ISO-RACK16/P CONNECTION DIAGRAM

The ISO-RACK16/P series allows analog inputs for the CIO-DAS6400 and PCI-DAS6400/1600/1200/1000 series of A/D boards to be quickly and simply connected to ISO-5B series isolation and signal conditioning modules. The ISO-RACK16/P map a single analog input channel to a single ISO-5B module(A/D channel 0 is directly connected to module 1, channel 1 to module 2 etc).

Mounting Screw Threads



CONNECTOR PIN ASSIGNMENTS

Pins 35-50 of connectors P22, P23, and P24 have been wired 1:1 to provide access to some of the host A/D's boards signals (see CONNECTOR MAP diagram for details). These signals are labeled "PASS" signals and the user should consult their DAS manual's I/O connector pin assignment section to verify the actual signals which are available.

NOTES:

1.) The board provides locations to install jumpers that allow the analog inputs from the controlling board to be directly connected to the output screw terminals. This allows hybrid systems in which analog inputs requiring isolation and/or signal conditioning to use the ISO-5B modules while other analog inputs can be connected directly to the host A/D board. A series of plated through jumper holes labeled Rx+ and Rx- jumper the analog inputs of the host A/D board directly to the screw terminals.

2.) A CJC reference sensor is provided with ISO-5B thermocouple modules and must be installed in the appropriate U1-U16 position.

3.) Shunt resistor positions R1-R16 allow each analog input channel to convert a current to a voltage.

4.) Connector P22 "16 CHANNEL IN" allows the ISO-RACK16/P to interface directly to 16 channel A/D boards utilizing 100 pin I/O connectors (see Connection Diagram for details). Connector P23 and P24 "64 CHANNEL IN/OUT" allows multiple ISO-RACK16/P boards to be daisy chained providing a direct connection to 64 channel A/D boards utilizing 100 pin I/O connectors (see Connection Diagram for details).



External power can be provided to Molex connector P21 from the PC power expansion plug inside the PC. Screw terminal P20 could also be used to provide external power.



		P23					P22					
CH24 HIGH 19 CH25 HIGH 21 CH25 HIGH 21 CH25 HIGH 22 CH27 HIGH 25 CH28 HIGH 25 CH29 HIGH 25 CH29 HIGH 25 CH30 HIGH 30 PASS_1 35 PASS_5 35 PASS_7 41 PASS_9 43 PASS_14 45 PASS_13 47 PASS_15 45	1 • • 3 • • 7 • • 9 • • 1 • • 3 • • 5 • • 7 • • 9 • • 1 • • 3 • • 6 • • 7 • • 9 • • 1 • • 5 • • 7 • • 9 • • 1 • • 3 • • 5 • • 7 • • 9 • • 1 • • 3 • • 5 • • 7 • • 9 • • • • • <	2 CH16 HIGH 4 CH17 HIGH 6 CH18 HIGH 8 CH19 HIGH 10 CH20 HIGH 12 CH21 HIGH 14 CH22 HIGH 16 CH23 HIGH 18 20 22 24 26 28 30 32 34 36 PASS_2 38 PASS_4 40 PASS_6 42 PASS_8 44 PASS_10 46 PASS_12 48 PASS_14 50 PASS_16	CH8 HIGH CH9 HIGH CH10 HIGH CH11 HIGH CH12 HIGH CH13 HIGH CH14 HIGH CH15 HIGH PASS_1 PASS_5 PASS_7 PASS_9 PASS_11 PASS_13 PASS_15	1 3 5 7 9 11 13 15 17 19 21 23 27 29 31 33 5 37 9 41 43 45 47 49 49 40 40 40 40 40 40 40 40 40 40		2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 22 24 26 32 34 36 38 40 42 44 46 48 50	CH0 HIGH CH1 HIGH CH2 HIGH CH3 HIGH CH4 HIGH CH5 HIGH CH6 HIGH CH7 HIGH CH7 HIGH PASS_2 PASS_4 PASS_6 PASS_10 PASS_12 PASS_12 PASS_14 PASS_16	CH8 HIGH CH9 HIGH CH10 HIGH CH11 HIGH CH12 HIGH CH13 HIGH CH14 HIGH CH15 HIGH CH15 HIGH PASS_3 PASS_5 PASS_7 PASS_9 PASS_11 PASS_13 PASS_15	1 3 5 7 9 11 13 15 17 19 21 23 27 29 31 33 5 37 341 43 45 47 49		$\begin{array}{c} 2\\ 4\\ 6\\ 8\\ 10\\ 12\\ 14\\ 16\\ 18\\ 20\\ 22\\ 24\\ 26\\ 30\\ 22\\ 34\\ 36\\ 38\\ 40\\ 42\\ 44\\ 46\\ 8\\ 50\\ \end{array}$	CH0 HIGH CH1 HIGH CH2 HIGH CH3 HIGH CH4 HIGH CH5 HIGH CH5 HIGH CH7 HIGH CH7 HIGH PASS_4 PASS_6 PASS_8 PASS_10 PASS_12 PASS_14 PASS_14 PASS_16

Connector Map

Pins 35-50 of connectors P22, P23, and P24 have been wired 1:1 to provide access to some of the host A/D's boards signals. These signals are labeled "PASS" signals and the user should consult their DAS manual's I/O connector pin assignment section to verify the actual signals which are available.





CH. 32 - 47 CH. 16 - 31 CH. 48 - 63 CH. 0 -15 C50FF-2 C50FF-2 Δ P24 P24 P24 P23 · - P23 P23 C100FF-X - 51 - 100 Cable 1 - 50 Cable -**ISO-RACK16/P 64 channels**