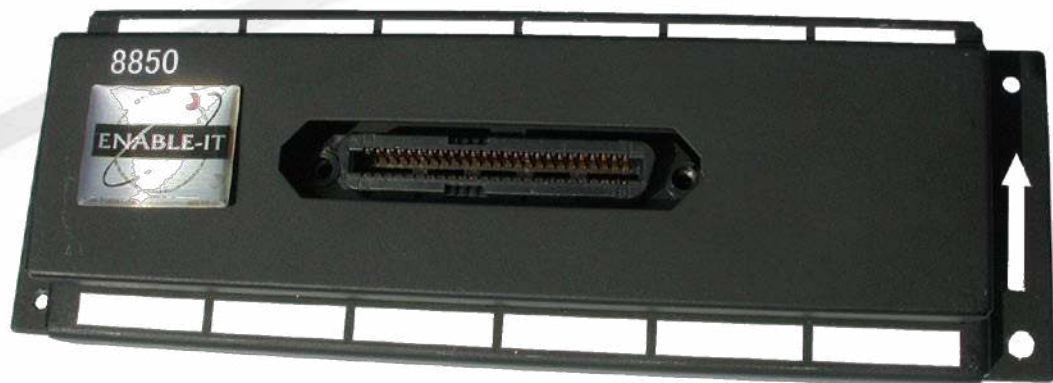


Enable-IT 8850 Two Pair Ethernet User Manual



3155 E. Patrick Avenue
Las Vegas, NV 89120
T (888) 309-0910
F (320) 215-6907
www.enableit.com
sales@enableit.com



Suite 2, Level 2, 12-14 Falcon Street
Crows Nest, NSW, 2065
T +61 2 9432-0799
F +61 2 9432-0707
www.enableit.com.au
sales@enableit.com.au



Copyright © 1997 - 2008 Enable-IT, Inc. All rights reserved. No part of this documentation may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from Enable-IT, Inc.

Enable-IT, Inc. reserves the right to revise this documentation and to make changes in content from time to time without obligation or notice on the part of Enable-IT, Inc. to provide notification of such revisions or changes.

Enable-IT, Inc provides this documentation without warranty, term, or condition of any kind, either implied or expressed, including, but not limited to, the implied warranties, terms or conditions of merchantability, satisfactory quality, and fitness for a particular purpose. Enable-IT, Inc. may make improvements or changes in the product(s) and/or the program(s) described in this documentation at any time.

If there is any software on removable media described in this documentation, it is furnished under a license agreement included with the product as a separate document, in the hard copy documentation. If you are unable to locate a copy, please contact Enable-IT, Inc. and a copy will be provided to you.

UNITED STATES GOVERNMENT LEGEND

If you are a United States government agency, then this documentation and the software described herein are provided to you subject to the following:

All technical data and computer software are commercial in nature and developed solely at private expense. Software is delivered as "Commercial Computer Software" as defined in DFARS 252.227-7014 (June 1995) or as a "commercial item" as defined in FAR 2.101 (a) and as such is provided with only such rights as are provided in Enable-IT, Inc's standard commercial license for the Software.

Technical data is provided with limited rights only as provided in DFAR 252.227-7015 (Nov 1995) or FAR 52.227-14 (June 1987), whichever is applicable. You agree not to remove or deface any portion of any legend provided on any licensed program or documentation contained in, or delivered to you in conjunction with, this User Guide.

Unless otherwise indicated, Enable-IT, Inc. registered trademarks are registered in the United States and may or may not be registered in other countries



CONTENTS

ABOUT THIS GUIDE

1 INTRODUCING THE 8850 CONCENTRATOR

About the 8850 Concentrator	5
Key Benefits	6
Summary of Features	6
Typical Applications	7
8850 Series — Installation View Detail	8
8850 Series — Uncovered Detail	8

2 INSTALLING THE 8850 CONCENTRATOR

Site Plan – Installation Design Considerations	9
Unpacking the 8850 Series Broadband Concentrator Kit	9
Performing the On-Site Installation	10
Mounting the 8850 Concentrator	10
Establishing Connectivity	10
Cabling Specifications for the 8850 Series Concentrator	11
Telco 110 Block punch-down Installation	11
8802 Wall Plate CPE Installation	12

A TECHNICAL SUPPORT

Online Technical Services	13
World Wide Web Site	13
Returning Products for Repair	13

B Enable-IT Inc. LIMITED WARRANTY



ABOUT THIS GUIDE

This guide provides all the information needed to install and use the Enable-IT 8850 Broadband Concentrator. This guide is intended for use by technicians who are responsible for installing and setting up network equipment. Consequently, it is assumed that the installer has a basic working knowledge of LANs (Local Area Networks) and voice telecom wiring.

