



Innovative Electronics for a changing world

MANUAL

POE 4+4 GM (10-30V)

DC INPUT : 10VDC – 30 VDC max



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1. Description:

The **POE 4 +4 GM** is an 4+4 = 8 Channel Gigabit DC passive power over Ethernet strip injector with a 10Mbps management Ethernet interface to allow the user to toggle the power output of each one of the 8 POE power outputs via a web-browser interface or SNMP SET Commands.

POE output ports is Grouped into **Group A** (4 POE channels) and **Group B** (4 POE channels) –The user can select the **MODE** (MODE B-2 pair power or PHANTOM POWER-4 pair power) and **voltage (10 VDC to 30VDC- input dependant)** for each group of 4 POE outputs individually via changing power connections at the rear of the unit.

The unit operates from 10Vdc to 30Vdc supply voltage for Group A and B.

2. Technical & Connections:

The unit have 8 LAN input Ports and 8 LAN + POE output ports via 70W POE+ Gigabit Ethernet transformers.

All Power output Ports on the device, both positive and negative lines is protected via **1Amp** PTC thermal self recoverable fuses against short circuits and faulty equipment that might be connected to the port.

The unit controls power to each POE output port via **mechanical relays** for robustness on the power line from incoming spikes on the power line caused by ESD discharges etc.

POE Port 1 to 8 can only be toggled to break power to the POE outputs 1 to 8 to reset connected devices.

The POE port will after being toggled – automatically re-connect power to the connected device after **15 seconds** so the user can not log himself out permanently of a connection to the remote tower.

10Mbps User control Ethernet interface for remote management.

Each Port have led indication for port power status, led's also indicates if the unit is connected in MODE B-2pair power or PHANTOM MODE-4pair power mode for POE A and POE B.

When POE A or POE B is connected in the MODE B mode – only the **green** led illuminates on the POE port

When POE A or POE B is connected in the PHANTOM mode – the **green** and **amber** led illuminates on the POE port

Rear view



POE A is the master unit and POE B is the slave unit

The unit will not function if Power is connected to POE B only – always use POE A power input

RESET

To factory reset the unit to the default 192.168.1.2 IP address , disconnect power from the unit , short circuit the 2 pins carefully as indicated by the arrow on the backside , apply power to POE A , wait 10seconds , remove the short circuit across the 2 reset pins.

Green pluggable terminals for power connection:

The unit can be powered from the **same** supply voltage or from **two different** supply voltages –see connection diagrams below

**** Reverse polarity connections could damage your POE connected equipment****

Please be careful about correct polarity when connecting the power source

Each POE group, POE A (ch1-4) and POE B (ch1-4) can be wired to function in the (same or different modes) and the (same or different) voltages.

MODES:

MODE B = 2 pair powering over LAN cable

PHANTOM = 4 pair powering over LAN cable

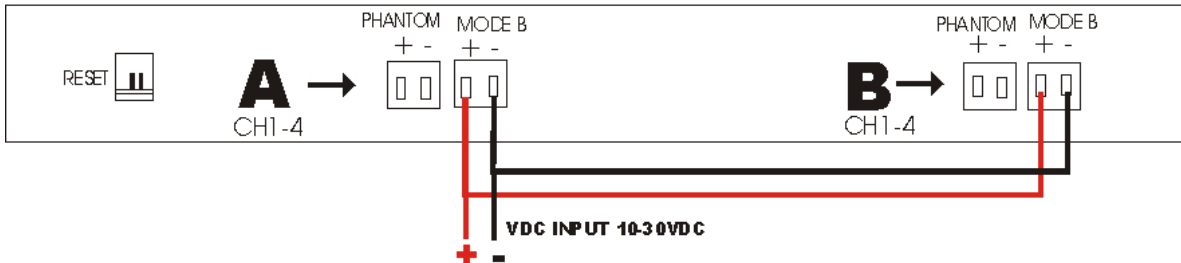
Provision was made for the user to write the voltage for the POE A group and the POE B group onto the front facia of the unit to avoid confusion between different voltage supplies between the channels

