# Dynalink ADSL Router Quick Setup Guide

RTA100+



## Important

This Guide is intended to get you started quickly. The factory default profile of this Router is customised for Australian users. Please follow through the steps we describe here to install and set up your Router.

This Guide should be read in conjunction with the RTA100+ *ADSL Modem/Router User Manual*. This is provided as a PDF file on the enclosed Driver & Utility CD. For the remainder of this Quick Set Up Guide all references to the Users Manual refer to this PDF file.

**Note:** the *User Manual* was written for international users. PPPoA is the most common connection mode currently supported in Australia.

Advanced users who have other setup preferences should refer to the *User Manual*. There is a table in Section 8 of this Guide is to assist you in locating the relevant material.

# Contents inside this box:

- RTA100+ ADSL Modem/Router
- Power adapter 16VAC 1A
- S Telephone line cord for Australia
- S RJ-45 Ethernet cable (straight through cable)
- USB cable
- Driver & Utility CDROM (User's Manual included)

If you connect via Ethernet port instead of USB port, there is no driver to load.





# Default Configuration for Australia

This Router is shipped with the following factory default settings.

Router IP address	192.168.1.1	
Subnet mask	255.255.255.0	
VPI	8	(do not change)
VCI	35	(do not change)
Encapsulation	PPPoA VC-MUX	
NAT	enabled	
DHCP	enabled	
IP Filter Security Level	Low	

Router configuration & management:User nameadminPasswordadminTelnet passwordadmin

Advanced users who have other setup preferences should refer to the *User Manual*.



# Before you start

Make sure your computer has the following installed:

- S Ethernet or USB port (see 'Choose your connection option' below)
- ⊘ TCP/IP protocol
- ⊘ A web browser, Internet Explorer 5.0/Netscape 6 or better

Obtain your Internet account information from your ISP:

- Login user name and password
- Customer IP address, Subnet mask, Gateway & DNS IP addresses (only required if specified by ISP for bridged/routed ADSL services).

Choose your connection option:

- Ethernet (for standalone computer)
   Connect using the enclosed "straight through" Ethernet cable.
- Ethernet (via network hub to LAN) Connect using the enclosed "straight through" Ethernet cable to the UPLINK port of the network hub. If the hub does not have an UPLINK port, connect using a "cross-over" Ethernet cable to any other port of the network hub. Cross-over Ethernet cable is not provided.

USB (for standalone Windows 98/ME/2000/XP computers) Connecting the Router via Ethernet is always recommended. However, you may connect via your USB port if you are using Windows 98/ME/2000/XP.

# 3

# Connect the ADSL Router

- Or connect the 16VAC 1A power adapter to the PWR jack of the Router, and plug the adapter into a mains power outlet. Switch on the Router.
- Connect the DSL port of the Router to your ADSL jackpoint (telephone wall socket) with the enclosed telephone line cord. Never connect the ADSL Router through a Microfilter.
- If you have chosen to connect via the Ethernet port (recommended), connect the LAN port of the Router to the Ethernet port of your computer (or uplink port of a network hub) using the Ethernet cable provided.
- Alternatively, if you have chosen to connect via the USB port, please follow the procedure below to correctly install the required USB driver **BEFORE** connecting the USB cable (when prompted).

### 3.1 USB DRIVER INSTALLATION

- 1. Insert the enclosed CD into your CD-ROM drive.
- Locate the USB installation drivers on x:\RTA100+\PC USB Driver where x is your CD drive.



**setup** DSL Setup Wizard GlobespanVirata

3. Double click on Setup.exe





4. Keep clicking Next until you are prompted with the message below

The DSL Installer is searching for installed hardware. If your modern is not yet plugged in to your computer, please plug it in now.

After the USB drivers have installed correctly, you will be prompted to connect the USB cable. Now connect the USB cable from the USB port on the Router to the USB port on your computer (or USB hub).

After connecting the LAN or USB cable, the corresponding light on the front panel of the Router should turn on. If not, it indicates a problem with the Ethernet or USB connection. Refer to Section 10 – Troubleshooting.

