



User's Guide

SISTF10xx-110-LR(T)

Stand-alone industrial media converter

- Copper to fiber
- Ethernet/fast ethernet
- 10Base-T/100Base-TX to 100Base-FX
- Extended temperature
- Hazardous environment

Transition Networks SISTF10xx-110-LR(T) industrial media converter connects 10Base-T/100Base-TX twisted-pair copper cable to 100Base-FX fiber-optic cable. The SISTF10xx-110-LR(T) is designed for harsh industrial environments such as hazardous

locations (*Class 1 Division 2/Zone 2*). It includes a relay output warning alarm, and is designed to withstand a high degree of vibration and shock. It is also available in models that operate in either standard or extended temperature ranges.

Part Number	Port One - Copper 10Base-T/100Base-TX	Port Two - Duplex Fiber-Optic 100Base-FX
Standard Temperature Models: 0°C to 60°C (32°F to 140°F)		
SISTF1011-110-LR	RJ-45 100 m (328 ft)*	ST, 1300 nm multimode 2 km (1.2 miles)*
SISTF1012-110-LR	RJ-45 100 m (328 ft)*	ST, 1310 nm single mode 15 km (9.3 miles)*
SISTF1013-110-LR	RJ-45 100 m (328 ft)*	SC, 1300 nm multimode 2 km (1.2 miles)*
SISTF1014-110-LR	RJ-45 100 m (328 ft)*	SC, 1310 nm single mode 15 km (9.3 miles)*
Extended Temperature Models: -40°C to 70°C (-40°F to 158°F)		
SISTF1011-110-LRT	RJ-45 100 m (328 ft)*	ST, 1300 nm multimode 2 km (1.2 miles)*
SISTF1012-110-LRT	RJ-45 100 m (328 ft)*	ST, 1310 nm single mode 15 km (9.3 miles)*
SISTF1013-110-LRT	RJ-45 100 m (328 ft)*	SC, 1300 nm multimode 2 km (1.2 miles)*
SISTF1014-110-LRT	RJ-45 100 m (328 ft)*	SC, 1310 nm single mode 15 km (9.3 miles)*

* Typical maximum cable distance. Actual distance is dependent upon the physical characteristics of the network installation.

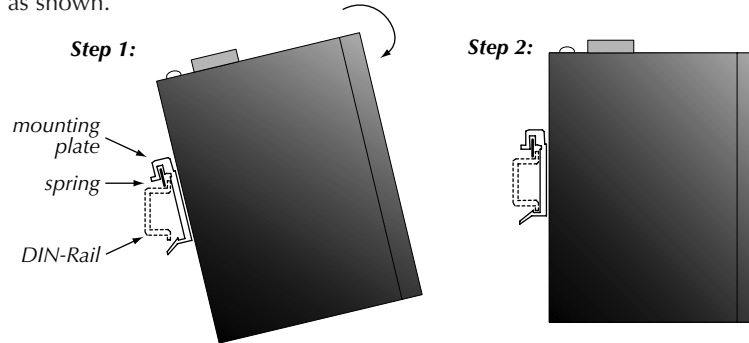
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Installation

DIN-rail mount

The SISTF10xx-110-LR(T) media converter includes an aluminum DIN-rail mounting plate attached to the back panel of the converter. To mount the converter onto a DIN-rail:

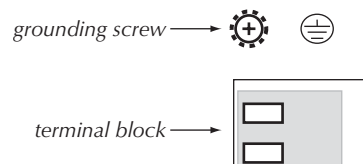
1. Insert the top of the DIN-Rail into the upper slot of the mounting plate. The stiff metal spring should be positioned behind the DIN-rail.
2. Push down and rotate the converter to snap it into place on the DIN-rail as shown.



Note: This device must be grounded to a well-grounded mounting surface such as a metal plate. Install the grounding wire prior to connecting any other device.

Ground the media converter

Grounding the device helps limit the effects of noise due to electromagnetic interference (EMI). The grounding screw is located on the top panel next to the terminal block.



To ground the media converter:

1. Connect one end of the grounding wire (*not provided*) to the grounding screw by looping one end of the grounding wire under the star washer.
2. Tighten the grounding screw with a phillips-head screwdriver.
3. Connect the other end of the grounding wire to earth ground.

