

Appendix C RS232 Protocol

RS232 settings are internally definable via jumper blocks, to accommodate interfacing with a wide range of control products.

Baud rate	9600 or 19200
Echo status	AUTO or REQUEST

Baud rate: Maximum number of bits per second. The duration of a single bit is equal to 1 / baud rate.
Echo status: Specifies whether the **STATUS** of each parameter shown in the protocol will automatically (**AUTO**) be echoed back to the controller when there is any change, or whether the user must manually request (**REQ**) the status information be sent to the controller. Please refer to page 12 or information on changing these settings.

All commands will follow the format:

<Header><Command Identifier><Argument 1><Argument 2><Argument 3>
where:

<Header> = <FEh><EEh>
<Command identifier> = <byte>
<Argument x> = <byte>

Each command will be able to access the system configuration directly, eliminating the need to press any button on the Intrepid front panel.

Example:

- 1) To put the Intrepid into standby: Send FE, EE, 01, 00, 00, 00 (all values in Hex).
Where FE and EE are the header, 01 = command, 00 = main standby, 00 = put unit in standby and 00 = filler (4 characters required)

Command	Description	Argument 1	Argument 1 Description	Argument 2	Argument 2 Desc	Argument 3	Arg 3 Desc
01	Standby	0	Main standby	0	Put unit in standby		
		0	Main standby	1	Take unit out of standby.		
02	Status	0	Return amplifier status.				
The RS232 can be set using a hardware jumper to automatically send changes to the RS232 port.							
Five bytes will be returned, the fifth byte contains no information.							
Status Byte #	Byte Description	bit	Value Description				
1	Standby	0	Main bus (1 = activate, 0 = standby)				
2	Temperature	0	Channel 1				
		1	Channel 2				
		2	Channel 3				
		3	Channel 4				
		4	Channel 5				
3	Fuse Plus Rail	0	Channel 1				
		1	Channel 2				
		2	Channel 3				
		3	Channel 4				
		4	Channel 5				
4	Fuse Minus Rail	0	Channel 1				
		1	Channel 2				
		2	Channel 3				
		3	Channel 4				
		4	Channel 5				
5	none		all bits = 0				

RS232 Hardware Connections

RTS and CTS are not implemented in the Intrepid

DB9

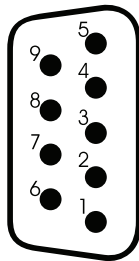
Pin	I/O	
1 - DCD	0	
2 - Intrepid sends on this pin	0	
3 - Intrepid receives on this pin	1	
4 - DTR	1	
5 - GND		
6 - DSR	0	
7 - RTS	1	
8 - CTS	0	
9 - Ring	---	

CN2

RJ45

Pin	I/O	
1 - RTS	1	
2 - DTR	1	
3 - Intrepid receives on this pin	1	
4 - GND		
5 - GND		
6 - Intrepid sends on this pin	0	
7 - DCD	0	
8 - CTS	0	

CN3



Rear panel view of DB9 connector
(From outside of unit).

