

FCC ID: I88 PRESTIGE 760V

# PRESTIGE 760V

*HDSL2 DSU*

## *User's Guide*

Version 0.2

July, 2000

**ZyXEL**

TOTAL INTERNET ACCESS SOLUTION

# INSTRUCTIONS MANUAL

## FEDERAL COMMUNICATIONS 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 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.

#### CAUTION:

To assure continued FCC compliance:

- (1) Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

#### FCC Label Compliance Statement:

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.

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# Chapter 1

## Getting to Know Your HDSL2 DSU

The P760V is a HDSL2 (High-bit-rate Digital Subscriber Line - 2<sup>nd</sup> Generation) Data Service Unit (DSU), designed for small offices and branch offices to provide cost-effective access to high speed HDSL2 service. The P760V will interoperate with a frame relay router via V.35 and X.21 interface, enabling Internet access through HDSL2 connection over the existing phone line.

### 1.1 Features of the P760V

- Power Requirement: 16VAC @ 1A
- Operating Requirements:
  - Temperature: 0°C to 45°C
  - Humidity: 5% to 90% (Non-condensing)
- Standard compliant HDSL2 WAN Interface.
- V.35 and X.21 synchronous serial interface in DCE (Data Communication Equipment) mode.
- 2-wire T1 transport 1.544 Mbps speed Internet Access.
- Interoperable with Frame Relay and ATM networks.
- Complies with FRF.8 – "Frame Relay / ATM PVC Service Interworking Implementation Agreement".
- Transparent support for PPP over ATM and others protocols over ATM.
- External clock support.
- Self-diagnostic tests performance. These tests check the integrity of the FLASH memory, HDSL2 circuitry and RAM.
- FLASH download capability enables future upgrades via console port. You need not open the unit or change memory chips in order to upgrade your software.
- System Management via Command Line Interface (CLI).

### 1.2 Key Benefits

- High Speed Internet Access
- Frame Relay and ATM Interworking Services support.
- PPP over ATM and ATM over HDSL2 support.
- Ease of use and configuration

### 1.3 P760V Management

The P760V is managed through command line interface, which is accessible via serial connection.

# Chapter 3

## Configuration and Management

### 3.1 Introduction

The P760V is shipped with certain set values. If you do not need to change the default settings, just make the various connections and the unit is ready for use. To change the configuration you must use the command line interface. The following sections list the default settings and explain how to configure and manage your DSU.

#### 3.1.1 Default Settings

Your HDSL2 DSU is shipped with the following default settings:

- VPI:0, VCI: 35
- DLCI: 16
- RFC-1483 LLC mode at the WAN interface
- RFC-1490 at V.35 interface
- DCE mode at V.35 interface
- Console port speed: 9600 bps
- V.35 Clock Rate: 1.544 Mbps

### 3.2 Command-Line Interface

Two sets of Terminal Server commands are provided in P760V. The first one is 'show', and the second one is 'set'. The next table lists all the commands.

show		
	atm stats chan [chan-index]	Displays the status of virtual channel.
	hdl2 stats	Displays the HDSL2 line status.
	fr stats	Displays frame relay information
	fr chan [chan-index]	Displays channel information
	v35 stats	Displays v35 information
	frf8 stats chan [chan-inex]	Displays FRF8 information
set		

## Appendix B

### Pin Assignments

- V.35.

PIN NUMBER	SIGNAL	SOURCE
1	Cable Shield	
2	Transmit Data	DTE
3	Receive Data	DCE
4	Request To Send	DTE
5	Clear To Send	DCE
6	Data Set Ready	DCE
7	Signal Ground	
8	Data Carrier Detect	DCE
9*	Receive Clock Return	DCE
10	Unassigned	
11*	External Clock Return	DTE
12*	Transmit Clock Return	DCE
13	Unassigned	
14	Transmit Data Return	DTE
15	Transmit Clock	DCE
16	Receive Data Return	DCE
17	Receive Clock	DCE