

# Preface

This manual describes how to install and use the 12-Bay Media Converter System. The system introduced here is capable of housing up to twelve media converters, each of which offers a single channel media conversion solution:

10/100Base-TX ↔ 100Base-FX

100Base-TX ↔ 100Base-FX

100Base-FX ↔ 100Base-FX

10/100/1000Base-TX ↔ 1000Base-SX/LX

1000Base-T ↔ 1000Base-SX/LX

1000Base-SX/LX ↔ 1000Base-SX/LX

In this manual, you will find:

- An introduction to the system
- Product features
- Illustrative LED functions
- Installation instructions
- Specifications

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## Product Overview

### 12-Bay Media Converter System

The 12-Bay Media Converter System can house up to twelve media converters in a 1U standard 19" rackmountable size. The front panel of the 12-Bay Media Converter System provides status LEDs.



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Figure 1: 12-Bay Media Converter System

### Package Contents

When you unpack the product's package, you should find the items listed below:

- ✓12-Bay Media Converter System
- ✓Two AC power cords
- ✓User's manual
- ✓Rackmount ears with screws

Please inspect the contents, and report any apparent damage or missing items immediately to your authorized reseller.

## Product Features

- ◆ *Houses twelve channels of media conversion*
- ◆ *Front panel status LEDs*
- ◆ *Standard 19" rackmountable size, 1U high*
- ◆ *2 Redundant Power Supplies*
- ◆ *12-Bay 10/100Base-TX to 100Base-FX converters, 100Base-TX to 100Base-FX converters, 100Base-FX to 100Base-FX converters, 10/100/1000Base-TX to 1000Base-SX/LX converters, 1000Base-T to 1000Base-SX/LX converters, or 1000Base-SX/LX to 1000Base-SX/LX converters*

## Front Panel Display

### *FRONT PANEL*

The front panel of this 12-Bay Media Converter System shows the layout of the twelve media converter channels.

There are 12 sets of LED indicators, which provide you with instant feedback on the status of each media converter channel.



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Figure 2: Front Panel of the 12-Bay Media Converter System

**UNDERSTANDING LEDs****10/100TX to 100FX Media Converter**

LEDs	State	Indication
PWR	Steady	Power on PWR stands for POWER
	Off	Power off
100 (Mbps)	Steady	Connection at the speed of 100Mbps
	Off	Connection at the speed of 10Mbps
LNK/ACT	Steady	A valid network connection established LNK stands for LINK
	Flashing	Transmitting or receiving data ACT stands for ACTIVITY
	Off	Neither valid network connection established nor transmitting/receiving data.
FDX/COL	Steady	Connection in full duplex mode FDX stands for FULL-DUPLEX
	Flashing	Collision occurred COL stands for COLLISION
	Off	Connection in half-duplex mode

**100TX to 100FX Media Converter**

LEDs	State	Indication
Power	Steady	Power on
	Off	Power off
LNK	Steady	Connection at the speed of 100Mbps
	Off	No connection at the Speed of 100Mbps
ACT	Steady	A valid network connection established
	Flashing	Transmitting or receiving data
	Off	Neither valid network connection nor transmitting/ receiving data

**100FX to 100FX Media Converter**

LEDs	State	Indication
PWR	Steady	Power on
	Off	Power off
SDA/ SDB (100FX)	Steady	A valid network connection established, Transmitting and Receiving
	Off	Neither valid network connection nor transmitting established

**10/100/1000TX to 1000SX/LX Media Converter**

LEDs	State	Indication
PWR	Steady	Power feeding in
	Off	No power
LNK/ACT (TX)	Steady	A valid network connection established. LNK stands for LINK.
	Flashing	Transmitting and receiving data. ACT stands for ACTIVITY.
	Off	Neither connection nor activity existing.
LNK/ACT (SX/LX)	Steady	A valid network connection established. LNK stands for LINK.
	Flashing	Transmitting and receiving data. ACT stands for ACTIVITY.
	Off	Neither connection nor activity existing.
FDX	Steady	Connection in full duplex mode. FDX stands for FULL DUPLEX.
	Flashing	Collision occurred.
	Off	Connection in half duplex mode
1000	Steady	Connection at 1000Mbps speed.
100	Steady	Connection at 100Mbps speed.
1000, 100	Off	Connection at 10Mbps speed.

