Altronix® NetWay® Installation Guide

NetWay8G - Eight (8) Port PoE+ Midspan Injector

Overview:

Altronix NetWay8G is an 8 port networked Managed Midspan in a 1U rack enclosure. It provides PoE/PoE+ (up to 30W) power per port, and passes data at 10/100/1000 mbps at distances up to 100m. Features also include an integral battery charger for applications requiring backup and embedded LINQ Technology to monitor, control, and report power and diagnostics from anywhere.

Specifications:

Input:
- 115VAC 60Hz, 3.25A or 230VAC 50/60Hz, 2A.

Power:
- Unit supplies PoE output voltage (55V) and up to 30W max. full power per port.
  Total power: NetWay8G - 240W
- IEEE 802.3af and IEEE 802.3at compliant (PoE/PoE+).
- Short circuit protection.

Ethernet:
- Eight (8) ports for cameras/edge devices over ethernet.
- Wire type: 4-pair CAT5e and higher.
- Speed: 10/100/1000 mbps.

Functions:
- Auto detection and protection of legacy non-PoE cameras/edge devices.

Battery Backup:
- Built-in battery charger *(optional rack mount battery enclosure - RE2)*.
- Automatic switchover to stand-by battery when AC fails.

Accessories:

NetWayXT:
- PoE repeater module extends data range 100m.

NetWayXTX:
- PoE/PoE+ repeater module extends data range 100m.

RE2:
- Rack Mount Battery Enclosure accommodates up to four (4) 12VDC/7AH batteries

Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction. NetWay8G is not intended to be connected to outside plant leads. These products are for indoor use only and must be installed within the protected premises.

1. Attach mounting brackets to NetWay8G unit for rack or wall mount installation *(Fig. 9 or 10, pg. 4)*. Affix rubber pads to NetWay8G for shelf installation *(Fig. 11, pg. 4)*.
2. Secure the unit in a rack or on a wall, or place unit on a shelf as desired.
   Note: The following factors should be taken into consideration when installing these rack mount units:
   a. The unit is to be installed in a space where the maximum ambient temperature does not exceed 104ºF (40ºC).
   b. Take care to ensure that there is sufficient air flow around the unit and that obstructions do not impede it.
   c. When mounting units in a rack, take care to avoid uneven loading which can cause a hazardous condition.
3. Plug the grounded AC line cord (included) into the IEC 320 connector of the NetWay8G unit *(Fig. 1g, pg. 2)*. Plug unit into a reliable earth grounded socket.
   When using multiple units, the sum of the individual name plate ratings should not exceed the supply circuit rating.
   Do not connect to a receptacle controlled by a switch.
4. Connect structured cables from port marked [IN] on NetWay8G to the corresponding inputs of an ethernet switch or video server *(Fig. 1b, pg. 2, Fig. 3, pg. 3)*.
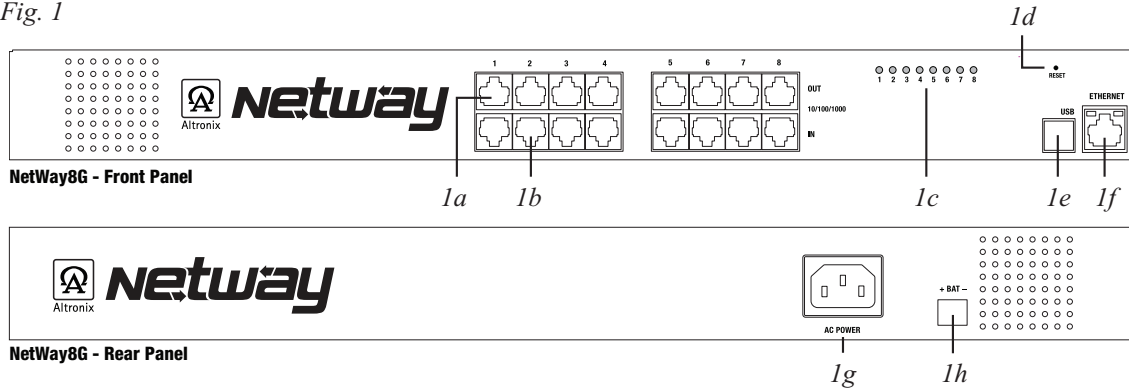   **Note:** All cabling and wire must be UL Listed and/or Recognized wire suitable for their application.
5. Connect structured cables from port marked [OUT] on NetWay8G to PoE compliant camera/edge devices *(Fig. 1a, pg. 2, Fig. 3, pg. 3)*.
6. When the use of stand-by batteries is required, they must be sealed lead acid or gel type.
   Connect four (4) 12VDC batteries in series to terminals marked [+BAT–] *(Fig. 1h, pg. 2),* carefully observing polarity.
   Note: When batteries are not used a loss of AC will result in a loss of output voltage.