# Configure your computer

For a step-by-step guide refer to *Chapter 4 - Local PC Configuration* in the User Manual. If you are connecting via USB, the USB driver installation process would have already set up your computer correctly, so you can now move on to *Section* 5 - Going On-Line.

The description below assumes you are connecting via an Ethernet port. The simplest configuration is to follow Option 1 to obtain an IP address automatically from your ADSL Router. If you need to manually assign a fixed IP address to your computer, please skip to Option 2.

#### **STEP 1** OBTAIN AN IP ADDRESS AUTOMATICALLY FROM THE ADSL ROUTER

If your computer stands alone and is already set up to obtain an IP address automatically, you can move on to *Section 5 – Going On-Line*.

#### For Windows 95/98/ME:

 From Control Panel, double click Network. Scroll down and highlight TCP/IP -> (your network card). Click Properties.

inguration   Identific	ation   Access Lontro	1
The following networ	k components are inst	alled:
B Dial-Up Adapter	Q(AC) DCI Ethomot MI	
	Internet NI	Ethernet NIC
	le Adaptor	Ethemetrill
TCP/IP > Bealt	k BTI 8029(AS) PCLE	themet NIC
Eile and printer s	haring for Microsoft Ne	tworks
Carlie and burgers	namy for microsoft Ne	
	-	
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- 2. Select the IP Address tab. Select Obtain an IP address automatically.
- Click OK & then OK to finish. You may be prompted for the Windows CD and then be asked to restart. Answer Yes to restart the computer.

You have now finished configuring your computer. Please proceed to *Section* 5 – *Going On-line*.

Bindings Gateway n IP address can b your network does yur network admini ie space below.	Advanc WINS Co e automa not autor istrator for	ed onfigu tically matica an ac	assigr assigr ally ass dress,	DNS ned to I	Configura IP Addr his compu
Gateway n IP address can b your network does yur network admini e space below.	WINS Co e automa s not autor strator for	tically matica an ac	assign ally ass dress,	ned to I ign IP	IP Addi his compu addresses
n IP address can b your network does our network admini e space below.	e automa s not autor strator for	tically matica an ac	i assigr ally ass ddress,	ned to l ign IP	his compu addresses
				and tr	ien type it
	ddress au address:	tomat	tically		
IP Address:					
S <u>u</u> bnet Mask:					ſ

#### For Windows 2000/XP:

- From Control Panel double click Network Connections. Open Local Area Connections and click Properties.
- 2. Double click Internet Protocol (TCP/IP).
- 3. Select Obtain an IP address automatically and select Obtain DNS server address automatically.
- 4. Click OK to finish.

You have now finished configuring your computer. Please proceed to Section 5 – Going On-line.

Internet	Protocol (TCP/IP) Properties 🛛 🛛 🔀
General	Alternate Configuration
You ca this cap the app	n get IP settings assigned automatically if your network supports ability. Otherwise, you need to ask your network administrator for ropriate IP settings.
<u>⊙ 0</u>	btain an IP address automatically
OU	se the following IP address:
ĮP ad	ddress:
	net mask:
Defa	ult gateway:
00	ptain DNS server address automatically
OU	se the following DNS server addresses:
	nate DNS server:
	Advanced
	OK Cancel



#### STEP 2 MANUALLY ASSIGN A FIXED IP ADDRESS TO YOUR COMPUTER

If you prefer to assign an IP address manually, use **192.168.1.x** (x is any number between **3** and **254**) and subnet mask **255.255.255.0**. Specify gateway as **192.168.1.1** and enter DNS server IP as **192.168.1.1**. Windows specific instructions follow:

#### For Windows 95/98/ME:

- From Control Panel, double click Network. Scroll down and highlight TCP/IP -> (your network card). Click Properties.
- Select the IP Address tab. Specify 192.168.1.x (x is any number between 3 and 254). This is the IP address assigned to your computer. Subnet Mask is 255.255.255.0.
- Select Gateway tab. Enter the Router's IP address 192.168.1.1 and click Add.
- Click OK & then OK to finish. You may be prompted for the Windows CD and then be asked to restart. Answer Yes to restart the computer.

You have now finished configuring your computer. Please proceed to Section 5 – Going On-line.