**1000T to 1000SX/LX Media Converter**

LEDs	State	Indication
Power	Steady	Power feeding in
	Off	No power
LNKC	Steady	TX port: A valid network connection established. LNKC stands for LINK/Copper
	Off	No connection
LNKF	Steady	FX port: A valid network connection established. LNKF stands for LINK/Fiber
	Off	No connection
FDX/COL	Steady	Connection in full duplex mode FDX stands for FULL DUPLEX
RX	Steady	Receiving data
	Off	No reception
TX	Steady	Transmitting data
	Off	No transmission

**1000SX/LX to 1000SX/LX Media Converter**

LEDs	State	Indication
Power	Steady	Power feeding in
	Off	No power
SDA	Steady	Port A Signal Detect: A valid network connection established.
	Off	No connection
SDB	Steady	Port B Signal Detect: A valid network connection established.
	Off	No connection

## Installation

### Selecting a Site for the Equipment

As with any electric device, you should place the equipment where it will not be subjected to extreme temperatures, humidity, or electromagnetic interference. Specifically, the site you select should meet the following requirements:

- The ambient temperature should be between 32 and 113 degrees Fahrenheit (0 to 45 degrees Celsius).
- The relative humidity should be less than 95 percent, non-condensing.
- Surrounding electrical devices should not exceed the electromagnetic field (RFC) standards for IEC 801-3, Level 2 (3V/M) field strength.
- Make sure that the equipment receives adequate ventilation. Do not block the ventilation holes on each side of the equipment or the fan exhaust port on the side or rear of the equipment.
- The power outlet should be within 6 feet (1.8 meters) of the equipment.



## Connecting to Power

**Step 1:** Connect the supplied AC power cords to the receptacles on the rear panel of the system.

**Step 2:** Attach the plugs from each of the dual power supplies into standard AC outlets with a voltage range from 100~240VAC.

**Step 3:** Turn on the system by flipping the ON/OFF switches beside the dual power supplies' receptacles to the ON position.

**Step 4:** The power LED of each media converter will shine after turning on the system.

**Step 5:** The link LED of each media converter will shine after connecting twisted pair copper cabling between the TX port (or fiber optic cabling between the FX port) and another working networked device.

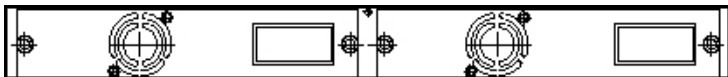


Figure 3: Rear view of the 12-Bay Media Converter System

## Specifications

<b>Applicable Standards</b>	IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX/FX, IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-SX/LX
<b>Speed – 10Base-T 100Base-TX/FX 1000Base-T/SX/LX</b>	10/20Mbps for half/full-duplex 100/200Mbps for half/full-duplex 2000Mbps for full-duplex
<b>Forwarding rate</b>	14,880pps for 10Mbps 148,810pps for 100Mbps 1,488,100pps for 1000Mbps
<b>Dimensions</b>	440mm (W) × 243mm (D) × 45mm (H) (17.32" (W) × 9.57" (D) × 1.77" (H))
<b>Weight</b>	3.1Kg (6.82lbs.)
<b>Power</b>	100 ~ 240VAC, 50 ~ 60Hz
<b>Power Consumption</b>	55.2W Max.
<b>Operating Temperature</b>	0 ~ 45 (32 ~ 113 )
<b>Storage Temperature</b>	-10 ~ 70 (14 ~ 158 )
<b>Humidity</b>	5 ~ 95%, non-condensing
<b>Emission Compliance</b>	CE Mark Class A, FCC Part 15 Class A