FAQ on DSL-500/504 Latest firmware R2.01B2 and above Date: 19 March 2002 Author: Steven Sia Doc Ver: 1.0

# For ISPs:

1) How do I trouble-shoot?

Ans:

a) Check the line and phone number

-Make sure that the ADSL service has been subscribed and activated on that line.

b) Check the ISP ADSL IP addresses have been activated too

-If ISP router is not set up accordingly, no Internet traffic is available.

c) When powering up the DSL-50x, after the POST (~1 min), the Status LED should blink

-if both ADSL Link and Act LEDs stay solid ON for more than 4 minutes, contact D-Link RMA Dept. Possible cause: Firmware corruption.

d) Check network connection, i.e. Ethernet Link is up on DSL-50x

-All ports on DSL-500 and DSL-504 are MDI-X ports. That is, when connecting to a NIC, use a straight-thru cable; when connecting to a switch/hub, use straight-thru cable to the uplink port or cross-over cable to normal port.

e) Plug ADSL line into DSL-50x and power DSL-50x up

-The **ADSL Link** LED should stay steadily on after 1 minute (i.e. it connects to DSLAM successfully). The ADSL Act LED will only blink when there is traffic. Else, check and make sure the phone line is plugged in firmly. Also, make sure the right ISP profile is being entered, esp. VPI=8, VCI=35.

f) Check your PC's IP address to be in the same subnet as DSL-50x

-Default DSL-50x IP address = 192.168.0.1.

-By default, DSL-50x DHCP server function is enabled. So, the PC should be able to obtain IP automatically from DSL-50x.

g) Double-check network connection by PING 192.168.0.1

-You should get a Reply if network connection and IP config are all fine.

h) Now, you could proceed with Console or Browser config

-If you have had too many attempts and would like to restore all factory settings, follow the steps below (for DSL-50x R1.14AU).

1.Once you connect up via console (9600,8,N,1) successfully, press ENTER and you should see the prompt like: 2.x.x.x.x>

3.Enter the commands below as shown below (please enter everything that is after the prompt >):

4.x.x.x.x>ip device flush

5.x.x.x.x>ip subnet flush

6.x.x.x.x>ip route flush

7.x.x.x.x>ip ipatm pvc flush 8.x.x.x.x>ip nat delete ppp\_device

9.x.x.x.x>ppp 1 disable

10.x.x.x.x>r1483 pvc none

11.x.x.x.x>config save

12.x.x.x.x>restart

13.After those commands, the system will reboot. Then, you will see the followings and continue with the commands as shown below:

14.??:???????????>ip device add ethernet ether //edd 192.168.0.1

15.??:??:??:??:??:??>ip device add ppp\_device ether //ppp/DEVICE=1 20.0.0.1

16.??:??:??:??>config save

17.??:??:??:??:??>restart

18.After reboot completes, continue with the followings.

19.Set your PC's (to be used for recovering DSL-50x) IP address to be 192.168.0.2 subnet mask 255.255.255.0 gateway 192.168.0.1. Restart your PC.

20.Once restart completes, install the firmware program available from:

http://www.dlink.com.au/tech/drivers/files/routers/dsl500.htm

21.Run to Upgrade the firmware of your DSL-500/504.

22.As long as it is discovered, leave all IP settings as it is, simply proceed with upgrade. 23.Even if it is already 1.14AU, please upgrade it again. FOLLOW THE INSTRUCTIONS CLOSELY TO AVOID UNNECESSARY CORRUPTION!!

i) Restore all factory settings for DSL-50x R2.01

- -On console, issue command:
  - > config default

j) Backup the unit's configuration file and send it to ISP for closer examination.

-This can be easily done via browser under "Maintenance"\"Configuration Maintenance".

2) What is the latest firmware version for DSL-500/504?

Ans: The latest firmware version is R2.01B2AU (on March 2002). This version is used for both Australia and NZ ADSL services.

3) Can New Zealand parties use R2.01B2AU firmware?

Ans: Yes, NZ users can simply choose or create the right NZ profile under "Router/Bridge Configuration" or "Connection Profile".

## 4) Do I need it?

Ans: For those existing connections running fine with firmware R1.14AU/NZ, you will NOT need it as the new firmware provides the same performance as the existing ones.

5) Who should upgrade and use it then?

Ans: For those ISPs who need to:

- a) examine customer's backup configuration file of the DSL-500/504.
- b) send proper or updated configuration file to the customer for restoring into the DSL-500/504 via web-configurable interface.
- c) have IPoA configuration on the web-configurable interface.
- d) change the DSL-500/504 router into a dumb ADSL-bridge-modem.
- e) set up specific filtering and firewall rules on their connections.
- f) have Telnet-over-WAN basic trouble-shooting and configuration-checking capability on their connections. They must also have the capability, expertise and resources to do so.

## 6) What are new in there?

Ans:

- a) It gives ISPs and customers the ability to backup or restore the configuration file of the DSL-500/504 via web-configurable interface (under "Maintenance")" ("Configuration Maintenance"). This is very useful for setting up, trouble-shooting, updating and restoring the configuration in the unit. This will be useful for Linux, Unix and Mac users as well.
- b) It has pre-configured profiles for general ADSL services in Australia and NZ (under "Router/Bridge Configuration") so that most subscribers can select them easily. (**IMPORTANT**: When selecting a profile under "Router/Bridge Configuration", you must click "OK" at the bottom and then select "Save changes and reboot system now", "OK". This is to ensure that the selected profile is activated and all the right settings are available for you to configure.)
- c) It has IPoA configuration on the web-configurable interface.
- d) It allows DSL-500/504 to operate in dumb ADSL-bridge-modem mode.
- e) It allows those ADSL service providers (who have the expertise and resources) to do Telnet-over-WAN basic trouble-shooting and configuration-checking on the connections.
- f) Its firmware is upgradeable via web-interface now (under "Maintenance"\"Update Firmware"). This will be useful for Linux, Unix, Mac and other OS users.

