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**P74476au**

**BELKIN**

# High-Speed ADSL Modem

*with USB and Ethernet*

*Connect your PC or network for  
high-speed Internet access*



**User Manual**

F5D5730au

# TABLE OF CONTENTS

Introduction . . . . .	1
Features . . . . .	1
Package Contents . . . . .	1
System Requirements . . . . .	2
Knowing your Modem . . . . .	3
Installation . . . . .	5
Installation Method 1 – Ethernet . . . . .	6
Installation Method 2 – USB . . . . .	6
Modem Configuration . . . . .	7
Annex A – Troubleshooting . . . . .	13
Annex B – FAQs . . . . .	18
Information . . . . .	20

# INTRODUCTION

Thank you for purchasing the Belkin High-Speed ADSL Modem with USB and Ethernet. This Modem will allow you to surf the Web and connect to some popular game consoles.

## Features

- RJ45 Ethernet interface support via crossover cable; USB interface support
- IEEE 802.3 standard 10/100Mbps compliance
- DHCP Server
- ANSI T1.413 Issue 2, ITU-T G.DMT (G.992.1), G.Lite (G.992.2) and G.hs (G.994.1)
- IP Sharing via NAT routing function (Network Address Translation)
- NAT function for NetMeeting®, ICQ®, CU-SeeMe®, etc.
- PPPoE, PPPoA, Bridged and Routed IP (RFC 1493) Encapsulations
- Full ATM protocol support
- Multi-protocol support: IP, PPP, Transparent bridging, etc.
- Configuration, management, and firmware updates via Web Browser Interface
- Two-level password protection for device management
- Flash memory for future firmware upgrades
- Simultaneous USB and Ethernet support

## Package Contents

- Belkin High-Speed Modem with USB and Ethernet
- Power Adapter
- RJ45 Crossover Cable
- A-B USB Cable
- RJ11 Phone Cable
- CD

# INTRODUCTION

## **System Requirements**

PC running Windows® 98SE , Me, 2000, XP

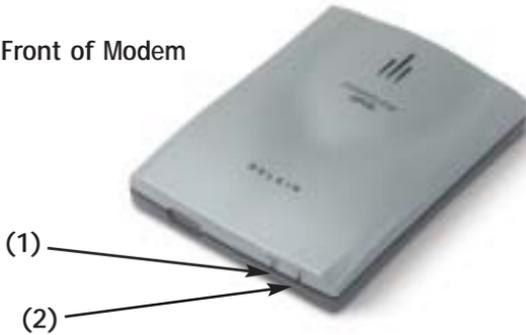
CD-ROM drive (For USB Installation Only)

One free USB port (For USB Installation Only)

One RJ45 Ethernet port (Ethernet Installation Only)

# KNOWING YOUR MODEM

Front of Modem



## 1. ADSL

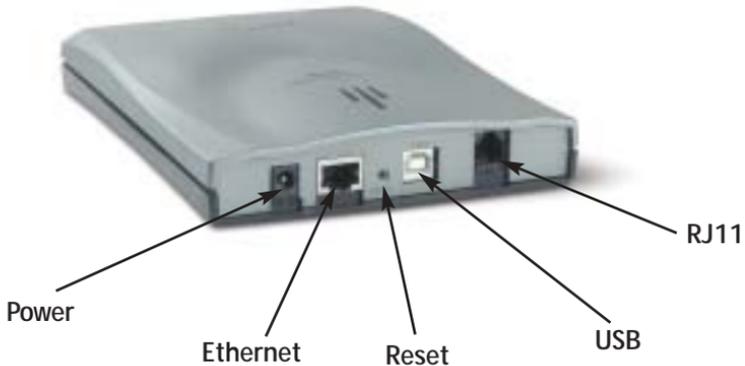
ON	ADSL Connected
OFF	No ADSL Detected
Blinking	Connecting/Handshaking

## 2. LAN

ON	Ethernet Connected
OFF	No Ethernet Connection
Blinking	Data Transmitting

# KNOWING YOUR MODEM

## Back of Modem



## Before You Start

Before you start to use your Modem you must have the following:

1. An active ADSL account and line with a user name and password.
2. IP address, DNS, and gateway settings from your ISP only if applicable.
3. At least one computer with either USB or Ethernet connection.
4. TCP/IP networking protocol installed on the computer (most computers have this installed by default).
5. Microsoft® Internet Explorer 5.0 or Netscape® 4.5 or greater installed.
6. It may be necessary to disable any firewall or anti-virus software during installation. It may prevent successful installation. This can be reactivated on successful installation.

