

INTRODUCTION

About This Guide:

This Guide takes you through the basic steps necessary to install and configure your OfficeConnect Cable/DSL Router, and establish a connection from your computers to the Internet. Throughout, the OfficeConnect Cable/DSL Router is simply referred to as the Router.

Your package contains:

- One OfficeConnect Cable/DSL Router
- One power adapter for use with the Router
- Four rubber feet
- One Ethernet cable
- One CD-ROM containing the Router Discovery program and the User Guide
- This Installation Guide
- One Support and Safety Information Sheet
- One Warranty Flyer

System Requirements

Before starting, you must ensure the following:

- You already have a cable or DSL broadband connection to the Internet, with a suitable modem, and that this connection works properly. The modem must have an Ethernet port for connection to your Router.
- You have a computer that has an Ethernet connection available and is already correctly configured for communication with the Internet. Your computer must be able to connect to the Internet via the modem, and must have a Web browser installed.
- There are no other DHCP server devices on your local network that are responsible for allocating IP addresses to your computers and other network-connected devices. Your Router will now perform this function by default.

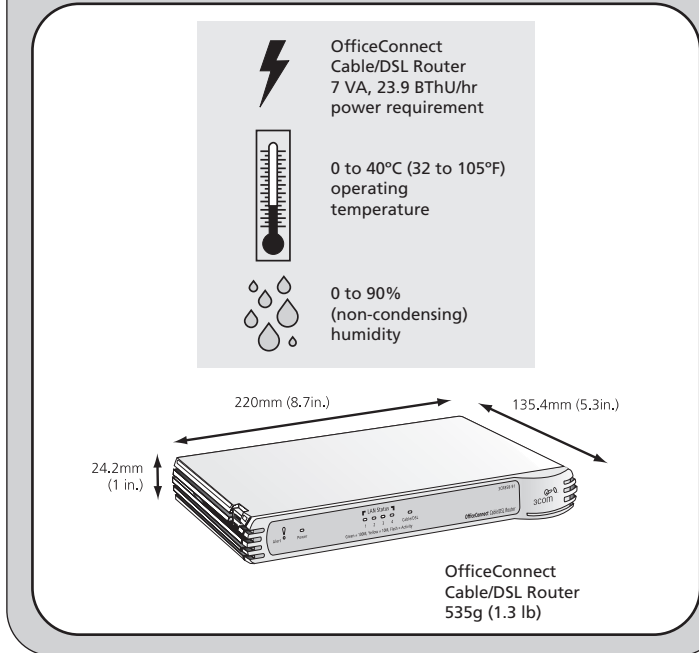
If one or more of these conditions are not met, refer to the comprehensive Router User Guide provided on the accompanying CD-ROM for further guidance.

DIMENSIONS AND STANDARDS

Dimensions and Operating Conditions

Standards	Functional:	EMC:	EN 55022 Class B EN 55024, CISPR 22
	ISO 8802/3		FCC Part 15 Class B*
	IEEE 802.3		ICES-003 Class B
Safety:	UL60950, EN 60950		ETSI EN 301 489-17
	CSA 22.2 #60950		CNS 13438 Class A
	IEC60950	Environmental:	EN 60068 (IEC 68)

* Refer to Regulatory Notices section in the Support and Safety Information sheet



POSITIONING YOUR ROUTER

Safety Information

⚠ WARNING: Please read the 'Important Safety Information' section in the Support and Safety Information sheet before you start.

⚠ VORSICHT: Bitte lesen Sie den Abschnitt 'Wichtige Sicherheitsinformationen' sorgfältig durch, bevor Sie das Gerät einschalten.

⚠ AVERTISSEMENT: Veuillez lire attentivement la section "Consignes importantes de sécurité" avant de mettre en route.