Voltage outputs will be equal to voltage inputs

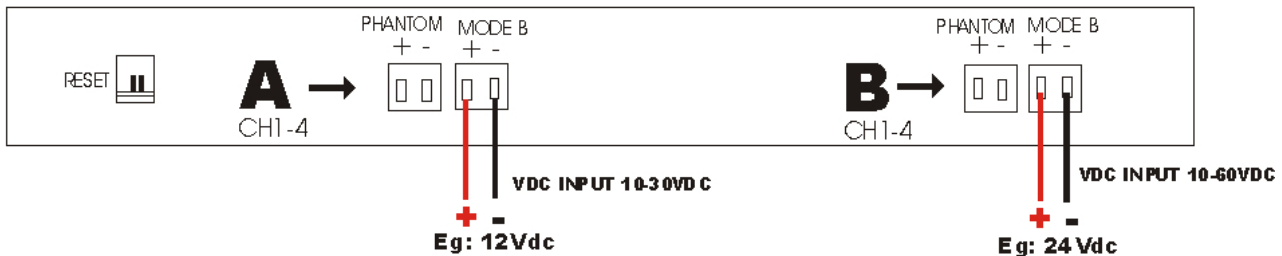
MODE B = POWER OVER 2 PAIRS = +4,5 and - 7,8

PHANTOM = POWER OVER all 4 pairs + 1,2,4,5 and - 3,6,7,8

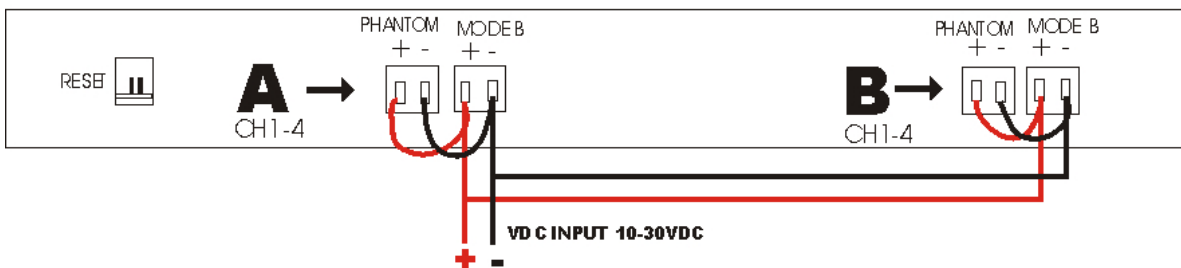
POWER Connection - MODE B for POE A + POE B at the same voltage



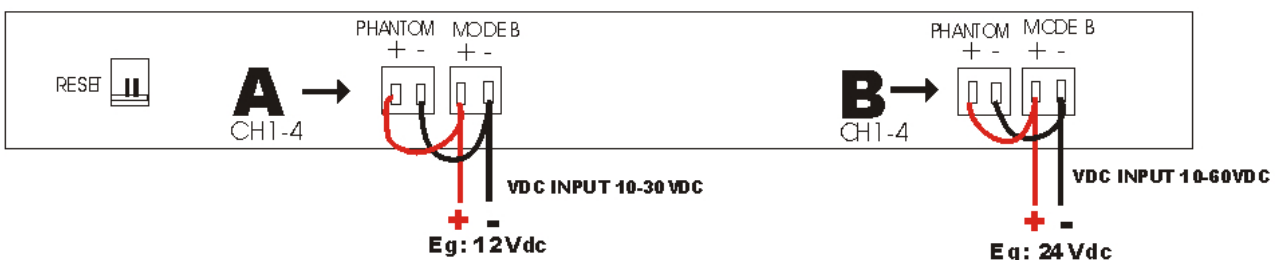
POWER Connection - MODE B for POE A + POE B at different voltages



