

10 Base-T To Fiber Transceivers  
Series DL213/DL213A

# 10BASE-T TO FIBER TRANSCEIVERS INSTALLATION MANUAL SERIES DL213/DL213A

## Description

This manual covers installation procedures for the following RJ45 (10 Base-T) to Fiber Transceivers:

- Series DL213 - Two Fiber Transceivers
- Series DL213A - One Fiber Transceivers

Description	Part Number	Wave-length	# of Fibers	Max Optical Attenuation		Approximate Distance
				62mm	9mm	
Transceiver	DL213	850nm	2	8dB	-	0-2 Km
"	DL213/13	1300nm	2	9dB	-	0-5 Km
"	DL213/SM	1300nm	2	-	9dB	0-20 Km
"	DL213/SMHP	1300nm	2	-	18dB	15-50 Km
"	DL213/SMSP	1300nm	2	-	28dB	30-80 Km
"	DL213/SMUP	1550nm	2	-	28dB	60-110 Km
"	DL213A	1300nm	1	7dB	-	0-4 Km
"	DL213A/SM	1300nm	1	-	9dB	0-20 Km
"	DL213A/SMHP	1300/1550	1	-	18dB	15-50 Km
"	DL213A/SMSP	1300/1550	1	-	28dB	30-80 Km

## General

The Series DL213/213A is a Half/Full Duplex 10 Mbs transceivers. Series DL213/213A on both ends of the fiber must each be connected to a port on a switch or router that has been "Force Set" for half or full duplex operation. These transceivers will not operate at all if the switch port is set for "Auto Negotiation"! All Radiant switches can be force set for half or full duplex operation.

Please reread the above paragraph, it is EXTREMELY important. If the proper connections are made, these transceivers will transmit information over long distances, as noted. There are no adjustments to make.

## LED Indicators

The Series DL213/213A has the following indicators to monitor network status:

LED	State	Description
Power	On	Power is connected.
	Off	Power is not connected properly.
Data Detect	On	Data is being received from TP input
	Off	No data
Twisted Pair	On	Proper RJ45 connection
	Off	No RJ45 connection, or must switch to crossoverRJ45 cable (if straight cable is being used) or straight RJ45 cable (if crossover cable is being used).
Received Optical	On	Link has been acheived - data received from remote end.
	Off	No Link - fiber is broken, or loss budget has been exceed ed, or no data received from remote end.

## Installation

The Series DL213/213A is available in a standalone can or can be ordered as a rack mount card which can be mounted in our card cage #CR200 ET/EPS. The standalone can has a power supply which must be plugged in.

## IMPORTANT

The DL213A/SMHP and DL213A/SMSP transceivers are sold in matched pairs only. One unit has a 1300nm transmitter and the companion unit has a 1550nm transmitter, as noted on the units. The DL213A/SM units are both 1300nm.

In case of problems, contact Radiant 800-969-3427

FIG. 111A (2 Sheet)

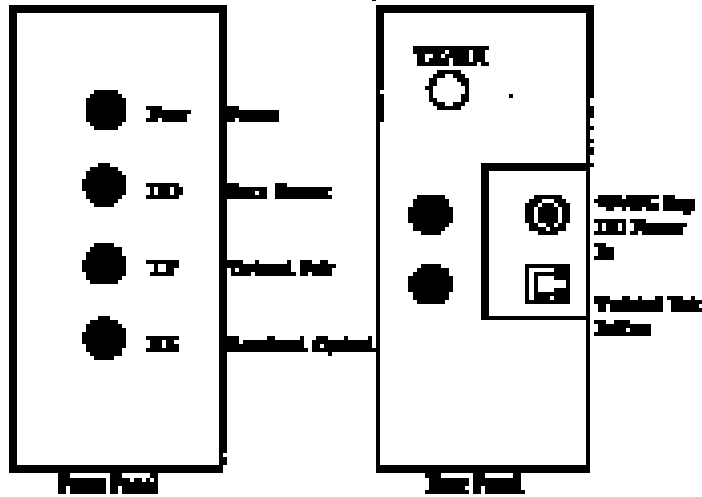
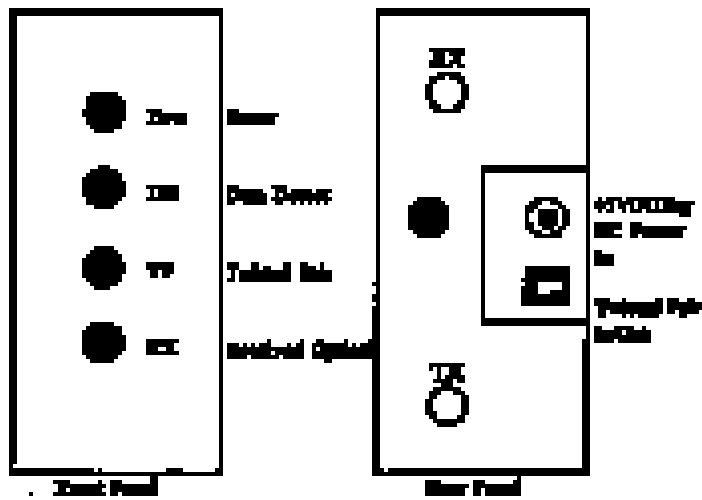


FIG. 111B (2 Sheet)



## **IMPORTANT NOTE**

Many of our Fiber Optic Electronic Systems are manufactured to transmit signals over the maximum distance possible. This is true for both singlemode and multimode versions. However, it is especially true for singlemode fiber systems, many of which are manufactured to transmit up to 50Km (30 miles).

For short lengths of fiber optic cable, the receiver may saturate - the amount of light intensity may be too high for the receiver to handle. When this occurs, the system will not operate properly. This frequently occurs when singlemode video systems are tested on a bench using a short jumper. But it can also happen when a 50Km singlemode system is used over a 5Km length of cable. For multimode system, a 3Km system may saturate when used over a 1500 foot length of cable.

There is a simple solution to the problem of saturation. If you suspect this is happening, contact the factory. We will be happy to provide you with a fixed attenuator to increase the losses in your fiber optic cable. This extra loss will decrease the light intensity to allow the system to operate properly.

## **WARRANTY**

Radiant Communications Corporation warrants that at the time of shipment the products manufactured by Radiant Communications Corporation will be free from defects in material and workmanship and will conform to the specifications furnished by or approved by Radiant Communications Corporation.

Should any defects appear within 1 year from date of shipment, Radiant Communications Corporation shall at its sole discretion repair or replace the defective material. Such material shall not be accepted for return or repair without prior notification of Radiant Communications Corporation.

Return shipments to Radiant Communications Corporation shall be at the buyers expense. Radiant Communications Corporation will return said equipment prepaid via best way.

The foregoing warranty is in lieu of and excludes any and all other expressed or implied warranties of merchantability or fitness, or otherwise. Items manufactured by any supplier other than Radiant Communications Corporation assumes no responsibility for the performance or reliability of the product.

Radiant Communications Corporation will not be liable for any special or consequential damages, or for loss, damages, or expense directly or indirectly arising from the use of the products or any inability to use them either separately or in combination with any other equipment or material or from any other cause.

The warranty does not extend to any product manufactured by Radiant Communications Corporation which has been subject to misuse, neglect, accident, improper installation, act of God or in violation of the instructions furnished by Radiant Communications.