



ETHERNET EXTENSION EXPERTS

Enable-IT 824P Gigabit PoE Extender Kit Quickstart Guide

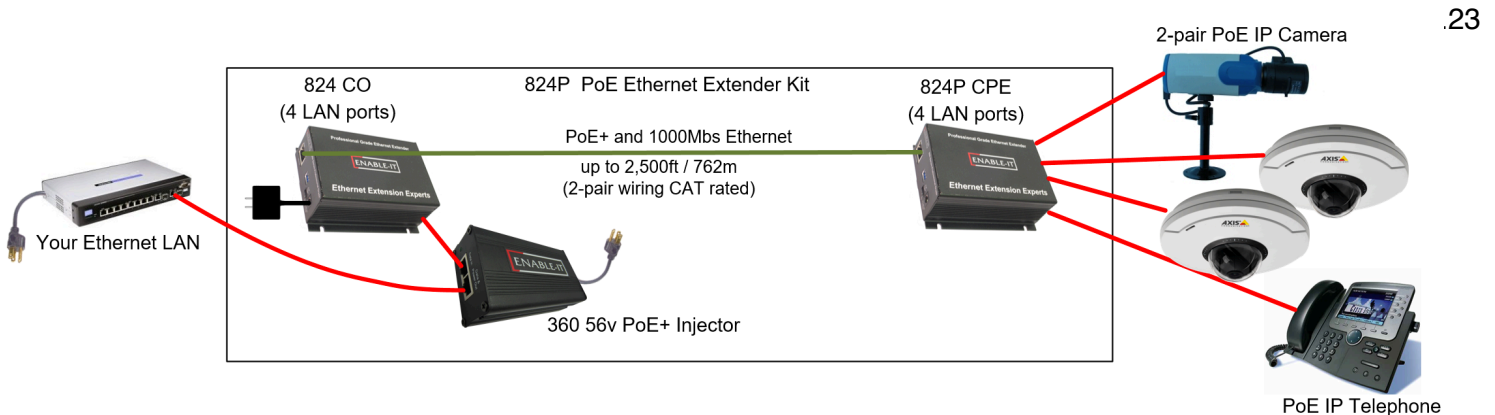


Professional Grade Networking



INSTALLING THE 824P POE EXTENDER KIT

The Enable-IT 824P Gigabit PoE Extenders have a distance restriction of 2,000ft (609m) over 2, 3 or 4-pair of Category 5e or better wiring from device extension to device extension. Adding Power load decreases the distance for PoE Power so typically installs up to 2,000ft are most common.



This diagram shows the contents of the product box inside the rectangle. Devices outside the rectangle above are your equipment that can be attached.

We highly recommend that you perform a quick out of the box test to ensure the working order of your Enable-IT 824P PoE Extender units prior to installing. This will also serve to familiarize you with how easy the process should be. Follow the steps below to perform the Out Of the Box Test.

Step 1 - Attach the 12V DC power adapter 824P CO unit so it powers up. The Power LED will indicate the unit is receiving power. The LAN ports will display a quick diagnostic by lighting up the LAN activity LED for 1 second starting from Port 4 to Port 1 in a sequence.

Step 2 - Connect the 824P CPE to the CO by the RJ-45 Interlink ports together using one of the Ethernet LAN Patch cords provided – as shown by the green line connecting the ports in the diagram above. Next attach the 360 PoE Injector to the 824P CO LAN port 1 and power up the injector.

The Green LED Sync indicator on each of the 824P units will blink as they see each other and then go solid once they are synched together.

Left side Interlink / Power LEDs

- Mode** – Yellow Solid LED (LED Off = CO unit, LED On = CPE unit)
- Sync** – Green slow to fast flicker LED on power up – indicates negotiation of a link
– Green solid LED indicates link established and rapid pulse is traffic.
- Power** – Green Solid LED indicates the unit is receiving 12V power.

Right side LAN LEDs

- Act** – Yellow LED
 - Off = No device attached or detected.
 - On = Solid, indicates the presence of local LAN.
 - Blinking = Indicates the presence of local LAN traffic.

The Green Sync LEDs will start flickering slowly and then fast as the units talk to each other. After a few seconds you should see a solid Green Interlink Sync LED on each unit to confirm a link is established. This confirms basic proper operation of the units.

Step 3 - Next for a more detailed test and to confirm your LAN and PoE Equipment works with the 824P, connect your Ethernet LAN to the 360 PoE Injector Data In port and the remote PoE device/s to the 824P CPE LAN/PoE ports and test connectivity. The Green Interlink Sync LED will pulse rapidly as it detects traffic.