7) How do I upgrade it?

Ans: Please refer to the example document here. **WARNING**: All instructions must be followed carefully to avoid unnecessary corruption. If the unit is corrupted, customer could contact D-Link RMA department to arrange the unit to be sent back to D-Link office for recovery (at his/her own cost). D-Link reserves the right to charge the customer according to the RMA repair policy. Details can be discussed when contacting the department.

8) How do I backup or restore the configuration file of DSL-500/504? Ans: Please refer to the example document here.

9) How do I change or convert DSL-500/504 into a dumb ADSL-bridge-modem? Ans: Please refer to the example document here.

10) When will this firmware be shipped?

Ans: This firmware will start phasing into all shipments from the end of March 2002. It is already available for download under here.

11) What VPN support does this new firmware has?

Ans: VPN configuration is not an issue at all when public IP addresses are assigned on the local network. The challenge begins when users try to share one IP address using Network Address (Port) Translation (NAT/NAPT) technology AND use VPN configuration at the same time. DSL-500/504 does not have VPN server built-in. All firmware versions support VPN passthrough (PPTP GRE protocol and IPSec ESP+tunnel mode). To use it, simply place your VPN server's or client's IP address under the "NAT Configuration"\"DMZ IP address" field. However, it is encouraged to assign public IP addresses for the local network when sophisticated VPN implementation is involved.

12) Where can I find additional information?

Ans: You could find them under our Technical Resources database.

# For End-user:

1) How do I set up PPPoE or PPPoA (Type A) connection?

Ans: Please refer to the example document here. (Basically, you select the right profile under "Router/Bridge Configuration", click "OK" at the bottom and then select "Save changes and reboot system now", "OK". This is to ensure that the selected profile is activated and all the right settings are available for you to configure after the restart. Remember to save all your final settings as well)

2) How do I set up IPoA (Type C) connection? Ans: Please refer to the example document here.

3) How do I trouble-shoot?

Ans:

## a) Check the line and phone number

-Make sure that the ADSL service has been subscribed and activated on that line. Please contact your ADSL service provider to confirm this.

## b) Check the ISP ADSL IP addresses have been activated too

-Contact your ADSL service provider to double-confirm this as well. If ISP router is not set up accordingly, no Internet traffic is available. (There are numerous occasions where the services have been provisioned but wrong IP addresses are provided)

c) When powering up the DSL-50x, after the POST (~1 min), the **Status** LED should blink.

-if both **ADSL Link** and **Act** LEDs stay solid ON for more than 4 minutes, contact D-Link RMA Dept. Possible cause: Firmware corruption.

d) Check network connection, i.e. Ethernet Link is up on DSL-50x

–All ports on DSL-500 and DSL-504 are MDI-X ports. That is, when connecting to a NIC, use a straight-thru cable; when connecting to a switch/hub, use straight-thru cable to the uplink port or cross-over cable to normal port.

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-Default DSL-50x IP address = 192.168.0.1.

-By default, DSL-50x DHCP server function is enabled. So, the PC should be able to obtain IP automatically from DSL-50x.

g) Double-check network connection by PING 192.168.0.1

-You should get a Reply if network connection and IP config are all fine.

h) Now, you could proceed with your configuration

i) Backup the unit's configuration file and send it to your ISP for closer examination.

-This can be easily done (on R2.0x only) via browser under "Maintenance"\"Configuration Maintenance". Please contact your ISP before proceeding with this.

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5) Can New Zealand parties use R2.01B2AU firmware?

Ans: Yes, NZ users can simply choose or create the right NZ profile under "Router/Bridge Configuration" or "Connection Profile".

6) Do I need it?

Ans: For those existing connections running fine with firmware R1.14AU/NZ, you will NOT need it as the new firmware provides the same performance as the existing ones.

7) Who should upgrade and use it then?

Ans: It is not encouraged for normal end-users at home or in a small office. It will be fine for those users who have discussed this with their ISP, have excellent understanding on their network implementation, are qualified/certified network professionals and need to:

a) have IPoA configuration on the web-configurable interface.

- b) set up specific filtering and firewall rules on their connections.
- c) backup or restore the configuration file of the DSL-500/504. This should be done according to ISP's instructions.

8) What are new in there?

Ans:

a) It has pre-configured profiles for general ADSL services in Australia and NZ (under "Router/Bridge Configuration") so that most subscribers can select them easily. (**IMPORTANT**: When selecting a profile under "Router/Bridge

Configuration", you must click "OK" at the bottom and then select "Save changes and reboot system now", "OK". This is to ensure that the selected profile is activated and all the right settings are available for you to configure.) b) It has IPoA configuration on the web-configurable interface.

#### 9) How do I upgrade it?

Ans: This is not suitable for normal end-users at home or in a small office. It will be fine for those users who have discussed this with their ISP, have excellent understanding on their network implementation and are qualified/certified network professionals. Please refer to the example document here. **WARNING**: All instructions must be followed carefully to avoid unnecessary corruption. If the unit is corrupted, customer could contact D-Link RMA department to arrange the unit to be sent back to D-Link office for recovery (at his/her own cost). D-Link reserves the right to charge the customer according to the RMA repair policy. Details can be discussed when contacting the department.

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