

Power Injector DUO

User Guide

Models covered: M-POE-DUO-NS M-POE-DUO-S15.5

The Power Injector DUO (DUO) provides power to BAD BOY Wi-Fi devices via Power-over-Ethernet (PoE). This is an ethernet specification allowing powering a remote device without the need of a separate power cable. Two DUO models are available: the S15.5 provides a regulated 15.5Vdc output and the NS provides simple filtering only for the voltage being supplied. Both models provide circuit protection for shorts and reverse polarity connection.



Check off items when completed.

Step 1 (Skip this step if an optional Unleashed or Unleashed HP is NOT included in your system)

- DUO comes pre-configured with Port 2 PoE disabled. If Unleashed is included, power injection must be enabled on Port 2. Refer to [Enabling / Disabling Port 2 PoE](#) on following page.

Step 2

- Connect power to DUO using either AC or DC:

AC Plug in the AC Adapter (included) and insert barrel plug into DUO's power connector.

DC Connect the Power Cable (included) to an appropriate power source. Connect the red (or white striped) wire to positive(+) and the solid black wire to negative(-). Insert barrel plug into DUO.

Verify that the Green LED illuminates on Port 1 (and Port 2 if enabled in Step 1). **Note: If Yellow Power Fault LEDs illuminate, it indicates a reverse polarity connection. In this condition, built-in circuit protection will NOT allow power to Port 1 or Port 2.**

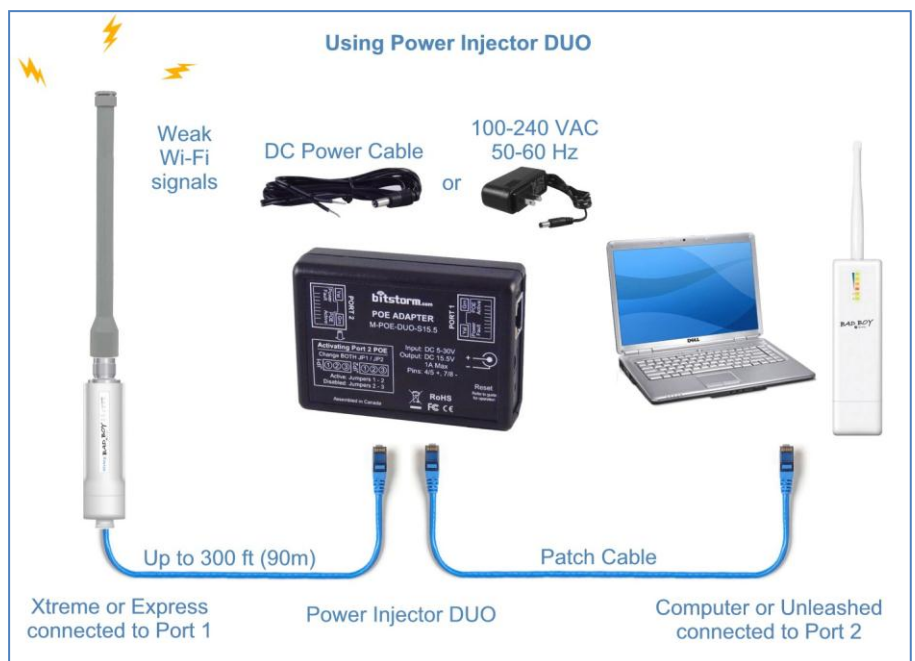
Step 3

- Connect one end of your BAD BOY cable into your Xtreme, Express or Zone. Refer to your device's Installation Guide for additional information. Connect the other end of the BAD BOY cable to the **Port 1** socket of the DUO. See illustration above for location. Note: Xtreme, Express and Zone require power to operate and should be connected to Port 1 which always supplies power. **Caution: Do not connect anything other than Bitstorm BAD BOY devices to Port 1.**

Step 4

- Plug a patch cable into Port 2 of the DUO.
If using a computer or networking device: Ensure Port 2 green LED is **NOT** lit.
If using Unleashed or Unleashed HP: Ensure Port 2 green LED is lit.

Connect other end of patch cable to computer, network devices or Unleashed.