POWER Connection - PHANTOM for POE A + POE B at the same voltage



POWER Connection - PHANTOM for POE A + POE B at different voltages

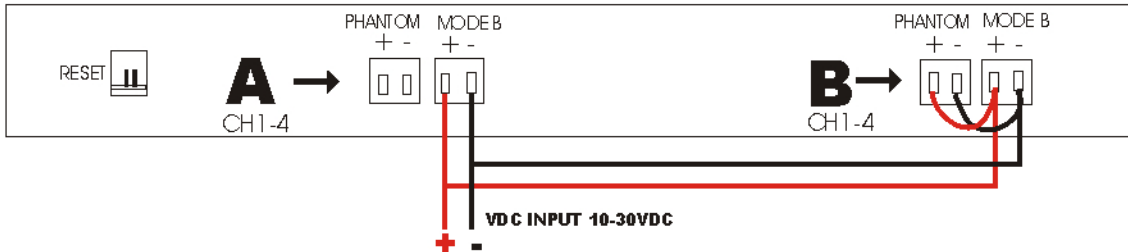


Voltage outputs will be equal to voltage inputs

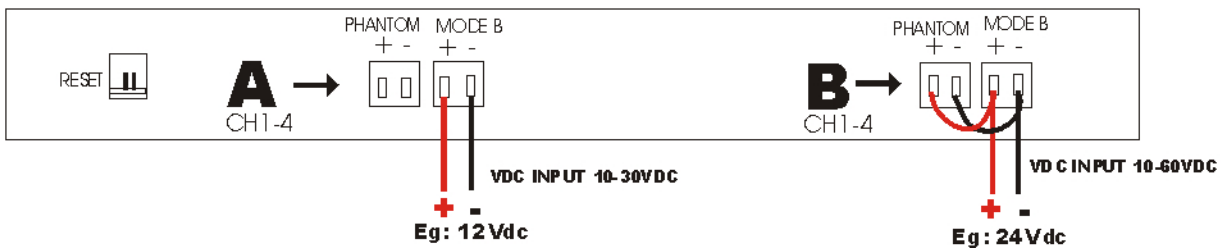
MODE B = POWER OVER 2 PAIRS =+4,5 and - 7,8

PHANTOM = POWER OVER all 4 pairs + 1,2,4,5 and - 3,6,7,8

POWER Connection - MODE B for POE A and Phantom for POE B at the same voltage or vice versa



POWER Connection - MODE B for POE A and Phantom for POE B at different voltages or vice versa



3. Screenshots:

Home page

Indicates PORT output power active with a green dot
 POE ID – user can specify a site name for the POE 4+4GM



Managed 4+4 CH GB DC POE Injector

- Home
- POE ID and MODE
- POE A Control(Main)
- POE B Control(Expander)
- Network Configuration

Managed 4 + 4 CH GB DC POE injector

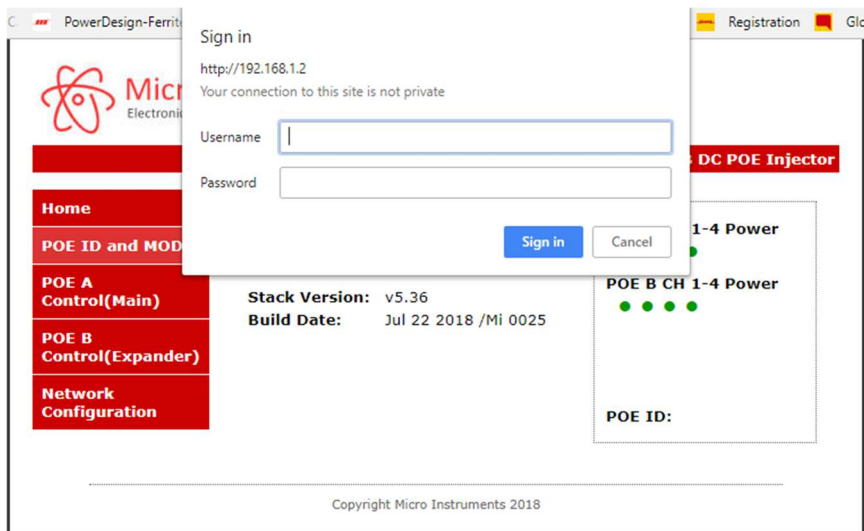
Stack Version: v5.36
 Build Date: Jul 22 2018 /Mi 0025

