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DB25TSF

DB25TSM

DB15TSM



DB25TS-U



DB15TS-U

**DIGITAL & ANALOG I/O
TERMINAL STRIPS
GENERIC
DB25TSF DB25TSM DB15TSM
CUSTOM
DB25TS-U DB15TS-U**

Integrity Instruments A & D I/O TSM/F User Manual

DB25TSM GENERIC

The **DB25TSM** terminal strip with DB25 male connector has nomenclature corresponding to the DB25 pin numbers, and mates directly to the Digital I/O port of all of the Integrity Instruments M2, M3 and M4 series of Data Acquisition modules. It is shipped with hardware to attach permanently to the module.

The **DB25TSM** provides for easy access to the Digital I/O of our M2, M3, and M4 series modules as well as to all the other power, ground and other voltages available.

The tables below list the I/O connection and the signals available at the Digital I/O point of the data acquisition modules.

All connections for both the M2, M3, and M4 series are identical, except of course that the M2 series only has 8 digital I/O points.

Digital I/O M2 Series	
DB25 Pins	Description
1	Port 2 Bit 0
2	Port 2 Bit 1
3	Port 2 Bit 2
4	Port 2 Bit 3
5	Port 2 Bit 4
6	Port 2 Bit 5
7	Port 2 Bit 6
8	Port 2 Bit 7
9	PWM output
10	N/A
11	+V_Unreg
12	+5Vdc
13	GND
14	N/A
15	N/A
16	N/A
17	N/A
18	N/A
19	N/A
20	N/A
21	N/A
22	Pulse Counter Input
23	N/A
24	+5Vdc
25	GND



Digital I/O M3 and M4 Series	
DB25 Pins	Description
1	Port 2 Bit 0
2	Port 2 Bit 1
3	Port 2 Bit 2
4	Port 2 Bit 3
5	Port 2 Bit 4
6	Port 2 Bit 5
7	Port 2 Bit 6
8	Port 2 Bit 7
9	PWM output
10	N/A
11	+V_Unreg
12	+5Vdc
13	GND
14	Port 1 Bit 0
15	Port 1 Bit 1
16	Port 1 Bit 2
17	Port 1 Bit 3
18	Port 1 Bit 4
19	Port 1 Bit 5
20	Port 1 Bit 6
21	Port 1 Bit 7
22	Pulse Counter Input
23	-5Vdc
24	+5Vdc
25	GND

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DB25TSF GENERIC

The **DB25TSF** terminal strip with DB25 female connector has nomenclature corresponding to the DB25 pin numbers and is a general purpose DB25 to terminal strip device

It can be used with Integrity Instruments I/O expander boards, **EXP-TRK** and **EXP-STA**.

With the **DB25TSF** connected to the **EXP** board, any signal inputs from any controller can be used to control the I/O modules on the expander board.

DB15TSM GENERIC

The **DB15TSM** terminal strip with DB25 male connector has nomenclature corresponding to the DB25 pin numbers, and mates directly to the Analog I/O port of all of the Integrity Instruments M2, M3 and M4 series of Data Acquisition modules. It is shipped with hardware to attach permanently to the module.

The **DB15TSM** provides for easy access to the Analog I/O of our M2, M3, and M4 series modules as well as to all the other power, ground and other voltages available.

The tables below list the I/O connection and the signals available at the analog I/O point of the data acquisition modules.

M2 series ANALOG I/O	
DB15 Pins	Description
1	NA
2	NA
3	NA
4	NA
5	NA
6	NA
7	ANALOG IN CHANNEL 1
8	ANALOG IN CHANNEL 0
9	GND
10	+ V UNREG
11	+ 5VDC REG
12	NA
13	V REFERENCE
14	ANALOG OUT B
15	ANALOG OUT A



M# and M4 series ANALOG I/O	
DB15 Pins	Description
1	ANALOG IN CHANNEL 7
2	ANALOG IN CHANNEL 6
3	ANALOG IN CHANNEL 5
4	ANALOG IN CHANNEL 4
5	ANALOG IN CHANNEL 3
6	ANALOG IN CHANNEL 2
7	ANALOG IN CHANNEL 1
8	ANALOG IN CHANNEL 0
9	GND
10	+ V UNREG
11	+ 5VDC REG
12	- V UNREG
13	V REFERENCE
14	ANALOG OUT B
15	ANALOG OUT A

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DB25TS-U CUSTOM

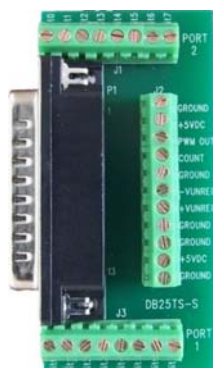
The **DB25TS-U** terminal strip with DB25 male connector has nomenclature corresponding to the Digital I/O port of all of the Integrity Instruments M2, M3 and M4 series of Data Acquisition modules. It is shipped with hardware to attach permanently to the module.