Note – Residential, Hospitality and other commercial installations operate flawlessly with the 8850 series equipment. However 8802 wallplate and 8805 SM units may not be compatible with PBX systems that use high-frequency digital signaling for control functions to digital handsets in those rooms. It is rare that in Hospitality or Residential to find Digital handsets in rooms.

If the information in the release notes that are shipped with your product differs from the information in this guide, follow the instructions in the release notes.

Most user guides and release notes are available in Adobe Acrobat

Reader Portable Document Format (PDF) or HTML on the Enable-IT World Wide Web site:

<http://www.ethernetextender.com/datasheets/8850.pdf>

INTRODUCING THE 8850 CONCENTRATOR

Congratulations on purchasing the Enable-IT's 8850 Series Concentrator — the most desired multi-service broadband platform available for in-building deployment in commercial office buildings, hotels, and multi-tenant residential units.

The 8850 Series of Ethernet Extension concentrators offers the Lowest Cost per port and the Highest performance in the industry. The low cost of the products and the intelligent design means service providers and property managers can afford to light up more buildings in less time and recover their investments more rapidly compared to any other competitive products.

This chapter contains introductory information about the 8850 Series Broadband Concentrator and how it can be used in your network. It covers the following topics:

- About the 8850 2-Pair Ethernet Extension Concentrator
- Key Benefits
- Summary of Features
- Typical Applications
- 8850 Series — Controller Assembled Detail
- 8850 Series — Controller Wiring Detail

About the 8850 2-Pair Ethernet Extension Concentrator

The 8850 2-Pair Ethernet Extension Concentrator solves the problem of high costs associated with deploying HSIA services and growth in demand for higher density HSIA deployments. The 8850 Series is much more than a Long Reach Ethernet/VDSL hybrid. The system comprises a complete, integrated architecture of modular parts that are easy to install and use. A simple design methodology would be to think of the 8850 extending a standard managed Ethernet switch up to 600' (183m) to a wall plate CPE including 2 voice lines.

The 8850 2-Pair Ethernet Extension Concentrator is available in an easy to install 12 port Telco 110 Block design. The 12 port limit per 110 block is a restriction of the 50 pin Amphenol hydra cable as Ethernet requires 4 wires per port connection, thus 12 ports uses 48 pins.

To increase the durability and extended use of the product providing maximum future technology protection, the 8850 Broadband Concentrator meets the challenge of modern switched LANs and allows you to add features and capacity as your network expands. The 8850 concentrator has been tested to provide full duplex transport up to 80MB/s over CAT3 cabling.

The 8850 concentrator works with Enable-IT 8802 two pair universal wallplates and Enable-IT 8808 two pair powered 10/100 Wallplate switch.



Key Benefits

The following list identifies the 8850 Concentrators' key benefits.

- Dramatic cost reduction over any competing technology.
- The Enable-IT 8850 2-Pair Ethernet Extension Concentrator, Wall Plates and Ethernet Extenders require No Power, No Firmware, No Maintenance
- Broadband technology that delivers in-building Ethernet access over 2 pair of existing Category 2 wires or better up to 600', whether spare or actively in use for analog or digital voice. This means no new wiring is required.
- Provides one scalable infrastructure for Internet access, dual POTS, VoIP, video, and virtual private networking. It also allows service providers and property managers to deliver high speed bandwidth to their customers independently of the wire speed.
- Rapid installation with small Telco 110 Block profile, no programming and no firmware to upgrade.
- No CPE required. Unique low profile custom wall plate with dual POTS line and single 10/100MB Ethernet port. Up to 6 Wall plates can be installed on same wiring for multi-device access.
- Secured Custom Branded Ethernet Extender – From wall plates to Desktop

Summary of Features

The Enable-IT 8850 2-Pair Ethernet Extension Concentrator has the following hardware features:

- 12 Extended Ethernet lines in a single Telco 100 Block
- Rapid Telco style installation – no programming required
- Supports digital VoD channels or MPEG4 over IP support
- Drives Ethernet 10 Mbps full-duplex service delivery up to 600ft / 183m
- Network Equipment independence – Transparent to protocols/applications/MAC
- Connects to Standard IP Digital Set Top boxes; IGMP compliant
- Maintains lifeline POTS
- Supports multiple (6) wall plate CPE per managed switch port on the same daisy-chained or home run 2 pair wire

Specifications:

8850 Power: No power consumption
Passive Device, No Firmware.

Dimensions:

Height: 3" (76mm)
Depth: 1.5" (38mm)
Width: 9" (230mm)

Interfaces

8850 Block – AMP Hydra (12) RJ-45 switched

Wall Plate – (1) RJ-11 dual POTS
(1) RJ-45 10Mb LAN

Functionality:

Data Rates 10Mbps Full Duplex
Ethernet modes supported
10Mbps half duplex
10Mbps full duplex
Max Distance 183m / 600ft

