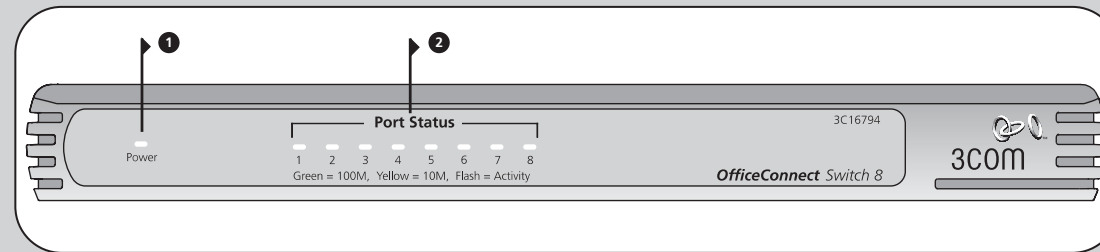


ABOUT YOUR SWITCH

OfficeConnect Switch - Front



1 Power LED

green
Indicates that the Switch is powered on.

2 Five or Eight Port 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, or the connected device is switched off, or there is a problem with the connection (refer to the "Problem Solving" section).

3 Power Adapter socket

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

4 Uplink/Normal switch

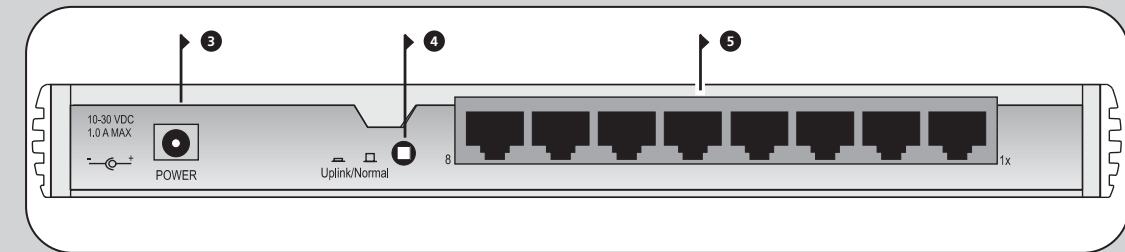
Affects the operation of port 8. If you are connecting another unit (such as a Hub or Switch) to port 8, set to Uplink (in), otherwise set to Normal (out). Refer to "Connecting Workstations and Other Equipment to your Switch".

Note: For the Switch 5, substitute 'port 5' for 'port 8'.

5 Five or Eight 10/100 ports

Use suitable TP cable with RJ-45 connectors. You can connect your Switch to a workstation, or any other piece of equipment that has a 10BASE-T or 100BASE-TX port. Each port is capable of autosensing for 10Mbps or 100Mbps operation. Ports operate in half-duplex mode as well as full duplex mode.

OfficeConnect Switch - Rear



⚠ WARNING: RJ-45 Ports

These are shielded RJ-45 data sockets. They cannot be used as standard traditional telephone sockets, or to connect the unit to a traditional PBX or public telephone network. Only connect RJ-45 data connectors, network telephony systems, or network telephones to these sockets. Either shielded or unshielded data cables with shielded or unshielded jackets can be connected to these data sockets.

⚠ AVERTISSEMENT : Points d'accès RJ-45

Prises RJ-45 blindées. Ces prises ne peuvent servir comme prises téléphone standard et ne permettent pas la connexion de l'appareil à un système PBX ni à un réseau téléphonique public. N'y branchez que des prises RJ-45 mâles adaptées, ou des systèmes de réseaux téléphoniques. Il est possible d'y brancher des câbles blindés ou non comportant des prises de type Jack (blindées ou non).

⚠ VORSICHT: RJ-45-Porte

RJ-45-Portes. Diese Portes sind geschützte Datensteckdosen. Sie dürfen weder wie normale traditionelle Telefonsteckdosen noch für die Verbindung der Einheit mit einem traditionellen privaten oder öffentlichen Telefonnetzwerk gebraucht werden. Nur RJ-45-Datenanschlüsse, Telefonnetzsysteme oder Netztelefone an diese Steckdosen anschließen. Entweder geschützte oder ungeschützte Buchsen dürfen an diese Datensteckdosen angeschlossen werden.

