cable equipment, inc.

TFT13 Series

Fiber Optic Transmitter

User Manual

cable equipment, inc.
969 Horsham Road, Horsham, Pennsylvania 19044 USA
TEL: (1) 215-675-2053 FAX: (1) 215-675-7543
www.tonercable.com sales@tonercable.com

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.

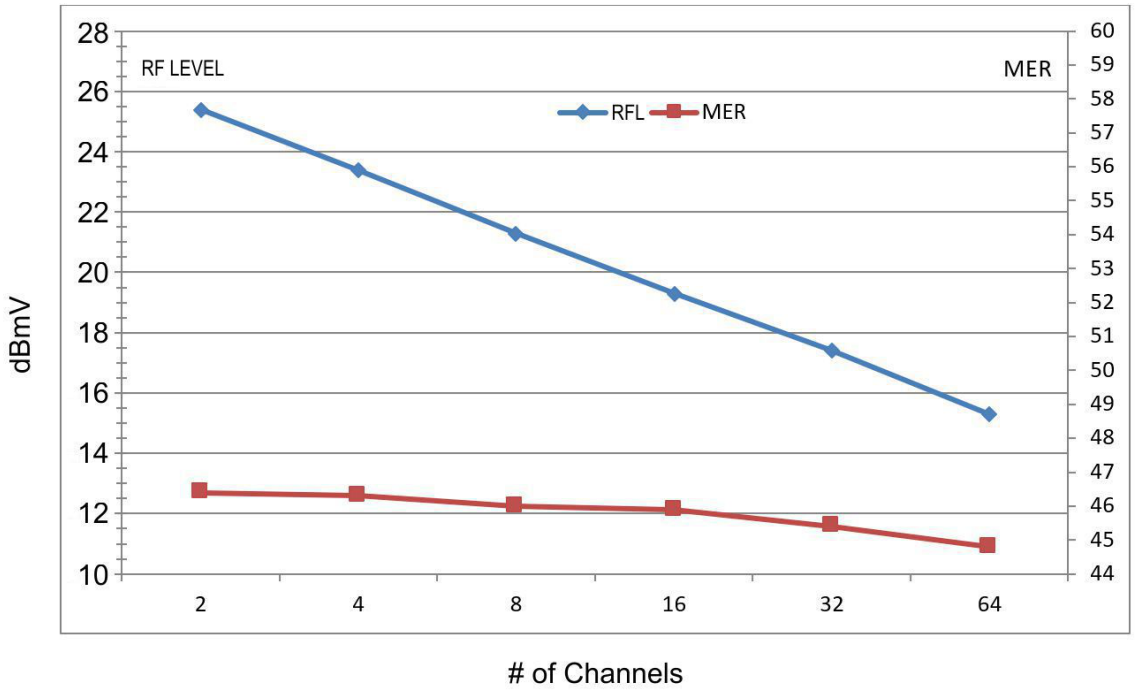
INVISIBLE LASER RADIATION! AVOID EYE INJURY!
NEVER LOOK INTO THE OPTICAL CONNECTOR!

INSTALLATION AND GENERAL SETUP GUIDELINES

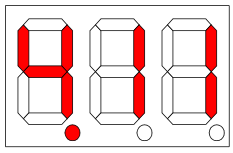
1. Mount the TFT13 to mounting panel to maintain a stable physical condition and operation
2. Test the optical input power on the system downstream cable with an optical power meter to verify that it is within the optical input range specification.
3. Clean the optical connector on the node and on the service cable then connect them together, matching the system downstream cable to the node receiver and the system upstream cable to the laser transmitter.
4. Verify that the total upstream RF signal level is within the node's specified input range, then connect the coaxial cable to the node's RF In/Out F-port. Connect the system ground to the ground screw located directly below the output optical connector.
5. Route all the cable (RF, fiber, power, ground) neatly around the node to make a tidy and safe installation.
6. Apply power to the node and verify that the node's Optical LEDs illuminate.

