RS-232 Port Multiplexer Model PM-110



OVERVIEW

The PortMUX, Model PM-110, is a software controlled multiple channel, bidirectional electronic switch that allows a PC or similar controller with an RS-232 port to communicate with multiple RS-232 port equipped devices. The PortMUX allows the user to break the RS-232 barrier of one instrument per computer port, and operate as many RS-232 instruments from a single computer port as necessary. A single PortMUX can directly operate up to five RS-232 instruments, and, by cascading PortMUXs together, any number of instuments can be operated. The PortMUX port to be communicated with is software selected by manipulating the control lines (RTS and DTR) of the computer port. No characters are passed through to the slave ports because it uses handshake lines to select ports.

OPERATION

PortMUX operates from standard RS-232 signals and can function with any software that properly manipulates the computer's RS-232 port. PortMUX has eight channels, five of which carry bi-directional data to external ports. The other three channels facilitate the detection of a PortMUX's presence on a computer port. Individual PortMUX channels are selected by a self-contained shift register operated from the standard RTS (pin 7) and DTR (pin 4) control lines of the computer's RS-232 port. If a PortMUX is to be used with MeterBOSS, all operating code (drivers) and PortMUX presence detection are automatically accomplished by the MeterBOSS software. MeterBOSS software is available through B&B Electronics. The PortMUX can also raise the RTS and DTR handshake lines in order to port power measuring devices or converters. Port-powered converters, like B&B Electronics Model 485SD9TB, can be powered on ports A-E (output ports). Only the TX and RX lines are passed through from the input port to the output ports.

CASCADING

To cascade PortMUXs, connect the first PortMUX (input port) to the computer with the cable provided and connect the input of a second PortMUX to any of the output ports (A through E) of the first PortMUX with the cable provided. If you desire, space can be saved by plugging one PortMUX directly into another.

VISUAL INDICATORS

Each PortMUX output port is equipped with red and green LED indicators. The green indicator lights when a signal is passing out of the nearby port from the computer. The red indicator lights when a signal is passing into the nearby port from the connected instrument. Electronic pulse stretchers are used to drive the indicators so their illumination will be visible regardless of the speed or shortness of the data transmission.

CONNECTORS

The PortMUX has 5 output ports and 1 input port. The output ports are DB9 males and the input port is a DB9 female.

POWER SUPPLY

The PM-110 requires 9VAC at 200mA. The power supply comes with the PortMUX.

SPECIFICATIONS

Model:	PM-110
Power:	9VAC @ 200 mA
Dimensions:	5.5" L x 3.0" W x 1.0" H

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