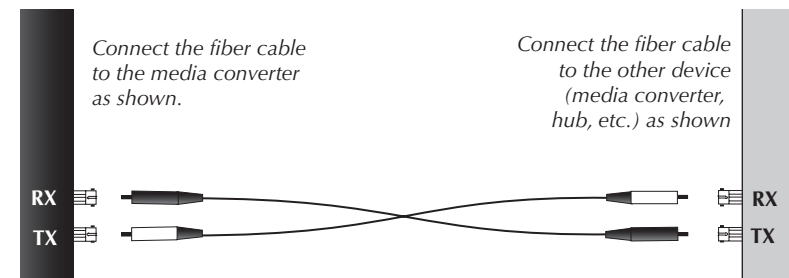
Installation -- Continued



CAUTION: Disconnect the media converter from the DC power source BEFORE installing and/or wiring the device.

Install the fiber cable

1. Locate or build 100Base-FX fiber cable with male, two-stranded TX to RX connectors installed at both ends.
2. Connect the fiber cables to the media converter as described:
 - Connect the male TX cable connector to the female TX port.
 - Connect the male RX cable connector to the female RX port.
3. Connect the fiber cables to the other device (*another media converter, hub, etc.*) as described:
 - Connect the male TX cable connector to the female RX port.
 - Connect the male RX cable connector to the female TX port.



Install the copper cable

The AutoCross feature allows either straight-through (MDI) or crossover (MDI-X) copper cable to be used when connecting devices via the RJ-45 port.

1. Locate or build 10Base-T or 100Base-TX copper cables with male, RJ-45 connectors installed at both ends.
2. Connect the RJ-45 connector at one end of the cable to the RJ-45 port on the media converter.
3. Connect the RJ-45 connector at the other end of the cable to the RJ-45 port on the other device (switch, workstation, etc.).



Installation



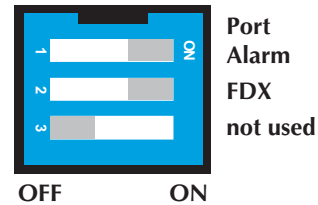
CAUTION: Wear a grounding device and observe electrostatic discharge precautions when setting the dip switches. Failure to observe this caution could result in damage to, and failure of, the media converter.

Set the DIP switches

- The DIP switches are located on the top panel of the media converter.
- Use a small flat blade screwdriver or a similar device to set the switches.



NOTE: To activate the updated switch setting, cycle the power to the media converter.



Switch "1" set the port alarm:

ON = Enable the port alarm feature.
OFF = Disable the port alarm feature.

The port alarm feature is used to alert the user whenever a port fault occurs. The internal relay that activates the alarm feature is connected to the two middle contacts on the 6-contact terminal block, which is located on the top panel of the media converter.

These two fault contacts form an open circuit when either the copper port or the fiber port is not properly connected. Otherwise, the circuit will be closed.

A user-supplied fault alarm device can be connected to the fault contacts. An example would be to connect the fault contacts to a warning light located in the control room. The light can be set up to turn on when a fault is detected.

See page 5 for instructions on installing a port alarm device.

Switch "2" set the full/Half duplex mode ON = Full-duplex on the 100Base-FX (fiber) port:

OFF = Half-duplex on the 100Base-FX (fiber) port.

Set the fiber link to full-duplex ON when connecting the media converter to another device that operates at full-duplex mode over fiber.

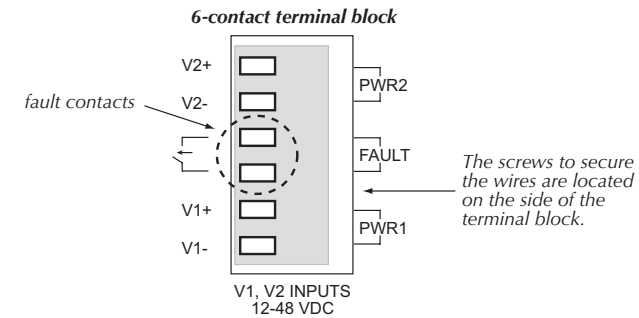
Set the fiber link to half-duplex OFF when connecting the media converter to another device that operates at half-duplex mode over fiber.

Switch "3" currently not used.