Fig. 1

NetWay8G - Front Panel

NetWay8G - Rear Panel

1a OUT 1-8: Structured cable to PoE compliant cameras/edge devices.
1b IN 1-8: Structured cable to ethernet switch or video server.
1c LED(s) 1-8: Port status LEDs.
1d Reset: Restores unit to factory settings.
1e USB Port: For future use.
1f Ethernet: For future use.
1g IEC 320 Connector: 115/230VAC (grounded line cord included).
1h Built-in battery charger: Charges stand-by batteries for applications requiring back-up,
    (optional rack mount battery enclosure available - RE2)

Port Status and LED Flash Codes:

Port Status	Flash Codes	Description
All Ports Off	Sequential LED Port Scan	No devices connected
Port Off	OFF	LED OFF
Port On	ON	LED ON
Class 4 detection Port	Blinks 2 times	Enables power to PoE devices.
Non-compliant Device	2Hz	Will prevent port from turning on.
Port Overload Fault	5Hz	Will prevent port from turning on.
4 Port Overload Grouped	5Hz	4 LEDs. Will prevent ports from turning on.
8 Port Overload Grouped	5Hz	LEDs 1-8 Power Supply Overload for ports 1-8.

Installing a NetWayXT/NetWayXTX repeater module:

NetWayXT will work only with PoE devices. NetWayXTX will work with PoE/PoE+ devices.

1. Mount NetWayXT/NetWayXTX in desired location utilizing the mounting hole *(Fig. 2, pg. 2)*. Use a proper fastener and/or wall anchor when securing NetWayXT/NetWayXTX to the wall.
2. Connect structured cable from port marked [OUT] on NetWay to port marked [IN] on the NetWayXT/NetWayXTX *(Fig. 2, pg. 2)*.
3. Connect structured cable from port marked [OUT] on NetWayXT/NetWayXTX to the PoE/PoE+ camera/edge device or next NetWayXT/NetWayXTX repeater *(Fig. 2, pg. 2)*.
4. Port status LEDs will illuminate on NetWayXT/NetWayXTX indicating the port is operational *(refer to LED Definitions, pg. 2)*.
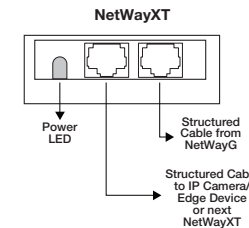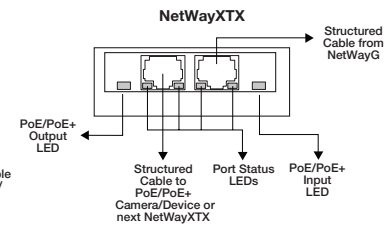5. Power LED will illuminate indicating 12VDC output.
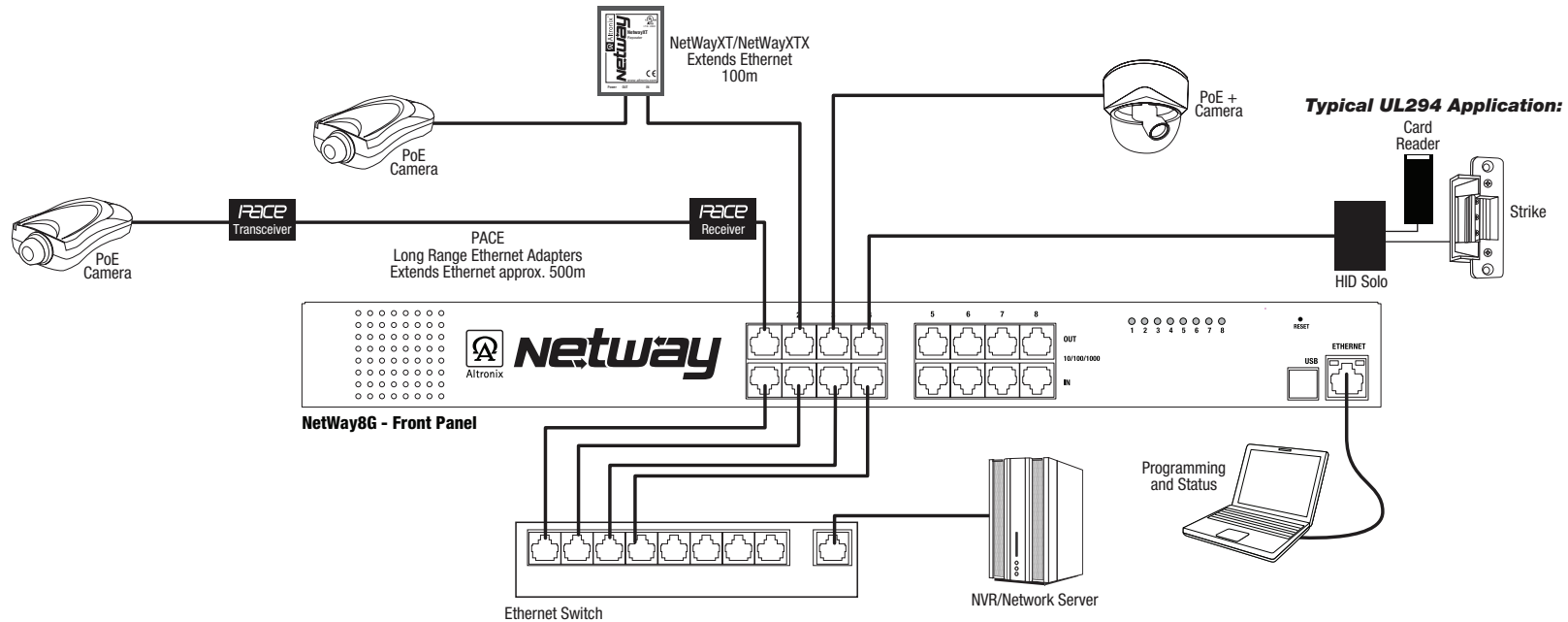
Fig. 2 - NetWayXT/NetWayXTX