Performing the On-Site Installation

After removing the Enable-IT 824P PoE Extender Kit from the box, and performing the Out Of The Box Testing (OOTBT), all that remains to install the unit on-site is to mount the unit, build the interconnect wiring, add voice lines if needed, and attach the LAN device cabling with the provided Ethernet Patch cords.

Mounting the Enable-IT 824P PoE Extender Units

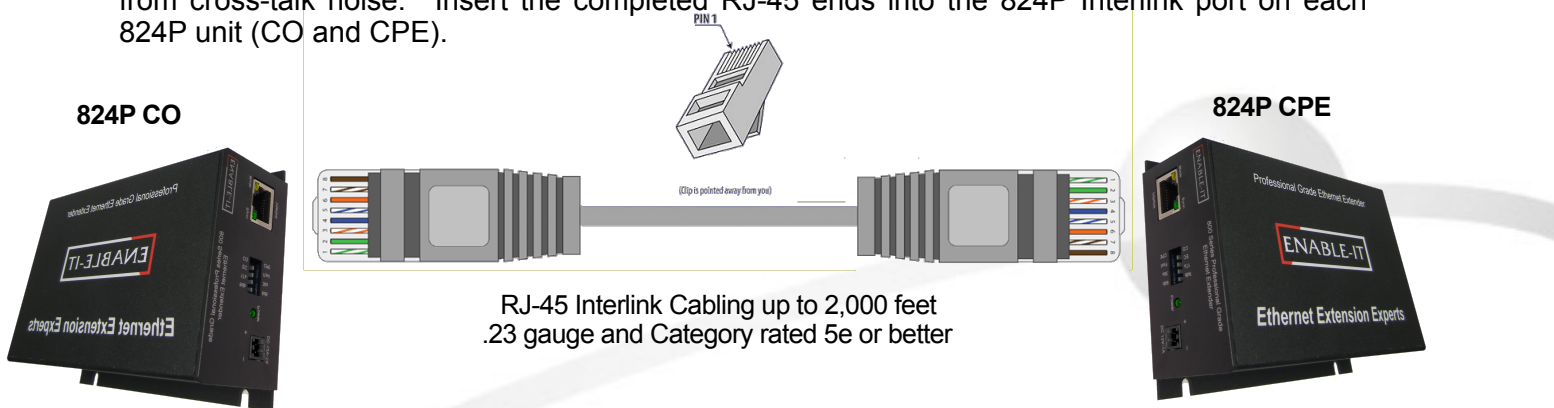
The Enable-IT 824P extended Ethernet solution is designed for quick wall mounting. Choose a location to mount each of the Enable-IT 824P's where the maximum distance does not exceed 2,000ft (609m) total between devices to be connected. When wall-mounting the Enable-IT 824P unit it is recommended that you use the appropriate screw anchors for your mounting surface. If mounting on existing plywood use wood screws; if mounting onto drywall or sheetrock, use plastic drywall anchors to secure your installation.

Building the 824P Interlink Wiring

The most important aspect of the installation is the correct wiring of the Interlink cabling.

The 824P Interlink port (RJ-45 Jack) carries this 1-pair signaling over the RJ-45 (pins 1 & 2) - and is used as the transport for 200Mbps G.Hn data and (pins 4,5,6,7 & 8) - used as transport for PoE Power. The 824P CPE outputs IEEE 802.3at/at power specs to the end PoE devices.

For all wiring you will need to crimp a (LAN Standard) RJ-45 Male head to each end of the contiguous wire run and using the following (pins 1 & 2) straight through. We recommend using a category rated twisted pair cable as it is optimized for high throughput frequencies isolated from cross-talk noise. Insert the completed RJ-45 ends into the 824P Interlink port on each 824P unit (CO and CPE).



Cabling Devices to The Enable-IT 824P Extended Ethernet Kit

Attach your remote PoE devices to the 824P CPE unit PoE ports and attach your local LAN to the 360 PoE Injector that is connected to LAN Port 1 on the 824P CO. Power up the 360 and 824P CO unit. The 824P CPE and PoE device should all receive power and be ready to go. Your equipment should now be powered up and functioning. LED indicators will provide visual operational status of the 824P units.

Troubleshooting

At any time you should always 1st bring all the devices back to a test bench and perform the default out of the box test. This quickly confirms and or identifies the core issue.

The most common problem is the Interlink wiring connection. Examine the Interlink wiring to make sure you have solid connections. The Interlink Sync LED will be lit solid Green with rapid pulsing on each 824P unit to show proper connection and pairing. If the Interlink Sync LED Link is flashing slow to fast and never goes solid.... Then follow the steps below:

- 1) Make sure your wiring is straight through and not connected to any Telco punch down blocks; If so remove from the block and use Telco butt clips to bridge wire.
- 2) Check for a firm connection of the RJ-45 connections in each 824P unit, and power is applied to the 824P CO & CPE units.
- 3) **You can easily isolate any issue by performing an Out Of The Box Test (OOTBT). This test will confirm the correct working order of your Enable-IT 824P PoE Extender Kit. This will point to a possible issue with your long distance Interlink wiring being affected by possible outside interference.**

DIP Switch Details

By Default the DIP switches are set out of the box for plug and go operation. There is no reason to ever touch of change the DIP switches for basic Ethernet Extension and they are provided for PoE Feature sets and troubleshooting.