INTRODUCTION

Thank you for purchasing the OfficeConnect Switch. The OfficeConnect Switch is an efficient and inexpensive way of creating or expanding an existing network. The Switch is ideal for use with other OfficeConnect products, as shown in Figure 1. It is compact and attractively designed for desktop use. The Switch is part of the OfficeConnect range and can be stacked with other OfficeConnect units.

- Your Package Contains:**
- One OfficeConnect Switch
 - One power adapter for use with the Switch
 - Four rubber feet
 - This Installation Guide
 - One Support and Safety Information Sheet
 - One Warranty Flyer

About This Guide

This Installation guide will use the term 'Switch' when referring to the OfficeConnect Switch 5 or Switch 8.

This Installation Guide covers installation of the OfficeConnect Switch 5 and Switch 8. The instructions are the same for both models, except Switch 5 users should substitute 'port 5' for 'port 8' throughout.

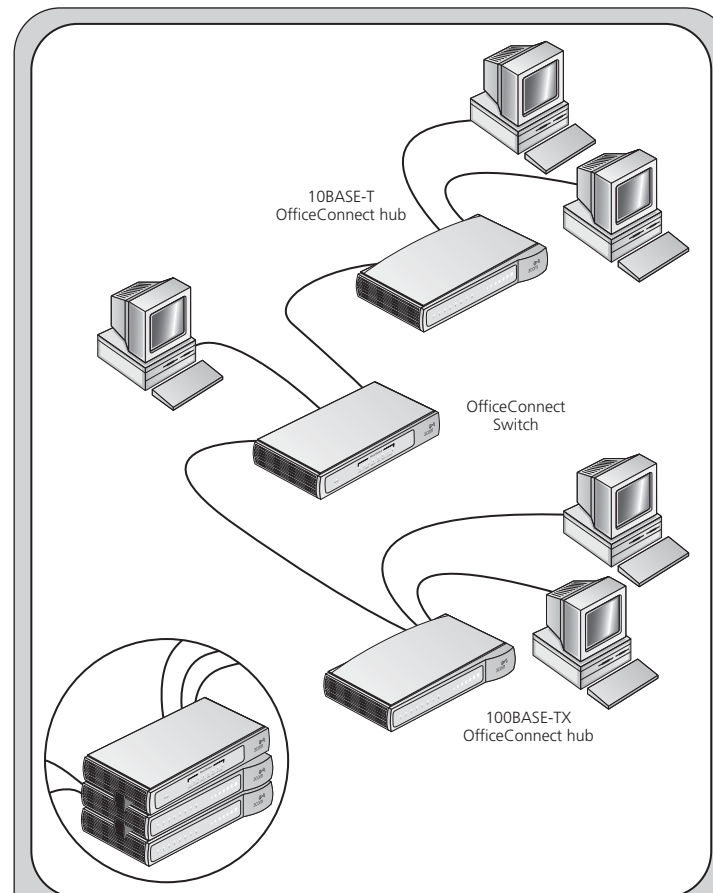


Figure 1 Small Network with OfficeConnect Switch (Circle Shows Units Clipped Together).

1 POSITIONING YOUR SWITCH

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 Switch, 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 Switch 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 Switch.

Using a Stacking Clip

Use a stacking clip when stacking your Switch with curved OfficeConnect units. Stacking clips are only supplied with curved OfficeConnect units. The stacking clip allows you to stack units neatly and securely. Refer to user guide of the curved unit for more details on how to use the stacking clip.

Wall Mounting

There are two slots on the underside of the OfficeConnect Switch that can be used for wall mounting. 3Com recommends that you mount the Switch with the LEDs facing upwards to prevent dust entering the ports.

▶ When wall mounting the unit, ensure that it is within reach of the power outlet.

You need two suitable screws. Ensure that the wall you are going to use is smooth, flat, dry and sturdy. Make two screw holes which are 150mm (5.9in.) apart. Fix the screws into the wall, leaving their heads 3mm (0.12in.) clear of the wall surface.

Remove any connections to the Switch and locate it over the screw heads. When in line, gently push the Switch on to the wall and move it downwards to secure. When making connections, be careful not to push the Switch up and off the wall.

