### DSL-6300V

USER MANUAL

FEBRUARY 2011 ISSUE 1 All other trademarks are the property of their respective owners..

The information presented is subject to change without notice. D-Link Corporation assumes no responsibility for inaccuracies contained herein.

Copyright © 2011 D-Link Corporation. All Rights Reserved.

#### Conformance statements

The device complies with Part 68 of the Federal Communications Commission (FCC) statements and UL.

## Contents

#### About this document

В	TCP/IP configuration
Α	Troubleshooting
	Install the CPE
1	Installation Guide
	Technical support vi
	Eco-environmental statements
	Conventions used
	Safety information
	Supported systems
	Intended audience
	Reason for revision
	Purposev

С Product conformance

## About this document

#### Purpose

The purpose of the *User Manual* is to provide installation information, procedures for installation, service activation and system reconfiguration for the DSL-6300V VDSL2 Bridge. Additionally the *User Manual* contains status indicators and troubleshooting information and a comprehensive description of safety guidelines.

#### **Reason for revision**

This version 1.0 of the User Manual is the first issue.

#### Intended audience

The intended audience of the *User Manual* primarily is for individuals who install, configure and maintain this customer premises equipment (CPE) and in addition responsible for the supervision of transmission operation.

#### Supported systems

For theDSL-6300V VDSL2 gateway operation as described in this manual, a specific hardware consists of the following components is required:

- One DSL-6300V VDSL2 Bridge
- One standard telephone cable
- One category 5 UTP network cable
- One power adapter

#### Safety information

**Important!** The following information lists the safety reminders for installation and maintenance personnel.

Read all instructions before attempting to unpack, install, operate, or connect power to this CPE. Please remember the following when you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury.
- To prevent fire or shock hazard, do not expose the CPE to rain, moisture or install this equipment near water. Never spill any form of liquid on or into this product.

- Do not insert any sharp object into the products module openings or empty slots. Doing so may accidentally damage its parts.
- Do not attach the power supply cable on building surfaces or floorings. Rest the power cable freely without any obstacle or heavy items piled on top of it. Refrain from abusing, stepping or walking on the cable.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.
- Exercise caution when installing or modifying telephone lines. Never install telephone wiring during inclement weather conditions (i.e., storm).
- Electrostatic discharge (ESD) can permanently damage semiconductor devices. Always follow ESD-prevention guidelines for equipment handling and storage.

#### **Conventions used**

Important! Introduces important additional information.

CAUTION: Warns that a failure to follow the recommended procedure could result in loss of data or damage to equipment.

WARNING: Warns that a failure to take appropriate safety precautions could result in physical injury. In addition it warns of danger of electrical shock.

#### Eco-environmental statements

The statements that follow are the eco-environmental statements that apply to DSL-6300V products.

Countries, states, localities, or other jurisdictions may require that systems be established for the return and/or collection of packaging waste from the consumer, or other end user, or from the waste stream. Additionally, reuse, recovery, and/or recycling targets for the return and/or collection of the packaging waste may be established.

For more information regarding collection and recovery of packaging waste within specific jurisdictions, please contact the D-Link Technologies Field Services/Installation or Environmental Health and Safety organization.

#### **Technical support**

To obtain technical support, contact your local sales representative or use the Online Customer Support (OLCS) (http://support.dlink.com).

# 1 Installation Guide

### Overview

#### Purpose

This Installation Guide provides information about how to install the DSL-6300V VDSL2 Bridge at the customers premises, which may be apartment blocks, hotels or office complexes.

This customer premises equipment (CPE) supports Ethernet-over-VDSL2 via one Ethernet data link rated up to 100 Mbps symmetrically. With its bridge functionality, it connects any device equipped with a 10BASE-T or 100BASE-TX network interface card via a standard telephone cable to a VDSL switch. For this purpose, it provides:

- One VDSL port
- One Ethernet LAN port (10/100BASE-TX)

#### Contents

This chapter covers these topics.

