Netway

Power over the Ethernet

NetWay V Series
PoE Solution for
Standard Network Infrastructure

Models Include:

NetWay8V
- Eight (8) Port PoE Midspan Injector

NetWay16V
- Sixteen (16) Port PoE Midspan Injector

Installation Guide

$C\epsilon$

Altronix®

More than just power.™

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Altronix NetWay8V/NetWay16V Midspans provide power and pass data for PoE compliant cameras/edge devices. Cameras/edge devices may be located up to 100m from the NetWay unit. A NetWayXT/NetWayXTX repeater module can be utilized to extend the distance an additional 100m for a total range of up to 200m. A maximum range of 600m is possible using multiple repeaters, based on camera/device port requirement. NetWay Midspans are capable of supporting non-PoE compliant fixed and PTZ IP cameras utilizing NetWay1512 or NetWay3012 adapters.

NetWay Specifications:

NetWay8:
- Eight (8) ports of cameras/edge devices over ethernet (CAT5) cable up to a distance of 100m per port.
- Input: 220VAC 50/60Hz, 1.8A.

NetWay16:
- Sixteen (16) ports of cameras/edge devices over ethernet (CAT5) cable up to a distance of 100m per port.
- Input: 220VAC 50/60Hz, 2.5A

.

Common Specifications:

Agency Listings:
- **CE**   European Conformity.

Power:
- Unit supplies PoE output voltage (55V), and up to 30W max. full power per port.
  Total power: NetWay8V - 150W,
                      NetWay16V - 300W.
- IEEE 802.3af (PoE) and
  IEEE 802.3at (PoE+) compliant.
- All output circuits are power-limited.
- Short circuit protection.

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

Features:
- Illuminated master power disconnect circuit breaker with manual reset (switch).

Features (cont'd):
- Individual port status LEDs.
- IEC 320 - 3-wire grounded line cord (detachable).
- Unit can be rack or shelf mounted.
- 1U rack mount chassis for use in standard EIA 19" rack.

Accessories:
NetWay1512:
- 15W adapter for non-PoE compliant IP cameras.
NetWay3012:
- 25W adapter for non-PoE compliant IP fixed or PTZ cameras.
NetWayXT:
- PoE repeater module extends range 100m.
NetWayXTX:
- PoE+ repeater module extends range 100m.

Installation Instructions:

NetWay is not intended to be connected to outside plant leads.
1. Attach mounting brackets to NetWay unit for rack installation *(Fig. 6, pg. 8)*.
   Affix rubber pads to NetWay for shelf installation *(Fig. 8, pg. 7)*.
2. Secure the unit in a rack 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 rack, take care to avoid uneven loading which can cause a hazardous condition.
3. Set illuminated master power disconnect circuit breaker to the (OFF) position *(Fig. 1d, pg. 3)*.
4. Plug the grounded AC line cord (included) into the IEC 320 connector of the NetWay unit *(Fig. 1e, pg. 3)*.
   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.
5. Connect structured cables from port marked [IN] on NetWay to the corresponding inputs of an ethernet switch or video server *(Fig. 1b, pg. 3, Fig. 5, pg. 6)*.
6. Connect structured cables from port marked [OUT] on NetWay to PoE compliant camera/edge devices *(Fig. 1a, pg. 3, Fig. 5, pg. 6)*.
7. Upon completion of wiring set illuminated master power disconnect circuit breaker to the RESET (ON) position *(Fig. 1d, pg. 3)*.
8. Port status LEDs on the NetWay will initialize when PoE devices are connected as follows:
   - LED will illuminate when devices are IEEE 802.3af compliant.
   - LED will blink once and illuminate when devices are IEEE 802.3at compliant (PoE+).

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	LED's 1-8 Power Supply Overload for ports 1-8. LED's 9-16 Power Supply Overload for ports 9-16.