Installation -- Continued

Install the port alarm device

A user-supplied port alarm device can be connected to the media converter to alert the user whenever a port fault occurs. The alarm switch (#1) must be "ON" to enable the port alarm feature (see page 4).



The contacts for the fault alarm are on the 6-contact terminal block, located on the top panel of the media converter. To install a port alarm device:

- Insert the two wires from the user-supplied port alarm device into the two terminals marked "FAULT" on the 6-contact terminal block.
- Secure the wire by tightening the corresponding screw on the side of the terminal block.



NOTE: Calculate the maximum possible current in each power wire and signal wire. Observe all electrical codes for maximum current allowed. If the current goes above the maximum ratings, the wiring would overheat, causing serious damage to the network equipment.

Note the following when wiring the network:

- Signal lines must not be directly connected to outdoor wiring.
- Use separate paths to route the power wiring and the signal wiring. If power wiring and signal wiring paths must cross, make sure the wires are perpendicular at the intersection point.
- Do not run signal wiring and power wiring in the same wire conduit. To avoid interference, wires with different signal characteristics should also be routed separately.
- Use the type of signal transmitted through a wire to determine which wires should be kept separate. The rule of thumb is that wiring with similar electrical characteristics can be bundled together.
- Keep input wiring and output wiring separate.
- Where necessary, label the wiring to all devices in the network.

Installation -- Continued

Power the media converter

This device is suitable for use in Class I, Division 2, Groups A, B, C and D or non-hazardous locations only.

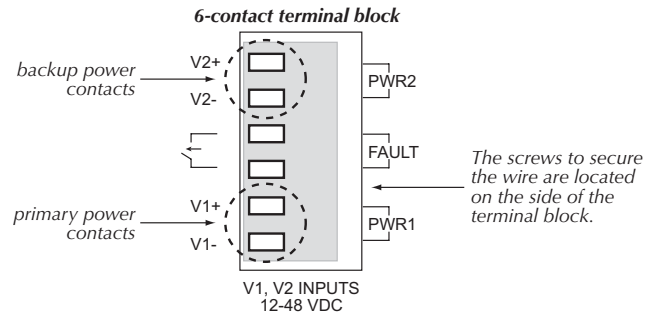


WARNING: EXPLOSION HAZARD - Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.



WARNING: EXPLOSION HAZARD - Substitution of components may impair suitability for Class I, Division 2.

The media converter is designed for both a primary and a backup power supply via the 6-contact terminal block, located on the top panel of the device. Both power inputs can be connected simultaneously to live DC power sources. If one power source fails, the other live source acts as a backup, and automatically supplies the converter with power.



CAUTION: Before connecting the media converter to the 12-48 VDC power source, ensure the power source voltage is stable.

To provide PRIMARY (PWR1) power to the media converter:

1. Insert the positive (+) DC wire from the 12-48VDC power source into the terminal marked "V1+".
2. Insert the negative (-) DC wire into the terminal marked "V1-".
3. Secure the wires by tightening the corresponding screws on the side of the terminal block.

To provide BACKUP (PWR2) power to the media converter:

1. Insert the positive (+) DC wire from the 12-48VDC power source into the terminal marked "V2+".
2. Insert the negative (-) DC wire into the terminal marked "V2-".
3. Secure the wires by tightening the corresponding screws on the side of the terminal block.

Operation

LED status

Use the status LEDs to monitor the SISTF10xx-110-LR(T) media converter operation in the network.

The three LEDs near the top indicate the power and fault status:

PWR1 (amber) ON = Primary power is connected to the media converter.

PWR2 (amber) ON = Backup power is connected to the media converter.

FAULT (red) ON = (If the port alarm switch (#1) is on) the media converter lost either the fiber link or the copper link.

If the port alarm switch (#1) is off the FAULT LED will remain off, even in the event of a loss of a link.

The two lights near the fiber port indicate the fiber (100Base-FX) link status:

100M (green) ON = Fiber link is active.
flashing = Data is being transmitted over the fiber link.

FDX/COL (green) ON = Fiber link is in full-duplex mode.
flashing = Collisions are occurring.

OFF = Fiber link is in half-duplex mode.

The two lights embedded in the RJ-45 port indicate the copper link status:

10M (green) ON = Copper link is active at 10 Mb/s.

flashing = data is being transmitted over the copper link at 10 Mb/s.

