

4 Port 10/100 VDSL Ethernet Extender Kit over Single Pair - 1km

410VDSLEXT

410VDSLEXTGB

410VDSLEXTEU



*actual product may vary from photos

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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.

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Introduction

The 410VDSLEXT 10/100 4-Port VDSL Ethernet Extender Kit lets you span a 10/100 network over single pair wire at distances up to 1km, to multiple users or network segments while maintaining high-speed network connectivity.

With the ability to run over new or existing RJ45 cabling, RJ11 phone lines, or any other single pair wire, the 4-port VDSL2 kit provides a simple, out-of-the-box solution that includes both the Ethernet-VDSL extender and receiver units.

Perfect for connecting isolated user stations within, or between buildings, or to overcome infrastructure obstacles (e.g. stone/concrete architecture) where new wiring or wireless may be impossible. This LAN extender kit also helps to eliminate expense by allowing video streaming and data to share the same telephone pair without interference.

Backed by a StarTech.com 2-year warranty and free lifetime technical support.

Packaging Contents

- 1x Extender Unit
- 1x Receiver Unit
- 1x RJ-45 Cable
- 1x RJ-11 Cable
- 2x Power Adapter
- 1x Instruction Manual

System Requirements

- 10/100 Mbps Ethernet Network
- Available AC electric outlets

Front View

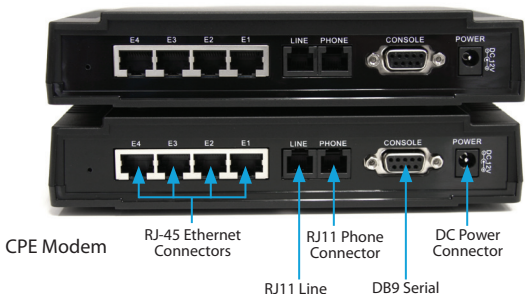
CO Modem

CPE Modem



Rear View

CO Modem



Installation

Hardware Installation

1. Place each VDSL Extender unit at their respective end-point locations. Make sure an AC electrical outlet is located nearby.
2. Connect the included power adapters to the pair of VDSL Extender units. The Power LED should light up solid.
3. Connect the "Line" RJ11 connector on the VDSL Extender units either directly together with patch cabling, or to a buildings existing analog telephone wiring. If the two units are able to successfully communicate with each other, the "WAN" LED should light up solid.

OPTIONAL: If the telephone wiring is also used for POTS telephone service, then a telephone may be connected to the "Phone" RJ11 connector on the VDSL Extender units.

4. Connect each computer, or Ethernet networking device to an available RJ45 connector on the VDSL Extender units. The respective LAN LED should light up to indicate a successful physical connection.

Driver Installation

No driver or software installation is required.

Configuration

Web Interface

Each of the VDSL Extender units have a built-in web interface, for configuring the router settings (WAN and LAN ports), if necessary. The interface can be access via their IP addresses (**CO Modem: 192.168.16.249, CPE Modem: 192.168.16.250**). The default password is: admin

The main menu screen on the CPE Modem has two options: "Setup Wizard" for quick setup, and "Advanced Setup" for a more customized configuration. The CO Modem only has "Advanced Setup" options.

Setup Wizard (CPE Modem only)

The Setup Wizard allows for quick and easy configuration of the most common settings (WAN) for the VDSL Extender.

CPE Modem

- 1. Host Settings
- 2. WAN Type
- 3. WAN Settings
- 4. DNS

1. Host Settings

Host Name

Domain Name

Enter the unique host name for the Modem, and the domain name of your organization.

Advanced Menu System

This section allows for general configuration/administration of the VDSL Extender unit.

System

- Administrator Settings
- Firmware Upgrade
- Device Mode
- System Status
- System Time Zone
- System Time
- Reboot
- Reset System

Administrator Settings

Set a password to restrict management access to the modem. If you want to manage the modem from a remote location (outside of the local network), you must also specify the IP address of the remote PC.

