XM-OCTAL I/O

Dual 8 Port Rack Mounting Connector Panel For Octal I/O IndustryPack®s

User Manual

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Dual 8 Port Rack
Mounting Connector Panel
For Octal I/O IndustryPacks

SBS Technologies, Inc.
1284 Corporate Center Drive
St. Paul, MN 55121
Tel (651) 905-4700
FAX (651) 905-4701
Email: support.commercial@sbs.com
http://www.sbs.com

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General Product Description

The SBS IP-OCTAL Distribution Panel operates with Octal format IndustryPacks IP-OCTAL Serial and IP-OCTAL-422. Each panel interfaces up to two IndustryPacks to industry standard D9 connectors. Each D9 connector can be configured meet individual channel requirements. The D9 output emulates the IBM-PC/AT style output for RS-232. These signal names are provide in Figure 9.

The IP-OCTAL Distribution Panel is rack mountable into most standard 19" cabinets and only requires 1U (43.6mm) of rack space. Some mounting hardware is provided for your convenience. D9 to DB25 adapter cables are available in groups of eight. These adapters are shown in figure 10.

Repair

Service Policy

Before returning a product for repair, verify as well as possible that the suspected unit is at fault. Then call the factory for a RETURN MATERIAL AUTHORIZATION (RMA) number. Carefully package the unit, in the original shipping carton if this is available, and ship prepaid and insured with the RMA number clearly written on the outside of the package. Include a return address and the telephone number of a technical contact. For out-of-warranty repairs, a purchase order for repair charges must accompany the return. SBS will not be responsible for damages due to improper packaging of returned items.

Specifications

Capacity:		16 Channels of RS-232 or RS-422
Connector type		D9 Female IBM-PC/AT D9 Serial I/O output
Signals supported		
	RS-232	RX, TX, RTS, CTS, DTR, DCD, DSR, RI, GND
	RS-422	TX+, TX-, RX+, RX-, GND
Size, inch:		18.99 w 1.72 h 1.5 d
Weight:		1.45 lbs

Requires 50 pin ribbon cable (one per IndustryPack) and an IP-OCTAL Serial or IP-OCTAL-422

Installation and Jumper Options

The Octal panel can be mounted in a standard 19" rack with the provided hardware (4, 10-24 x 1" machine screws).consult the rack manufacturer if the provide hardware is not sufficient for installation.

IndustryPacks can be connected via a 50 pin flat cable to J1 and J2 (located on the back side of the panel). Be careful to put pin 1 in the right location. (The IP-50 cable is keyed to prevent incorrect installation)

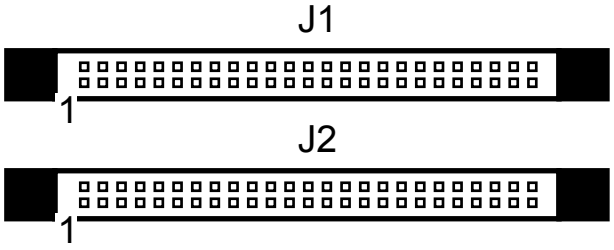


Figure 1. IP-Distribution connectors as viewed from unit back

Each channel of the Octal panel can be configured to meet individual needs. Each channel has a corresponding 16 pin jumper block. Factory default settings are shown below.

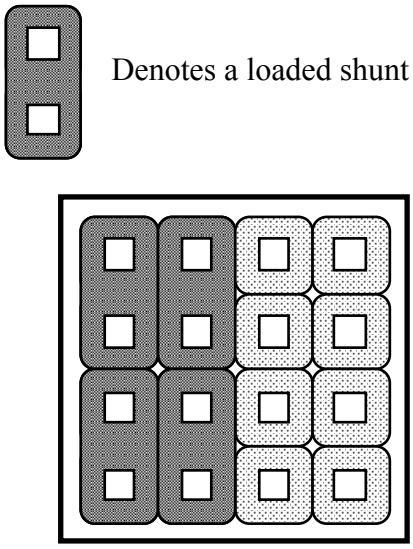
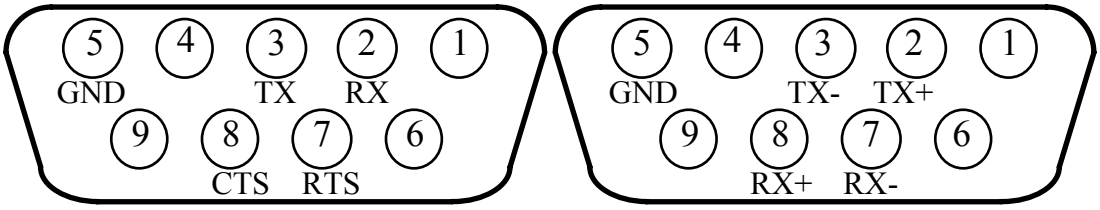