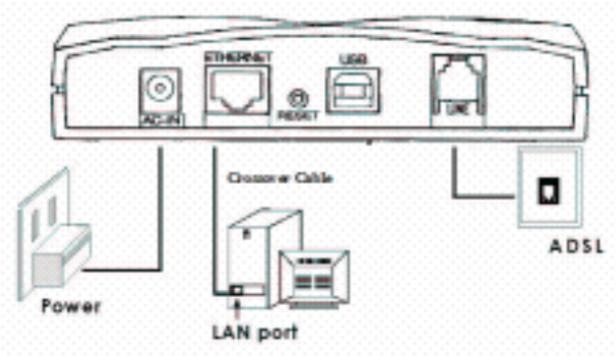
*TIP: After plugging in the power cord, the Modem initialises and starts working after 20 seconds.*

*TIP: If you push the Reset button, all the parameter settings will revert back to factory default.*

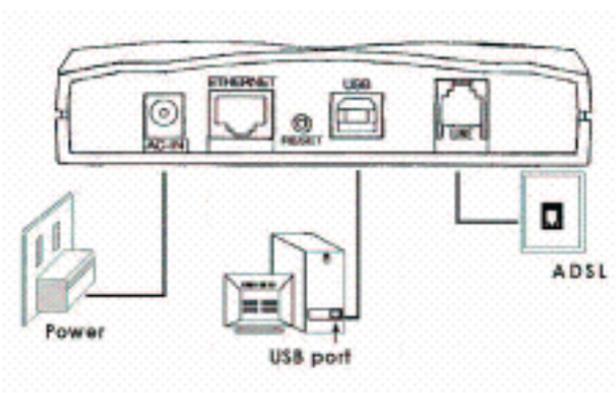
# INSTALLATION

You can connect your equipment in one of two ways: via an Ethernet crossover cable or a USB connection.

If you are connecting via an Ethernet crossover connection then follow the diagram below and proceed to "Installation Method 1" on page 6.



If you have chosen to connect via a USB connection, make sure the computer you are connecting to is switched off. Use the diagram below and then proceed to "Installation Method 2" on page 6.



# INSTALLATION

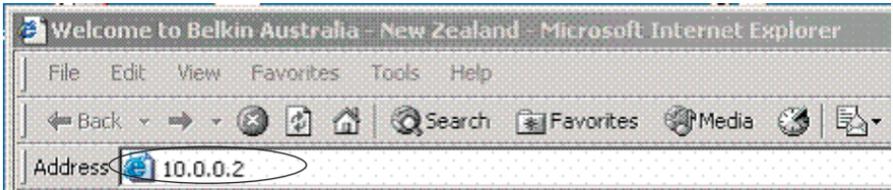
## Installation Method 1 - Ethernet

1. Make sure that the computer that you are connecting to is powered off.
2. Connect one end of the Ethernet crossover cable to your Modem's Ethernet port; connect the other end to your computer's Ethernet port.
3. Connect the RJ11 phone line provided for ADSL into the line socket in the Modem.
4. Connect the power cord to the Modem and power on the Modem; wait 20 seconds for the Modem to initialise, then boot up your computer.
5. Open your web browser and type in the default IP address of the Modem to the address bar—IP address: 10.0.0.2 (see image on the top of next page).
6. Proceed to "Modem Configuration" on page 7.

