Enable-IT 850 CPE
Gigabit Ethernet Extender
Quickstart Guide

Professional Grade Networking

ENABLE-IT

INSTALLING THE 850 GIGABIT ETHERNET CPE

The Enable-IT 850 Gigabit Ethernet CPE is designed to be deliver dedicated high speed Ethernet up to 24,000ft (7.31km) over 1-pair wiring from the 8908, 8916, 8924 or 8948 DSLAM to 850 CPE. Therefore a site survey of the wiring and installation planning are highly recommended. For highest performance use CAT5e rated or higher spec for interlink wiring.
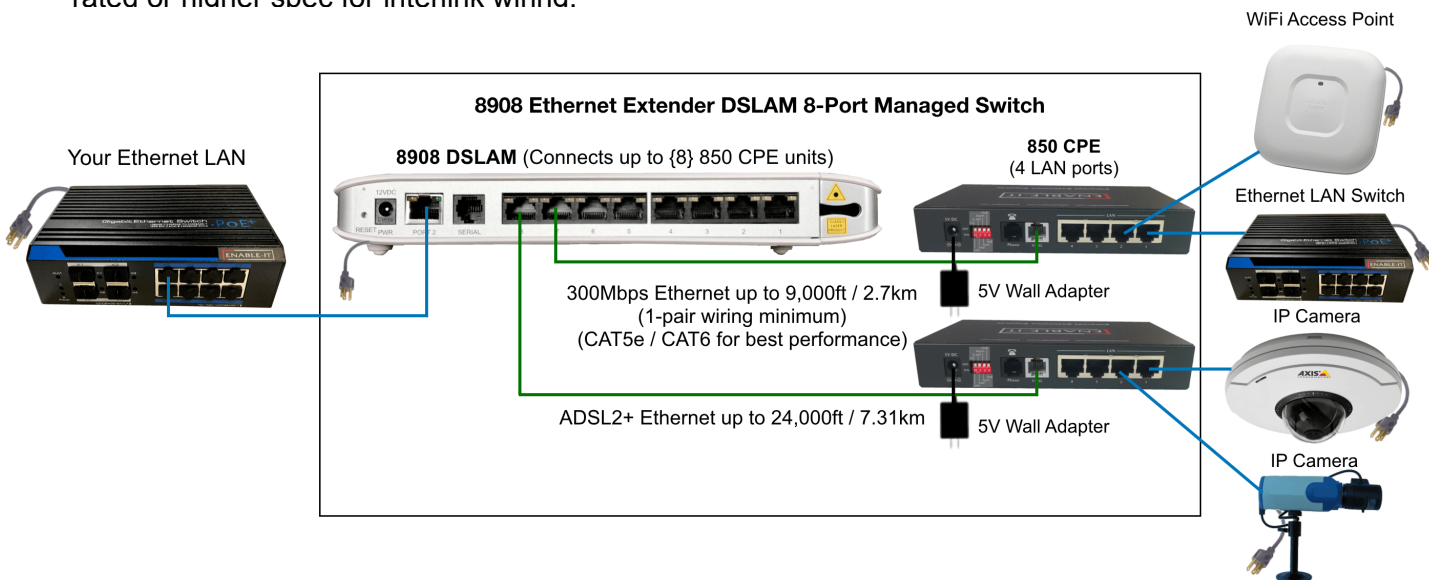
The Overview Diagram: This diagram shows the contents of the product box inside the rectangle. Devices outside the rectangle above are your equipment that can be attached.

We recommend that you perform a quick out of the box test to ensure the working order of your Enable-IT 8908, 8916, 8924 or 8948 DSLAM and 850 CPE Ethernet Extender solution prior to installing. This will also serve to familiarize you with how easy the process should be.

Step 1 – Using one of the RJ-45 Ethernet patch cords provided, attach the RJ-45 head to LINE port 1 of the 8908 or telco block to an 8916, 8924 or 8948 DSLAM and the RJ-11 head end to an 850 CPE unit Interlink DSL port.

Step 2 - Power up both the 8908, 8916, 8924 or 8948 DSLAM and the 850 CPE Ethernet Extender. The Green Sync LED on the 850 CPE will start flickering slowly and then fast as the 8908, 8916, 8924 or 8948 DSLAM and 850 talk to each other. After a few seconds you should see a solid Green Interlink Sync LED on 850 CPE to confirm a link is established. This confirms basic proper operation of the solution.

850 CPE LED indicators will provide visual operational status of the 850 CPE connectivity.

Mode – Yellow Solid 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

Lan/Act – Yellow LED

Off = No device attached or detected
On = Solid, indicates the presence of local LAN
On = Blinking, indicates the presence of local LAN traffic

