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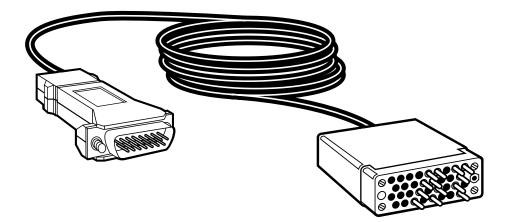
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JANUARY 1995 IC940A-F IC940A-M

## V.35/X.21 Bi-Directional Interface Converter



CUSTOMER SUPPORT INFORMATION Call our Technical Support Specialists to discuss your application. For 24-hour technical support: Call (412) 746-5500 or Fax: 1-800-321-0746 To order: Call (412) 746-5500 8:00 A.M. to 8:00 P.M. EST Mail order: Black Box Corporation, P.O. Box 12800, Pittsburgh, PA 15241

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## 1. Specifications

Data Rates-Up to 2048 kbps

Transmission Format— Synchronous, transparent to protocol

Transmission Mode—Full-duplex

**Temperature**—32° to 122° F (0° to 50° C)

Humidity—Up to 90%, noncondensing

#### Interface Connections—

V.35: IC940A-M M/34 male (configured as DCE), IC940A-F M/34 female (configured as DCE); X.21: IC940A-M, IC940A-F: DB15 male (configured as DTE) **Cable length between connectors**— 6.5 ft. (1.9 m)

**Power**—interface-powered V.35 pins C, D, E, or F or X.21 pins 3, 10, or 15

**Size**—V.34 connector: 0.9"H x 2"W x 2.5"D (2.3 x 5.1 x 6.4 cm), DB15 connector: 1"H x 1.8"W x 2.8"D (2.5 x 4.6 x 7.1 cm)

Weight—0.9 lb. (0.4 kg)

# 2. Introduction

The V.35/X.21 Bi-Directional Interface Converter performs bidirectional conversion of both the physical and electrical specifications of a V.35 device to those of an X.21 device.

Two models are available for connecting a V.35 DTE to an X.21 DCE:

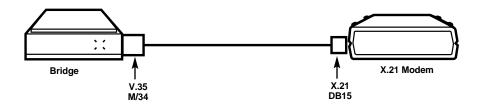
- IC940A-M: Male V.35 (DCE) to Male DB15 (DTE)
- IC940A-F: Female V.35 (DCE) to Male DB15 (DTE)

### 3. Installation

Choose a location so that you can connect the devices directly to the converter. The units are designed to operate over short distances. We do not recommend attaching additional cables to the ends of the converter.

Connect the M34/V.35 DCE connector directly to the DTE equipment. Connect the DB15/X.21 connector directly to the DCE equipment. There are no internal jumpers or switch setting to configure. The converter is transparent to baud rate and protocol and contains only passive components.

A typical application appears in **Fig. 3-1**.



#### Fig. 3-1. Typical Application.

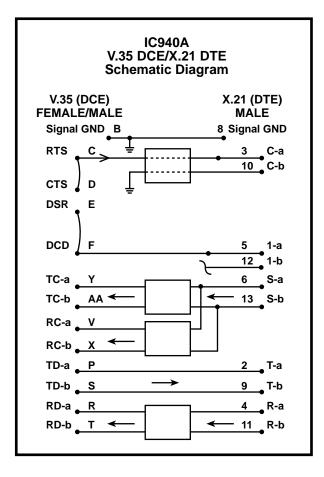


Fig. 3-2. Pins Supported.