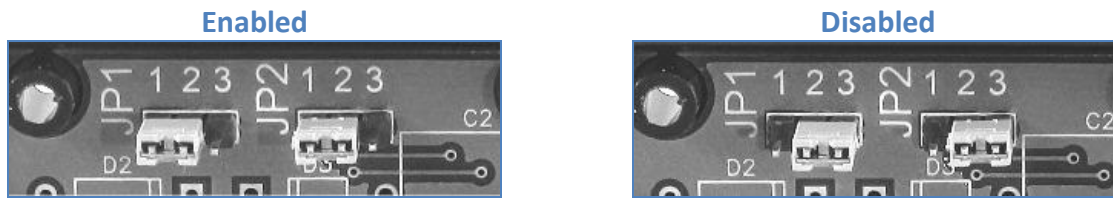
Step 5

- Refer to your device's Quick Start Guide for getting up and running. Surf the web to verify your BAD BOY Wi-Fi device(s) and cabling are operating correctly.

Congratulations, you're finished!

Enabling / Disabling Port 2 PoE

- 1) Open the case by removing the four screws on the back.
- 2) Move **BOTH** jumpers **JP1** and **JP2** to position **1-2** to allow power injection on Port 2. Placing **BOTH** jumpers to position **2-3** removes power injection from Port 2. **NOTE: Both jumpers must be positioned identically.**
- 3) Close case and refasten four screws on back.

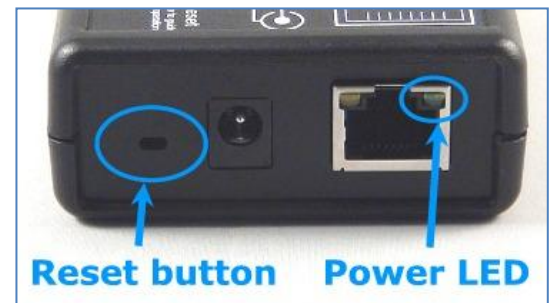


Note: If connecting to anything other than Bitstorm products, exercise caution to ensure that no damage is caused due to Port 2 injecting power.

Remote Reset (Only available on model M-POE-DUO-S15.5)

A reset allows you to restore the settings to a known default state. For example, this can be useful if you've changed the access username or password and it is no longer known. To perform a Reset operation, do the following (read all instructions prior to performing a reset):

- 1) The DUO will send a signal to perform a remote reset to all connected devices. Unplug the cables of any device that you do **NOT** want to have reset. Leave connected the device(s) that you wish to reset.
- 2) Power on and ensure devices have had enough time to fully start as normal.
- 3) Using a small screw driver or other flat ended, **non sharp** object, insert it into the slot until you feel and hear a click. **Note: Do not use excessive force!**
- 4) Hold the reset button depressed for at least 30 seconds and then release the button. If the button becomes unpressed during the 30 seconds, cycle the system off and on, and wait 30 seconds before trying again. Disregard any LED patterns displayed on Xtreme, Express, Unleashed or Zone.
- 5) Power off. Tip: You can remove the barrel power plug from the DUO. Wait until the green power LED turns completely off on the DUO.
- 6) Reconnect power. Tip: Using the barrel power connector to power up ensures a clean power start. Your Xtreme, Express, Unleashed or Zone should now be restored to factory default settings. Refer to your appropriate Quick Start Guide for default values and operation.



Specifications

	M-POE-DUO-NS	M-POE-DUO-S15.5
Injector Power Input:	10-20 Vdc	5-30 Vdc
Injector Power Output:	Same as input, 2A max	15.5 Vdc, 1A max
Output Ripple:	Capacitor Filtering, Smoothing	< 80 mV
Output Short Circuit Protected:	Yes – internal 2A fuse	Yes – protection circuit limited to 5A
Power Reverse Polarity Protection:	Yes – yellow LED indication	
Thermal Shutdown:	No	Yes
Efficiency:	N/A	up to 90%
Port 2 Power Injecting (PoE):	Yes – enabled / disabled by jumpers	
Port PoE Pins:	Positive(+) 4 & 5, Negative(-) 7 & 8	
Startup Delay:	None	approx. 2-3 seconds
Dimensions:	3.6" x 2.6" x 1.1" (9.2cm x 6.6cm x 2.8cm)	
AC Adapter:	Included, 100-240 Vac, North American style	
DC Power Cable:	Included, 6' (1.8m)	
Remote Reset Capability:	No	Yes