



Fiber Optic Cable Installation

For 2364P Parallel Configurations

Contents

This document shows how to install the RGU-to-RGU (R2R) fiber optic cable in a parallel configuration.

What This Kit Contains


Using the table below, verify that you have received the appropriate items in your kit:

For this part:	You should receive this quantity:
fiber optic cable	1


Fiber optic cables are available in three different lengths. 26 foot (7.92 m) cables are used for most connections. The 6 foot (1.83 m) and 34 foot (10.36 m) cables are used when connecting to an R2R hub board (see Figure 3). Verify that you have the appropriate cable for your configuration.

Figure 1
Cable Lengths Available


6 foot (1.83m) Cable



26 foot (7.92m) Cable



34 foot (10.36m) Cable



Other Items Needed

Before you begin, be sure you also have the following:

- Tools and items you will need for:
 - Measuring voltages
 - Securing wires (tie wraps)
- Documentation:
 - Your drive system schematics
 - Publication 2364P-5.01, *Parallel Configuration–User Manual*

Safety Precautions

The following general precautions apply when servicing your parallel configuration:



ATTENTION: Only those familiar with the drive system, the products used in the system, and the associated machinery should plan or implement the installation, startup, and future maintenance of the system. Failure to comply can result in personal injury and/or equipment damage.

ATTENTION: Verify that all sources of AC and DC power are deenergized and locked out or tagged out in accordance with the requirements of ANSI/NFPA 70E, Part II.

ATTENTION: The system may contain stored energy devices. To avoid the hazard of electrical shock, verify that all voltage on capacitors has been discharged before attempting to service, repair, or remove a drive system or its components. You should only attempt the procedures in this manual if you are qualified to do so and are familiar with solid-state control equipment and the safety procedures in publication NFPA 70E.

ATTENTION: When servicing any unit, do not drop any nuts, bolts, washers, etc. inside the unit, as they may cause a short circuit on power up.

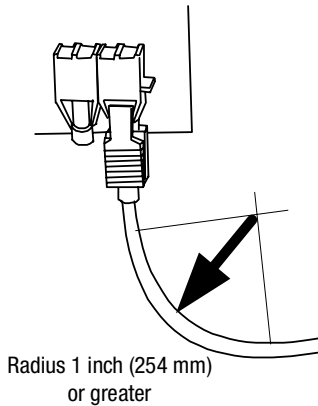
ATTENTION: This drive system contains ESD (Electrostatic Discharge) sensitive parts and assemblies. Static control precautions are required when installing, testing, or repairing this assembly. Component damage can result if ESD control procedures are not followed. If you are not familiar with static control procedures, refer to Allen-Bradley publication 8000-4.5.2, *Guarding Against Electrostatic Damage* or any other applicable ESD protection handbook.

Wiring Guidelines

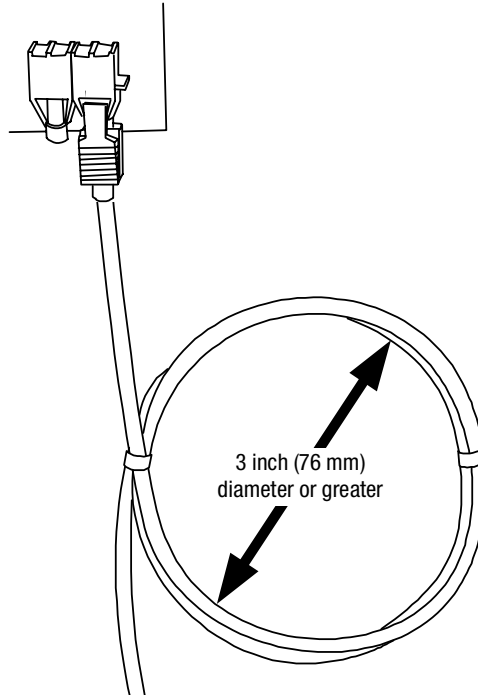
Fiber optic cables are fragile and can be damaged if not handled properly. Please adhere to the guidelines shown in Figure 2 when installing the fiber optic cables.

Figure 2
Wiring GuideLines

Bending Radius

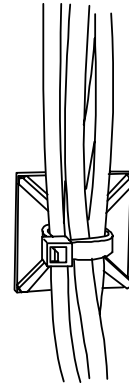


Coiling Excess Cable



Tie Wrap

Do not overtighten tie wraps



The fiber cable should be able to move freely within the cable tie wrap.

