



FIBT-1310 Series

1310nm Fiber Optic Transmitters
Stock No. 7603 Series

General Installation Instructions

You will find the following items in the box:

- FIBT-1310 Series 1RU transmitter (QTY=1)
- Power Cord with IEC C13 line socket and 3-pin Type B NEMA 5 plug (QTY=1)



CAUTION: If any of the equipment appears to have been damaged, do **NOT** connect it to a power source. This will only cause additional damage to the unit. Contact Technical Support for further instructions.

The following tools and supplies are recommended for installation:

- An optical power meter
- A digital multimeter
- An RF signal meter or spectrum analyzer
- A standard SC/APC fiber test jumper
- Denatured or 99% pure isopropyl alcohol and lint-free fiber optic cleaning wipes.

Operational Setup

The FIBT-1310 Series transmitters are designed to be installed into any standard 1RU 19" rack. Verify that the power source to the rack is turned OFF before installing the unit into the rack.

- 1** Mount and secure the unit's front panel to the rack by inserting four (4) machine screws, with cup washers, through the four (4) mounting holes in the front panel. Ground the case immediately afterward.
- 2** Check input voltage using a digital multimeter in accordance with power requirement. After you are satisfied with the results, plug in the power cable.
NOTE: When the unit is first plugged in, it will briefly beep one time. This indicates that the transmitter has successfully initialized.
- 3** Check the message on the LCD and the status of the front panel LED indicator. Push the **UP** and **DOWN** buttons to check each parameter, insuring that the transmitter is operating normally.
NOTE: If there is no RF input, the status LED will be a steady orange and the LCD will display "**INPUT RF IS LOW**".
- 4** Connect a standard SC/APC fiber test cable to the transmitter's optical output. Measure the optical output power and confirm that it is approximately the same as the value displayed on the LCD.
NOTE: When measuring the optical power, make sure the optical power meter is set for 1310nm wavelength and the fiber test connector is clean.
- 5** Measure the input RF level with an RF signal meter or a spectrum analyzer, making sure the RF signal is in the AGC range of the transmitter (+15 to +25 dBmV). At this time, you can connect the RF signals to the RF IN port of the FIBT. The front panel Status LED should be Green and the LCD will display the RF input level as "**INPUT RF=XXdBmV**".
- 6** Re-measure the optical output power to ensure that it is normal. Remove the standard fiber test jumper and optical power meter, then connect the FIBT to the network.



NOTE: Factory MOD Level is set for optimum CSO/CTB/CNR. It is recommended to record this setting prior to changing MOD Level. See the User Manual for more information.

Need More Information?

For additional information and product warranty, download the latest User Manual (PDF) by visiting our website.

Navigate to the product page by entering the full Model Name or Stock Number in the search field. Upon reaching the product page, the "User Manual" download link will be located beneath the product image.

www.blondertongue.com

For technical support please contact us at 1-800-523-6049 between the hours of 8am and 5pm EST.



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Safety Instructions

**WARNING INVISIBLE LASER RADIATION
AVOID DIRECT EYE EXPOSURE TO BEAM** 

Class 1 Laser Product IEC 60825-1: 2014
Wavelength: 1.31µm Max Output: 31mW

**ATTENTION LASER RADIATION INVISIBLE EVITER
UNE EXPOSITION DIRECTE DES YEUX AU FAISCEAU**

HAZARD

LEVEL 1

IEC 60825-2:2004

WARNING

**CLASS 3B LASER
INVISIBLE RADIATION
WHEN OPENED** 


**AVOID DIRECT EYE
EXPOSURE TO BEAM**

ATTENTION

**LASER DE CLASSE 3B
RAYONNEMENT INVISIBLE
À L'OUVERTURE** 

**ÉVITER LES YEUX DIRECTS
EXPOSITION AU FAISCEAU**

WARNING: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. The optical emissions from the units are laser-based and present eye hazards. Avoid Exposure and follow all safety precautions.

 The YIELD sign symbol is intended to alert you to the presence of RECOMMENDED operating and maintenance (servicing) instructions.

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER FROM THIS UNIT. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE

NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV System Installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

 **This product is designated for use in restricted locations. It is strongly advised that you ALWAYS follow these safety instructions to help ensure against injury to yourself and damage to your equipment.**

Safety Precautions

- ➔ The optical emissions from the units are laser-based Class IIIb, and may present eye hazards if improperly used. **NEVER USE ANY KIND OF OPTICAL INSTRUMENT TO VIEW THE OPTICAL OUTPUT OF THE UNIT.**
- ➔ As always, be careful when working with optical fibers. Fibers can cause painful injury if they penetrate the skin.

Laser Safety Procedures

- ➔ **ALWAYS** read the product data sheet and the laser safety label before powering the product. Note the operating wavelength, optical output power, and safety classifications.
- ➔ If safety goggles or other eye protection are used, be certain that the protection is effective at the wavelength(s) emitted by the device under test **BEFORE** applying power.
- ➔ **ALWAYS** connect a fiber to the output of the device **BEFORE** power is applied. Power should never be applied without an attached fiber output. If the device has a fiber output, a connector should be attached that is connected to a fiber. This ensures that all light is confined within the fiber waveguide, virtually eliminating all potential hazard.
- ➔ **NEVER** look in the end of a fiber to see if light is coming out. **NEVER!** Most fiber optic laser wavelengths (1310 nm and 1550 nm) are totally invisible to the unaided eye and will cause permanent damage. Shorter wavelength lasers (e.g. 780 nm) are visible and are very damaging. Always use instruments, such as an optical power meter, to verify light output.
- ➔ **NEVER, NEVER, NEVER** look into the end of a fiber on a power device with **ANY** sort of magnifying device. This includes microscopes, eye loupes, and magnifying glasses. This **WILL** cause permanent, irreversible burn on your retina.
- ➔ **ALWAYS** double check that power is disconnected before using such devices. If possible, completely disconnect the unit from any power source.
- ➔ If you have questions about laser safety procedures, please call Blonder Tongue before powering your product.
- ➔ Do not attempt to service the unit yourself, as opening or removing covers may expose you to dangerous voltage and will void the warranty. Refer all servicing to authorized service personnel.
- ➔ Unplug the unit from the wall outlet and refer servicing to authorized service personnel whenever the following occurs:
 - The power supply cord or plug is damaged;
 - Liquid has been spilled, or objects have fallen into the unit;
 - The unit has been exposed to rain or water;
 - The unit has been dropped or the chassis has been damaged;
 - The unit exhibits a distinct change in performance.