100M (green) ON = Copper link is active at 100 Mb/s.

flashing = data is being transmitted over the copper link at 100 Mb/s.

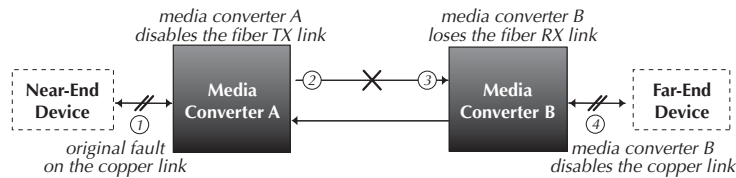


Operation -- Continued

Features

Link Pass-Through

The Link Pass-Through feature allows the media converter to monitor both the fiber and copper RX (*receive*) ports for loss of signal. In the event of a loss of an RX signal (1), the media converter will automatically disable the TX (transmit) signal (2), thus, “passing through” the link loss (3). The far-end device is automatically notified of the link loss (4), which prevents the loss of valuable data unknowingly transmitted over an invalid link.



Auto-Negotiation

With the Auto-Negotiation feature, the media converter automatically configures itself to achieve the best possible mode of operation over the copper link. The media converter broadcasts its speed (*10 Mb/s or 100 Mb/s*) and duplex capabilities (*either full- or half-duplex*) and negotiates the best mode of operation between the two linked devices.

If the media converter is connected to a non-negotiating device over the copper link, it will default to 10 Mb/s speed, half-duplex mode.

AutoCross™

The AutoCross feature allows either straight-through (MDI) or crossover (MDI-X) cables to be used when connecting to devices such as hubs, transceivers, or network interface cards (NICs). AutoCross determines the characteristics of the cable connection and automatically configures the unit to link up, regardless of the cable configuration. (*Requires no operator intervention.*)

Cable Specifications

The physical characteristics must meet or exceed IEEE 802.3™ specifications.

Fiber cable

Bit Error Rate:	<10 ⁻⁹
Single mode fiber (<i>recommended</i>):	9 μm
Multimode fiber (<i>recommended</i>):	62.5/125 μm
Multimode fiber (<i>optional</i>):	100/140, 85/140, 50/125 μm

Standard models

SISTF1011-110-LR	1300 nm multimode
Fiber Optic Transmitter Power:	min: -20.0 dBm max: -14.0 dBm
Fiber Optic Receiver Sensitivity:	min: -36.0 dBm max: -32.0 dBm
Link Budget:	16.0 dB
SISTF1012-110-LR	1310 nm single mode
Fiber Optic Transmitter Power:	min: -15.0 dBm max: -6.0 dBm
Fiber Optic Receiver Sensitivity:	min: -34.0 dBm max: -32.0 dBm
Link Budget:	19.0 dB
SISTF1013-110-LR	1300 nm multimode
Fiber Optic Transmitter Power:	min: -20.0 dBm max: -14.0 dBm
Fiber Optic Receiver Sensitivity:	min: -36.0 dBm max: -32.0 dBm
Link Budget:	16.0 dB
SISTF1014-110-LR	1310 nm single mode
Fiber Optic Transmitter Power:	min: -15.0 dBm max: -6.0 dBm
Fiber Optic Receiver Sensitivity:	min: -34.0 dBm max: -32.0 dBm
Link Budget:	19.0 dB

Extended Temperature Models

SISTF1011-110-LRT	1300 nm multimode
Fiber Optic Transmitter Power:	min: -20.0 dBm max: -14.0 dBm
Fiber Optic Receiver Sensitivity:	min: -36.0 dBm max: -32.0 dBm
Link Budget:	16.0 dB
SISTF1012-110-LRT	1310 nm single mode
Fiber Optic Transmitter Power:	min: -15.0 dBm max: -6.0 dBm
Fiber Optic Receiver Sensitivity:	min: -34.0 dBm max: -32.0 dBm
Link Budget:	19.0 dB
SISTF1013-110-LRT	1300 nm multimode
Fiber Optic Transmitter Power:	min: -20.0 dBm max: -14.0 dBm
Fiber Optic Receiver Sensitivity:	min: -36.0 dBm max: -32.0 dBm
Link Budget:	16.0 dB
SISTF1014-110-LRT	1310 nm single mode
Fiber Optic Transmitter Power:	min: -15.0 dBm max: -6.0 dBm
Fiber Optic Receiver Sensitivity:	min: -34.0 dBm max: -32.0 dBm
Link Budget:	19.0 dB



NOTE: The fiber optic transmitters on this device meet Class I Laser safety requirements per IEC-825/CDRH standards and comply with 21 CFR1040.10 and 21CFR1040.11.

