud Rate:	9600 bps	TxD:	Pin 2
Data Bit:	8 bits	RxD:	Pin 3
Stop Bit:	1 bit	Gnd:	Pin 5
Parity:	None		
Flow Control:	No		

Basic RS-232 Control:

ASCII (not decimal) and hexadecimal examples are shown below. The commas in the Hex example are merely for your ease of reading and are not required in transmission. All strings must have a space between each number or letter (except two digit numbers). In the Hex examples the space is already represented with code "20." The end of each string must have a carriage return after the last number with no space in-between, this is represented by "<CR>" in the ASCII examples and "0D" in the Hex examples.

Command	String ASCII	String Hexadecimal
Power On	W 1 1 2<CR>	57,20,31,20,31,20,32,0D
Power Off	W 1 1 1<CR>	57,20,31,20,31,20,31,0D
Power Toggle	W 1 1 3<CR>	57,20,31,20,31,20,33,0D
Volume Up	W 1 9 1<CR>	57,20,31,20,39,20,31,0D
Volume Down	W 1 9 2<CR>	57,20,31,20,39,20,32,0D
Mute On	W 1 10 2<CR>	57,20,31,20,31,30,20,32,0D
Mute Off	W 1 10 1<CR>	57,20,31,20,31,30,20,31,0D
Mute Toggle	W 1 10 3<CR>	57,20,31,20,31,30,20,33,0D
Input 1	W 1 2 6<CR>	57,20,31,20,32,20,36,0D
Input 2	W 1 2 7<CR>	57,20,31,20,32,20,37,0D
Input 3	W 1 2 8<CR>	57,20,31,20,32,20,38,0D
Input 4	W 1 2 9<CR>	57,20,31,20,32,20,39,0D
Input 5	W 1 2 10<CR>	57,20,31,20,32,20,31,30,0D
Input 6	W 1 2 11<CR>	57,20,31,20,32,20,31,31,0D
Input MP3	W 1 2 12<CR>	57,20,31,20,32,20,31,32,0D
Input Bypass	W 1 2 13<CR>	57,20,31,20,32,20,31,33,0D
Next Input	W 1 2 4<CR>	57,20,31,20,32,20,34,0D
Previous Input	W 1 2 5<CR>	57,20,31,20,32,20,35,0D
Tone On	W 1 3 1<CR>	57,20,31,20, 33,20,31,0D
Tone Off	W 1 3 2<CR>	57,20,31,20, 33,20,32,0D
Tone Toggle	W 1 3 3<CR>	57,20,31,20, 33,20,33,0D

Please Note: "<CR>" stands for Carriage Return and the Hex Code is "0D".
A space in Hex is "20", a space in ASCII is just a blank space (as shown above).

Feedback Information:

Unsolicited feedback is sent anytime that the MODEL 2100 is controlled by IR remote, Front Panel or by RS232. Even if the MODEL 2100 is turned off it should send full feedback. Full unsolicited feedback will be automatic and in this format:

***G1 S3 M1 T0<CR>**

* = Start of transmission

<CR> = End of transmission

G0 = Power Off, G1 = Power On

S1 = Input 1, S2 = Input 2, S3 = Input 3, S4 = Input 4, S5 = Input 5, S6 = Input 6

S7 = Input MP3, S8 = Input Bypass

M0 = Mute Off, M1 = Mute On

T0 = Tone Off, T1 = Tone On

Volume Feedback *V0<CR> and *V1<CR>

Because the volume control is a motor driven type there is no exact feedback of the current volume setting. When the volume is turned up or down from the remote or RS232, feedback will be transmitted confirming the volume was increased or decreased. This will be represented by a "*V0<CR>" for volume decrease and "*V1<CR>" for volume increase.

You can request the status of the MODEL 2100 by issuing the following commands:

Request	String ASCII	String Hexadecimal	Response From 2100
Current Input	R 1 2<CR>	52,20,31,20,32,0D	*S1<CR>
			*S2<CR>
			*S4<CR>
			*S5<CR>
			*S6<CR>
			*S7<CR>
			*S8<CR>
Power Status	R 1 1<CR>	52,20,31,20,31,0D	*G0<CR>
			*G1<CR>
Mute Status	R 1 10<CR>	52,20,31,20,31,30,0D	*M0<CR>
			*M1<CR>
Tone Status	R 1 4<CR>	52,20,31,20,34,0D	*T0<CR>
			*T1<CR>
Full Status	R 1 13<CR>	52,20,31,20,31,33,0D	*G1 S2 M0 T0<CR>