Environment

Temperature Operating temp:
0° to 50°C/32° - 122°F
Storage temp: -25° to 60°C/-13° - 140°F
Humidity 5% to 95%, non-condensing

Typical Applications

Enable-IT 8850 2-Pair Ethernet Extension Concentrators are usually installed into telephone wiring infrastructures where delivery of Broadband services are required and WAN connectivity is being provisioned to provide Internet Data Access. The 8850 Concentrators allow standard managed Ethernet switches to be deployed quickly over existing 2 pair Telco Copper Wiring in combination with existing POTS voice signals to a custom wall plate. No power is required for the 8850 Concentrators or 8802 wall plate and Ethernet signals can be driven up to 600ft. That is 272ft beyond standard CAT 5 Ethernet. There are no moving parts and no firmware to upgrade, thus providing maintenance free operation.

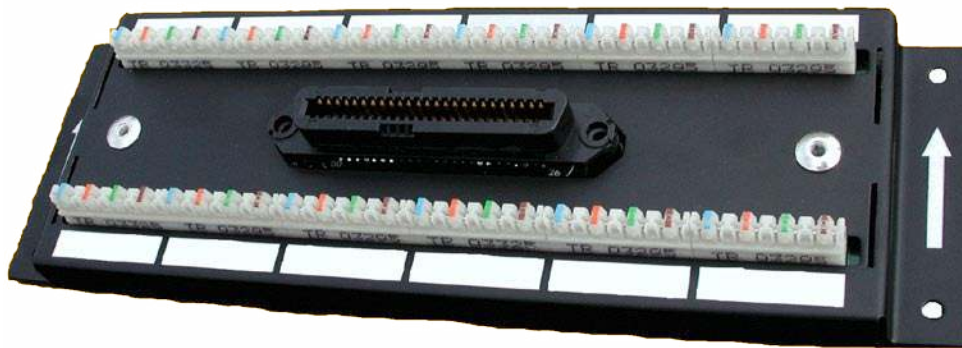
End users have the convenience of a 10/100Mbps LAN Ethernet wall plate for peace of mind connectivity, no power and no CPE maintenance. Rapid installation allows for minimal interruption and the Broadband technology allows for investment protection up to 10 -15 years with no firmware or replacement issues. Bandwidth can be scaled according to the Broadband Access Provider needs. The 8850 Concentrator is a passive device so interruption of Internet service does not affect POTS services. Carriers and Access Providers can come and go, but the 8850 series technology continues to provide lasting value such as the other utilities like Water, gas and electricity.

The Enable-IT 8850 2-Pair Ethernet Extension Concentrator is suited for the following key environments:

- **Commercial Buildings (Multi-Tenant Units)**
- **Business Parks (Multi-Tenant Units)**
- **Apartments (Multi-Residential Units)**
- **Hotels (Multi-Hospitality Units)**
- **Business Suites (Multi-Hospitality Units)**
- **School Campuses (University, K-12)**
- **College Housing (Multi-Residential Units)**
- **Mining Operations – Quarries, Mine shafts**
- **Nautical Infrastructure – Cruise ships, Marinas, dive operations, subs**
- **Video Surveillance/Security**
- **WiFi Deployment – ISP's, RV Parks, Construction sites**
- **Manufacturing – Foundries, pharmaceutical, aerospace, automotive, petroleum, concrete plants, etc.**
- **Retail POS – Department stores, Bars, restaurants, retail spaces**
- **Government – Naval ships, FEMA, Housing, USGS, National Parks, Forestry, Research stations, NASA, utilities, etc.**
- **Education – outdoor camps, college campuses**
- **Healthcare – Hospitals, elder care, outpatient facilities**
- **Entertainment – Movie theaters. home entertainment. fairs. outdoor venues**



8850 Concentrator — Uncovered Detail



Telco 110 Block Connections

The 8850 2-Pair Ethernet Extension Concentrator supports (12) 10/100 BASE-T ports, and 24 POTS connections through industry standard 110 punch down connectors. We use industry standard color codes for Telco wiring.

Managed Switch Connectivity

If integrating with billing system, we recommend using switches that support either RFC 1492 SNMP or 802.1q VLAN or both protocols. We highly recommend our certified Enable-IT Gateway Firewall Server series Appliances support all managed switches, PMS billing systems, wireless RADIUS and credit card billing needs.

The 8850 2-Pair Ethernet Extension Concentrator operates in conjunction with any Managed Ethernet Switches that support auto-negotiating 10BASE-T/100BASE-TX ports. These ports must be set to 10BASE-T half duplex or 10BASE-T full duplex as auto-negotiation of 100BASE-TX will not be successful at the maximum wiring length for the 8802 Wall plates.

The 8850 2-Pair Ethernet Extension Concentrators connect to Managed Ethernet Switches with the provided Enable-IT Hydra cable. It is recommended to place the Managed Ethernet Switch within 5ft (1.52m) of the 8850 Series concentrator. Enable-IT can provide longer Hydra cables on request. Multiple 8850 series concentrators may be connected to a single Ethernet switch to match your desired port densities.