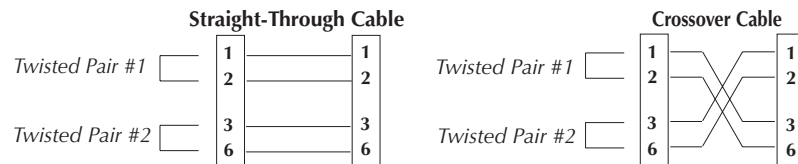
Cable Specifications -- Continued

Copper cable

Category 5: (*minimum requirement*)

Gauge: 24 to 22 AWG
 Attenuation: 22.0 dB /100m @ 100 MHz
 Maximum cable distance: 100 meters

- Straight-through or crossover cable may be used.
- Shielded twisted-pair (STP) or unshielded twisted-pair (UTP) may be used.
- Pins 1&2 and 3&6 are the two active pairs in an Ethernet network.
- RJ-45 Pin-out: Pin 1 = TD+, Pin 2 = TD-, Pin 3 = RD+, Pin 6 = RD-
- Use only dedicated wire pairs for the active pins:
 (e.g., blue/white & white/blue, orange/white & white/orange, etc.)
- Do not use flat or silver satin wire.



This device is certified by the manufacturer to comply with DHHS Rule 21/CFR, Subchapter J applicable at the date of manufacture.



CAUTION: Visible and invisible laser radiation when open. Do not stare into beam or view directly with optical instruments.



CAUTION: Use of controls, adjustments or the performance of procedures other than those specified herein may result in hazardous radiation exposure

Technical Specifications

For use with Transition Networks Model SISTF10xx-110-LR(T) or equivalent

Standards:	IEEE 802.3™	
Data Rate:	10 Mb/s, 100 Mb/s (<i>copper</i>); 100 Mb/s (<i>fiber</i>)	
Dimensions:	(W x H x D) 1.8" x 5.3" x 4.1" (46 x 135 x 105 mm)	
Weight:	1.4 lb. (0.63 kg) approximate	
Input Power:	12-48VDC, 0.2-0.7A, 24W minimum, redundant inputs	
Overload Current:	1.1 Amp with reverse polarity protection	
Alarm Relay:	1Amp @ 24VDC	
Max. Packet Size:	1600 bytes	
MTBF:	810,000 hrs (<i>MIL-HDBK-217F</i>)	
Mechanical:	Ingress Protection:	IP30
Environment:	Tmra* (<i>standard temp</i>):	0°C to 60°C (32 to 140°F)
	Tmra* (<i>extended temp</i>):	-40°C to 75°C (-40 to 167°F)
	Storage Temperature:	-40°C to 85°C (-40 to 185°F)
	Humidity:	5% to 90%, non-condensing
Warranty:	Lifetime	

*Manufacturer's rated ambient temperature.

The information contained in this user's guide is subject to change. For the most up-to-date information see the user's guide on line at: www.transition.com.



CAUTION: This device is intended to be supplied by a listed power unit marked LPS or Limited Power Source, provided with a connector for field wiring terminal, and output rated 12-48VDC, 0.2-0.7 A, 24W minimum.



CAUTION: This device is designed for operation with a safety extra-low voltage (SELV) in compliance with IEC950 / EN60950 / VDE0805 and in compliance with the low voltage directive 73/23/EEC and 93/68/EEC.

This device has been evaluated as EEx nC IIC T4 equipment under DEMKO Certificate No. 03 ATEX 0324537U. Each module is suitable for use in Zone 2 Explosive Atmospheres. The device must be installed in a minimum IP 54 enclosure as defined in IEC 60529 and EN 60529.

This device is a building-in type. The installation into a certain end equipment shall comply with fire enclosure request of IEC 60950/EN60950 or similar sentence.