After Modify Password, system will Reboot!!

Current Password

Password

Re-type password (3-12 Characters)

Auto-Logout Time 30 Min (Auto-Logout Time, at least >= 1 Min)

Firmware Update

New firmware for your Modem to improve functionality and performance.

Enter the path and name of the upgrade file then click the APPLY button below. You will be prompted to confirm the upgrade.

Runtime Version:

2.4.20_mw31-ADM5120 #1458 Thu Apr 15 20:17:17 CST 2010

Device Mode

The Device mode allows the user to specify the mode setting for the Modem. Users can choose Router or Switch mode.

- Router Mode
- Switch Mode

Status

You can use the Status screen to see the connection status for the Modem's WAN/LAN interfaces, firmware and hardware version numbers, and the number of connected clients to your network.

INTERNET

WAN IP	0.0.0.0
Subnet Mask	0.0.0.0
Gateway	0.0.0.0
DNS	0.0.0.0
Secondary DNS	0.0.0.0
Connection Type	FXED

GATEWAY

IP Address	192.168.16.249
Subnet Mask	255.255.255.0
DHCP Server	Disable
Firewall	Disable

INFORMATION

Connected Clients	0
Runtime Code Version	2.4.20_rmv31-ADM5120 #1458 Thu Apr 15 20:17:17 CST 2010
LAN MAC Address	00:05:6E:00:82:26
WAN MAC Address	00:05:6E:00:82:27
Hardware Version	1.00.00

System Time

Connecting to a Simple Network Time Protocol (SNTP) server allows the Modem to synchronize the system clock to the global Internet.

Set Time Zone (GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London ▾

Current System Time

Thu Jan 1 00:15:27 GMT 1970

System Date and Time Settings

If you can't connect to a SNTP server to allow the Modem to synchronize the system clock to the global Internet. You can setup system time.

Current System Time

Thu Jan 1 00:15:30 GMT 1970

Month (Month setup, 01~12)

Date (Date setup, 01~31)

Hour (Hour setup, 01~24)

Minute (Minute setup, 01~60)

Year (Year setup, 1970~2037)

Reboot Modem

In the event that the modem stops responding correctly or in some way stops functioning, you can perform a reboot. Your settings will not be changed. To perform the reboot, click on the "Reboot" button below. You will be asked to confirm your decision. The reboot will be complete when the power light stops blinking.

Reset System Modem

Reset System to default configuration.

WAN

This section can configure how the built-in VDSL Modem connects to a DSL Internet Service Provider (ISP) through the “Line” RJ11 connector. The modem supports Dynamic IP, Static IP and PPPoE modes.

System

WAN

Dynamic IP

IP Settings

PPPoE

DNSS

WAN

The Device can be connected to your service provider in any of the following ways:

- Dynamic IP Address Obtain an IP address automatically from your service provider.
- Static IP Address Uses a static IP address. Your service provider gives a static IP address to access Internet services.
- PPPoE PPP over Ethernet is a common connection method used for xDSL.

LAN

The LAN section is used to configure the IP address and DHCP server on the RJ45 Ethernet side of the VDSL Extender unit. By default the DHCP server is not enabled.

System

WAN

LAN

LAN Settings

DHCP Client List

LAN Switch Port Setting

LAN Port Status

LAN Settings

You can enable DHCP to dynamically allocate IP addresses to your client PCs.

IP Address

Subnet Mask

The Gateway acts as DHCP Server Enable

All Lan Port Setting

The Lan Port Setting mode allows the user to specify the mode setting for the VDSL2 CO Modem. Users can choose 10Mb or 100Mb mode.

- Force 10Mb Full
- Auto 10/100 Full/Half
- Force 10Mb Half
- Force 100Mb Half
- Force 100Mb Full

Status

The following information provides a view of the current Ethernet ports status of the unit

Port 1

Link Status Link Up, 100Mb/s, Full Duplex

Port 2

Link Status Link Down,

Port 3

Link Status Link Down,

Port 4

Link Status Link Down,

NAT

This section is used to configure the advanced features on the Ethernet side of the VDSL Extender unit. This include "Virtual Server", "Port Mapping" and DMZ settings.

