



# REFERENCE MANUAL MODEL 268 RS-232 OPTICAL ISOLATOR

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide a reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

## 1.0 GENERAL DESCRIPTION

The Model 268, Opto Isolation Module, provides for a complete full duplex (including control signal) electrical isolation channel between two RS-232 devices. This isolation is an important consideration if a system uses different power sources, has noisy signals or must operate at different ground potentials.

## 2.0 SPECIFICATION

2.1 **Interface** - Conforms to EIA RS-232D and CCITT V.24 Specifications. Pin 2 and 3, Transmit and Receive Data, Pin 4 and 5, Request to Send and Clear to send (Pin 20, Data Terminal Ready and Pin 8, Data carrier detect can be used instead of RTS & CTS by reconfiguring internal jumpers), Pin 7, Signal Ground.

2.2 **Connectors** - DTE = DB-25F, DCE = DB-25M

2.3 **Data Rate** - 0 to 19,200 Bps

2.4 **Isolation** - 1500 VAC

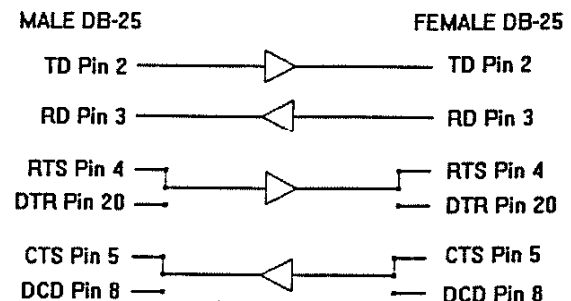
2.5 **Power** - None required, derived from incoming data signals and control signals.

2.6 **Size** - 2.25" W x 6.75" L x 1" H

2.7 **Environment** - 0 to 50C, 5% to 95% RH (no condensation)

## 3.0 OPERATION

The Model 268 has been designed so that the user need only connect their equipment to the proper DB-25 on the Model 268. The male DB-25 connector is a DCE port and will connect to a DTE device, such as a terminal or PC and the female DB-25 DTE port should get connected to a DCE interface, like a dial-up modem. The direction of each signal is shown in Fig. 1.



Direction Of Signals  
Figure 1

The Model 268 does have the option of reconfiguring which control signal shall be used. DTR can be selected instead of RTS and DCD instead of CTS. To reconfigure the unit

remove the 4 screws located on the top of the unit. The jumpers are located near each DB-25, as shown in Fig. 2, and can be set according to the needs of your system. Once the jumpers are set, replace the cover, making sure that the end marked DCE is facing the male DB-25.



Model 268 Jumper Positions  
Figure 2

## 4.0 CONNECTOR PIN ASSIGNMENT

Pin	EIA	CCITT	Name
2	BA	103	Transmit Data
3	BB	104	Receive Data
4	CA	105	Request To Send
5	CB	106	Clear to Send
7	AB	102	Signal Ground
8	CF	109	Data Carrier Detect
20	CD	108.2	Data Terminal Ready

## 5.0 POWER

The Model 268 incorporates micro power DC to DC converters that generate the necessary power for operation. There are two sets of these circuits, one for each port, and will power the unit even if only TD & RD are connected.