## Installation Method 2 – USB

1. Make sure that the computer that you are connecting to is powered off.
2. Insert the rectangular end of a USB cable into a USB port on your PC.
3. Insert the square end of the USB cable into the USB port of the Modem.
4. Connect the RJ11 phone line provided for ADSL into the line socket in the Modem.
5. Connect the power cord to the Modem and power on the Modem; wait 20 seconds for the Modem to initialise, then boot up your computer.
6. Your PC will automatically detect this Modem as "USB Net Card".
7. Insert the bundled USB driver CD into the CD-ROM drive and follow the on-screen instructions to install the USB Modem drivers.
8. After installation, the Modem will be installed as "USB Network Adapter" within the Device Manager of Windows. You will be required to reboot your PC before continuing.
9. Open your web browser and type in the default IP address of the Modem to the address bar—IP address: 10.0.0.2 (see image on the top of the next page).

# INSTALLATION

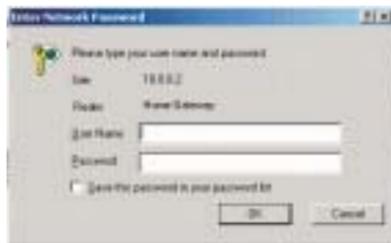


## Modem Configuration

Enter the default user name and password and click "OK". If you do not see the screen below then turn to "Annex A Problem 1".

Default User Name: admin

Default Password: password

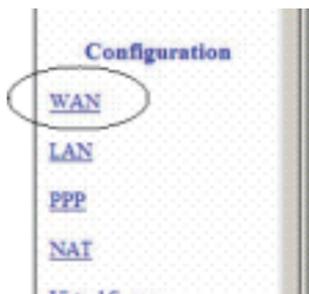


You will then be logged into the web interface of the Modem.

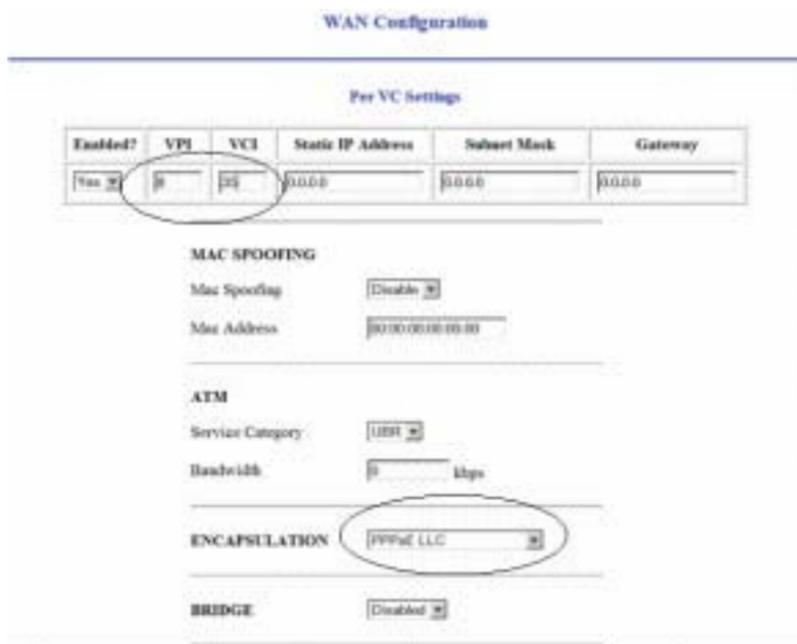


# INSTALLATION

1. Click on "WAN" under the Configuration menu on the left-hand side of the screen.



2. Your screen will look like this.



A screenshot of the "WAN Configuration" page. The page title is "WAN Configuration". Below the title is a section titled "Per VC Settings" containing a table with the following columns: "Enabled?", "VPI", "VCI", "Static IP Address", "Subnet Mask", and "Gateway". The first row of the table has the following values: "Yes" (with a dropdown arrow), "0", "35", "0.0.0.0", "0.0.0.0", and "0.0.0.0". The "VPI" and "VCI" cells are circled in red. Below the table are several sections: "MAC SPOOFING" with "Mac Spoofing" set to "Disable" and "Mac Address" set to "00:00:00:00:00:00"; "ATM" with "Service Category" set to "UBR" and "Bandwidth" set to "0 Mbps"; "ENCAPSULATION" with a dropdown menu set to "PPPw/ LLC" (circled in red); and "BRIDGE" set to "Disabled".