When positioning your Router, ensure:

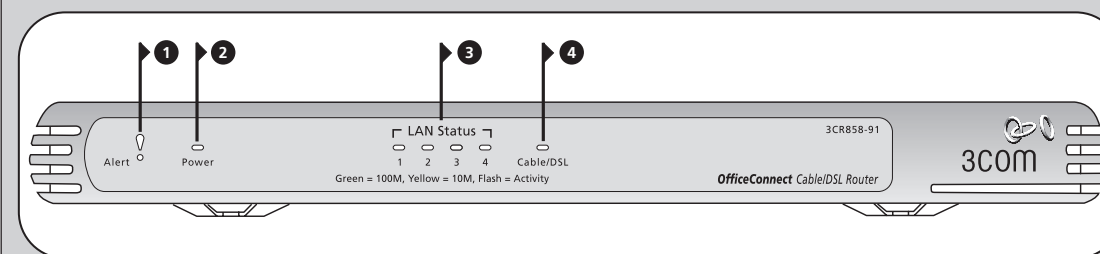
- It is out of direct sunlight and away from sources of heat.
- Cabling is away from power lines, fluorescent lighting fixtures, and sources of electrical noise such as radios, transmitters and broadband amplifiers.
- Water or moisture cannot enter the case of the unit.
- Air flow around the unit and through the vents in the side of the case is not restricted. We recommend you provide a minimum of 25mm (1in.) clearance.

Using the Rubber Feet

Use the four self-adhesive rubber feet to prevent your Router from moving around on your desk or when stacking with other flat top OfficeConnect units. Only stick the feet to the marked areas at each corner of the underside of your Router.

ABOUT YOUR ROUTER

Cable/DSL Router - Front



1 Alert LED

Orange

Indicates a number of different conditions, as described below.

Off - The Router is operating normally.

Flashing quickly - Indicates one of the following conditions:

- The Router has just been started up and is running a self-test routine, or
- The administrator has invoked the *Reset to Factory Defaults* command, or
- The system software is in the process of being upgraded

In each of these cases, wait until the Router has completed the current operation and the alert LED is Off.

Flashing slowly - The Router has completed the *Reset to Factory Defaults* process, and is waiting for you to reset

the unit. To do this, remove power, wait 10 seconds and then re-apply power. The Router will then enter the start-up sequence and resume normal operation.

On for 2 seconds, and then off - The Router has detected and prevented a hacker from attacking your network from the Internet.

Continuously on - A fault has been detected with your Router during the start-up process. Refer to 'Problem Solving' section.

2 Power LED

Green

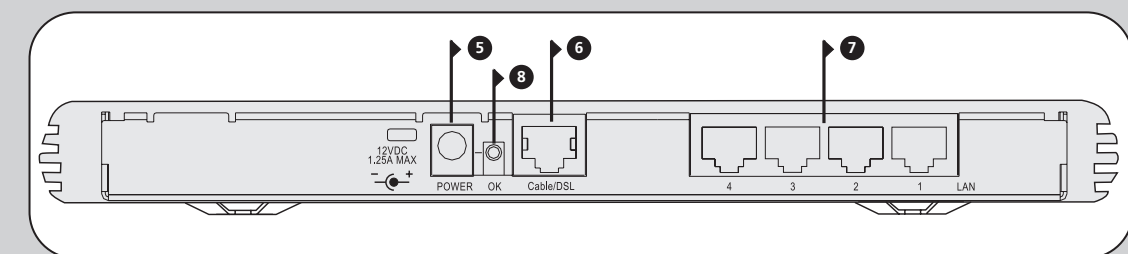
Indicates that the Router is powered on.

3 Four LAN Status LEDs

Green (100Mbps link) / Yellow (10Mbps link)

If the LED is on, the link between the port and the next piece of network equipment is OK. If the LED is flashing, the link is OK and data is being transmitted or received. If the LED is off, nothing is connected, the connected

Cable/DSL Router - Rear



device is switched off, or there is a problem with the connection (refer to 'Problem Solving' section). The port will automatically adjust to the correct speed and duplex.

4 Cable/DSL Status LED

Green (100Mbps link) / Yellow (10Mbps link)

If the LED is on, the link between the Router and the cable or DSL modem is OK. If the LED is flashing, the link is OK and data is being transmitted or received. If the LED is off, nothing is connected, the modem is switched off or there is a problem (refer to 'Problem Solving' section).