INSTALLING THE 8850 SERIES CONCENTRATOR

The 8850 2-Pair Ethernet Extension Concentrator has a distance restriction of 600ft or 183m over Category 3 or better Telco wiring from concentrator 110 punchdown to 8802 wall plate or 8808 powered wallplate switch. Therefore site surveys and installation planning are highly recommended.

This chapter describes the recommended installation process for the 8850 Series Broadband Concentrator. It covers the following topics:

- Site Plan – Installation Design Considerations
- Unpacking the 8850 Series Broadband Concentrator Kit
- Performing the On-Site Installation

Site Plan - Installation Design Considerations

The planning process should involve a site walkthrough and discovery survey. Electrical Cable measurement tools are the most reliable method to determine the longest run of hidden wiring. Estimate the best locations to position the Broadband Concentrators to adequately reach desired connectivity on each floor. Document your findings to use in designing a network topology to support the Ethernet Switches and backbone connectivity.

Key points to remember in the Site Survey.

- Wall plate distance limitation of 600ft over CAT 3 or better Telco wiring from the Concentrator.
- IDF Location or MDF location for inserting 8850 Concentrators.
- Riser locations for backbone network cabling or use an 8850 Concentrator as a Backbone switch and leverage existing Telco wiring.
- 2 Pair Telco wiring or greater at wall plate locations.

Unpacking the 8850 Series 2-Pair Ethernet Extension Concentrator Kit

Carefully remove the 8850 Series Chassis, Telco 66 Block, cabling and all packing materials from the box. Verify that the items listed below are present. Make sure that the equipment supplied matches what you ordered. If any items are missing or damaged, please contact your Enable-IT or your distributor for assistance.

- (1) The 8850 2-Pair Ethernet Extension Concentrator
- (1) 5' Enable-IT Hydra Cable
- (12) 8802 Wall Plate CPE
- (12) 8802f Dual line DSL filters
- (12) 8801 Ethernet Extenders (optional)
- Enable-IT 8850 Series Broadband User Manual (this manual)

Performing the On-Site Installation

After removing the 8850 Series 2-Pair Ethernet Extension Concentrator Kit from the box, all that remains to install the unit on-site is to mount the unit, punch-down the subscriber wiring, cross connect voice lines and attach the hydra cabling to your managed switch.

Mounting the 8850 Concentrator

8850 Series Concentrators are designed for quick wall mounting and stacking of multiple units to match Telco port numbers.

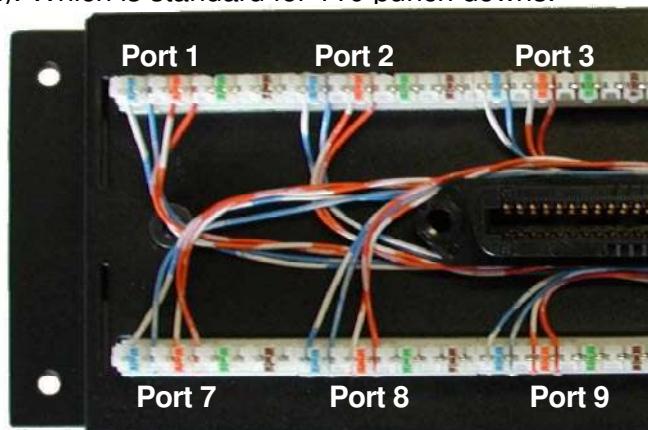
When wall-mounting the 8850 Concentrator it is recommended that you use the appropriate screw anchors for your mounting surface. If mounting on existing plywood use wood screws; if mounting onto drywall or sheetrock, use plastic drywall anchors to secure your installation.

- ❶ Mark drill holes in the wall for the 8850 Concentrator bracket by holding the concentrator in a suitable mounting location against the wall.
- ❷ Drill the holes in the wall. Four holes are required for each concentrator.
- ❸ Use the appropriate anchor hardware (not supplied) for the wall material, mount the 8850 Concentrator with the widest part of the Amphenol connector facing up. (When mounted properly, the attached Hydra cable trunk should protrude to the right of the controller.)
- ❹ Mount your Ethernet Managed switch in a similar fashion within 5' of the 8850 concentrator. (Custom hydra cable lengths are available on request)
- ❺ Attach the provided 8850 hydra cable to the Ethernet switch ports. Hydra cable heads are labeled 1 through 12 for easy reference to the 8850 ports. Leave the Amphenol head of the hydra cable unattached to the 8850 until you punchdown room wiring and telephone line wiring.