- Switch 1: CO / CPE Mode

CO Mode – Down / **On** Position

CPE Mode – Up / **Off** Position



The terms CO and CPE are used to identify the role of the 824 Unit. Central Office Equipment (CO) is generally the equipment residing at the Carrier Telephone office or the head end of a circuit. Customer Premise Equipment (CPE) is generally the equipment residing on the customer side of a circuit. Typically you would place the CO at the local end and the CPE at the remote end for reference only. CO's only communicate with CPE's.

- Switch 2: Not used
- Switch 3: 802.3 af PoE Device Mode

Disable PoE output – Up / **Off** Position

Enable PoE output – Down / **On** Position = Default

- Switch 4: PoE Self Power Mode

Enable PoE Self Power Mode – Down / **On** Position = Default

d that you switch to 6dB SNR. This may help clean up any noise bleeding over your cabling.

TECHNICAL SUPPORT

Enable-IT, Inc.'s Customer Care Team support is available directly to customers and distributors. All support requests are processed through the online support portal. This allows us to provide assigned support ticket numbers in order to bring closure to any technical issues.

Online Technical Services

The Enable-IT Support Portal is available 24/7 to open a ticket or check the status of one. Please use this support website as your first source for help as it contains an on-line knowledge base of articles, documentation, FAQ's and other problem-solving resources. This web-based support resource provides the quickest solution to the most common technical support issues.

World Wide Web Site

<https://support.enableit.com>

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Enable-IT warrants to the original purchaser of the Product ("you" or the "End User") that, for the limited lifetime period commencing on the date the Product was purchased (the "Warranty Period"), the Product will be substantially free from defects in materials and workmanship under normal use and conditions. This warranty does not apply to Products, which are resold as used, repaired or reconditioned.

Electrical or water damage is not covered under this warranty, extended warranties or Advanced Replacement Program (AREP).

In order to obtain an authorized RMA approval, the End User must complete the required information online located at <https://support.enableit.com>. If you have questions or difficulty completing this information you may contact the Customer Care Team at 888-309-0910 between the hours of 8:00 a.m. and 5:00 p.m. PT.

Please ship Authorized RMAs to:

RMA Warranty Repair Processing Facility
16027 Brookhurst St, Suite G272
Fountain Valley, CA 92708-1551

Returning Products for Refund

Enable-IT, Inc. offers a generous 45-Day refund on a single Ethernet Extender Kit only, and is subject to a 15% Restocking Fee. Shipments without a valid or authorized RMA number, or sent to our corporate Las Vegas address, can be refused and / or billed for additional shipping.

ENABLE-IT, INC. LIMITED LIFETIME WARRANTY

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Enable-IT warrants to the original purchaser of the Product ("you" or the "End User") that, for the limited lifetime period commencing on the date the Product was purchased (the "Warranty Period"), the Product will be substantially free from defects in materials and workmanship under normal use and conditions. This warranty does not apply to Products, which are resold as used, repaired or reconditioned.

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In the event of a breach of the foregoing warranty, Enable-IT will, in its sole discretion and at its cost, and subject to the terms of the following paragraph, repair the non-conforming Product, replace the non-conforming Product with a new or reconditioned Product or refund the purchase price for the Product. Any new or reconditioned Product provided pursuant to this paragraph is warranted as provided herein for the remainder of the original Warranty Period. THE REMEDY SET FORTH IN THIS PARAGRAPH SHALL BE THE END USER'S SOLE AND EXCLUSIVE REMEDY FOR BREACH OF THE FOREGOING WARRANTY.

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d. Voiding of Warranty.

The express warranty set forth above shall not apply to failure of the Product if the Product has been subjected to: (i) physical abuse, misuse, improper installation, abnormal use, power failure or surge, or use not consistent with the operating instructions provided by Enable-IT; (ii) modification (including but not limited to opening the Product housing) or repair by any party in any manner other than as approved by Enable-IT in writing; (iii) fraud, tampering, unusual physical or electrical stress, unsuitable operating or physical conditions, negligence or accidents; (iv) removal or alteration of the Product serial number tag; (v) improper packaging of Product returns; or (vi) damage during shipment (other than during the original shipment of the Product to the End User from Enable-IT, if applicable).

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