Port LED Definitions for NetWayXT and NetWayXTX Repeaters:

Status	NetWayXT		NetWayXTX		
	Green LED	Yellow LED	PoE/PoE+ Output LED	PoE/PoE+ Input LED	Yellow LED
OFF	Indicates it is connected as 10Base-T or no link.	Indicates no link.	No PoE/PoE+ Output	No PoE/PoE+ Input	Indicates no link.
ON	Indicates it is connected as 100Base-TX.	Indicates a link.	Normal PoE/PoE+ Output	PoE/PoE+ Input	Indicates a link.
Blinking	—	Indicates activity.	—	—	Indicates activity.

NetWay8G Typical Application:

Fig. 3

NetWayXT/NetWayXTX
Extends Ethernet
100m

PoE +
Camera

Typical UL294 Application:

Card
Reader

Strike

PoE
Camera

PACE
Transceiver

PACE
Receiver

PACE
Long Range Ethernet Adapters
Extends Ethernet approx. 500m

PoE
Camera

HID Solo

NetWay8G - Front Panel

Programming
and Status

Ethernet Switch

NVR/Network Server

Technical Specifications:

Parameter	Description
No. of Ports	NetWay8G - Eight (8) PoE+ Ports (10/100/1000).
Input power requirements	NetWay8G: 115VAC 60Hz, 3.25A or 230VAC 50/60Hz, 2A. Fuse: 4A/125V. **Note:** To reduce the risk of fire, replace only with same type and rating of fuse.
Indicators	Port Status LED
Environmental Conditions	Operating Ambient Temperature: -20ºC to 40ºC (-4ºF to 104ºF). Relative Humidity: 85%, +/ -5%. Storage Temperature: -20ºC to 70ºC (-4ºF to 158ºF). Operating Altitude: -304.8 to 3,048m (-1,000 to 10,000 ft.).