Telco Wiring the 8850 Concentrator

After mounting the 8850 Series Concentrator and Managed Ethernet switch the next step is to bridge the existing Telephone wiring onto the 8850 110 Telco connector blocks. The sequence of ports on the 8850 follows a sequential order starting from the upper left as port 1 through the bottom right is port 12. (See diagram below)

The 8850 punch down ports are color coded in the following sequence (Blue, Orange, Green & Brown). Which is standard for 110 punch downs.



This diagram shows outgoing wiring for the room. Add cross-connect wiring for Line 1 voice and Line 2 voice.

Line 1 Voice input – Green pair

Line 2 Voice input – Brown pair

Room wiring is to be punched down on the first 2-pair (Blue and Orange pair) as pins 1,2,3,& 4 respectively. Voice lines are to be punched down on the last 2-pair (Green and Brown) pins 5,6 (line 1) and pins 7,8 (line 2).

The most challenging part of this installation is the correct positioning of the end user wiring and existing POTS wiring. The principal methodology is to insert the Enable-IT 8850 concentrator as a bridge between the existing POTS wiring and the end user wiring run. To accomplish this task we first examine the end user wiring and determine the best practical way to re-terminate (move and punch-down onto the Enable-IT 8850 110 Telco Block) or to install a cross-connect wire (2-pair) between the existing termination 66 block and the Enable-IT 8850.