Enabled?	VPI	VCI	Static IP Address	Subnet Mask	Gateway
Yes	0	35	0.0.0.0	0.0.0.0	0.0.0.0

**MAC SPOOFING**

Mac Spoofing:

Mac Address:

**ATM**

Service Category:

Bandwidth:  Mbps

**ENCAPSULATION**:

**BRIDGE**:

## INSTALLATION

- For New Zealand users, change the “VPI” to “0” and the “VCI” to “100”—by default this is set to 8/35. Set the “ENCAPSULATION” to “PPPoA VC-Mux” — the default is PPPoE LLC.

For Australian users, ensure the “VPI” is “8” and the “VCI” is “35” and the “ENCAPSULATION” is “PPPoE LLC”. (By default this should already be set.)

- Use the scroll bar on the right-hand side of your screen; scroll down so you see the heading “PPP”.



The screenshot shows a window titled "PPP" with the following fields and values:

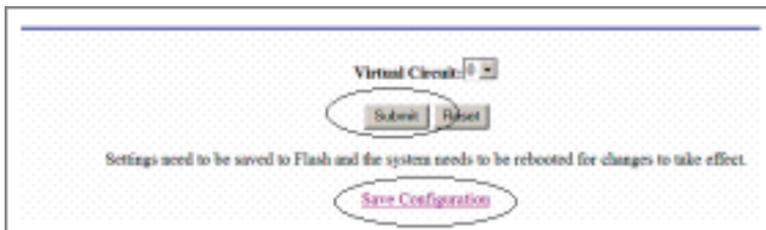
Service Name	xyz internet service provider
Username	john.smith@xyz.net.au
Password	*****
Disconnect Timeout	0 seconds (Max:32767)
MRU	1492
MTU	1492
MSS	1432
Authentication	Auto <input checked="" type="checkbox"/>

At the bottom, there is a checkbox for "Automatic Reconnect" and a link for "Advanced PPP configuration".

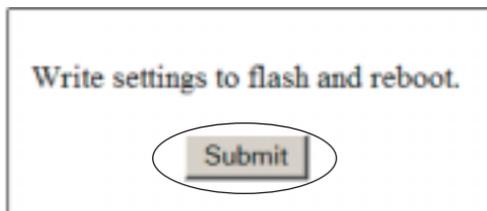
- Enter the following personal details as given to you by your ISP:
  - Service Name: Enter in the name of your ISP such as “xyz Internet provider”.
  - Username: As given to you by your ADSL provider. For New Zealand Xtra account holders, the user name always needs the extension “.xDSL” after the normal user name, and should be entered in the form of an e-mail address, e.g. john.smith.xDSL@xtra.co.nz.
  - Password: As provided by your ADSL provider, remember that passwords are case-sensitive.
  - Disconnect timeout: Leave as default “0”.
  - MRU: Should be left as default “1492”.
  - MTU: Leave as default “1492”.
  - MSS: Leave as default “1432”.

## INSTALLATION

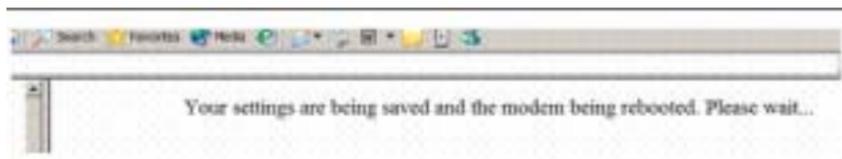
- h. Authentication: Select "Auto".
  - i. Automatic Reconnect: Should remain checked.
6. Scroll down to the bottom of the screen and you will see the following.



7. Click the "Submit" button to update the changes and then scroll back to the bottom of the screen and then click on "Save Configuration".
8. The screen will change and you will see the following. Click on "Submit" to make the change to the Modem.

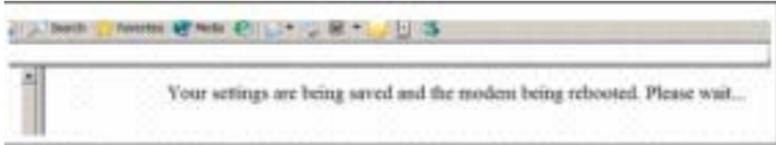


9. The Modem will restart and the LAN connection will be reestablished between your PC and your Modem. You will see the following on your web browser.



