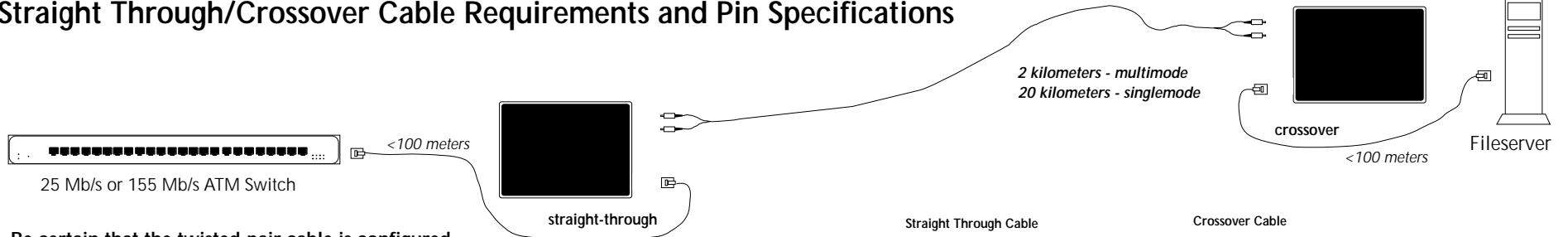
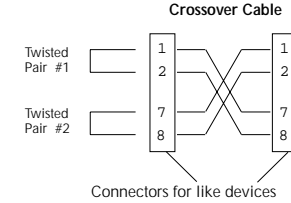
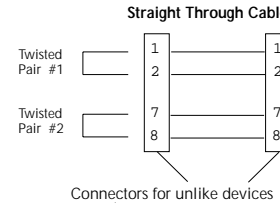


Straight Through/Crossover Cable Requirements and Pin Specifications



Be certain that the twisted-pair cable is configured correctly (straight through or crossover) for site. Cable connections between an ATM switch and the media converter must be configured as **straight through**. Cable connections between the media converter and a NIC must be configured as **crossover**.



The two active pairs in an ATM network are pins 1 & 2 and pins 7 & 8. Use only dedicated wire pairs (such as blue/white & white/blue, orange/white & white/orange) for the active pins.

Installation Notes

- **KEEP twisted-pair RUNS AS SHORT AS POSSIBLE.**
- Connect the power supply cable to the media converter BEFORE connecting to the outlet.
- Install unit with PSU provided. (Output 9 VDC regulated, 500 mA).

Troubleshooting the Media Converter

If the ATM media converter fails, determine the answers to the following questions:

1. Is the power LED on the media converter illuminated?
 - NO**
 - Is the power adapter the proper type of voltage and cycle frequency for your AC outlet? NOTE: Refer to the "Power Supply Requirements" on the back page.
 - Is the power adapter properly installed in the media converter and in the outlet?
 - Contact Technical Support at (800) 260-1312/ (800) LAN-WANS.
 - YES**
 - Proceed to step 2.
2. Is the *Copper Activity* LED illuminated?
 - NO**
 - Check UTP cables for proper connection and pin assignment. (See above.)
 - Contact Technical Support at (800) 260-1312/ (800) LAN-WANS.
 - YES**
 - Proceed to step 3.
3. Is the *Fiber Activity* LED illuminated?
 - NO**
 - Check fiber cables for proper connection.
 - Verify that TX and RX cables on media converter are connected to RX and TX ports, respectively, on the other 100BASE-FX device.
 - Refer to Tech Tips available at: <http://www.transition.com>
 - Contact Technical Support at (800) 260-1312/ (800) LAN-WANS.
 - YES**
 - Contact Technical Support at (800) 260-1312/ (800) LAN-WANS.

ATM Cable Specifications

The physical characteristics of the media cable must meet or exceed the specifications: ATM UNI 3.1 #AF-PHY-0015

Maximum number of media converters in series: 2

Copper Cable Specifications

Category 5 wire or better is required. Either shielded twisted-pair (STP) or unshielded twisted-pair (UTP) can be used. **DO NOT USE FLAT OR SILVER SATIN WIRE.**

Category 5:

Gauge	24 to 22 AWG
Attenuation	20 dB/1000' @ 10 MHz
Impedance	100 Ω ±10% @ 10 MHz

Maximum Cable Distance:

100 meters (330 feet)

Fiber Cable Specifications

Singlemode

Fiber Optic Cable Recommended:	9 μm singlemode fiber	
Fiber Optic Transmitter Power:	min: -15.0 dBm	max: -8.0 dBm
Fiber Optic Receiver Sensitivity:	min: -31.0 dBm	max: -8.0 dBm
Wavelength:	1300nm	
Bit error rate:	≤10 ⁻⁹	
Maximum Cable Distance:	20 kilometers	

multimode

Fiber Optic Cable Recommended:	62.5 / 125 μm multimode fiber	
Optional:	100 / 140 μm multimode fiber	
	85 / 125 μm multimode fiber	
	50 / 125 μm multimode fiber	
Fiber Optic Transmitter Power:	min: -19.0 dBm	max: -14.0 dBm
Fiber Optic Receiver Sensitivity:	min: -30.0 dBm	max: -14.0 dBm
Wavelength:	1300nm	
Bit error rate:	≤10 ⁻⁹	
Maximum Cable Distance:	2 kilometers	