5 Power Adapter Socket

Only use the power adapter that is supplied with this Router. Do not use any other adapter.

6 Ethernet Cable/DSL port

Use the supplied patch cable to connect the Router to the Ethernet port on your cable or DSL modem. The port will automatically adjust to the correct speed and duplex.

7 Four 10/100 LAN ports

Using suitable RJ-45 cable, you can connect your Router to a computer, or to any other piece of equipment that has an Ethernet connection (for example, a hub or a switch). The LAN ports are configured as MDIX, for connection to a computer with a straight through RJ-45 cable.

8 Power Adapter OK LED

Green

Indicates that the power adapter is supplying power to the Router. If the LED is off, there may be a problem with the power adapter or adapter cable.

1 INSTALLING YOUR ROUTER

Connecting Your Router

1. Connect the power adapter to the Router and wait for the Alert LED to stop flashing.
2. Ensure that your modem and computer are both switched on.
3. Use the supplied cable to connect the Router's Ethernet Cable/DSL port to the modem. Check that the Cable/DSL Status LED lights.
4. Connect your computer to one of the 10/100 LAN ports on the Router. Check that the LAN Port Status LED lights.

Refer to Figure 1 for an example configuration.

Connecting to a Hub or Switch

To share your Router with more than four users you will need an additional Hub or Switch. To connect your Router to a Hub or Switch on the LAN side you must either:

- use a Hub or Switch with Auto MDIX ports, for example, the OfficeConnect Dual Speed Switch 8 Plus, or
- connect a straight-through cable to a Hub or Switch which has a cross-over port and set it to the "Uplink" or "MDI" position, or
- use a cross-over cable.

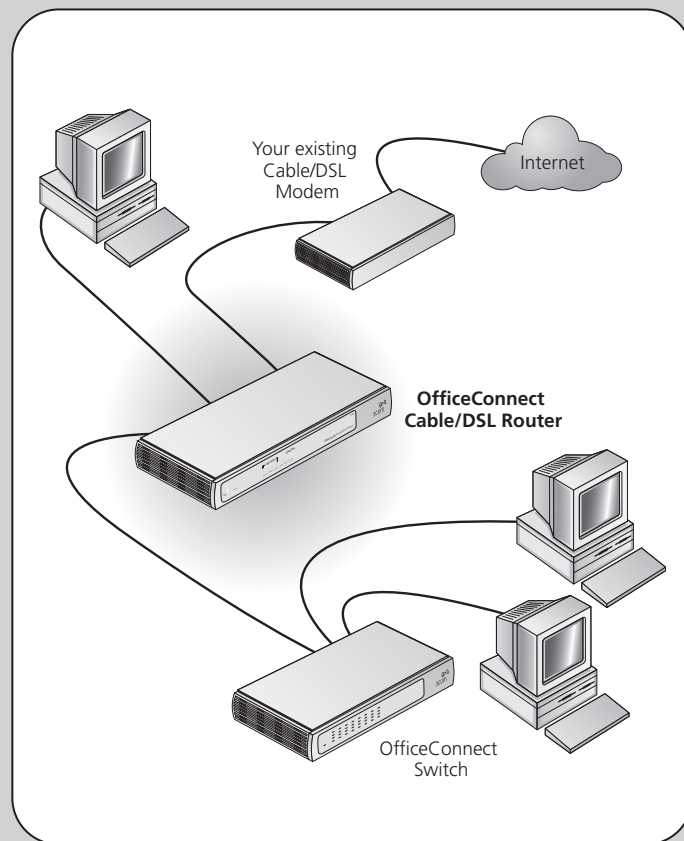


Figure 1
Example Network with OfficeConnect Cable/DSL Router.

3 CONFIGURING YOUR ROUTER

Before you can configure the Router you need to know the IP information allocation method used by your ISP. There are several different ways that ISPs allocate IP information, as described below:

1. Dynamic IP Address (DSL or Cable)

Dynamic IP addressing (or DHCP) automatically assigns the Router IP information. This method is popular with Cable providers. This method is also used if your modem has a built in DHCP server.