Fig. 1 - **NetWay8V/NetWay16V Configuration**

NetWay8V - Front Panel

NetWay16V - Front Panel
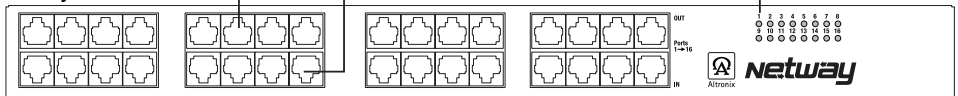
NetWay8V & NetWay16V - Rear Panel

1d   *1e*

1a OUT 1-8 (NetWay8V), OUT 1-16 (NetWay16V): Structured cable to PoE compliant cameras/edge devices.
1b IN 1-8 (NetWay8V), IN 1-16 (NetWay16V): Structured cable to ethernet switch or video server.
1c LED(s) 1-8 (NetWay8V), 1-16 (NetWay16V): Port status LEDs.
1d Illuminated master power disconnect circuit breaker (switch):
   • OFF position Circuit breaker tripped. Switch not illuminated.
   • RESET (ON) position. Switch illuminated.
1e IEC 320 Connector: 115VAC 60Hz (grounded line cord included).

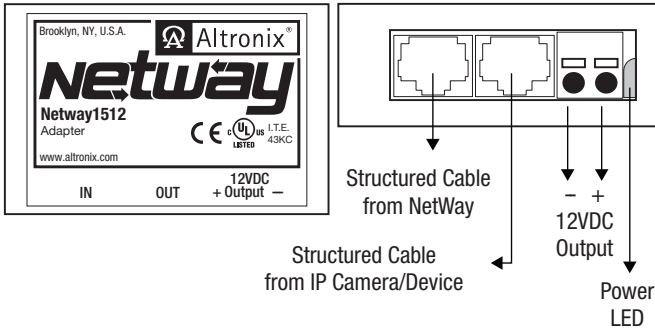## Installing a NetWay1512 Adapter for 12VDC IP Cameras up to 13W:

Fig. 2 - **NetWay1512**

Structured Cable
from NetWay

Structured Cable
from IP Camera/Device

− +
12VDC
Output

Power
LED

1. Mount NetWay1512 in proximity to IP camera *(Fig. 2, pg. 4)*. Affix one side of velcro (supplied) to NetWay1512 and the place the second side of the velcro in the desired location.
2. Connect structured cable from port marked [IN] on NetWay1512 to any ports marked [OUT] of NetWay8/NetWay16 *(Fig. 2, pg. 4, Fig. 1a, pg. 3)*.
3. Connect structured cable from port marked [OUT] on NetWay1512 to the IP camera *(Fig. 2, pg. 4)*.
4. Connect 12VDC output from NetWay1512 terminals marked [− 12VDC +] to the power input of the IP camera *(Fig. 2, pg. 4)*. Polarity must be observed.
5. Power LED indicator will illuminate on NetWay1512 under normal conditions *(Fig. 2, pg. 4)*.

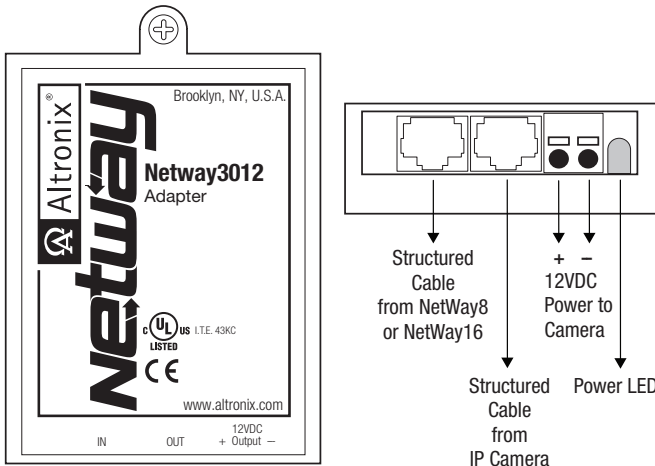## Installing a NetWay3012 Adapter for 12VDC IP PTZ up to 25W:

Fig. 3 - **NetWay3012**

Structured
Cable
from NetWay8
or NetWay16

+ −
12VDC
Power to
Camera

Structured
Cable
from
IP Camera

Power LED

1. Mount NetWay3012 in proximity to IP camera utilizing mounting hole *(Fig. 3, pg. 4)*. Use a proper fastener and/or wall anchor when securing NetWay3012 to the wall.
2. Connect structured cable from port marked [IN] on NetWay3012 to ports marked [OUT] of NetWay8/NetWay16 *(Fig. 3, pg. 4, Fig. 1a, pg. 3)*.
3. Connect structured cable from port marked [OUT] on NetWay3012 to the IP fixed or PTZ camera *(Fig. 3, pg. 4)*.
4. Connect 12VDC output from NetWay3012 terminals marked [+ 12VDC −] to the power input of the IP camera *(Fig. 3, pg. 4)*. Polarity must be observed.
5. Power LED indicator will illuminate on NetWay3012 under normal conditions *(Fig. 3, pg. 4)*.