Bindings	Adv	anced	Ne	etBIOS
DNS Configuration	Gateway	WINS Conf	iguration	IP Address
An IP address can If your network do your network admi the space below	be automati es not autom nistrator for a	ically assigne iatically assig an address, a	ed to this c in IP addre ind then ty	omputer. esses, ask ipe it in
C <u>O</u> btain an IP	address aut	omatically		
© <u>O</u> btain an IP <b>⊡</b> Specify an IF	address auto Paddress: —	omatically		
C Obtain an IP	address auto 9 address:	omatically	. 3	

Bindings	Advanced		N	letBIOS
ONS Configuration	Gateway	WINS Co	onfiguration	IP Address
The first gateway i The address order	in the Install r in the list w	ed Gatewa ill be the or	y list will be der in which	the default. h these
The first gateway i The address order machines are used	in the Install r in the list w d.	ed Gatewa ill be the or	y list will be der in which	the default. 1 these

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#### For Windows 2000/XP:

- 1. From Control Panel double click **Network Connections**. Open Local Area Connections and click **Properties**.
- 2. Double click Internet Protocol (TCP/IP).
- 3. Select Use the following IP address.
- Enter 192.168.1.x (x is any number between 3 and 254). This is the IP address assigned to your computer. Subnet Mask is 255.255.255.0.
- 5. Enter the Router's IP **192.168.1.1** as the **Default gateway**, and **Preferred DNS server.**
- 6. Click OK to finish.

You have now finished configuring your computer. Please proceed to Section 5 – Going On-line.

eneral	
You can get IP settings assigned this capability. Otherwise, you ne the appropriate IP settings.	automatically if your network supports ed to ask your network administrator for
O <u>O</u> btain an IP address autorr	atically
Use the following IP addres	5]
<u>I</u> P address:	192.168.1.3
Sybnet mask:	255 . 255 . 255 . 0
Default gateway:	192.168.1.1
O Uptain Division address	er addresses:
Preferred DNS server:	192.168.1.1
Alternate DNS server:	
	Advanced



# Going On-line

#### **OPTION A: EXPRESS SET-UP (RECOMMENDED) FOR WINDOWS USERS ONLY**

Perform the following procedure once prior to using your Router for the first time only.

- ⊘ Insert the enclosed CD
- Open Windows Explorer

   (in Windows 95/98/ME, click on "Start">"Programs">"Windows Explorer")
   (in Windows 2000/XP, click on "Start">"Programs">"Accessories" > "Windows Explorer")
- Go to x:\RTA100+\QuickConfig\ where x is your CD drive. Double click expressSetup.exe
- Select your ISP from the drop-down list
  - If the list includes more than one entry for your ISP, select the entry corresponding to the type of service you subscribed to.
  - If your ISP is not on the drop-down list, select the type of service you subscribed to (e.g. RFC2364 PPPoA or RFC1483 Bridge).

(If you are unsure of the type of service you subscribed to, please check with your ISP)

- Complete the required fields as prompted with the information provided by your ISP.
  - e.g. **PPPoA/PPPoE ADSL service** will require your Internet Account Username and Password.



**Bridge or Routed ADSL service** will require your IP address, Subnet mask, Gateway & DNS.

- Olick on Set
- **Process completed** will appear if you have configured the Router successfully
- S Click on **Exit** to close Express Set-up

**Congratulations** - successful completion of the steps above should have saved the necessary settings to your Router and you should now be connected to the Internet. Please proceed to *Section 6 – Checking your Router's connection* if you would like to view details of your connection. If you experience any problems please refer to *Section 10 – Troubleshooting*.

### **OPTION B: WEB PAGE CONFIGURATION MANAGER**

#### Step 1 Go to the Router's Quick Start page

Start your web browser. Enter the address **http://192.168.1.1** into the website address bar. Enter user name and password. By default, the username is **admin** and the password is **admin**.

You should now see the **Quick Start** page of the Router. (If you do not see this page click the **Home** tab and click **Quick Start**. Refer to Q1 in *Section 10 - Troubleshooting* if you still cannot view this page.)