The **DB25TS-U** provides for easy access to the Digital I/O of our M2, M3, and M4 series modules as well as to all the other power, ground and other voltages available.

The tables below list the I/O connection and the signals available at the Digital I/O point of the data acquisition modules.

All connections for both the M2, M3, and M4 series are identical, except of course that the M2 series only has 8 digital I/O points.

Digital I/O M2 Series	
DB25 Pins	Description
1	Port 2 Bit 0
2	Port 2 Bit 1
3	Port 2 Bit 2
4	Port 2 Bit 3
5	Port 2 Bit 4
6	Port 2 Bit 5
7	Port 2 Bit 6
8	Port 2 Bit 7
9	PWM output
10	N/A
11	+V_Unreg
12	+5Vdc
13	GND
14	N/A
15	N/A
16	N/A
17	N/A
18	N/A
19	N/A
20	N/A
21	N/A
22	Pulse Counter Input
23	N/A
24	+5Vdc
25	GND



Digital I/O M3 and M4 Series	
DB25 Pins	Description
1	Port 2 Bit 0
2	Port 2 Bit 1
3	Port 2 Bit 2
4	Port 2 Bit 3
5	Port 2 Bit 4
6	Port 2 Bit 5
7	Port 2 Bit 6
8	Port 2 Bit 7
9	PWM output
10	N/A
11	+V_Unreg
12	+5Vdc
13	GND
14	Port 1 Bit 0
15	Port 1 Bit 1
16	Port 1 Bit 2
17	Port 1 Bit 3
18	Port 1 Bit 4
19	Port 1 Bit 5
20	Port 1 Bit 6
21	Port 1 Bit 7
22	Pulse Counter Input
23	-5Vdc
24	+5Vdc
25	GND

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DB15TS-U CUSTOM

The **DB15TS-U** terminal strip with DB55 male connector has nomenclature corresponding to the Analog I/O port of all of the Integrity Instruments M2, M3 and M4 series of Data Acquisition modules. It is shipped with hardware to attach permanently to the module.

The **DB15TS-U** provides for easy access to the Analog I/O of our M2, M3, and M4 series modules as well as to all the other power, ground and other voltages available.

The tables below list the I/O connection and the signals available at the analog I/O point of the data acquisition modules.

M2 series ANALOG I/O	
DB15 Pins	Description
1	NA
2	NA
3	NA
4	NA
5	NA
6	NA
7	ANALOG IN CHANNEL 1
8	ANALOG IN CHANNEL 0
9	GND
10	+ V UNREG
11	+ 5VDC REG
12	NA
13	V REFERENCE
14	ANALOG OUT B
15	ANALOG OUT A

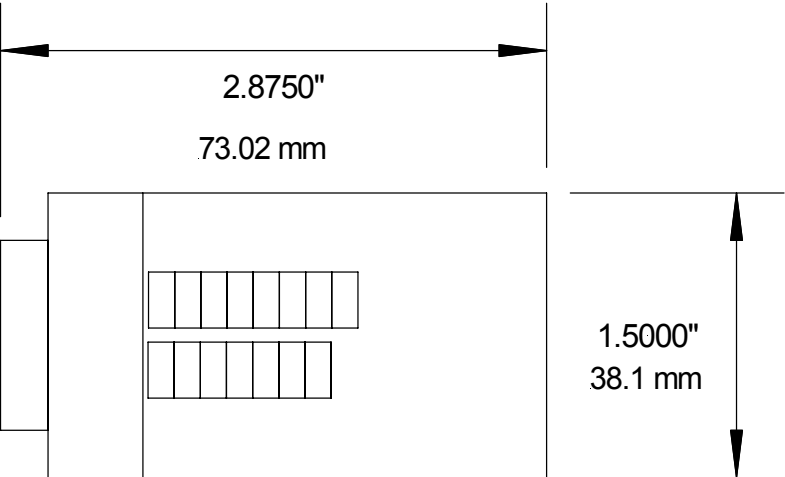
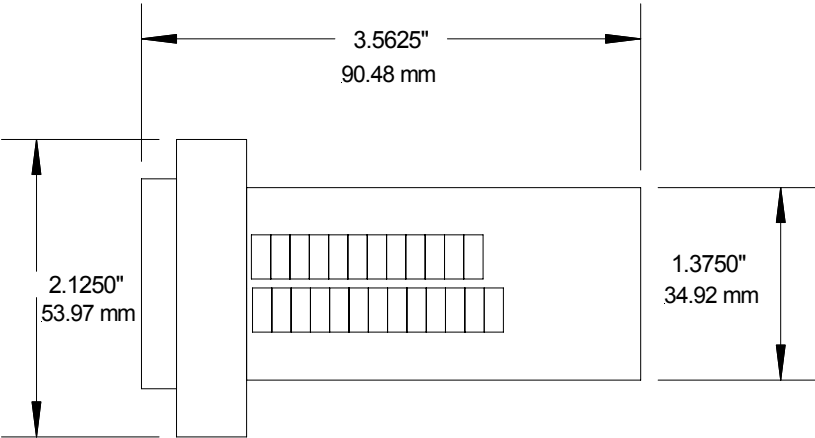