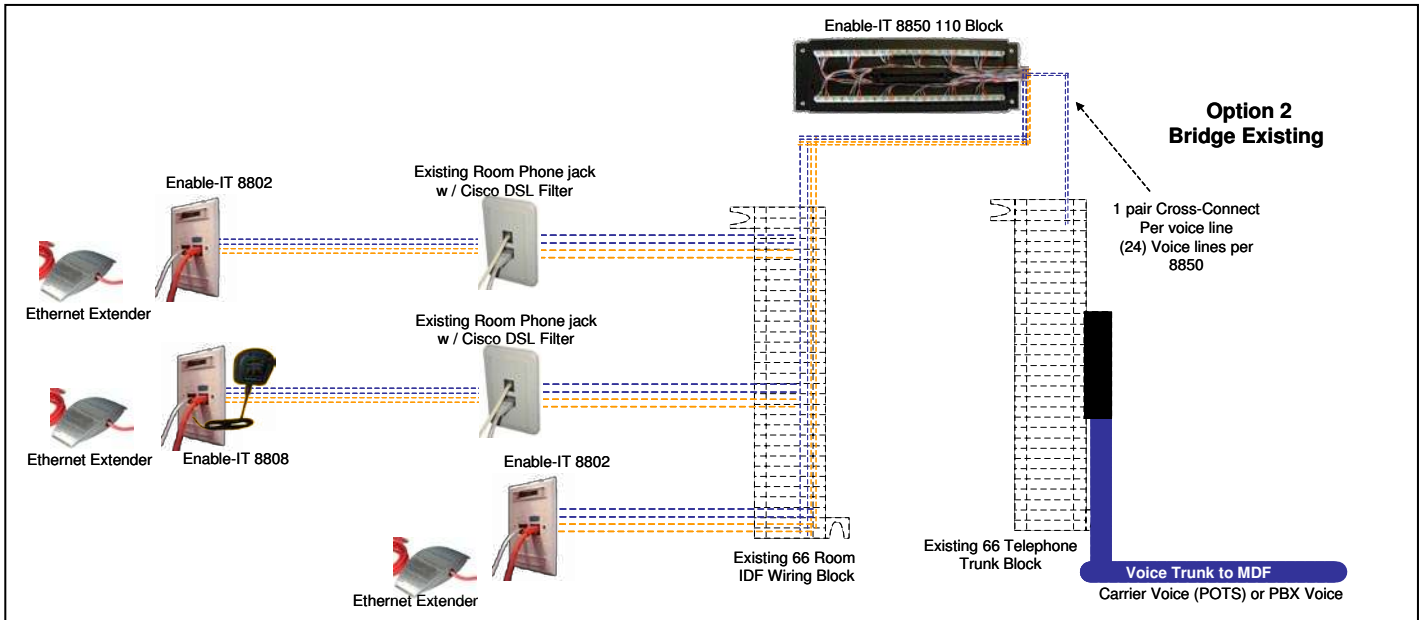
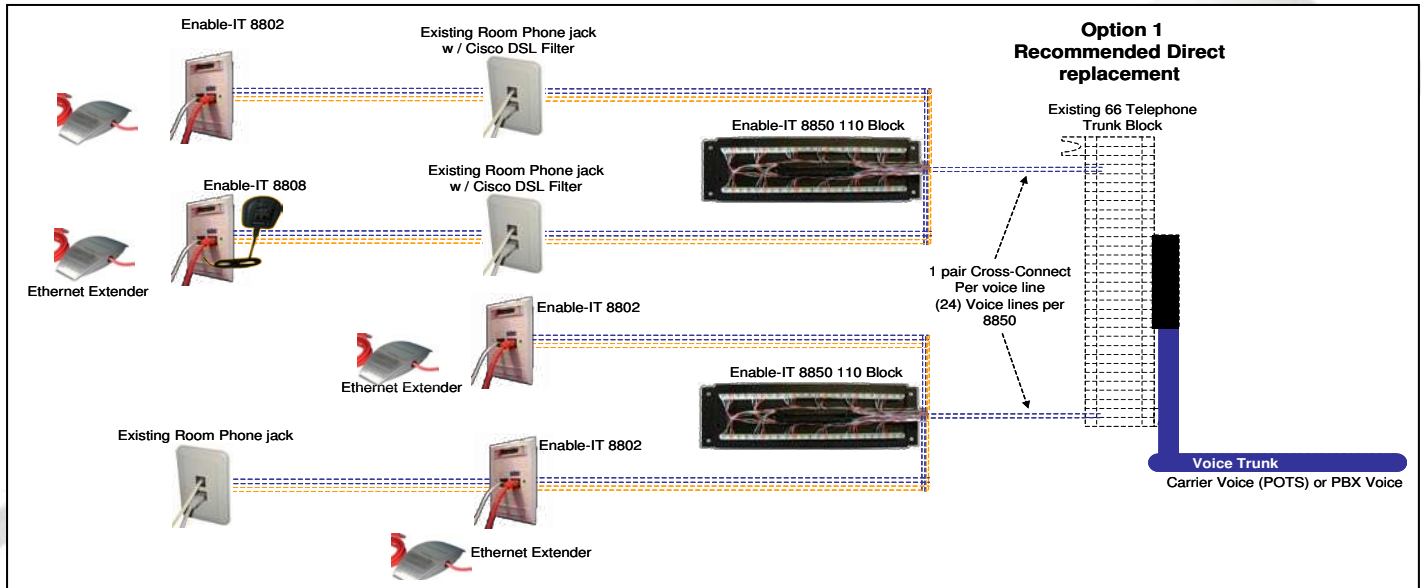
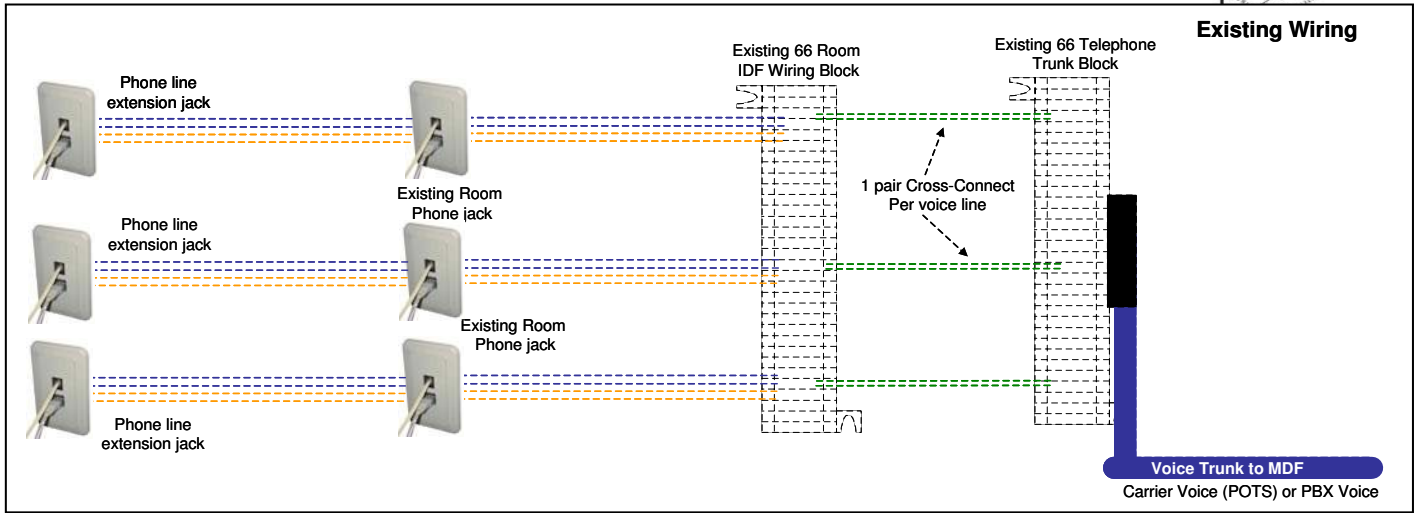
Establishing Initial Test Connectivity

We highly recommend testing a few ports/rooms to clearly understand the process and hotel specific wiring. Punch down a few room wiring terminations onto the 8850 concentrator and then replace Wall plates at the individual end run locations and test connectivity.

The following Figures detail a sample wiring installation and options for installing the Enable-IT 8850 concentrators.

