ENABLE-IT ETHERNET EXTENDER & POE EXTENDER EXPERTS

# Enable-IT 821 Ethernet Extender Quickstart Guide



## **Professional Grade Networking**



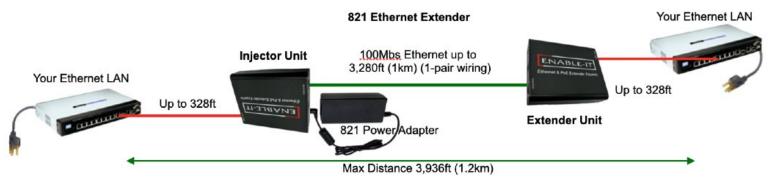
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## **INSTALLING THE 821 ETHERNET EXTENDER**

The Enable-IT 821 Ethernet Extender kit has a max distance reach of up to 3,280ft (1km) over any 1-pair wiring (Telephone, Coax, or Category rated) between the 821 units.

You can add additional 328ft (100m) onto the end of each 821 LAN output ports for a total distance of 3,936ft (1.2km) from device extension to device extension.

For highest performance use lower gauge wiring like 14AWG ~ 24AWG for the interlink wiring.



We highly recommend that you perform a quick out of the box test to ensure the working order of your Enable-IT 821 Ethernet 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 821 DC power adapter to the 821 Injector unit and to your AC outlet. The green PWR LED will indicate the unit is receiving power as well as the 821 56V 65W DC Power Adapter green LED.
- Step 2 Connect the 821 units together using one of the Ethernet LAN Patch cords provided attach to the RJ-45 Interlink port on each 821 unit as shown by the green line connecting the ports in the diagram above. The PWR and PLC LED indicators on each of the 821 units will provide visual operational status of the 821 Ethernet Extension kit.
- Step 3 Attach and test and to confirm your LAN Equipment works through the 821 extension, connect your Ethernet LAN to the 821 Injector unit LAN port and the remote device/s to the 821 Extender LAN port and test connectivity.
  This confirms basic proper operation of the units.

#### Performing the On-Site Installation

After removing the Enable-IT 821 Ethernet 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 build the interconnect wiring and attach the LAN device cabling with the provided Ethernet Patch cords.

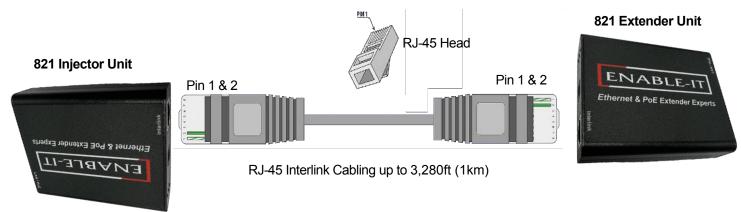
#### **Building the 821 Interlink Wiring**

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

The 821 Interlink port (RJ-45 interface) carries this 1-pair signaling and power over the RJ-45 (pins 1 & 2) - used as transport. If you use more than 1-pair of wiring, such as a CAT5 segment, the remaining RJ-45 pins 3, 5 and 7 carry positive and RJ-45 pins 4, 6 and 8 carry negative signal for distance.

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For all wiring you will need to crimp a 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 821 Interlink port on each 821 unit.



#### Cabling Devices to The Enable-IT 821 Extended Ethernet Kit

Attach your remote LAN device to the 821 Extender unit LAN port with Ethernet patch cord provided. Attach your local LAN to the 821 Injector LAN port with Ethernet patch cord provided. Attach the 56V - 65W power adapter to the 821 Injector unit.

Attach your local Interlink cabling end to the 821 Injector unit Interlink port – Then do the same for the remote end and plug into the 821 Extender unit Interlink port. The Green PLC and PWR LED should both be solid, indicating they each see the remote partner. There is no sync delay! Your equipment should now be powered up and functioning.

The LED indicators will provide visual operational status of the 821 Ethernet Extender units.

#### Troubleshooting

First examine the backbone wiring pair and make sure you have solid connections. The PWR and Interlink PLC LED will be lit solid Green on each 821 unit. The units sync instantly and have no delay. if either fail to light up.... 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 821 unit, and power is applied to the 821 Injector unit. The 821 Extender unit should be receiving power.
- 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 821 Ethernet Extender Kit. This will point to a possible issue with your long distance Interlink wiring being affected by possible outside interference.

## **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 <u>Portal</u> 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: <a href="https://warranty.enableit.com">https://warranty.enableit.com</a>

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 <u>https://support.enableit.com</u> 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.

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### **CONTACT US**

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