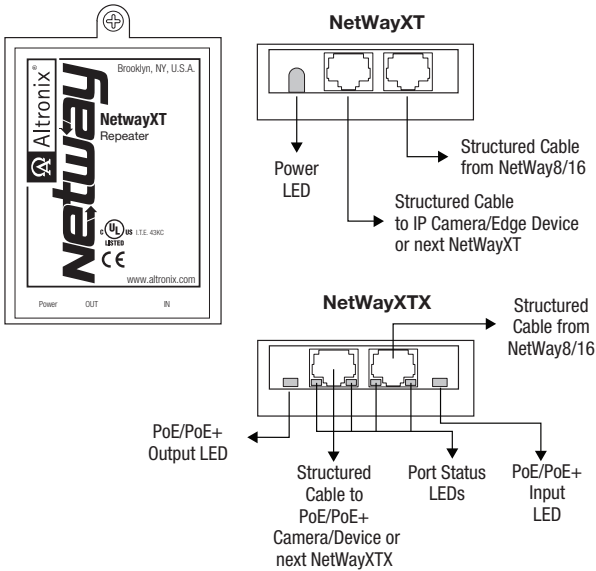## Installing a NetWayXT/NetWayXTX Repeater Module:

NetWayXT

Fig. 4 - **NetWayXT/NetWayXTX**

Power LED

Structured Cable from NetWay8/16

Structured Cable to IP Camera/Edge Device or next NetWayXT

NetWayXTX

Structured Cable from NetWay8/16

PoE/PoE+ Output LED

Structured Cable to PoE/PoE+ Camera/Device or next NetWayXTX

Port Status LEDs

PoE/PoE+ Input LED

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. 4, pg. 5)*. 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. 4, pg. 5, Fig. 1a, pg. 3)*.
3. Connect structured cable from port marked [OUT] on NetWayXT/NetWayXTX to the PoE/PoE+ camera/edge device or next NetWayXT/NetWayXTX repeater *(Fig. 4, pg. 5)*.
4. Port status LEDs will illuminate on NetWayXT/NetWayXTX indicating the port is operational *(refer to LED Definitions)*.
5. Power LED will illuminate indicating 12VDC output.

Port LED Definitions for NetWayXT Repeater:

Status	Green LED	Yellow LED
OFF	Indicates it is connected as 10Base-T or no link.	Indicates no link.
ON	Indicates it is connected as 100Base-TX.	Indicates a link.
Blinking	–	Indicates activity.

Port LED Definitions for NetWayXTX Repeater:

| Status	PoE/PoE+ Output LED	PoE/PoE+ Input LED	Yellow LED
OFF	No PoE/PoE+ Output	No PoE/PoE+ Input	Indicates no link.
ON	Normal PoE/PoE+ Output	PoE/PoE+ Input	Indicates a link.
Blinking	–	–	Indicates activity.

NetWay8V/NetWay16V Typical Application:

Fig. 5
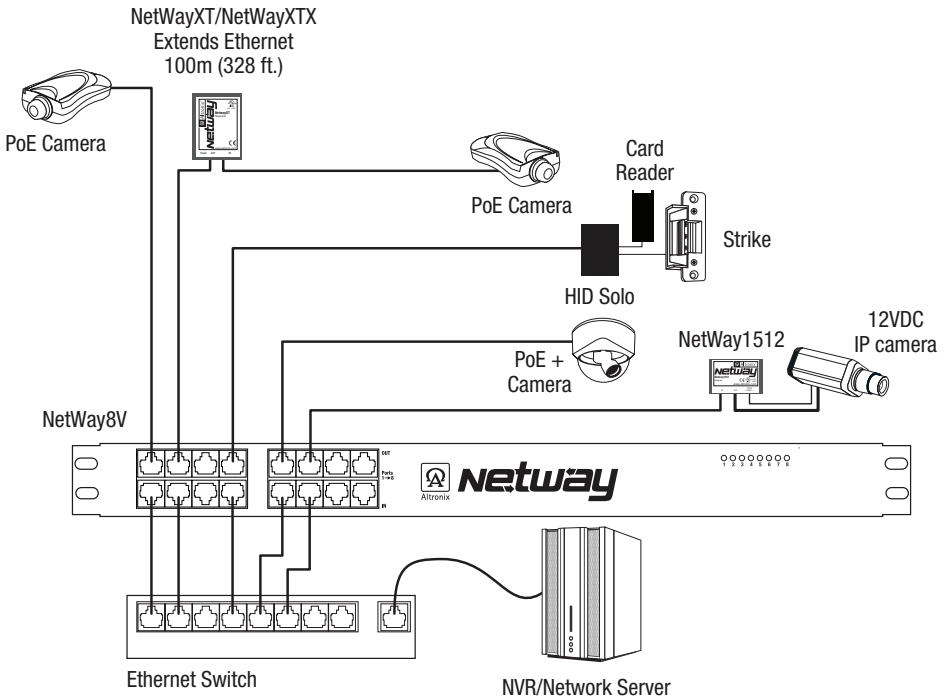
Technical Specifications:

