

DSX-1035

Communications Quadraplexor

- RS-232 / RS-485 In
- Master to Slave Star Wiring
- Slave to Slave Star Wiring
- **4 RS-485, 4 Wire Outputs**
- **1** RS-232, 3 Wire Output
- RS-232 Diagnostic Output
- Protocol Independent
- Communications Line Extender
- Mounts to door of 1040E Enclosure

General Application

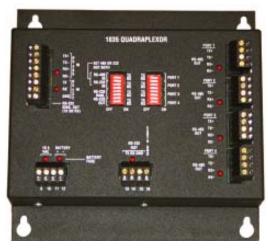
In the DSX system, the Quadraplexor is primarily used where Controller communications after the Master Controller could benefit from using several communication circuits (star configuration). In certain applications this could be more efficient than one continuous series loop. The DSX-1035 provides up to four RS-485 communication legs for Slave Controllers. The DSX-1035 can be placed anywhere after the Master in the panel-to-panel RS-485 network to provide branch circuits (star configuration) of panel communications. There can be any number of panels on each RS-485 output with each circuit running up to 4,000 feet to the first panel. Any number of Quadraplexors can be used in the System. The DSX-1035 has its own power supply and supports a standby battery. The DSX-1035 carries a limited 2 Year Warranty.

Panel to Panel Communications

The DSX-1035 is a true point to point, regenerative, RS-485, 4-wire, communications device. This allows the panel to panel network communications to be regenerated at each Controller providing up to 4000 feet of distance between Controllers over two twisted pair cable. Panel to Panel communications can be configured in a series loop, star configuration, or both. Star configurations require a DSX-1035 Quadraplexor.

Communications Multiplexor

The DSX-1035 Quadraplexor is protocol independent and can be used in any data communication system as a Short-Haul Modem to transmit data at rates up to 57.6K bit over a 2 twisted pair cable for 4,000 feet. The Quadraplexor will accept RS-232 or RS-485 as an input and provides 4 - RS-485 outputs and 1 - RS-232 output simultaneously. The RS-232 output can be connected to the RS-232 input of a second 1035 Quadraplexor which will then render 8 - RS-485 panel







communication lines available for Slave Controller communication. The Controllers communicate to each other and to the PC at 9600 baud. As long as the communications signal arrives at the Controller and/or at the PC in an asynchronous, full duplex mode, operating at 9600 baud, the method of communication in between can be just about any mode of transport such as Direct Wire, T1, Lease Line, or Fiber Optics.

Converter / PC

The DSX-1035 can be used when necessary to provide a RS-232 to RS-485 conversion between the PC and the Master Controller. This allows the Master to be up to 4000 feet from the PC. This could also be accomplished with a DSX-MCI module which is a single channel RS-232 to RS-485 converter.

Diagnostic Output

The Quadraplexor provides a Diagnostic Output to monitor data transmissions. The Diagnostic Output may be used to monitor the transmit or receive side of the data being sent through the DSX-1035. The diagnostic output is selected by dip-switch and both transmit and receive can be selected at once.

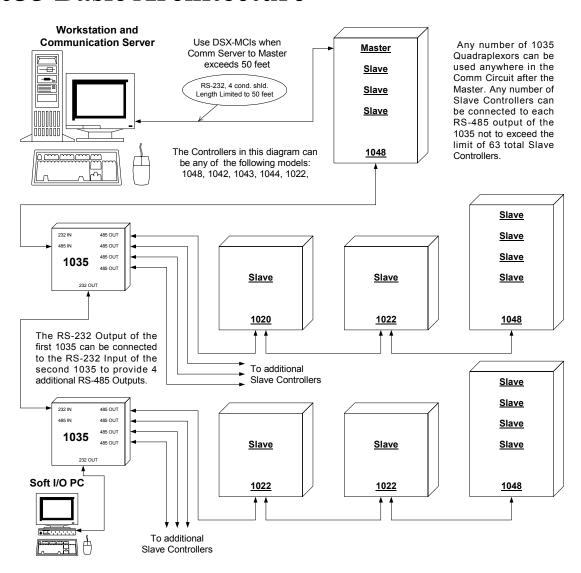
Power

The DSX-1035 is powered from its own 16.5 VAC 40VA transformer and will charge a 12V 7AH Battery. It is important that the DSX-1035 be Earth Grounded for proper operation and for the built-in transient protection to be effective.

Mounting

The DSX-1035 Quadraplexor is designed to fit in the same Equipment Cabinet as the DSX-1048 and DSX-1032 Controllers on the inside of the door. It has key slotted mounting holes and removable terminal blocks.

DSX-1035 Basic Architecture





CE

DSX-1035 Specifications

Size

DSX-1035 7.25" W x 6.75" H x 2.0" D

Weight

DSX-1035 2.00 lb.

Finish

Black Powder Coat with White Silkscreen.

Temperature/Humidity

Operating 32 to 131 F / 0 to 95%, relative

Supply Voltage

AC Input Voltage 16.5 VAC 40VA or DC Input Voltage 12 VDC @ 500 ma

Current Requirements

DSX-1035 only 12 VDC @ 500ma

Standby Power

Trickle Charge 13.5 VDC 500ma Fused For UL Installations, battery must be Powersonic PS-1270, Interstate

PC-1270, or a SBS S-1272.

Inputs

RS-232 50 feet max RS-485 4000 feet max

Outputs

RS-485 4-Wire 4

RS-232 3-Wire 1 RS-232 Diagnostic 1

Warranty

Limited 2 Year 1035/0304.p65

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