

110VDSLEXT
110VDSLEXTGB
110VDSLXTEU

Instruction Manual

VDSL Ethernet LAN Extender

**10/100 VDSL Ethernet
LAN Extender Kit over Single
Pair Wire**

StarTech.com 
Making hard-to-find easy!®

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of Trademarks, Registered Trademarks, and other Protected Names and Symbols

This manual may make reference to trademarks, registered trademarks, and other protected names and/or symbols of third-party companies not related in any way to StarTech.com. Where they occur these references are for illustrative purposes only and do not represent an endorsement of a product or service by StarTech.com, or an endorsement of the product(s) to which this manual applies by the third-party company in question. Regardless of any direct acknowledgement elsewhere in the body of this document, StarTech.com hereby acknowledges that all trademarks, registered trademarks, service marks, and other protected names and/or symbols contained in this manual and related documents are the property of their respective holders.

Table of Contents

Introduction	1
Package Contents	1
Installation.....	1
Hardware Installation.....	1
Operation.....	2
LED Displays	2
DIP Switch Settings.....	2
Connector Architecture	5
Specifications.....	6
Technical Support.....	7
Warranty Information.....	7

Introduction

Package Contents

- 2 x 110VDSLEXT/GB/EU units
- 2 x RJ-45 to VDSL Cable
- 2 x Power Adapter
- 1 x Instruction Manual

Installation

Hardware Installation

1. Install one of the 110VDSLEXT / GB / EU units with all four of the DIP switches set to the upward (OFF) position. This places the unit in CO mode.
2. Install the second 110VDSLEXT / GB / EU unit with DIP switches 2 through 4 set to the upward (OFF) position and DIP switch 1 set to the downward position (ON). This places the unit in CPE mode.
3. Plug the DC power adapter into the port on the rear panel of the units, and then into an available AC outlet.
4. Plug in an RJ45 Ethernet cable to the RJ45 port on the 110VDSLEXT / GB / EU units. Connect the other end of the cables to your Ethernet devices.
5. Plug a phone cable into the VDSL port of the 110VDSLEXT/GB/EU. Connect the other end of the cable into the opposing 110VDSLEXT/GB/EU unit.
6. **Optional:** Configure DIP switches 2 through 4 as necessary (see *DIP Switch Settings* section). Leave DIP switch 1 alone, as one unit should always be set to CO mode while the other is CPE mode.

Operation

LED Displays

LAN LED Display

LED	Blinking	ON	OFF
1	Activity	Link up	Link down
2		100 Mbps	10 Mbps
3		Full duplex	Half duplex

VDSL LED Display

LED	Blinking	ON	OFF
1	Activity	Device Power On	Device Power Off
2	-	CPE Mode	CO Mode
3	Slowly: Idle Quickly: Training	Linked	Offline

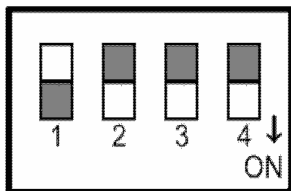
DIP Switch Settings

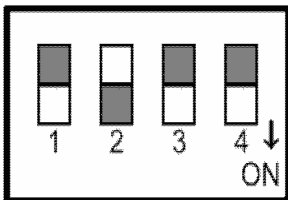
The 110VDSLEXT / GB / EU has a 4-position DIP switch for configuration of *Side*, *Channel*, *Rate Limit*, and *SNR*.

Pin 1 - CO, CPE Switch

OFF: If Pin 1 is in the OFF position, the 110VDSLEXT / GB / EU will operate in Central Office (CO) mode.

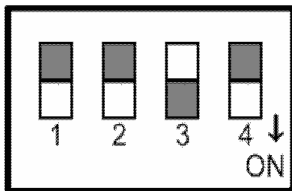
ON: If Pin 1 is in the ON position, the 110VDSLEXT / GB / EU will operate in Customer Premise Equipment (CPE) mode.



Pin 2 - Interleave Noise Protection

OFF: If Pin 2 is in the OFF position, the 110VDSLEXT / GB / EU will operate in Interleave mode, with communication protection for up to 250ms of impulse noise with latency less than 6 ms

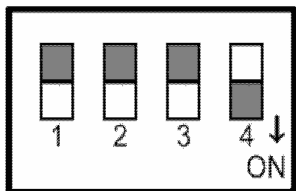
ON: If Pin 2 is in the ON position, the 110VDSLEXT / GB / EU will operate in Fast mode, with direct data transmissions having less than 1ms of latency.

Pin 3 - Band Plan

OFF: If Pin 3 is in the OFF position, the 110VDSLEXT / GB / EU will operate in Symmetric mode, with both downstream and upstream transmissions operating on the G.997 band plan.

ON: If Pin 3 is in the ON position, the 110VDSLEXT / GB / EU will operate in Asymmetric mode, with asymmetric short range transmissions operating at the highest available line rate.

Pin 4 - General Protection



OFF: If Pin 4 is in the OFF position, the 110VDSLEXT / GB / EU will operate with a SNR ratio up to 9 dB.

ON: If Pin 4 is in the ON position, the 110VDSLEXT / GB / EU will operate with a SNR ratio of 6 dB.

Connector Architecture

Ethernet Port

Pin Number	Assignment (MDI-X)
1	RX+; Receive data +
2	RX-; Receive data -
3	TX+; Transmit data +
4	Not used
5	Not used
6	TX-; Transmit Data -
7	Not used
8	Not used

VDSL Port

Pin Number	Assignment (MDI-X)
1	Not used
2	Not used
3	ANALOG Input/Output
4	ANALOG Input/Output
5	Not used
6	Not used
7	Not used
8	Not used

Specifications

	110VDSLEXT 110VDSLEXTGB 110VDSLEXTEU
LAN Interface	<ul style="list-style-type: none">• RJ-45 connector• Complies with IEEE 802.3/802.3u/802.3x• 10/100 Base-T Auto-Negotiation, Auto-MDI/MDI-X
VDSL Interface	<ul style="list-style-type: none">• RJ-45 connector• DMT Encoding• Complies with ITU-T G993.1/993.2• On-board surge protection
DIP Switch	4 position
LED	<ul style="list-style-type: none">• LAN: ACT/LNK, 10/100 Mbps, Half/Full Duplex• VDSL: Power On/Off, CO/CPE, Idle/Trained/Link
Power Supply	12VDC, 1A output, 3.5mm jack
Power Consumption	4.2 Watt maximum
Dimensions	95.5 mm x 72.0 mm x 22.0 mm

Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit www.startech.com/support and access our comprehensive selection of online tools, documentation, and downloads.

Warranty Information

This product is backed by a one year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

Limitation of Liability

In no event shall the liability of StarTech.com Ltd. and StarTech.com USA LLP (or their officers, directors, employees or agents) for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of business, or any pecuniary loss, arising out of or related to the use of the product exceed the actual price paid for the product. Some states do not allow the exclusion or limitation of incidental or consequential damages. If such laws apply, the limitations or exclusions contained in this statement may not apply to you.



StarTech.com has been making “hard-to-find easy” since 1985, providing high quality solutions to a diverse IT and A/V customer base that spans many channels, including government, education and industrial facilities to name just a few. We offer an unmatched selection of computer parts, cables, A/V products, KVM and Server Management solutions, serving a worldwide market through our locations in the United States, Canada, the United Kingdom and Taiwan.

Visit **www.startech.com** today for complete information about all our products and to access exclusive interactive tools such as the Cable Finder, Parts Finder and the KVM Reference Guide.