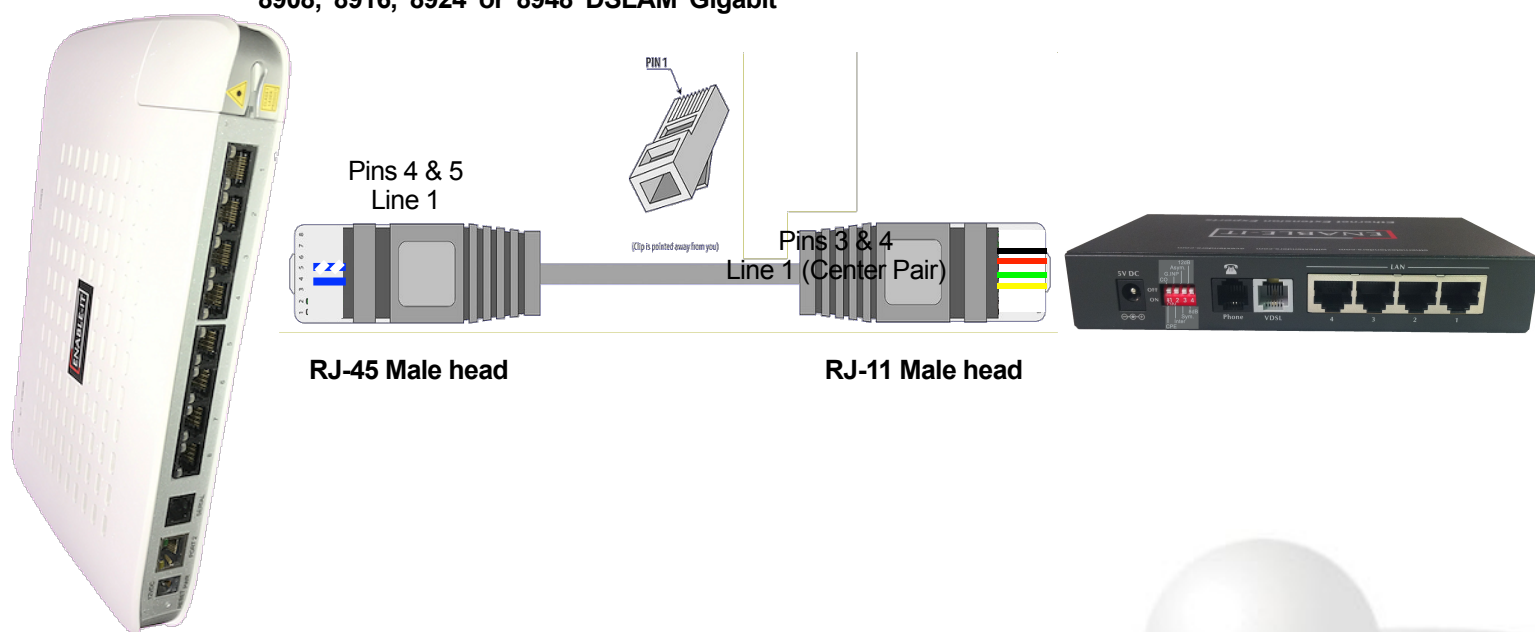**Power** – Green Solid LED indicates the unit is receiving PoE power

Step 3 - Next for a more detailed test and to confirm your LAN Equipment works with the solution, connect your Ethernet LAN to one of the Gigabit uplink ports on the 8908, 8916, 8924 or 8948 DSLAM DSLAM and remote device to the 850 CPE LAN ports and test connectivity. The Green Interlink Sync LED will pulse rapidly as it detects traffic.

Troubleshooting

First examine the 850 CPE wiring run and make sure you have solid connections. The 850 CPE should be receiving power and the Interlink Sync LED will be lit solid Green with rapid pulsing to show proper connection with the 8908, 8916, 8924 or 8948 DSLAM.   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 gel/butt clips to bridge wire.   We recommend using Category rated cabling -

2) Check for a firm connection of the RJ-11 & RJ-45 connections in each 850 CPE units, and power is applied to the 850 CPE units and 8908, 8916, 8924 or 8948 DSLAM DSLAM.

3) **You can easily isolate any issue by performing an <u>Out Of The Box Test (OOTBT)</u>. This test will confirm the correct working order of your Enable-IT 8908, 8916, 8924 or 8948 DSLAM and 850 CPE units.**

8908, 8916, 8924 or 8948 DSLAM Gigabit

Pins 4 & 5
Line 1

PIN 1

Pins 3 & 4
Line 1 (Center Pair)

(Clip is pointed away from you)

RJ-45 Male head

RJ-11 Male head

850 CPE Performance Settings (DIP Switch)

By default DIP settings are set for Max performance up to 2,000 feet. If over 2,000 feet then turn DIP switch 4 to the UP (Off) position on both units.

If you are experiencing performance issues with your Ethernet connection you may use the following DIP switch settings to adjust your application. For DIP switch 2-4 you must toggle both symmetrically, in other words the CO and CPE must match. If you turn DIP switch 3 Up (Off) on the CO, then you must do so for the CPE and vice-versa.

- Switch 1: CO / CPE Mode

  CO Mode – **Up** / **Off** Position

  CPE Mode – **Down** / **On** Position

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: ADSL2+ Mode for distance over 6,000 feet

  ADSL2+ Enabled   – Up / Off Position

  ADSL2+ Disabled – Down / On Position (Default)

ADSL2+ mode works better for long distance wiring although throughput is significantly reduced.

- Switch 3: 17a (over 2,000ft) / 30a (under 2,000ft) Mode

  17a Mode – Up / Off Position

  17a mode is only used for Interlink runs over 2,000ft to 6,000ft.

  30a Mode – Down / On Position (Default)

  30a mode is only enabled for Interlink runs under 2,000ft.

- Switch 4: Signal-to-noise Noise Ratio (SNR)

  9dB – Up / Off Position
  6dB – Down / On Position (Default)

Signal-to-noise ratio is a measurement that refers to how much noise is in the output of a device, in relation to the signal level. If you experience issues of noise bleeding over the lines, or high interference in your environment, it is suggested 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.

Returning Products for Warranty Repair

Enable-IT warrants to the original purchaser of this described 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. Lifetime Warranty details here: https://warranty.enableit.com

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 7:00 a.m. and 4:00 p.m. Pacific Time(PST).

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 20% 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.

CONTACT US

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