Installing the Fiber Optic Cable(s)

1. Using a meter, test the voltage across the AC line, and across the DC bus.



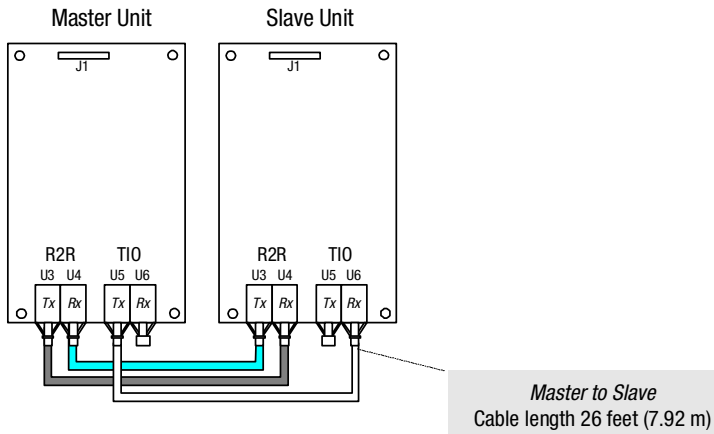
ATTENTION: If there is any voltage present, remove the source of the voltage. Check for voltages again before proceeding to the next step.

2. Connect the cables to the R2R boards according to Figure 3. Routing paths for cables are given in publication 2364P-5.01, Parallel Configuration–User Manual.

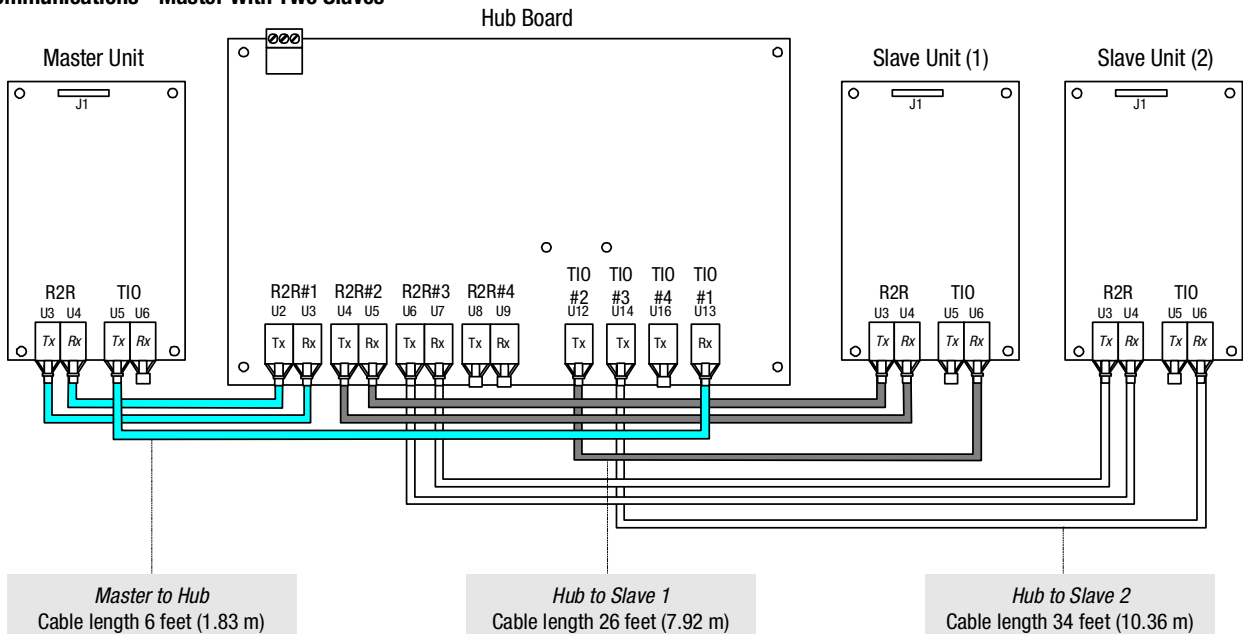
Inspection Precaution: Sharp bends, kinks, and deep nicks in the cable may greatly affect the performance of the fiber cable. Replacement may be necessary in these cases.

Figure 3
Fiber Optic Cable Connections

R2R Communications - Master With One Slave



R2R Communications - Master With Two Slaves



Reach us now at www.rockwellautomation.com

Wherever you need us, Rockwell Automation brings together leading brands in industrial automation including Allen-Bradley controls, Reliance Electric power transmission products, Dodge mechanical power transmission components, and Rockwell Software. Rockwell Automation's unique, flexible approach to helping customers achieve a competitive advantage is supported by thousands of authorized partners, distributors and system integrators around the world.



Americas Headquarters, 1201 South Second Street, Milwaukee, WI 53204, USA, Tel: (1) 414 382-2000, Fax: (1) 414 382-4444
European Headquarters SA/NV, avenue Herrmann Debroux, 46, 1160 Brussels, Belgium, Tel: (32) 2 663 06 00, Fax: (32) 2 663 06 40
Asia Pacific Headquarters, 27/F Citicorp Centre, 18 Whitfield Road, Causeway Bay, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Rockwell Automation