2. PPPoE (DSL only)

If the installation instructions that accompany your modem ask you to install a PPPoE client on your PC then select this option. Note that when you install the Router, you will not need to use the PPPoE software on your PC. To configure the Router you will need to know the following: Username, Password, and Service Name (if required by your ISP).

3. Static IP Address (DSL or Cable)

The ISP provides the IP addressing information for you to enter manually. To configure the Router you will need to know the following: IP Address, Subnet Mask, ISP Router Address, and DNS address(es).

4. PPTP (DSL or Cable)

PPTP is only used by some European providers. If the installation instructions that accompany your modem ask you to setup a dialup connection using a PPTP VPN tunnel then select this option. Note that when you install the Router, you will not need to use the dialup VPN on your PC anymore. To configure the Router you will need to know the following: Username, Password, Service Name (if required by your ISP), and VPN Server address (usually your modem).

Running the Configuration Wizard

1. If you haven't already done so, restart your computer.
 2. Launch your web browser and attempt to contact the Router by typing the following URL in the location bar: **http://192.168.1.1**. If you can access the Login page, then your computer has correctly received an IP address from the Router.
 3. Login using the default password *admin*. The Wizard will attempt to launch automatically, but if it fails, select the *Wizard* tab and click on the *Wizard...* button.
 4. Where possible, the Wizard will recommend settings for most parameters. However, there are some settings which you must provide. Most of these will have been provided to you by your ISP when you set the account up.
 5. By default, 3Com recommends that you leave the LAN IP address for the Router as 192.168.1.1. However, if you should choose to change it, make a note of the new address:
- Router's LAN IP Address _____
6. When the DHCP Server Settings page is displayed, make sure that the *Enable the DHCP Server with the following settings* option is selected.

Connecting to the Internet

When the Wizard has completed, attempt to browse to an Internet web site, such as **www.3com.com**. If you can successfully access this site, then your computer, Router and Cable/DSL modem have been correctly configured.

Refer to the Problem Solving section if you cannot make contact with the Router or the Internet.

2 CHANGING YOUR COMPUTER'S CONFIGURATION

You may need to make some changes to the configuration of your computers in order to communicate with the Router.

DSL users with PPPoE or PPTP Client Software

If you have PPPoE or PPTP client software installed on your computer, you will need to disable it. To do this:

1. From the Windows Start menu, select *Settings > Control Panel*.
2. Double click on *Internet Options*.
3. Select the *Connections* Tab. A screen similar to Figure 2 should be displayed.
4. Select the *Never Dial a Connection* option and click *OK*.

You may wish to remove the PPPoE client software from your computer to free resources, as it is not required for use with the Router.

Obtaining an IP Address automatically

Follow the instructions below for your particular operating system to ensure that your computers are configured to obtain an IP address automatically.

For computers using **Windows 2000**.

1. From the Windows Start Menu, select *Settings > Control Panel*.
2. Double click on *Network and Dial-Up connections*.
3. Double click on *Local Area Connection*.
4. Click on *Properties*.
5. A screen similar to Figure 3 should be displayed. Select *Internet Protocol TCP/IP* and click on *Properties*.
6. Ensure that the options *Obtain an IP Address automatically*, and *Obtain DNS servers automatically* are both selected as shown in Figure 4. Click *OK*.
7. Restart your computer.