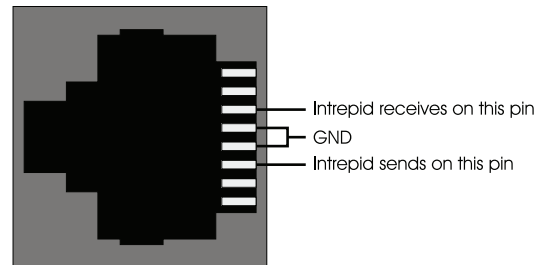


Figure 5 – Intrepid RS232 Jack Pinout

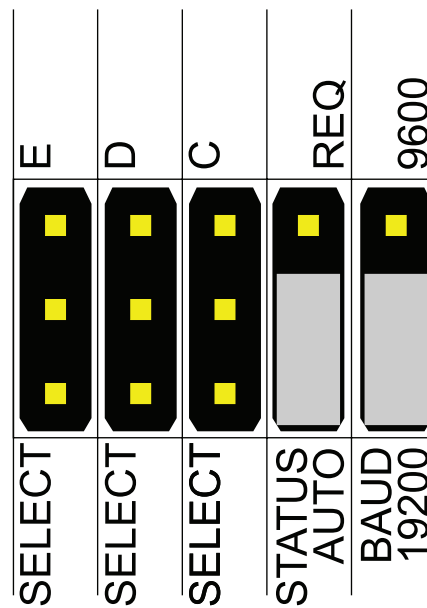
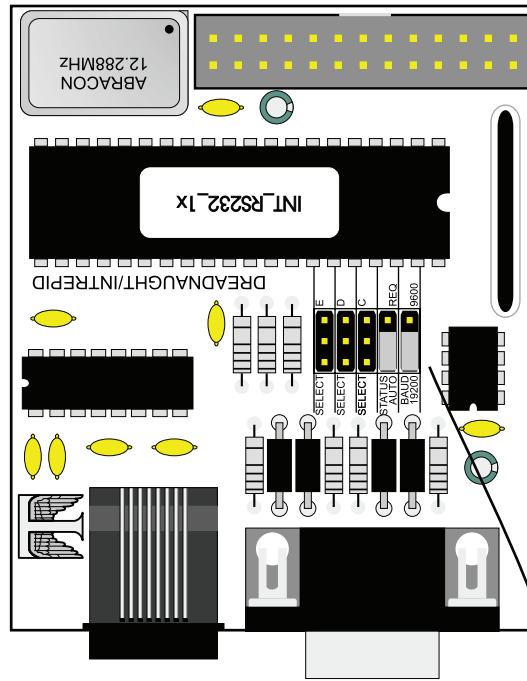


Figure 6 – Intrepid RS232 Jumper Settings

RS232 Jumper Settings

There are 2 possible Baud rates: **9600** and **19200**. The factory default is **19200**. To change the baud rate to **9600**, move the jumper to the center and top pins (if the RS232 board is orientated as in figure 6).

The **STATUS** can be returned to the controller either: automatically every time a parameter has changed, or the user can request it manually. The factory default is **AUTO**. To set the Echo **STATUS** to return Status information only upon request, move the **AUTO/REQ** jumper to the top pins, or nearer to **REQ** on the RS232 board.

The three **SELECT** jumpers are not currently implemented.

Appendix D Specifications

Inputs:	<u>Analog audio:</u> 1 Single-ended per channel (RCA). 1 Balanced per channel (XLR).
	Input Impedance: 50 K Ω Single-Ended or Balanced, for each phase.
	Input sensitivity: (Single-Ended) 1.5V RMS input for 100W into 8 ohms. (Balanced) 0.75V RMS input for 100W into 8 ohms.
	Gain: (Single-Ended) 25.5dB (19x). (Balanced) 31.5dB (38x).
	Polarity: (Single-Ended) Non-Inverting. (Balanced) Pin-2 = Positive, Pin-3 = Negative for Non-Inverting Output.
Outputs:	<u>Analog Audio:</u> 1 balanced output per channel.
I/O	<u>RS232:</u> 1 DB9 and 1 RJ45 connector.
Modes/Processes:	Standby: All channels are muted and output bias is reduced to 40%. Thermal: One or more channels has overheated; amp automatically switches to Standby.
Power Output:	(8 ohms-one channel driven) 100 W (rated) 130 W (typical) (8 ohms-five channels driven) 100 W (rated) 115 W (typical) (4 ohms-one channel driven) 200 W (rated) 210 W (typical)
Frequency Response:	(-3dB points @ full power) 0.9 Hz - 350 KHz.
THD+Noise:	<2%
Signal to Noise Ratio:	(unweighted) >100dB
Power Requirements:	117 VAC, 7.7 amp; 230 VAC, 4 amp; 50-60 Hz; for full power in all channels.
Power Consumption:	80W @ Standby; 100W @ idle; 900W @ full power.
Standby Trigger Input:	5-12 VDC Pulse between 1 and 500mS.
Dimensions:	17 5/8" W x 6 1/4" H x 20 1/2" D (448 x 159 x 521 mm)
Weight:	58 Lbs. Stand alone (26.3 Kg), 64 Lbs. Boxed with accessories (29 Kg)
Maximum Operating Temperature:	Internal: 176° F (80° C) Room: 131° F (55° C)

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(3 Year optional extended service contract)

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3. For continued protection against fire hazard, replace fuses only with the same type and rating of fuses as specified.