M# and M4 series ANALOG I/O	
DB15 Pins	Description
1	ANALOG IN CHANNEL 7
2	ANALOG IN CHANNEL 6
3	ANALOG IN CHANNEL 5
4	ANALOG IN CHANNEL 4
5	ANALOG IN CHANNEL 3
6	ANALOG IN CHANNEL 2
7	ANALOG IN CHANNEL 1
8	ANALOG IN CHANNEL 0
9	GND
10	+ V UNREG
11	+ 5VDC REG
12	- V UNREG
13	V REFERENCE
14	ANALOG OUT B
15	ANALOG OUT A

DIMENSIONS

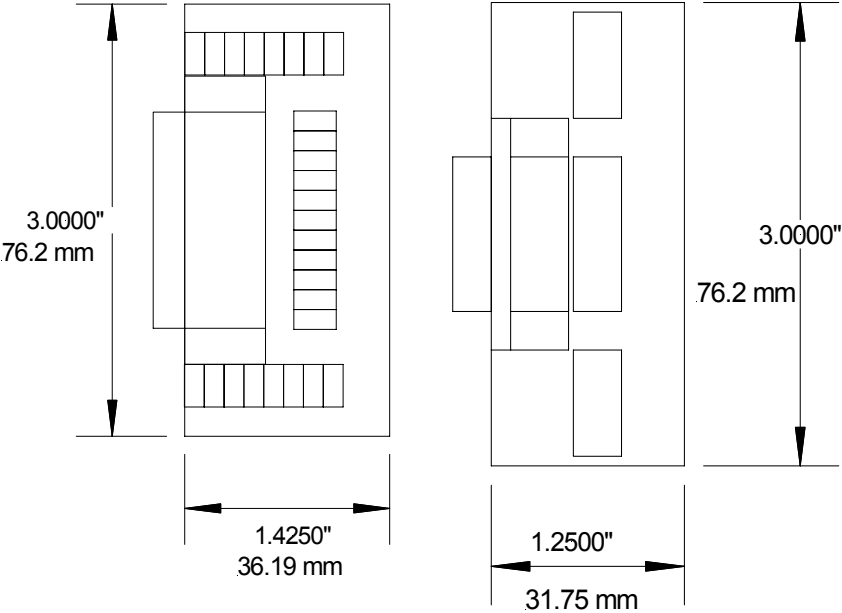
DB25TSF **DB25TSM** **DB15TSM** **GENERIC**

Dimensions for DB25TSF and DB25TSM are the same.



DIMENSIONS

DB15TS-U **DB25TS-U** **CUSTOM**



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REFERENCE

Hexadecimal conversion chart

EXAMPLE HEX CONVERSION															
X				X				Y				Y			
BITS	1	1	0	0	1	0	0	0	1	0	1	1	0	1	1
HEX	C				8				B				7		

PORT 1								PORT 2							
X				X				Y				Y			
H E X V A L U E	BIT VALUE			H E X V A L U E	BIT VALUE			H E X V A L U E	BIT VALUE			H E X V A L U E	BIT VALUE		
7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	1	1	0	0	1	1	0	0	1	1	0	0
2	0	0	1	0	2	0	0	2	0	0	1	0	2	0	0
3	0	0	1	1	3	0	0	3	0	0	1	1	3	0	0
4	0	1	0	0	4	0	1	4	0	1	0	0	4	0	1
5	0	1	0	1	5	0	1	5	0	1	0	1	5	0	1
6	0	1	1	0	6	0	1	6	0	1	1	0	6	0	1
7	0	1	1	1	7	0	1	7	0	1	1	1	7	0	1
8	1	0	0	0	8	1	0	8	1	0	0	0	8	1	0
9	1	0	0	1	9	1	0	9	1	0	0	1	9	1	0
A	1	0	1	0	A	1	0	A	1	0	1	0	A	1	0
B	1	0	1	1	B	1	0	B	1	0	1	1	B	1	0
C	1	1	0	0	C	1	1	C	1	1	0	0	C	1	1
D	1	1	0	1	D	1	1	D	1	1	0	1	D	1	1
E	1	1	1	0	E	1	1	E	1	1	1	0	E	1	1
F	1	1	1	1	F	1	1	F	1	1	1	1	F	1	1

WARRANTY

Integrity Instruments warrants all products against defective workmanship and components for the life of the unit. Integrity Instruments agrees to repair or replace, at it's sole discretion, a defective product if returned to Integrity Instruments with proof of purchase. Products that have been mis-used, improperly applied, or subject to adverse operating conditions fall beyond the realm of defective workmanship and are not covered by this warranty.

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