Technical Specifications -- Continued

EMS Type Tests

Test	Description	Test Levels	Severity	
IEC61000-4-2	ESD	Air discharge	+/- 8 KV	3
		Contact discharge	+/- 6 KV	3
		ESD contact discharge	+/- 6 KV	3
IEC61000-4-3	Radiated RFI	Housing	10V/m, 80 MHz - 1 GHz AM 1 KHz, 80% mod 10 V/m, 0.9 - 1.8 GHz FM 200 Hz 50% square	3
IEC61000-4-4	Burst (Fast Transient)	Power supply lines	+/- 2 KV	3
		Communication lines	+/- 1 KV	3
		Relay	+/- 1 KV	3
IEC61000-4-5	Surge	Power supply lines	+/- 2 KV, 12 Ω, CM +/- 1 KV, 2 Ω, DM	3
		Relay	+/- 2 KV, 12 Ω, CM +/- 1 KV, 2 Ω, DM	3
IEC61000-4-6	Induced (Conducted RFI)	Power supply lines	10 VAC, 150-80 MHz AM 1 KHz, 80% mod	3
		Communication lines	10 VAC, 150-80 MHz AM 1 KHz, 80% mod	3
		Relay	10 VAC, 150-80 MHz AM 1 KHz, 80% mod	3

Environmental Type Tests

Test	Description	Test Levels
IEC 60068-2-6	Vibration	10 - 500 - 10 Hz, 0.5 oct./min, 4g, X, Y, Z (3 axes)
IEC 60068-2-27	Shock	50 g, 11 ms, +/-X, +/-Y, +/- Z (6 direction)
IEC 60068-2-32	Free fall	75 cm, 1 corner, 3 edges, 6 faces (total 10 drops)

Troubleshooting

If the media converter fails, isolate and correct the fault by determining the answers to the following questions and then taking the indicated action:

1. Is the PWR1 LED illuminated?

NO

- Ensure the power source is the proper voltage (12 - 48 VDC).
- Ensure the (+) and (-) wires from the power source are inserted properly in the terminal block contacts labeled "PWR1".
- Contact Tech Support: 800-260-1312, Int'l: 00-1-952-941-7600.

YES

- Proceed to step 2.

Troubleshooting -- continued

2. Is the PWR2 LED illuminated?

NO

- Ensure the power source is the proper voltage (12 - 48 VDC).
- Ensure the (+) and (-) wires from the power source are inserted properly in the terminal block contacts labeled "PWR2".
- Contact Tech Support: 800-260-1312, Int'l: 00-1-952-941-7600.

YES

- Proceed to step 3.

3. Is the FAULT LED illuminated?

YES

- If the port alarm switch (#1) is on, the media converter lost the fiber link or the copper link.
- Check the fiber cables and the copper cables for proper connection.

NO

- Proceed to step 4.

4. Is the 100M LED illuminated?

NO

- Check the fiber cables for proper connection.
- Verify that the TX and RX cables on the media converter are connected to the RX and TX ports, respectively, on the other device.
- Contact Tech Support: 800-260-1312, Int'l: 00-1-952-941-7600.

YES

- Proceed to step 5.

5. Is the 100M LED flashing?

NO

- If there is no activity on the fiber port, contact Tech Support.
- If there is activity on the fiber port, disconnect and reconnect the fiber cable to restart the initialization process.
- Contact Tech Support: 800-260-1312, Int'l: 00-1-952-941-7600.

YES

- Proceed to step 6.

6. Is the FDX/COL LED illuminated?

YES

- The media converter has selected full-duplex mode for the fiber link.
- If the mode is not correct, disconnect and reconnect the fiber cable to restart the initialization process.
- Proceed to step 7.

NO

- The media converter has selected half-duplex mode for the fiber link.
- If the mode is not correct, disconnect and reconnect the fiber cable to restart the initialization process.

