



How to connect 48VDC power to Multicom Fiber Optic Products

Multicom, Inc.

1076 Florida Central Parkway, Longwood, FL 32750

www.multicominc.com

July 2017 (Version 1a)

This manual is intended solely for use by purchasers of Multicom, Inc. fiberoptic products and their qualified service technicians. This document is the property of Multicom, Inc. and incorporates proprietary subject material and information. The use of all design, manufacture, reproduction, and all other rights regarding these contents in whole or part without Multicom, Inc. written consent is expressly prohibited. **Multicom® and the Multicom logo are registered trademarks of Multicom, Inc.**

SAFETY CONSIDERATIONS



WORK ON THE EQUIPMENT WITH ALL POWER SHUT DOWN.

Dangerous voltages are present within the equipment. These voltages may not be insulated and may be of sufficient strength to cause serious bodily injury if touched. DO NOT OPEN THIS EQUIPMENT.

IN REDUNDANT POWERED EQUIPMENT BOTH POWER SUPPLIES MUST BE TURNED OFF/DISCONNECTED TO POWER DOWN THE UNIT.

Only qualified service personnel are to install or service the equipment. The performance and reliability of the equipment can be adversely and permanently affected by incorrect installation or servicing and the safety of the equipment operator can be compromised. Problems caused by unqualified installation/service personnel are NOT COVERED BY WARRANTY.



Optical Output Safety: These products may emit harmful laser radiation if powered on and the optical path is exposed or the case is opened.

DANGER: DO NOT WORK ON THE OPTICAL PATH, CONNECTIONS, ETC WHEN POWER IS ON OR UPSTREAM/DOWNSTREAM OPTICAL CONNECTIONS ARE TRANSMITTING LASER.

IMPORTANT SAFEGUARDS

Multicom, Inc. strongly advises you to read and understand the following safety instructions prior to installing and operating this equipment.

- **Read These Instructions first:** All safety and operating instructions should be read thoroughly and understood completely before installing or operating this equipment. All safety and operating instructions should be retained for future reference.
- **Heed All Warnings:** All warnings on the equipment and in this Operating Manual should be adhered to.
- **Provide the Required Power sources:** Operate this equipment only from the type of power source indicated on the rear panel. CAUTION: For continued protection against risk of fire, replace the fuses (if necessary) with only one of the same type and rating.



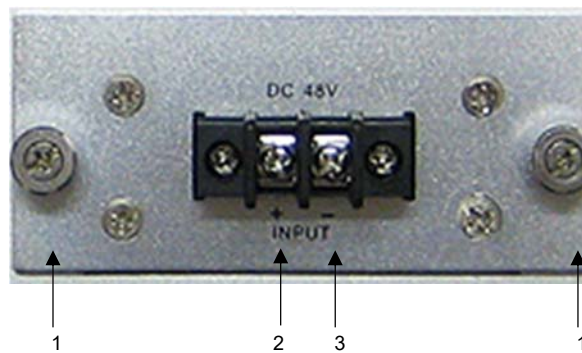
1.0 48VDC Power Modules (Optional)

Multicom provides a 48VDC powering option for its Fiber Optic product line including 1310nm and 1550nm transmitters, EDFAs, and receivers. The redundant, hot swappable 48VDC power supplies include several models which are labeled as shown below.

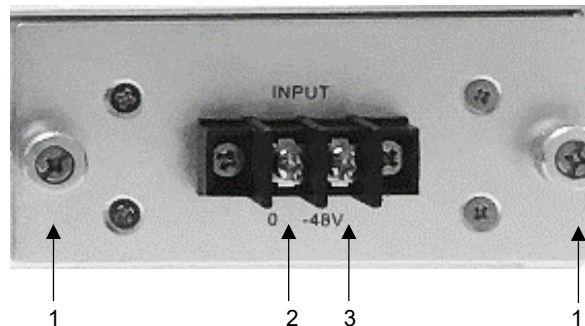
CRITICAL: VERIFY THE 48VDC POWER VOLTAGE AND POLARITY WITH A MULTIMETER BEFORE ATTACHING AND TURNING ON POWER.

Be very careful to attach the power wiring to these 48VDC power supplies correctly, with the correct polarity, supply turned off, or the 48VDC equipment power supplies can be permanently damaged, and due to this installer error – ARE NOT COVERED BY WARRANTY.

DC Power Model A



DC Power Model B



1	Retaining screws	2	+ Positive terminal block	3	- Negative terminal block
---	------------------	---	---------------------------	---	---------------------------



As a general rule: the most positive supply wire is to be connected to the “+” or “0” terminal and the most negative is to be connected to the “-“ or “-48” terminal.

When using a DC power supply with +48VDC and Ground: attach the +48VDC wire to the #2 Positive terminal (labeled + or 0 as shown above) and attach the Ground/Return wire to the #3 Negative terminal (labeled – or -48 as shown above).

When using a DC power supply with -48VDC and Return: attach the Ground/Return wire to the #2 Positive terminal (labeled + or 0 as shown above) and attach the -48VDC wire to the #3 Negative terminal (labeled – or -48 as shown above).

2.0 Disclaimer

Multicom reserves the right to change any products described herein at any time, and without prior notice. Multicom assumes no responsibility or liability arising from the use of the products described herein, except as expressly agreed to in writing by Multicom, Inc. The use and purchase of this product does not convey a license under any patent rights, copyrights, trademark rights, or any intellectual property rights. Nothing hereunder constitutes a representation or warranty that using any products in the manner described herein will not infringe any patents of third parties.

The contents of this manual are subject to change and/or update without notice.