The lightning flash with arrow head symbol within an equilateral triangle is intended to alert the user to the presence of an insulated DANGEROUS VOLTAGE within the product's enclosure that may be of sufficient magnitude to constitute an electric shock.
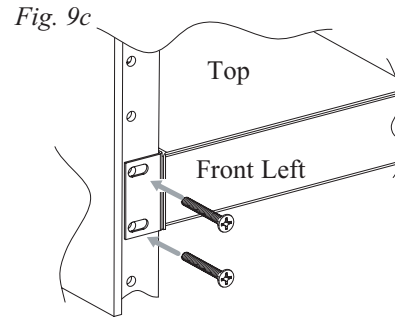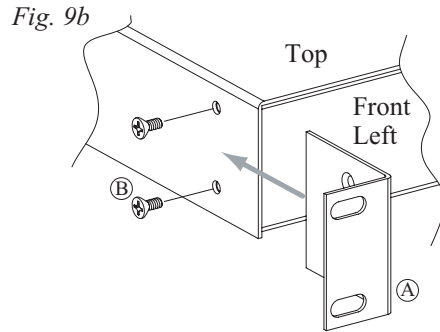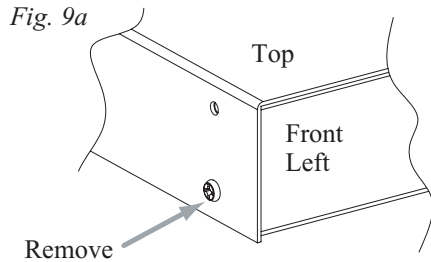
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: To reduce the risk of electric shock do not open enclosure.
There are no user serviceable parts inside. Refer servicing to qualified service personnel.

Mounting Options:

Rack Mount Installation

1- Remove and discard factory installed screws from both sides of rack chassis *(Fig. 9a)*.
2- Install mounting brackets (A) on the left and right side of rack chassis using the four (4) flat head screws (B) *(included) (Fig. 9b)*.
3- Place unit into desired EIA 19" rack position and secure with mounting screws *(not included) (Fig. 9c)*.

Fig. 9a

Top

Front
Left

Remove

Fig. 9b

Top

Front
Left

B

A

Fig. 9c

Top

Front Left

Wall Mount Installation

1- Install mounting brackets (A) on the left and right side of rack chassis using four (4) flat head screws (B) (included) *(Fig. 10a)*.
2- Place unit at desired location and secure with mounting screws *(not included) (Fig. 10b)*.
   Caution: It is necessary to make sure mounting screws are securely fastened to a beam when installing the unit vertically.
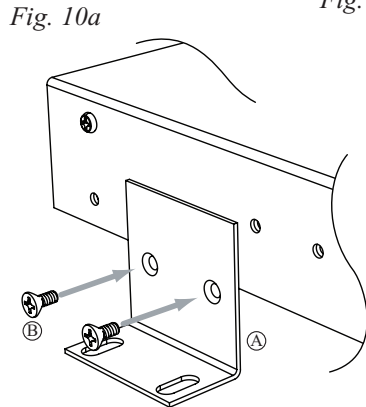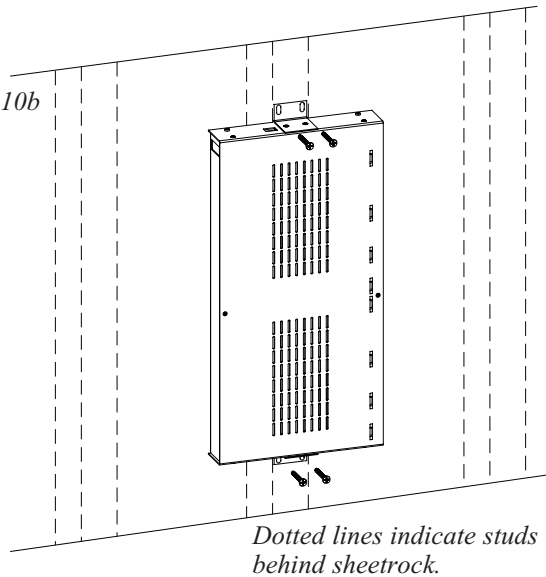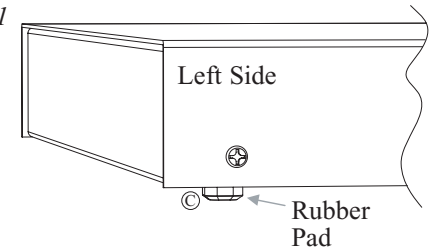
Fig. 10

Fig. 10a

B

A

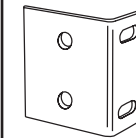*Fig. 10b*

Dotted lines indicate studs behind sheetrock.

Shelf Installation

1- Position and affix rubber pads (C) (included) at each corner on the bottom of the unit *(Fig. 11)*.
2- Place unit in desired location.

Fig. 11

Left Side

C — Rubber Pad

Mounting Hardware (Included):

A Two (2) mounting brackets

B Six (6) flat head screws for mounting brackets.

C Four (4) rubber pads.