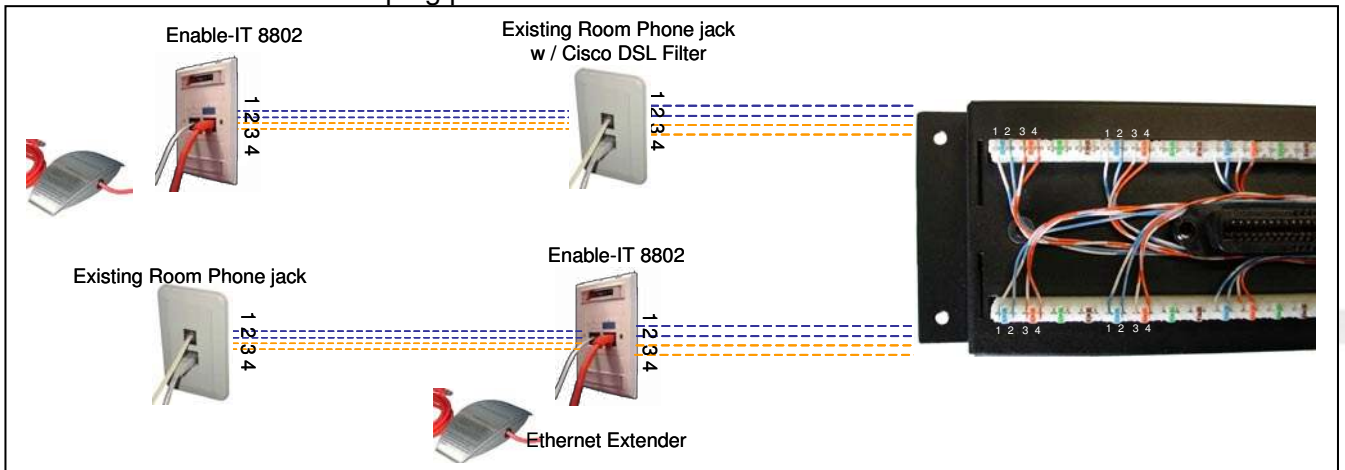
For in-room 8802 wall plate or 8808 powered wallplate switch installations, please see the 8800 series technical reference guide. The 8802 wall plate or 8808 powered wallplate switch can be installed in any existing telephone wallplate location. The Cisco two-line DSL filter is to be used in any existing telephone wallplate that is connected to the in-room wiring between the Enable-IT data wallplate and the Enable-IT 8850.

Existing telephone wallplates that are after the Enable-IT data wallplate do not need the Cisco DSL filter installed.



Wall Plate Installation

The final stage of the installation is to insert the Cisco DSL 2-line filters into any existing phone wall plates in front of the Enable-IT 8802 Wall Plate. This procedure requires the removal of the selected Telco wall plate and installation using the existing 2 pair (4 wires) in the correct sequence 1 2 3 4 as labeled on the 8802 Wall plate. Strip and connect the existing Telco wiring to the self crimping posts on the back of the 8802 Wall plate as shown. For daisy-chained multiple jacks, bind the extension wiring together and insert into the crimping posts.



Connectivity testing can be performed by attaching an Ethernet patch cord to a network device and connection of a telephone.

1st level of connectivity is the physical handshaking with the Ethernet Switch and dial tone on the Telephone.

Check to see if your network device has a Physical link light and that you can hear a clear dial tone in the telephone handset receiver.

2nd level of connectivity is the transmission of data packets and outbound dialing.

Using your network device and appropriate application, test 2-way connectivity to your Ethernet Switch and beyond if backbone is established. Use the Telephone to place a call and confirm proper voice communications.

Congratulations, you have now successfully completed installation of the Enable-IT 8850 Broadband Concentrator.



Technical Support

Enable-IT OEM Technical Support is available directly to registered distributors and prospective customers.

Online Technical Services

Enable-IT, Inc. Technical Support is available via e-mail at support@enableit.com

World Wide Web Site

Enable-IT, Inc. Technical Support is available via the Internet at http://www.ethernetextender.com/support/support_overview.php

Returning Products for Warranty Repair

Enable-IT, Inc. warrants to the original purchaser of the Product ("you" or the "End User") that, for the one (1) year 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. Electrical damage is not an item that is covered under this warranty or extended warranties. Optional two (2) year and three (3) year warranties are available to extend this coverage if purchased during the first year of coverage.

If authorized by Enable-IT to return a Product which does not conform to the warranty set forth above, the End User must: (1) obtain a return materials authorization (RMA) number from Enable-IT by contacting the Customer Service Dept. at 888-309-0910 between the hours of 8:00 a.m. and 5:00 p.m. PST and otherwise fully comply with Enable-IT's then-current RMA policy; (2) return the Product to Enable-IT, Inc. in its original packaging freight pre-paid; and (3) provide to Enable-IT the original receipt or bill of sale establishing the date on which the Product was purchased.