#### Step 2 PPPoA & PPPoE Configuration

If you have subscribed to a PPPoA or PPPoE ADSL service please follow the steps below, otherwise skip to *Step 3 Bridge/Routed Configuration*. (If you are unsure of the type of service you subscribed to, please check with your ISP)

			Quic	Ctart			
	se this page to conf		paramet	ers and enter U			
	DSL				Up	Do	own
Oper	ational Status:	Showtime,	/Data	Speed	128 Kbps	Speed	512 Kbps
			WAN In	terfaces			
Interface Encapsulation IP Address Mask		Gateway	Lower Interface	VPI/VCI	Status		
ppp-0	PPPoA	0.0.0	0.0.0.0	0.0.0.0	aal5-0	8/35	0
Enca	psulation:	PPPoA VC-M	ux 🗸		ррр		
	VPI:	8		Username:	user@isp.com		
	VCI:	35		Password:			

- Check that the Encapsulation / VPI / VCI parameters match those provided by your ISP. The most common settings for Australian ADSL services are either PPPoA VC-Mux/8/35 or PPPoE LLC/8/35
- S Enter your Internet Account Username and Password
- S Click on Save & Connect
- S Configuration is now complete, close your internet browser

**Congratulations** - successful completion of the steps above should have saved the necessary settings to your Router and you should now be connected to the



Internet. Please proceed to *Section 6 – Checking your Router's connection* if you would like to view details of your connection. If you experience any problems please refer to *Section 10 – Troubleshooting*.

#### Step 3 Bridge / Routed Configuration

If you have subscribed to a bridged or routed ADSL service please follow the steps below. (If you are unsure of the type of service you subscribed to, please check with your ISP)

- S Click on **Advanced Configuration** under the Home tab.
- Click on the Encapsulation field. From the drop-down list select the Encapsulation type to that provided by your ISP. The most common settings for Australian ADSL services are either 1483 Bridged IP LLC or 1483 Routed IP LLC.
- Enter the other following parameters as provided by your ISP
   IP Address
   Subnet Mask
   Gateway IP Address
   Primary DNS Server
   Secondary DNS Server

(if provided by your ISP)

- Olick on Submit
- Click on the Admin Page tab near the top of the webpage
- Olick on Save & Reboot
- Olick on Save

0 ~ ATM Interface: Enabled 👻 Operation Mode: Encapsulation: PPPoA VC-Mux VPI: 8 VCI: 35 Disabled 🗸 Bridae: IGMP: Disabled V IP Address: 0 0 0 0 Subnet Mask: 0 0 0 0 O Enable Use DHCP: ) Disable Default Route: Enabled V 0 0 Gateway IP Address: 0 0 PPP lisername: user@isp.com Password: .... Enable Use DNS: O Disable DNS 0 Primary DNS Server: 0 0 0 Secondary DNS Server: 0 0 0 0 Submit Delete Cancel Help

Advanced Configuration

**Congratulations** - successful completion of the steps above should have saved the necessary settings to your Router and you should now be connected to the Internet. Please proceed to Section 6 – Checking your Router's connection if you would like to view details of your connection.

**Note:** if you manually assigned a fixed IP to your computer, or you have another DHCP server already on your LAN, disable the DHCP server on your ADSL Router. Refer to Chapter 9 – DHCP Configuration on Page 41 of the User Manual.

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# Checking your Router's connection

At any time if you wish to check that the Router is on-line, go to the **Quick Start** page in Web Page Configuration Manager (*Section 5 – Going On-line, Option B: Web Page Configuration Manager, Step 1*). A screen similar to that below confirms that you are on-line. It shows a "green light" status, and the public IP address assigned by your ISP. Click **Disconnect** only if you wish to interrupt the connection.

			Quick	Start			
	Use this page	to confirm co	nnection parameter	rs and enter Use	rname Password to co	onnect.	
Operat	ional Status:	Showtime/	/Data	Speed	128 Kbps	Speed	512 Kbps
			WAN Inte	erfaces			$\frown$
Interface	Encapsulation	IP Address	Mask	Gateway	Lower Interface	VPI/VCI	Status
ppp-0	PPPoA	123.123.123.6	255.255.255.255	123.123.123.5	aal5-0	8/35	0
							V
Enca	Encapsulation: PPPoA VC-Mux 💌				ррр		
	VPI:	8	8		username@isp.com		
	VCI:	35		Password:			

If you cannot go online refer to Q2 in Section 10 - Troubleshooting.