Figure 2. Default jumpering of the Octal Panel

The above jumper setting will allow connection to DCE equipment. The pin assignment on the D9 connector will be as follows:



PIN ASSIGNMENT FOR RS-232 PIN ASSIGNMENT FOR RS-422

Figure 3. Default D9 output

To allow connection to DTE RS-232 equipment, the following jumper setting is required:

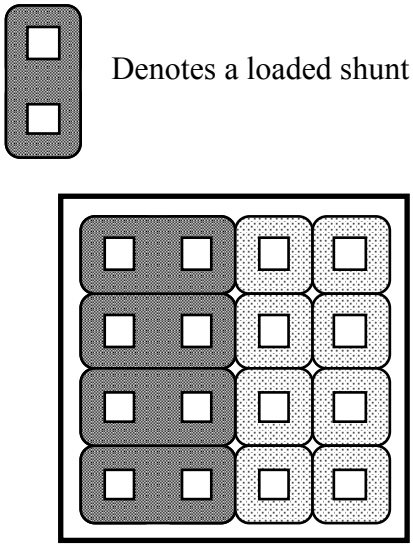
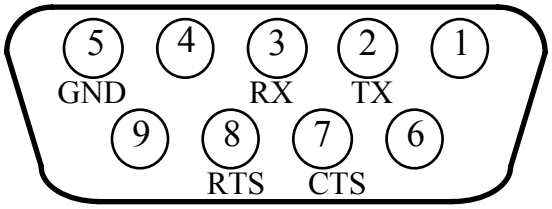


Figure 4. Null modem setting RS-232

The above jumper setting will assign pins on the D9 connector as follows :



PIN ASSIGNMENT FOR RS-232

Figure 5. Null Modem Output RS-232

To allow connection to DTE RS-422 equipment, the following wire wrapping is required:

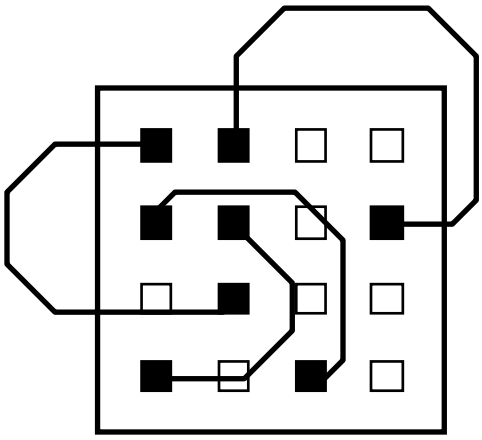
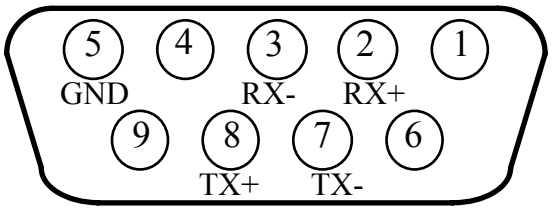


Figure 6. Null modem setting RS-422

The above jumper setting will assign pins on the D9 connector as follows :



PIN ASSIGNMENT FOR RS-422

Figure 7. Null Modem Output RS-422

The Octal panel can also be jumpered to support the following signals standard to some RS-232 equipment:

DCD (Data Carrier Detect)
DTR (Data Terminal Ready)
DSR (Data Set Ready)
RI (Ring Indicator)

Figure 8 shows the Pinout for the jumper blocks when connected to the IP-OCTAL serial (RS-232). The pins have been configured to provide the maximum amount of options with the use of shunt. If shunts are not available or the configuration required cannot be achieved with shunts, standard wire-wrapping can be done.