Parameter	Description
No. of Ports	NetWay8V - Eight (8) Ports. NetWay16V - Sixteen (16) Ports.
Input Power Requirements	NetWay8V: 220VAC, 50/60Hz, 1.8A. NetWay16V: 220VAC, 50/60Hz, 2.5A. Fuse: 4A/125V (NetWay16V has 2 fuses). **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: -20º to 70ºC (-4º to 158ºF). Operating Altitude: -304.8 to 3,048m.
Regulatory Compliance	$C\epsilon$ CE European Conformity

NetWay8V/NetWay16V Rack Mount Chassis
Mechanical Drawing and Dimensions:

Fig. 6

0.75" (19.1mm)

19.125" (485.8mm)

17.625" (447.7mm)

8.5" (215.9mm)

1.625" (41.3mm)
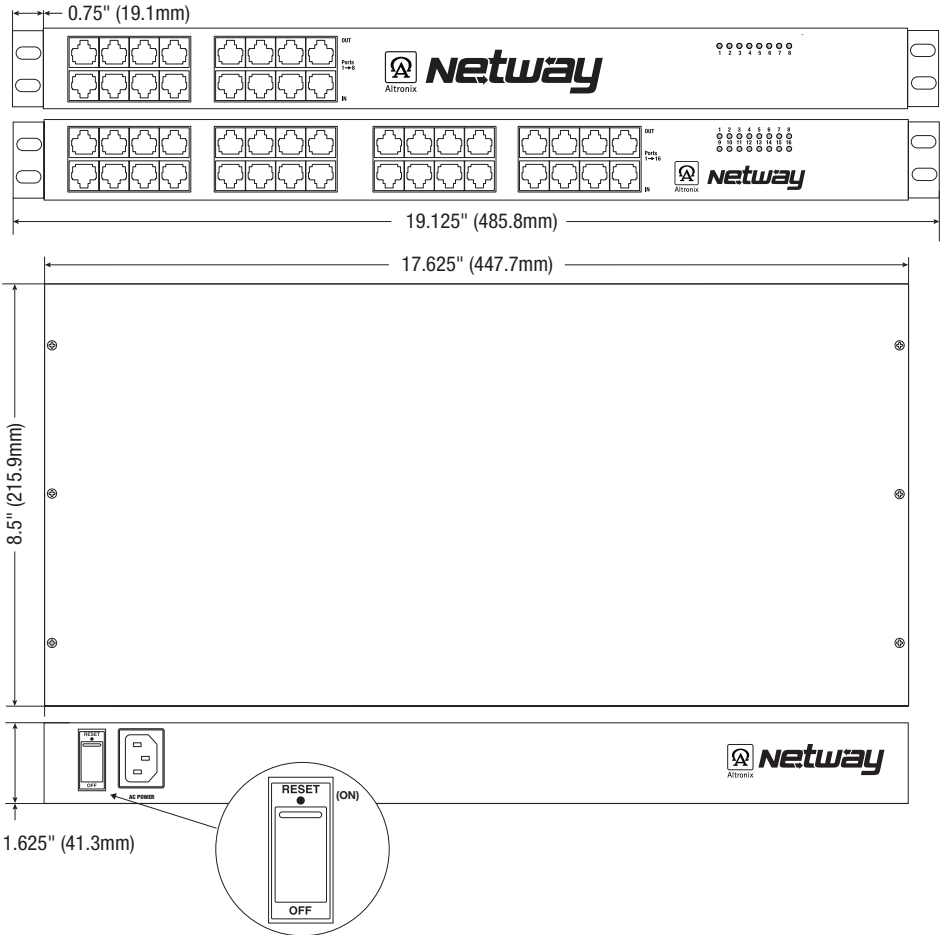
The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of an insulated DANGEROUS VOLTAGE within the product's enclosure that may be of sufficient magnitude to constitute an electric shock.