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# Backup the Router configuration

It is desirable to keep copies of your configuration on disk. The Router can read from a saved configuration file and restore your customised configuration after events such as reset to factory defaults.

To backup or restore your Router's configuration, go to Admin > Backup/Restore Config.





# Guide to the User's Manual

Refer to these pages numbers of the User's Manual on CD for:

Hardware and Connection	3
Using a PC Connected to the USB Port	7
Local PC Configuration	13
Configuration via CLI Session	17
Web Page Configuration Manager	19
Basic Configuration – Bridge Mode	27
Basic Configuration – PPP Connection	31
Basic Configuration – Router Connection	35
Configuring IP Routes	39
DHCP Configuration	41
NAT Configuration	47
Configuring DNS Server Addresses	59
RIP Configuration	61
Firewall, IP Filters & Blocked Protocols	63
Administration Tasks	75
View DSL Parameters	79
Troubleshooting	81



# Indicator lights

There are six indicators on the Router's front panel. Every time the Router is powered on or reset, all the lights will come on indicating self-test is in progress.

Indicator	Function	Description
PWR	Power	Off - No power. On - Power is on.
DIAG	Diagnosis	Flashes On/Off at boot-up to indicate that the device software is operational
LAN	Ethernet Link	Off - Ethernet not present. On - Ethernet connection is OK.
ACT	Activity	Flashes when ADSL data activity occurs. May appear solid when traffic is heavy.
USB	USB Link	Off – USB connection not present. On – USB connection is OK.
DSL	Link Status	Off – Handshaking/training in progress. On – ADSL link is up.



# **10** Troubleshooting

# Q1. After connecting the Ethernet (or USB) cable, the Router's LAN (or USB) light is not on.

Check your Ethernet (or USB) cable connection. If you connect via Ethernet, check that the Ethernet cable we supplied is plugged directly into a standalone computer OR the uplink port of network hub. Should the cable be plugged into any other port on a hub, a crossover (or uplink) cable must be used. A crossover cable is not provided with the Router.

#### Q2. Cannot open the Router's Web Page Configuration Manager from my browser.

 If you assigned IP addresses manually, check that every IP on the LAN is unique. The Router's private IP is 192.168.1.1 by default. You must use this address (or the IP address you have may have previously changed it to), in order to access the Router's Web Page Configuration Manager.

If your computer obtains an IP address automatically from the Router, follow this procedure to make sure your computer's IP address is renewed:

#### Windows 95/98/ME:

- I. Go to Start Run. Type winipcfg in the dialog box and click OK.
- II. When the IP configuration screen appears, click Release and then Renew.

#### Windows NT4/2000/XP:

- I. Go to Start Run. Type cmd in the dialog box and click OK.
- II. At the command prompt type **ipconfig** to display IP information from DHCP server.
- III. Type ipconfig /release and then type ipconfig /renew.
- Perform a PING test. Go to Start–Programs–MS DOS or Command Prompt (In WinXP/2000/NT4 click Start-Run. Enter cmd then OK). Type ping 192.168.1.1 then press Enter.

```
Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time=4ms TTL=30
```

If you see a similar response, the Router is communicating with the network correctly and the problem lies elsewhere. If the result is **Request timed out** or a similar failure, there is a TCP/IP networking problem. Check the LAN cable type is correct (as in step 1 above) and firmly plugged in. To check a computer's network settings see *Section 4 – Configure your computer*.

 Disable any personal firewall or virus checking software temporarily. If you are using Internet Explorer, go to Tools–Internet options-Security. Reset security level of all 4 icons to **default**. You can revert to your customised settings after configuring the Router.

- 4. If previously you were using a dialup modem, check the browser configuration. For example in Internet Explorer, go to Tools–Internet options–Connections, and select Never dial a connection. Also check LAN Settings that the option Use a Proxy Server is not selected.
- If the Router is connected to a network hub, try connecting the Router directly to the computer in a standalone setup to eliminate any possible hub problems.
- If the LAN has a DHCP server enabled, disable the DHCP server on your Router. Refer to *Chapter 9 – DHCP Configuration* on Page 41 of the User Manual.