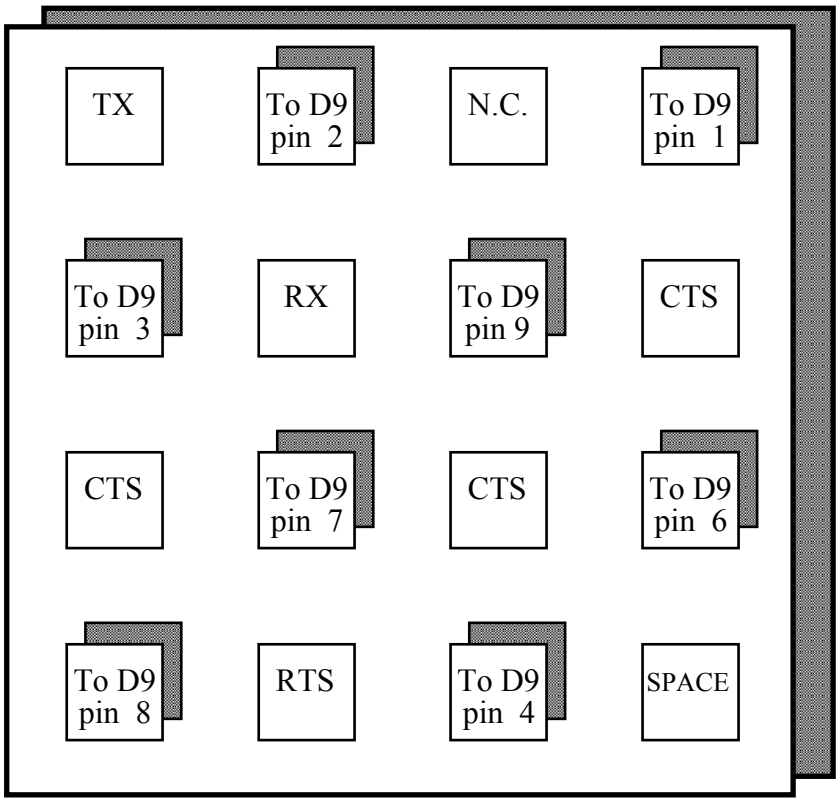


Figure 8. Jumper group pinout for RS-232

Figure 9 shows the Pinout for the jumper blocks when connected to the IP-OCTAL-422 (RS-422).

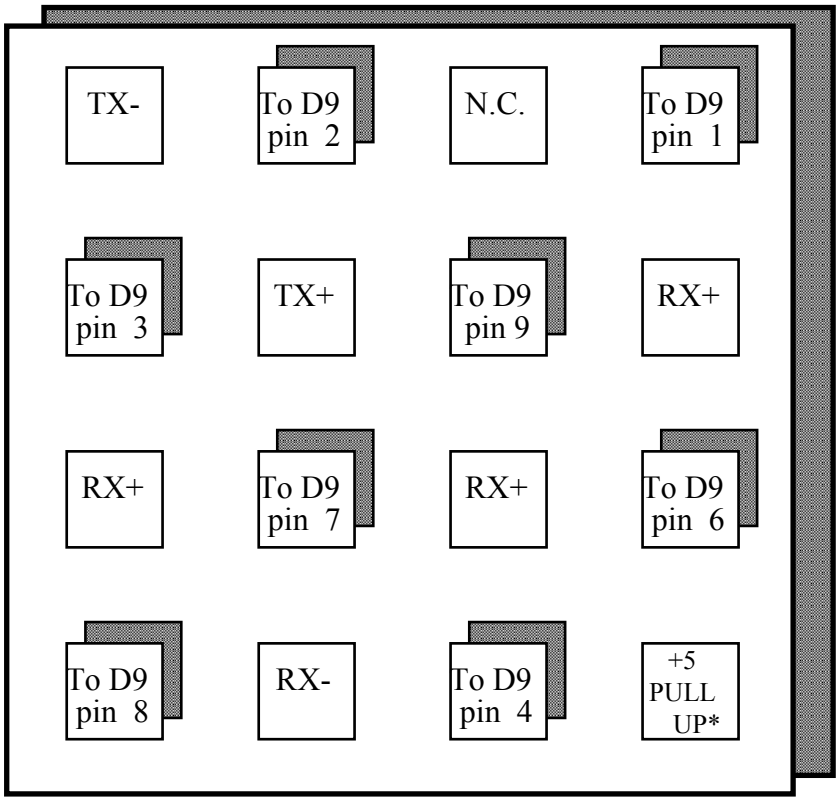


Figure 9. Jumper group pinout for RS-422

* Please note that the +5 pull up signal is a function of the installed Industry Pack. This signal is available through pin 42 of the IP's I/O connector. Refer to your IP-OCTAL documentation to verify that +5 volts is available on this pin.

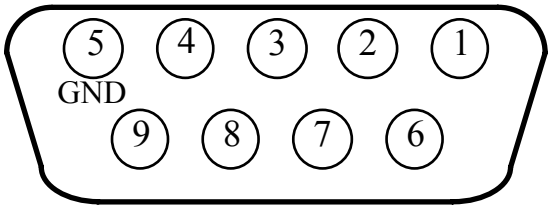


Figure 10. Basic pin out of D9 Female connectors

D9 to DB25 Translation

The following chart shows the industry standard RS-232 signals for the D9:

D9	DB25	Signal Name	
1	8	DCD	(Data Carrier Detect)
2	3	RX	(Receive Data)
3	2	TX	(Transmit Data)
4	20	DTR	(Data Terminal Ready)
5	7	GND	Ground
6	6	DSR	(Data Set Ready)
7	4	RTS	(Request To Send)
8	5	CTS	(Clear To Send)
9	22	RI	(Ring Indicator)

Figure 11. D9 to DB25 Translation