POE A CH 1-4 Power
 ● ● ● ●

POE B CH 1-4 Power
 ● ● ● ●

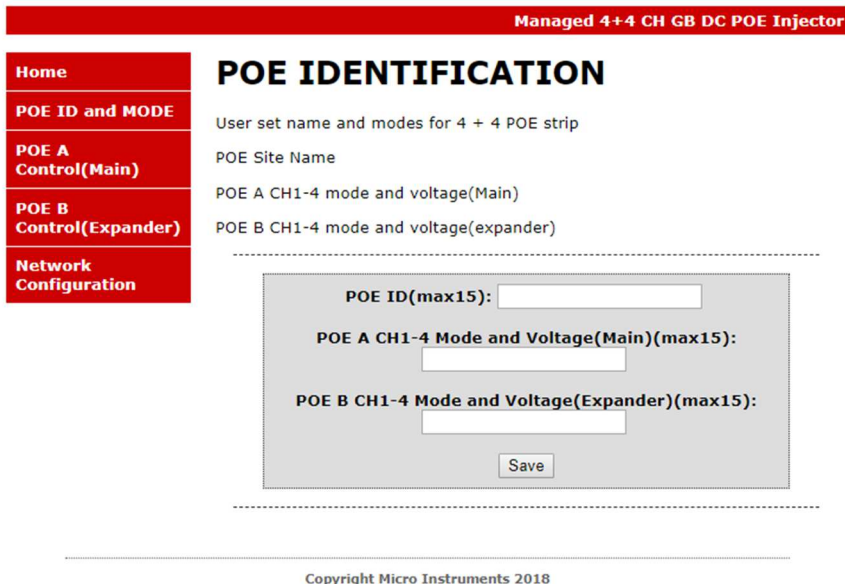
POE ID:

Selecting any menu will bring up the password pop up
Default : admin & admin



POE ID : user defined site name for the POE 4+4GM

User can enter the voltage and the mode for POE A and POE B for reference



POE A - PORT POWER CYCLE:

User defined Names can be specified for **PORT A** channel 1 to 4 to easily identifies connected devices to the port

PORT A CH 1-4 can be toggled for 15 sec to reset connected devices

POE B - PORT POWER CYCLE:

User defined Names can be specified for **PORT B** channel 1 to 4 to easily identifies connected devices to the port

PORT B CH 1-4 can be toggled for 15 sec to reset connected devices

Network Configuration:

Change User defined password

Set IP address , Gateway and subnet Mask for the Ethernet interface



Managed 4+4 CH GB DC POE Injector

- Home
- POE ID and MODE
- POE A Control(Main)
- POE B Control(Expander)
- Network Configuration

Ethernet Configuration

This page allows the configuration of the units network settings.

CAUTION: Incorrect settings may cause the unit to lose network connectivity.

Enter the new settings/name for the unit below:

MAC Address:	<input type="text" value="00:19:F6:00:1D:C2"/>
Host Name:	<input type="text" value="POE4+4GM"/>
Password: [max 9]	<input type="text" value="admin"/>
IP Address:	<input type="text" value="192.168.1.2"/>
Gateway:	<input type="text" value="192.168.1.1"/>
Subnet Mask:	<input type="text" value="255.255.255.0"/>
<input type="button" value="Save Config and Reboot"/>	

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4. Physical dimensions

The unit is housed in a **19" 1u** standard rack mount enclosure – the mounting flanges on the sides can be turned 90 degrees to act as mounting feet if a **19"** rack cabinet is not available.

LENGTH: 440mm

HIGHT: 45mm

WIDTH: 80mm

WEIGHT: 1.375Kg