#### **Q3.** Cannot connect to the Internet or cannot browse

- Check that the Router's DSL light is on. Normally it takes less than one minute to establish an ADSL link. A link will establish as long as there is sufficient signal. If the DSL light does not come on then the Router is not detecting any signal. Check that:
  - ⊘ the ADSL service has been enabled.
  - S the Router is connected to the correct jackpoint.
  - the Router is connected directly to a jackpoint, not after a microfilter or other device.
- 2. Check that the Router is on-line. Bring up the Quick Start page (Section 5 Going On-line, Option B: Web Page Configuration Manager, Step 1). If the IP Address field displays o.o.o., you are not on-line. Make sure the correct username and password is entered. The username and password are provided by your ISP.
- **3.** Check the configuration of your computer and Router. If you still cannot browse, perform a **PING test** as described in Q1-2, using these addresses:

(A) Ping <u>www.dynalink.com.au</u> (or any valid web address)

(B) Ping 205.178.180.16 (or any valid public IP address)

If both (A) & (B) returned no reply, go to the Services page in Web Page Configuration Manager, and check that NAT is enabled. If these settings are correct, ping the Router's IP address (i.e. Ping 192.168.1.1). If there is still no reply your network card may be faulty.

If (A) returned no reply but (B) showed a reply, this is probably a DNS problem. Check that you have entered the correct DNS address, if this is required by your ISP.



If both (A) & (B) showed a reply, there could be a problem with your browser settings. Try returning any custom settings of the browser to default. If you have personal firewall software running, disable it. Check if the condition in  $Q_{1-4}$  applies. Finally shut down the computer and restart it.

#### *Q4. Browsing is fine but I cannot run certain applications, such as PC Anywhere.*

Some applications may require one or more ports on your Router to be opened in order to operate successfully. For example, PC Anywhere needs to access the following ports - TCP 5631 and UDP 5632. Check your application's requirements and then configure the appropriate NAT rule entry settings on your Router (Web Page Configuration Manager > Services page > NAT option > NAT rule entry). Refer to *Chapter 10 – NAT Configuration* on Page 47 of the User Manual for details.

# Q5. My customised Router administrative password has been forgotten and the Router's Web Page Configuration Manager is no longer accessible.

Restore the Router to factory defaults. A hidden reset button is located next to the power on/off button at the back. Using a suitable sized pin (e.g. paper clip), while the Router is powered on press the reset button three times. All the front panel lights should come on indicating a successful reset.

**WARNING:** Resetting the device removes any custom settings and returns all settings to their default values.

#### Q6. Changes to the Router's configuration are not being retained.

Ensure that you use the Save function after any changes are made (Web Page Configuration Manager >Admin page > Save & Reboot > Save).

# Warranty

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Dynalink warrants this product against defects in materials and workmanship for a period of twelve months from the original date of purchase. We will, at our discretion, repair or replace the faulty unit, free of charge, provided it is returned to us with proof of purchase from an authorised dealer within the warranty period. Return delivery after repair will be paid for by Dynalink. We reserve the right not to repair or replace goods that:

- have been mishandled, abused or not installed according to the guidelines as outlined in the instructions.
- have been subjected to a power surge from other equipment or other external factors.
- ⊘ have been altered or modified.

# Help

Always check that your hardware is installed correctly. Check our web site for the latest information and troubleshooting guide. If you have difficulties, contact Dynalink Technical Support for issues relating to installation and operation.

If possible, visit Dynalink's on-line support area at:

New Zealand www.dynalink.co.nz/support Australia www.dynalink.com.au/support

Contact Dynalink's Technical Support:

#### New Zealand

 Phone
 0800 653 962

 Fax
 0800 503 962

 (Monday-Friday:
 8:30am-7:30pm)

#### Australia

 Phone
 1800 653 962

 Fax
 1800 063 962

 (Monday-Friday:
 8:30am-5:30pm)

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