

Foxcom Compact Installation Guide

5 L-band satellite signals using AL5T3 with internal CWDM

1. Installing Compact TX head end
 - a. Mount the AL5T3 TX and LGX-4 in an appropriate location using the mounting holes on the units and the appropriate fasteners for the installation.
 - b. Mount splitter modules into the LGX-4 using “clips”
 - c. Connect TX to AC mains using power supply provided.
 - d. Opt. LED should be green to verify proper laser operation.
2. RF input procedure
 - a. Install satellite dish(s) according to providers specifications
 - b. Connect satellite LNBS to power inserter/polarity locker as required, such as the PI-6S or HRPID-1422 [the AL5T3 TX **does not** supply LNB powering]
 - c. Block voltage from output of power inserter(s) using Voltage Blocking Couplers
DO NOT INSERT POWER INTO TX
 - d. Verify proper signal strength and quality using an appropriate satellite signal strength meter.
 1. Signal strength should be between -20 and -40 dBm per transponder.
 2. RF LED should be green to verify proper input levels.
 3. Record signal strength and quality for future reference.
 - e. Using co-ax jumpers [18” minimum, compression fitted F-connectors] connect power inserter to the input of the AL5T3 TX.
3. Optical installation
 - a. Using an appropriate optical power meter set on 1550nm, measure and record optical output of the AL5T3 in dBm. TX output should be a minimum of +8dBm
 1. NOTE—this is now TOTAL power of all 5 lasers as measured at 1550nm
 - b. Connect AL5T3 to the input of the appropriate splitter.
 - c. Using optical power meter set to 1550nm, measure and record the output power from each port of the optical splitter and verify that they are within the system design parameters as follows: (you will now be reading total cumulative power)
 1. Power from 8-way splitter; output of TX minus 10.5dB
 2. Power from 16-way splitter; output of TX minus 13.5dB
 3. Power from 32-way splitter; output of TX minus 16.5dB
 - d. Compact head end is now ready to be connected to distribution. All fibers used should be SC/APC SMF-28 or equivalent.
NOTE: 1x32 splitter requires **duplex SC/APC connectors on front side**
4. Receiver Installation
 - a. Mount the AL5R3 in an appropriate location using the mounting holes on the unit and the appropriate fasteners for the installation.
 - b. Connect RX to AC mains using power supply provided
 - c. Verify optical power level on fiber at each location. Power levels should be level from 3c above, minus distribution losses; fiber, splices, connectors, etc.
 - d. After cleaning fiber connector, insert into RX. RF and OP lights should be green.
 - e. Using satellite meter, confirm F-connector outputs and compare to readings taken in 2d above.
 - f. RX is now ready to be connected to coax distribution.
 - g. Output signals correspond directly to the inputs of the TX.