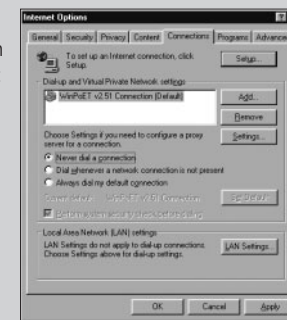


Figure 2

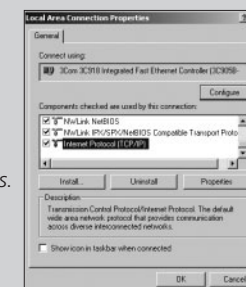


Figure 3

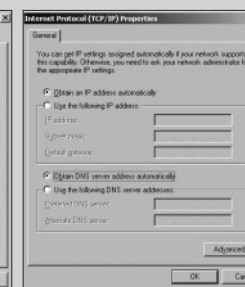


Figure 4

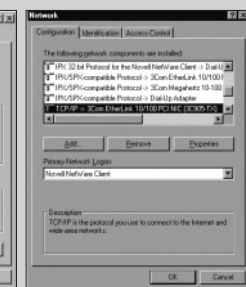


Figure 5

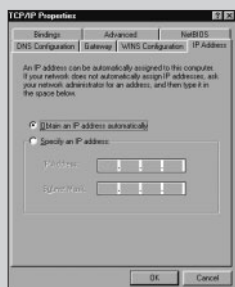


Figure 6

For computers using **Windows 95, 98 and ME**.

1. From the Windows Start Menu, select *Settings > Control Panel*.
2. Double click on *Network*. Select the *TCP/IP* item for your network card as shown in Figure 5 and click on *Properties*.
3. In the TCP/IP dialog, select the *IP Address* tab, and ensure that *Obtain IP address automatically* is selected as shown in Figure 6. Click *OK*.
4. Restart your computer.

For computers using **Windows XP**.

1. From the Windows Start menu, select *Control Panel*.
2. Click on *Network and Internet Connections*.
3. Click on the *Network Connections* icon.
4. Double click on *LAN or High Speed Connection* icon. A screen titled *Local Area Connection Status* will appear.
5. Select *Internet Protocol TCP/IP* and click on *Properties*.
6. Ensure that the options *Obtain an IP Address automatically*, and *Obtain DNS servers automatically* are both selected as shown in Figure 4. Click *OK*.
7. Restart your computer.

PROBLEM SOLVING

If you are experiencing difficulties with your installation, try the following:

- **Ensure all networking equipment is switched on.** The Router should be showing a green Power LED. If it is not, check the power adapter connection. Do not use any power adapter with your Router other than the one supplied.
- **Ensure the Cable/DSL Modem is connected.** The Router should be displaying a green or yellow Cable/DSL Status LED. If no LED is displayed, check that your modem is switched on and that it is connected to the Cable/DSL port with an Ethernet cable.
- **Ensure that the computer is connected to the Router.** The Router should be displaying a green or yellow LAN Status LED. If it is not, check that the computer is connected to one of the Router's LAN ports with an Ethernet cable.
- **Ensure your computer is configured correctly.** Make sure that the computer obtains an IP address automatically. See Section 2 for details. Ensure that the NIC card is configured for autonegotiation.
- **Ensure that you do not have a web proxy enabled on your computer.** Go to the *Control Panel* and click on *Internet Options*. Select the *Connections* tab and click on the *LAN Settings* button at the bottom. Make sure that the *Use Proxy Server* option is unchecked.
- **If you are unable to access the Router's Web interface.** Launch a web browser and enter **http://192.168.1.1**. If you chose a different IP address, use that instead. Ensure that you include the **http://** prefix.
- **If you cannot remember the Router IP address.** Run the Router Discovery application from a wired computer. The application can be found on the CD-ROM. This will always connect you to the Router.
- **If you have connected your Router to a Switch and the Link LED is not lit.** Refer to Section 1 "Connecting to a Hub or Switch".

Cable Internet Connections.

- Some Cable providers authenticate to the user's computer MAC address. If this is required, go to *Internet Settings* and select *Clone the MAC Address*. This will copy the MAC address of your computer onto the Internet port of the Router.
- Some Cable providers authenticate to the user's Host Name. If this is required, go to *Internet Settings* and enter the host name of your computer into the *Host Name* field.

DSL Internet Connections.

- If you have an existing DSL line and have PPPoE or PPTP client software installed on your computer, you will need to disable it. See section 2.
- If your DSL line uses PPPoE or PPTP, go to *Internet Settings* and ensure that the correct *IP Allocation mode* is selected. Check that your *Username* and *Password* are correct.
- Some DSL providers require the use of a PPPoE Service Name. If this is required, go to *Internet Settings* and enter the PPPoE Service Name in the field provided. If it is not required, you must leave it blank.

For further Problem Solving and Technical Support information, refer to the Router User Guide.