# INSTALLATION

10. When you see this screen, the Modem has rebooted and is ready to be connected to ADSL.



11. On the left of the screen under the Status settings in your browser, click on "PPP".



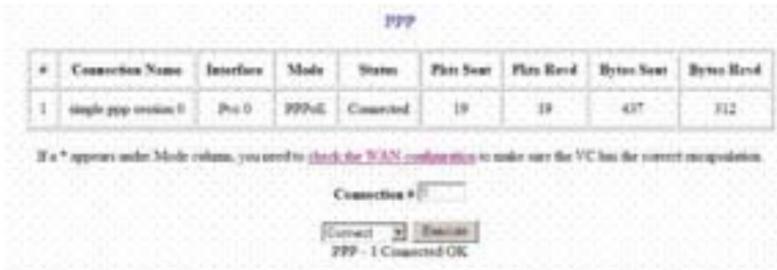
You will then see the following.



## INSTALLATION

12. Ensure that "Connect" is displayed in the drop-down window and then click on the "Execute" button.

The Modem will initiate the connection to your ADSL provider and the screen shot will look similar to this one once connected. Note that under the "Status" column it will indicate "connected" once your ADSL connection is running.



13. You can successfully close this browser window and open a new browser window and surf the Internet.

# ANNEX A – TROUBLESHOOTING

## Problem

My Internet web browser would not display the login dialogue box when I typed in the numbers “10.0.0.2”.

## Solution

- Check that your browser address bar displays nothing except “10.0.0.2”.
- Check that your PC is configured to accept IP addresses dynamically by doing the following:

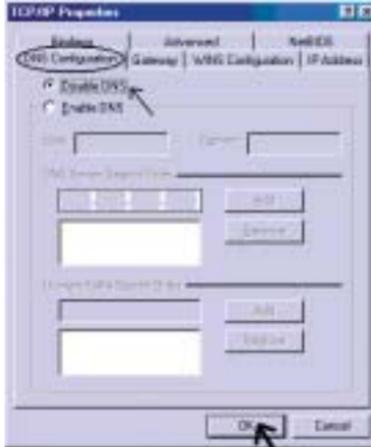
### Solution for Windows 98 and Me

1. Go to “Start / Settings / Control Panel”. In the Control Panel, double-click on “Network” and choose the “Configuration” tab.
2. Select “TCP / IP”, or the name of your Network Interface Card (NIC) in your PC.
3. Click “Properties”.
4. Select the “IP Address” tab. In this page, click “Obtain an IP address automatically”.
5. Then select the “DNS Configuration” tab.



## ANNEX A – TROUBLESHOOTING

6. Select the “Disable DNS” radio button and click “OK” to finish the configuration.



### Solution for Windows 2000

1. Go to “Start / Settings / Control Panel”. In the Control Panel, double-click on “Network and Dial-up Connections”.
2. Double-click “LAN Area Connection”.



## ANNEX A – TROUBLESHOOTING

3. In the “LAN Area Connection Status” window, click “Properties”.

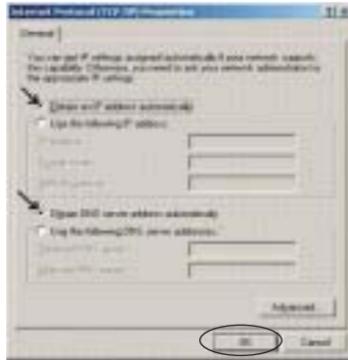


4. Select “Internet Protocol (TCP/IP)” and click “Properties”.



## ANNEX A – TROUBLESHOOTING

5. Select “Obtain an IP address automatically” and “Obtain DNS server address automatically”. Click “OK” to finish the configuration.



### Solution for Windows XP

1. Go to Control Panel on your computer and double-click “Network Connections” and right-click your network connection and select “Properties”.