Virtual Server

You can configure the Router as a virtual server so that remote users accessing services such as the Web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP addresses. In other words, depending on the requested service (TCP/UDP port numbers), the Router redirects the external service request to the appropriate server (located at another internal IP address).

	Private IP	Private Port	Type	Public Port	Enabled
1	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="radio"/> TCP <input type="radio"/> UDP	<input type="text"/>	<input checked="" type="checkbox"/>
2	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="radio"/> TCP <input type="radio"/> UDP	<input type="text"/>	<input checked="" type="checkbox"/>
3	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="radio"/> TCP <input type="radio"/> UDP	<input type="text"/>	<input checked="" type="checkbox"/>
4	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="radio"/> TCP <input type="radio"/> UDP	<input type="text"/>	<input checked="" type="checkbox"/>
5	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="radio"/> TCP <input type="radio"/> UDP	<input type="text"/>	<input checked="" type="checkbox"/>

Port Mapping

For some applications, you need to assign a set or a range of ports to a specified local machine to route the packets. Router allows the user to configure the needed port mappings to suit such applications.

	Server IP	Mapping Ports	Enabled
1	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
2	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
3	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
4	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
5	192.168.16. <input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>

DMZ(Demilitarized Zone)

If you have a local client PC that cannot run an Internet application properly from behind the NAT firewall, you can open the client up to unrestricted two-way Internet access by defining a virtual DMZ Host.

Enable



IP Address of Virtual DMZ Host

VDSL2

Allows for manual configuration of the VDSL2 connection.

System

WAN

LAN

NAT

Firewall

Route

UPnP

Vdsl2

▶ ChannelConfig

▶ LineConfig

▶ ProfileConfig

▶ LoopBack

▶ ActivateDeactivate

▶ LineStatus

▶ ChannelStatus

▶ VersionInfo

▶ SNRGraph

▶ BitsGraph

Channel Config

Configuration of line per bearer basis.

Channel Number	ChannelID ▾
Direction	Upstream ▾
Min Data Rate	64 <input type="text"/> kbps
Max Data Rate	102400 <input type="text"/> kbps
Max Interleave Delay	1 <input type="text"/> ms

Profile Config

Configuration of line for specific band plans.

Profile	Vdsl2 Profile30a ▾
Band Plan	Annex C_8K ▾
Filter	Additional Filter Off ▾
ToneMode	V43 ▾

Line Config

Configuration of line.

Direction	Upstream ▾
Target SNRM	6.000000 <input type="text"/> dB

Activate Deactivate

Activating or Deactivating the line

Line	Activate ▾
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Loop Back

Setting Of Loop Backs (System - System Loop, or Line Side Loop)

Channel Number	ChannelID ▾
Loop	System - System Loop ▾
State	Deactivate ▾

Specifications

External Connectors (per unit)	2 x RJ11 female 4 x RJ45 Ethernet female 1 x DB9 female 1 x DC Power
LEDs (per unit)	1 x Power 1 x WAN Link 4 x LAN Link/Activity
Supported Standards	IEEE 802.3, IEEE 802.3u, ITU G.993.2
Maximum Data Transfer Rate	300 m: 100 Mbps 1 km: 50 Mbps
Auto-MDIX	Yes
Full Duplex Support	Yes
Switching Architecture	Store and Forward
Power Adapter	12VDC, 1250mA, center positive, type M plug
Average Power Consumption (per unit)	< 5 W
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)
Storage Temperature	-10°C ~ 70°C (14°F ~ 158°F)
Humidity	10% ~ 90% RH
Dimensions (LxWxH)	184.0mm x 146.0mm x 40.0mm
Weight (per unit)	650g

Technical Support

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For the latest drivers/software, please visit www.startech.com/downloads

Warranty Information

This product is backed by a two year warranty.

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