Install the CPE

Install the CPE

#### When to use

Use this procedure to install the DSL-6300V and to establish a connection. The following figure shows the CPE with all external connections established. This will be described step by step in the procedure below.

1-1



#### Figure 1-1 Overview about all external connections

#### System requirements and safety guidelines

- 1. The CPE should be located in a cool dry place, with at least 5 cm (2 in.) of space on all sides for ventilation. Place the CPE out of direct sunlight, and away from heat sources or areas with a high amount of electromagnetic interference.
- 2. For power supply, the CPE requires 15 V DC via the supplied power adapter.
- 3. Do not spill any liquid on this CPE.
- 4. The CPE is a plug-and-play unit and does not need any configuration or maintenance.
- 5. Do not place the CPE on an unstable stand or table; the CPE may drop and become damaged.
- 6. For an Internet access, a PC with a 10/100 Mb/s Ethernet adapter card installed is required. And it must be configured for a connection method which should be obtained from the ISP. Please consult your ISP for connection requirement.

#### Before you begin

Make sure that the package content is complete. Preserve original carton and packaging material.

#### Mounting procedure

There are two ways for mounting the CPE:

- Wall mounting
  - 1. Locate a high position on the wall that is free of obstructions.

2. Connect two screws in the wall 5 cm (2 in.) apart. Do not screw the screws all the way into the wall.

**Important!** Make sure that the screws are securely fixed to the wall and strong enough to hold the weight of the CPE.

screws specification for wall mounting:



D	К
6.0 <d<10.0< td=""><td>K&lt;2.0</td></d<10.0<>	K<2.0

Unit : mm.

3. Align the holes on the back of the CPE with the screws on the wall.

4. Hang up the CPE on the screws.

• Desktop mounting

Place the CPE on top of the desk with the name logo side up.

#### HW installation procedure

#### CAUTION:

*Please follow the directions from your service provider regarding the connection of your VDSL2 bridge. The following procedure are meant as a guideline.* 

1 Connect the cord of the AC power adapter to the power socket on the CPE which is labeled 15 V 1 A. Then plug the power adapter directly into the AC power outlet.

**Result:** The LED (marked power) on the LED panel is on.

- 2 Restore this CPE to factory defaults if necessary. See section **Reset switch** to restore the CPE to the factory defaults.
- **3** Connect one end of the attached standard telephone cable to the port on the CPE which is labeled VDSL and connect the other end to the telephone wall outlet providing the VDSL servive.

- 4 Connect one end of the Category 5 UTP network cable to the Ethernet LAN port on the CPE and the other end to the port of the network interface on the appropriate device, for example a PC, Notebook and so on.
- **5** If you need to change the configuration of the gateway, make sure that the Ethernet adapter of your device is correctly configured for *Static IP*. For more details refer to Appendix B **TCP/IP configuration**.
- **6** Establish the first connection with your ISP. For information about how to configure an internet connection, please consult your ISP.

END OF STEPS

# A Troubleshooting

### Overview

#### Purpose

This Appendix provides guidance for troubleshooting. The CPE operation can easily be monitored via the LED indicators to identify problems. The table below describes common problems you may encounter and possible solutions.

#### Diagnosing

Symptom	Possible cause	Solution
<i>POWER</i> LED does not light up after power on.	Power outlet, power cord, or power adapter may be defective.	<ul> <li>Check the power outlet by plugging in another device that is functioning properly.</li> <li>Call the Customer Support Hotline or return the device to the vendor.</li> </ul>
<i>VDSL</i> is flashing slowly after making a connection.	The cabling, or the VDSL port on the CPE may be defect.	<ul> <li>Verify that the CPE is powered on.</li> <li>Make sure the cable is correctly plugged into the VDSL line wall outlet and the CPE connector labeled "VDSL".</li> </ul>
<i>LAN</i> LED does not light up after making a connection.	Network interface (e.g., a network adapter card in the attached computer), network cable, or the LAN port on the CPE may be defect or not connected.	<ul> <li>Verify that the CPE and the computer device are powered on.</li> <li>Make sure that the cable is plugged into both, the CPE and the device.</li> <li>Verify that the proper cable type is used and its length does not exceed specified limits.</li> <li>Check the network adapter in the device and the cable connections for possible defects. Replace the defective adapter or cable if necessary.</li> </ul>
<i>MESSAGE</i> is flashing	At the moment a CPE firmware upgrade is executed.	• Wait until the firmware upgrade is passed and the DIAG LED is "On".