Enable-IT Limited Warranty

Enable-IT warrants the Enable-IT 350 Power Over Ethernet Injector solely pursuant to the following terms and conditions.

1. PRODUCT WARRANTY

a. Express Warranty Enable-IT warrants to the original purchaser of the Product ("you" or the "End User") that, for the one (1) year 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 or consumables (such as batteries) supplied with the Product. Enable-IT does not make any warranty with respect to any third party product, software or accessory supplied with or used in connection with the Product and such third party products, software and accessories, if any, are provided "AS IS." Warranty claims related to such third party products, software and accessories must be made to the applicable third party manufacturer.

b. Remedies for Breach of Warranty 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 of 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.



c. Conditions for Warranty Qualification If authorized by Enable-IT to return a Product which does not conform to the warranty set forth above, the End User must: (1) obtain a return materials authorization (RMA) number from Enable-IT by contacting the Customer Service Dept. at 888-309-0910 between the hours of 8:00 a.m. and 5:00 p.m. PST and otherwise fully comply with Enable-IT' then-current RMA policy; (2) return the Product to Enable-IT in its original packaging freight pre-paid; and (3) provide to Enable-IT the original receipt or bill of sale establishing the date on which the Product was purchased.

Products returned to Enable-IT without an RMA number will be returned to the End User.

Enable-IT shall not be responsible for damage or loss during shipment of the returned Product to Enable-IT.

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).

e. Warranty Disclaimers THE EXPRESS WARRANTY SET FORTH ABOVE IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, EXPRESS OR IMPLIED. ENABLE-IT DISCLAIMS, TO THE MAXIMUM EXTENT PERMITTED BY LAW, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT OF THIRD PARTY RIGHTS. NO PERSON (INCLUDING WITHOUT LIMITATION, ENABLE-IT' EMPLOYEES, AGENTS, RESELLERS, OEMS OR DISTRIBUTORS) IS AUTHORIZED TO MAKE ANY OTHER WARRANTY OR REPRESENTATION CONCERNING THE PRODUCT. IF THE DISCLAIMER OF ANY IMPLIED WARRANTY IS NOT PERMITTED BY LAW, THE DURATION OF ANY SUCH IMPLIED WARRANTY IS LIMITED TO ONE (1) YEAR FROM THE DATE OF PURCHASE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY MAY LAST, SO SUCH LIMITATIONS OR EXCLUSIONS MAY NOT APPLY. THIS WARRANTY GIVES THE END USER SPECIFIC LEGAL RIGHTS AND THE END USER MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. ENABLE-IT DOES NOT WARRANT THAT THE OPERATION OF THE PRODUCT WILL BE UNINTERRUPTED OR ERROR FREE.

ENABLE-IT IS NOT RESPONSIBLE FOR ANY DAMAGE TO OR LOSS OF ANY PROGRAMS, DATA, OR OTHER INFORMATION STORED ON OR TRANSMITTED USING THE PRODUCT.

2. LIMITATION OF LIABILITY IN NO EVENT SHALL ENABLE-IT BE LIABLE TO THE END USER OR ANY THIRD PARTY FOR ANY INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING OUT OF THE SALE OR USE OF THE PRODUCT (INCLUDING BUT NOT LIMITED TO LOSS OF PROFIT, USE, DATA, OR OTHER ECONOMIC ADVANTAGE), HOWEVER IT ARISES, INCLUDING WITHOUT LIMITATION BREACH OF WARRANTY, OR IN CONTRACT OR IN TORT (INCLUDING NEGLIGENCE), OR STRICT LIABILITY, EVEN IF ENABLE-IT HAS BEEN PREVIOUSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGE AND EVEN IF A LIMITED REMEDY SET FORTH IN THIS AGREEMENT FAILS OF ITS ESSENTIAL PURPOSE. IN NO EVENT SHALL ENABLE-IT' LIABILITY TO THE END USER OR ANY THIRD PARTY EXCEED THE PRICE PAID FOR THE PRODUCT. BECAUSE SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATIONS MAY NOT APPLY TO THE END USER.

3. LICENSE AND LIMITATIONS. The firmware and software embedded in the Product (the "Embedded Software") are licensed to you. Your use of the Product is your acceptance of the warranty terms above and the terms below. You may use the Embedded Software solely in conjunction with your use of the Product. All worldwide right, title and interest in and to the Product, or any portion thereof (including but not limited to the Embedded Software), including all copyrights, patent rights, trademarks, trade secrets, and other intellectual property rights therein and thereto, are and shall remain the exclusive property of Enable-IT and/or its licensors. You acknowledge and agree that you may not, and may not allow any third party to, (i) use the Embedded Software in a manner that is inconsistent with the above express right granted to you or (ii) modify, distribute, reproduce, decompile, disassemble, reverse engineer or otherwise attempt to discover the source code for the Embedded Software.