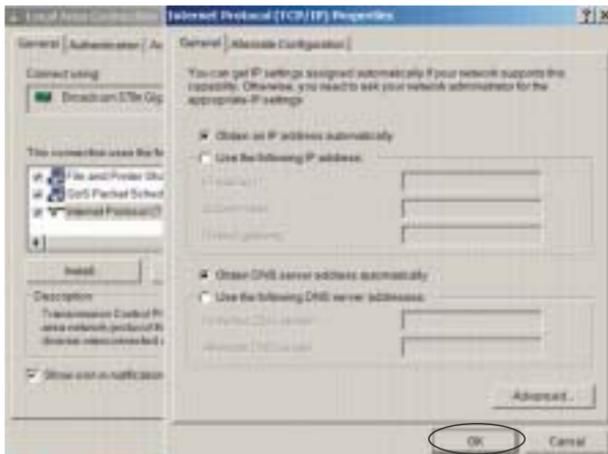


## ANNEX A – TROUBLESHOOTING

2. Highlight “Internet Protocol (TCP/IP)” and select “Properties”. If you do not have TCP/IP displayed in the list then you will need to install TCP/IP before proceeding.



3. Ensure that: “Obtain an IP address automatically” and “Obtain DNS server address automatically” is selected and then hit “OK” twice.



## ANNEX B – FAQs

**Can I connect two computers to my modem, one via Ethernet and one via USB, and be on the Internet with both computers at the same time?**

Yes, it is possible to have two computers using the Modem at the same time via USB and Ethernet. It is also possible to share files between the two computers.

**Can I connect my Modem to a hub and have multiple computers share the Internet at the same time?**

You can connect your PC to the modem using the USB cable and have the Ethernet cable from your Modem running into a hub, then attach your additional computers to the hub and access the Internet at the same time.

**I want to create a wireless network. Will this Modem support that feature?**

The easiest way to create a wireless network is to connect your desktop machine to the Modem using USB and then connect either a Belkin 802.11b or 802.11g Access Point to the Ethernet port of your modem.

**Can I connect a wired or wireless router to my Modem?**

You can connect a wired or wireless router to your Modem. The Modem will allocate a WAN IP address to your router and then you can configure the IP range that you wish to allocate to your client machines by configuring your router settings. Authentication to your ISP needs to be done on your Modem so simply connect you router to the Ethernet port of your Modem without running any setup wizards that may ship with the router.

**Where can I get help to connect my modem to Xtra New Zealand?**

The following website has a wealth of information to assist in your connection with Xtra New Zealand - <http://xtra.co.nz/help/0,,5739-907829,00.html> - modset

## ANNEX B – FAQs

### **Where can I get help configuring my modem in New Zealand or Australia?**

You can call our technical support on the following numbers. Before calling, ensure that you have your ISP settings such as username and password.

New Zealand – 0800 441 913

Australia – 1800 666 040

### **Where can I get more information on networking my home or office?**

You can access our website at [www.belkin.com/anz/modems](http://www.belkin.com/anz/modems) to learn more about the setup of PC networks using Belkin networking products.

# INFORMATION

## FCC Statement

### DECLARATION OF CONFORMITY WITH FCC RULES FOR ELECTROMAGNETIC COMPATIBILITY

We, Belkin Corporation, of 501 West Walnut Street, Compton, CA 90220, declare under our sole responsibility that the product,

F5D5730au

to which this declaration relates, 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.

## CE Declaration of Conformity

We, Belkin Corporation, declare under our sole responsibility that the product F5D5730au, to which this declaration relates, is in conformity with Emissions Standard EN55022 and Immunity Standard EN55024, and LVD EN61000-3-2 and EN61000-3-3.

## ICES

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

## Belkin Corporation Limited Lifetime Product Warranty

Belkin Corporation warrants this product against defects in materials and workmanship for its lifetime. If a defect is discovered, Belkin will, at its option, repair or replace the product at no charge provided it is returned during the warranty period, with transportation charges prepaid, to the authorized Belkin dealer from whom you purchased the product. Proof of purchase may be required.

This warranty does not apply if the product has been damaged by accident, abuse, misuse, or misapplication; if the product has been modified without the written permission of Belkin; or if any Belkin serial number has been removed or defaced.

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