.....

.....

.....

# B TCP/IP configuration

### Overview

The following procedures provide TCP/IP configuration instructions for all supported operating systems.

#### Windows 7

- 1. Open Network and Internet from the Control Panel.
- 2. Open Network and Sharing Center from the Network and Internet.
- 3. Right-click Local Area Connection from Network and Sharing Center.
- 4. Under the General tab, select Internet Protocol (TCP/IPv4), and click Properties.
- 5. Select the Obtain an IP address automatically radio button.
- 6. Select the Obtain DNS server address automatically radio button.
- 7. Click **OK** to save the settings.

END OF STEPS

#### Windows Vista

- 1. Open Network and sharing Center from the Control Panel.
- 2. Open Manage network connections from the Network and sharing Center.
- 3. Right-click Ethernet connection and select Properties.
- 4. Under the General tab, select Internet Protocol (TCP/IPv4), and click Properties.
- 5. Select the Obtain an IP address automatically radio button.
- 6. Select the Obtain DNS server address automatically radio button.
- 7. Click **OK** to save the settings.
- END OF STEPS

#### Windows XP

- 1. Open Network Connections from the Control Panel.
- 2. Right-click Ethernet connection and select Properties.

- 3. Under the General tab, select Internet Protocol (TCP/IP), and click Properties. The Internet Protocol (TCP/IP) properties window appears.
- 4. Select the Obtain an IP address automatically radio button.
- 5. Select the Obtain DNS server address automatically radio button.
- 6. Click **OK** to save the settings.

END OF STEPS

#### Windows Me/2000/98/95

- 1. Open Network and Dialing Connections from the Control Panel.
- 2. Right click the Ethernet connection icon and select Properties.
- 3. Select Internet Protocol (TCP/IP) component, and click Properties. The Internet Protocol (TCP/IP) properties window appears.
- 4. Select the Obtain an IP address automatically radio button.
- 5. Select the Obtain DNS server address automatically radio button.
- 6. Click **OK** to save the settings.

END OF STEPS

#### Windows NT

- 1. Open Network from the Control Panel.
- 2. From the **Protocol** tab, select the **Internet Protocol (TCP/IP)** component, and click the **Properties** button.
- 3. From the IP Address tab, select the Obtain an IP address automatically radio button.
- 4. From the DNS tab, verify that no DNS server is defined in the DNS Service Search Order box and no suffix is defined in the Domain Suffix Search Order box.

END OF STEPS

#### Mac OS

- 1. Open System Preferences from the Panel.
- 2. Choose Network from Internet & Network.
- 3. Make sure the window is unlocked. If it is locked, click the lock to make changes and enter the password for authentication.
- 4. From the TCP/IP tab, choose the Using DHCP on Configure IPv4 field.
- 5. Click on the Apply Now button to obtain an IP address from the DHCP server.

END OF STEPS

# C Product conformance

#### Federal Communication Commission Interference 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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### FCC Part 68 Statement

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US: 3P7DL01BSL6300VA1. If requested, this number must be provided to the telephone company.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US: 3P7DL01BSL6300VA1. The digits represented by 01B are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

If your equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC. Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, please contact the following address and phone number for information on obtaining service or repairs.

The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

#### **Company: D-Link Corporation**

#### Address: 17595 Mt. Herrmann, Fountain Valley, CA, United States, 92708

#### Tel no.: 714-885-6105

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.