Troubleshooting -- Continued

- Proceed to step 7.
7. Is the FDX/COL LED flashing?
- YES
- Collisions are occurring on the fiber link. Disconnect and reconnect the fiber cable to restart the initialization process.
 - Contact Tech Support: 800-260-1312, Int'l: 00-1-952-941-7600.
- NO
- Proceed to step 8.
8. Is the 10M LED (*on the RJ-45 port*) illuminated?
- YES
- The media converter has selected 10 Mb/s for the twisted-pair link.
 - If the speed is not correct, disconnect and reconnect the twisted-pair cable to restart the initialization process.
 - Proceed to step 9.
- NO
- Proceed to step 9.
9. Is the 100M LED (*on the RJ-45 port*) illuminated?
- YES
- The media converter has selected 100 Mb/s for the twisted-pair link.
 - If the speed is not correct, disconnect and reconnect the twisted-pair cable to restart the initialization process.
 - Contact Tech Support: 800-260-1312, Int'l: 00-1-952-941-7600.
- NO
- Contact Tech Support: 800-260-1312, Int'l: 00-1-952-941-7600.

Contact Us

Technical support

Technical support is available 24 hours a day
 US and Canada: 1-800-260-1312
 International: 00-1-952-941-7600

Transition now

Chat live via the Web with Transition Networks Technical Support.
 Log onto www.transition.com and click the Transition Now link.

Web-based seminars

Transition Networks provides seminars via live web-based training.
 Log onto www.transition.com and click the Learning Center link.



Contact Us -- continued

E-Mail

Ask a question anytime by sending an e-mail to our technical support staff.
techsupport@transition.com

Address

Transition Networks
 6475 City West Parkway
 Minneapolis, MN 55344, U.S.A.
 Telephone: 952-941-7600
 Toll free: 800-526-9267
 Fax: 952-941-2322

 TRANSITION NETWORKS	Declaration of Conformity
Name of Mfg:	Transition Networks 6475 City West Parkway, Minneapolis MN 55344, U.S.A.
Model:	SISTF10xx-110-LR(T) Series Media Converters
Part Number(s):	SISTF1011-110-LR, SISTF1012-110-LR, SISTF1013-110-LR, SISTF1014-110-LR, SISTF1011-110-LRT, SISTF1012-110-LRT, SISTF1013-110-LRT, SISTF1014-110-LRT
Regulation:	EMC Directive 89/336/EEC
Purpose:	To declare that the SISTF10xx-110-LR(T) to which this declaration refers is in conformity with the following standards. EN 55022:1998 Class A; FCC Part 15 Subpart B; 21CFR subpart J; UL 60950; UL 508; CSA C22.2 no 60950; EN 60950; UL/cUL Class 1, Div 2, Groups A, B, C, D; ATEX Class 1, Zone 2, EExnC IIC; EN61000-4-2, -4-3, -4-4, -4-5, -4-6; IEC 60068-2-6, -2-27, -2-32
I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).	
 Stephen Anderson, Vice-President of Engineering	May 5, 2006 Date

NOTE: The following part numbers are UL listed: SISTF1011-110-LR, SISTF1011-110-LRT, SISTF1013-110-LR, SISTF1013-110-LRT, SISTF1014-110-LR, SISTF1014-110-LRT.

Compliance Information

UL Listed, C-UL Listed (Canada)

CISPR22/EN55022 Class A, CE Mark

NOTE: The following part numbers are UL listed: SISTF1011-110-LR, SISTF1011-110-LRT, SISTF1013-110-LR, SISTF1013-110-LRT, SISTF1014-110-LR, SISTF1014-110-LRT.

FCC regulations

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at the user's own expense.

Compliance Information -- continued

Canadian regulations

This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out on the radio interference regulations of the Canadian Department of Communications. Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

European regulations

Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Achtung !

Dieses ist ein Gerät der Funkstörgrenzwertklasse A. In Wohnbereichen können bei Betrieb dieses Gerätes Rundfunkstörungen auftreten. In diesem Fall ist der Benutzer für Gegenmaßnahmen verantwortlich.

Attention !

Ceci est un produit de Classe A. Dans un environnement domestique, ce produit risque de créer des interférences radioélectriques, il appartiendra alors à l'utilisateur de prendre les mesures spécifiques appropriées.



In accordance with European Union Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003, Transition Networks will accept post usage returns of this product for proper disposal. The contact information for this activity can be found in the 'Contact Us' portion of this document.



CAUTION: RJ connectors are NOT INTENDED FOR CONNECTION TO THE PUBLIC TELEPHONE NETWORK. Failure to observe this caution could result in damage to the public telephone network.

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