

Description

FIB-232A is a compact, self-contained fiber interface converter that provides for extension of the RS-232 communication standard over fiber media. **FIB-232A** consumes power from an external 12VDC, 400mA, AC switching power adapter. Depending on the model, **FIB-232A** provides extension over multi-mode fiber cable up to 2Km or single mode fiber up to 120Km. **FIB-232A** is available with three of the industry's leading standard fiber connectors, ST, SC or FC type.

FIB-232A requires absolutely no configuration whatsoever. Just connect the serial interfaces, attach the optical cables and apply external power.

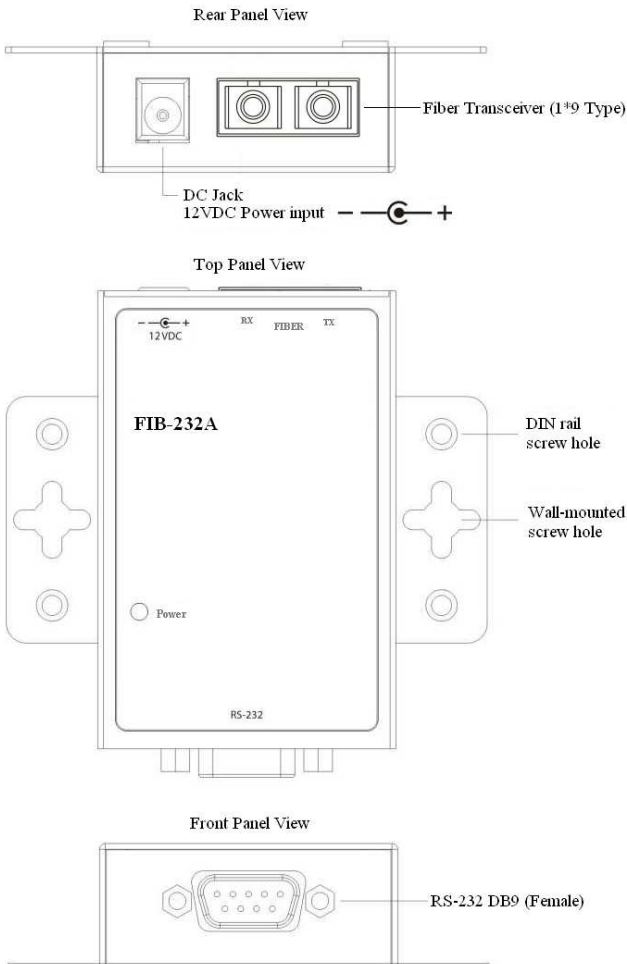
Features

- Compact size
- Wall mount, DIN rail mount option
- ST or SC type connectors.
- Multi-mode 62.5/125 μ m fiber cable up to 2Km.
- Single-mode 9/125 μ m fiber cable up to 120Km.
- FULL duplex
- Power budget: 11dB to 35dB. (transceiver dependant)
- RS-232: DB9 Female (DCE).
- Speed: DC ~ 230,400bps.
- BER: <10⁻¹⁰.
- Power LED indication

User Guide

EIA-232 to Fiber Media Converter

- FIB-232A-ST
- FIB-232A-SC
- FIB-232A-FC



Specifications

Standards	EIA 232E, CCITT V.28
Mode	Asynchronous DCE
Connector	DB9 Female
Data Rate	DC to 230.4Kbps
Input logic low	Max. 0.8V threshold
Input logic high	Min. 2.0V threshold
Receiver range	-30V to +30V
Transmitter output	-5V to +5V
Output resistance	300 Ω
Fiber Port	155M Fiber Transceiver, 1x9 Type
Power Adapter	DC12V, 400mA
Consumption	<100mA (~1 watt)

Physical

Dimensions	50mm x 95mm x 22mm WxLxH (2in x 3 3/4in x 7/8in)
Weight	90 grams net (3 oz. US)

Environment

Operation	0 ~ 50°C (32~122°F), 20 ~ 95% RH
Storage	-20 ~ 80°C (-4~176°F), < 95% RH

Installation

FIB-232A must be used in pairs. Connect the fiber cable between the Fiber Media Converters. Make sure the fiber Tx of one converter connects to the fiber Rx of the opposite converter.

The DB9 Female connector provides the RS-232 connection. Wired as a DCE (Data Communications Equipment) device, the **FIB-232A** uses a simple 3-wire scheme of TD, RD and Signal Ground (SG). For a DCE device, the RD signal (pin 2) is an output while the TD signal (pin 3) is an input. All other handshaking signals are floating.

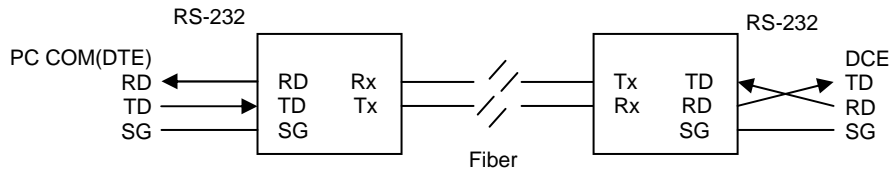
When connecting to a computer's COM port, use a one to one serial cable. When connecting to other DCE equipment, cross over the TD and RD signals.

Install the fiber converter with the AC power adapter provided (+12VDC, 400mA) and connect the adapter to an AC outlet.

Pin Assignment

RS-232 pin on DB9 Female		
Pin No.	Direction	Function
1	NC	
2	OUT	RD
3	IN	TD
4	NC	
5	---	SG
6	NC	
7	NC	
8	NC	
9	NC	

Typical RS-232 Extension Application



CTC sales@ctcu.com

www.ctcu.com

CTC sales@ctcu.com

www.ctcu.com

Model Summary

FIB-232A/STxxx ST connector
 FIB-232A/SCxxx SC connector
 FIB-232A/FCxxx FC connector

Where xxx =

002 2km MM 1310nm 11dB
 015 15km SM 1310nm 18dB
 030 30km SM 1310nm 20dB
 050 50km SM 1310nm 28dB
 080 80km SM 1550nm 29dB
 120 120km SM 1550nm 35dB

Technical Contact

CTC Union Technologies Co., Ltd.
 Far Eastern Vienna Technology Center
 (Neihu Technology Park)
 8F, No. 60 Zhouzi St.
 Neihu, Taipei, 114 Taiwan
 Phone: +886-2-2659-1021
 FAX: +886-2-2799-1355

Version 1.0 First Release, May 3, 2012

This document is the current official release manual. Please check CTC Union's website for any updated manual or contact us by E-mail at sales@ctcu.com. Please address any comments for improving this manual or to point out omissions or errors to marketing@ctcu.com. For technical support for this product or other CTC Union products, contact our support staff at techsupport@ctcu.com. Thank you.

CTC sales@ctcu.com

www.ctcu.com

CTC sales@ctcu.com

www.ctcu.com

Warning

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 reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause harmful interference in which case the user will be required to correct the interference at his own expense. NOTICE: (1) The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. (2) Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

CISPR PUB.22 Class A COMPLIANCE:

This device complies with EMC directive of the European Community and meets or exceeds the following technical standard. EN55022 -Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment. This device complies with CISPR Class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CE NOTICE

Marking by the symbol CE indicates compliance of this equipment to the EMC directive of the European Community. Such marking is indicative that this equipment meets or exceeds the following technical standards: EN55022:1994/A1:1995/A2:1997 Class A and EN61000-3-2:1995, EN61000-3-3:1995 and EN50082-1:1997