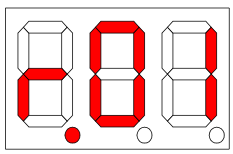
PRECAUTIONS	**REQUIREMENT**
Facilitate service and maintenance	Allow a minimum of 35 in. (90 cm) clearance in front of the equipment rack(s).
Avoid direct heating or air conditioning	If unavoidable, use deflector plates.
AC Power source outlets	Locate equipment near sufficient outlets to provide power for test equipment and power tools.
Rack support	Make certain rack supports are sufficiently rigid to support rack(s).
Building leakage	Beware of dripping water onto equipment from leaky roofs, waveguide roof entries, and cold water pipe condensations.

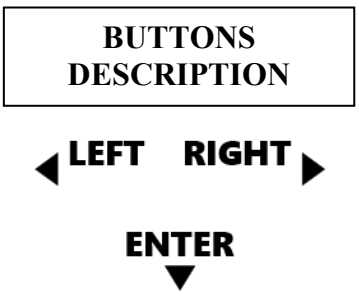
Before powering on the Transmitter make sure the RF cable is connected and the RF signal level is flat within 1.5 dB. The RF level should be based on the below chart to ensure proper operation as well as C/N



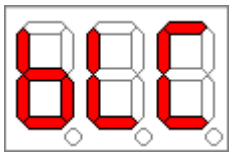
1.0 Plug in the power supply of the TFT13 series Fiber Optic Transmitter. The display will briefly show the software version, e.g. 4.11 and the manufacturing number, e.g. r.01
If no buttons are pressed within a few seconds the LED display will go blank and then after 5 Minutes the controls will be locked (blocked) from any input.







2.0 To check whether menu is Locked, press any button. If the controls are locked the display will show bLC.



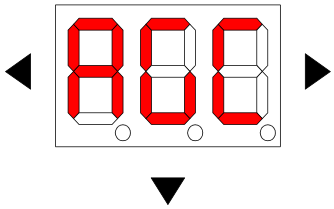
3.0 To unlock the controls, press the control buttons in the following sequence

Press any button once (the display will show "bLC") then press the buttons following this sequence

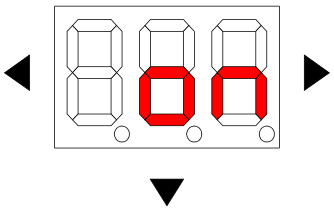
Left 3 times, Down 1 time, Right 3 times, Down 1 time

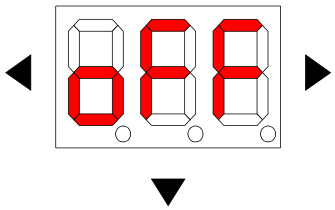
This should unlock the controls

4.0 After powering the Transmitter on or after unlocking the controls you then press any button and the menu will take you to the "AGC" section, the display will show AGC as below. This is where you can turn on or off the AGC function



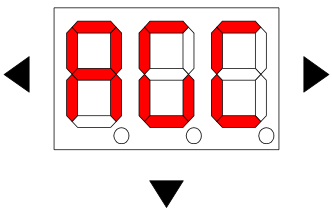
To see if the AGC is on or off just press the "enter" button (down arrow). Use the "left" and "right" buttons to switch the AGC on or off. When done press the enter button to save your selection.



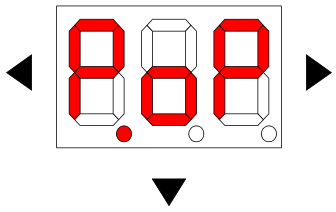


When the AGC function is on, the transmitter will maintain a constant Optical output level even if the RF input Fluctuates (over a range of +17 to +35 dBmV)

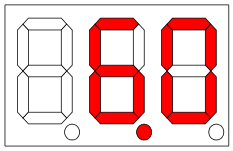
When the AGC mode is selected, the display will again show "AGC"



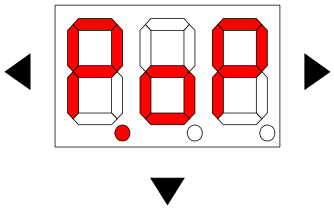
5.0 Next use the "right" button to go to see the optical output power of the transmitter. The display will show this.



Pressing the enter button (Down arrow) will display to output power of the laser in dBm.



Pressing the enter button again will take you back to the prior display



6.0 From this point you can press either the right or left arrow to take you back to the AGC display

NOTE: If there is no activity for 30 seconds, the display will automatically begin to Blink. Pressing any button while the display is blanked will return to the menu display starting from the initial section "AGC".