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. 7a)*.
2. Install mounting brackets (A) on the left and right side of rack chassis using the four (4) flat head screws (B) *(included) (Fig. 7b)*.
3. Place unit into desired EIA 19" rack position and secure with mounting screws *(not included) (Fig. 7c)*.

Fig. 7

Fig. 7a

Top

Front
Left

Remove

Fig. 7b

Top

Front
Left

Ⓑ

Ⓐ

Fig. 7c

Top

Front Left
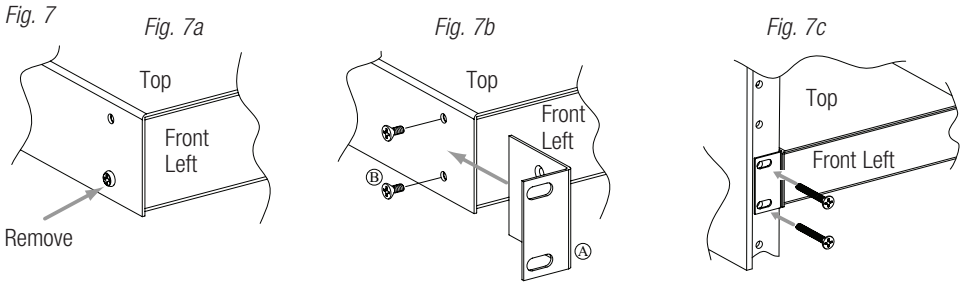
Wall Mount Installation
1. Install mounting brackets (A) on the left and right side of rack chassis using four (4) flat head screws (B) (included) *(Fig. 8a)*.
2. Place unit at desired location and secure with #6 size screws or larger *(not included) (Fig. 8b)*.
   Caution: It is necessary to make sure mounting screws are securely fastened to a beam when installing the unit vertically.

Fig. 8

Fig. 8a

Fig. 8b

Ⓑ

Ⓐ

*Dotted lines indicate studs behind sheetrock.*
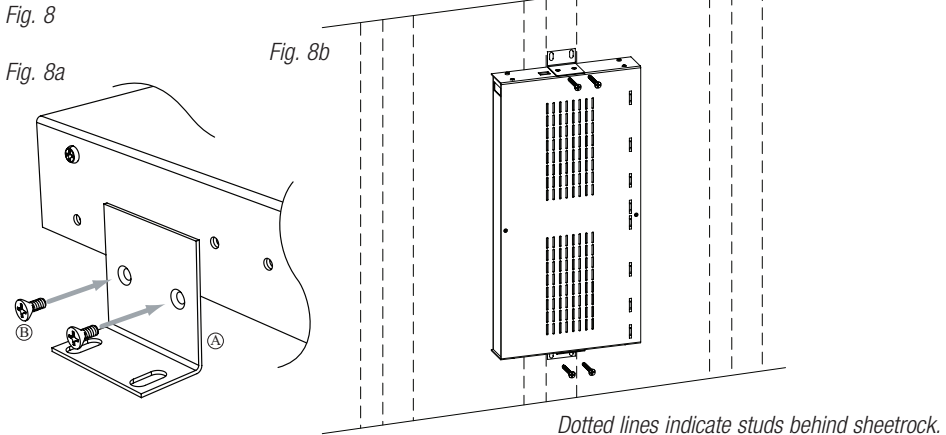
Shelf Installation
1. Position and affix rubber pads (C) (included) at each corner on the bottom of the unit *(Fig. 9)*.
2. Place unit in desired location.

Fig. 9

Left Side

Ⓒ
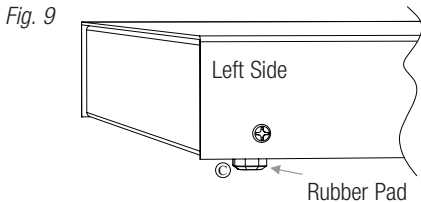
Rubber Pad

Mounting Hardware (Included):

Ⓐ Two (2) mounting brackets

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

Ⓒ Four (4) rubber pads.