⚠ **CAUTION:** Only wall mount single units, do not wall mount stacked units.

▶ Also available from 3Com, is the OfficeConnect Mounting Unit (part number 3C16765). This allows you to firmly secure a stack of OfficeConnect devices to the desktop or onto a shelf in a rack.

2 BEFORE YOU INSTALL YOUR SWITCH

Unit Connections

To connect OfficeConnect units (such as Hubs and other Switches) to your Switch, you need:

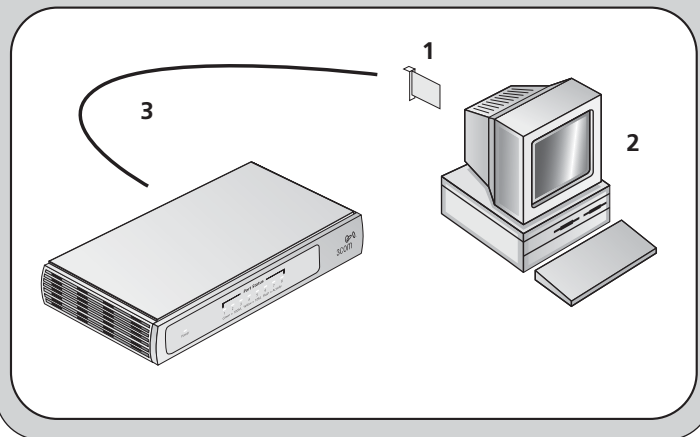
- One suitable Twisted Pair (TP) cable for each unit.

Workstation Connections

To connect workstations or other equipment (such as servers) directly to your Switch, you need:

1. One 10BASE-T, 100BASE-TX or 10/100BASE-TX adapter card for each workstation. 3Com produce a range of easy to install network adapters.
2. An operating system (for example, NetWare or Windows 95/98/Me/2000) with network support configured, running on your workstations.
3. One suitable Twisted Pair cable for each workstation.

Figure 2 Workstation connections



3 CONNECTING WORKSTATIONS AND OTHER EQUIPMENT TO YOUR SWITCH

Twisted Pair (TP) Cables

Cables can be shielded (screened) or unshielded; 3Com recommends that you use shielded cable. Cables used for 100BASE-TX connections must be data grade (Category 5). The maximum length you can use is 100m (328ft).

Twisted Pair (TP) cables are very easy to use. To connect a TP cable, simply slot the connector into the relevant RJ-45 port. When the connector is fully in, its latch locks it into place. To disconnect the cable, push the connector's latch in and remove it.

When one end of a TP cable is connected to the Switch and the other end to the network interface card of a workstation the units will 'autonegotiate' to determine the fastest possible link speed between them. This may take a few seconds and the outcome will be reflected in the LEDs on the front of the Switch.

The Switch detects all port connections, so you can start using your network immediately. If you need more ports, simply add another OfficeConnect unit.

! If the equipment connected to the Switch does not support autonegotiation or if it has been disabled, it must be configured to operate in half duplex mode

Expanding Your Network

You can increase the number of workstations that can connect to your network by adding OfficeConnect Hubs and Switches. You can connect either a 10BASE-T or a 100BASE-TX OfficeConnect unit to each port of the Switch. Use the following method for each unit:

1. Connect the Uplink/Normal port of the unit to any of the Switch's ports (as shown in Figure 3). If using the highest number port on the Switch (port 5 on Switch 5, port 8 on Switch 8), set its Uplink/Normal switch to Normal (out).
2. Set the Uplink/Normal switch on the other unit to Uplink (in).

If you are connecting your switch to a unit with automatic MDI / MDIX functionality there is no need to follow the steps described above. The connection will happen automatically.

Checking Unit Connections

When you have connected all your units, power on the units and the Switch. The Port Status LEDs for the ports you have used on both the units and the Switch should be on. If they are not, check your connections and the settings of the Uplink/Normal switches.

Spot Checks

At frequent intervals, visually check that:

- Case vents are not obstructed.
- Cabling is secure and not pulled taut.

OfficeConnect Switch

OfficeConnect Hub

Hub set to Uplink (in)

Twisted pair cable with RJ-45 connectors. Maximum length is 100m (328ft)

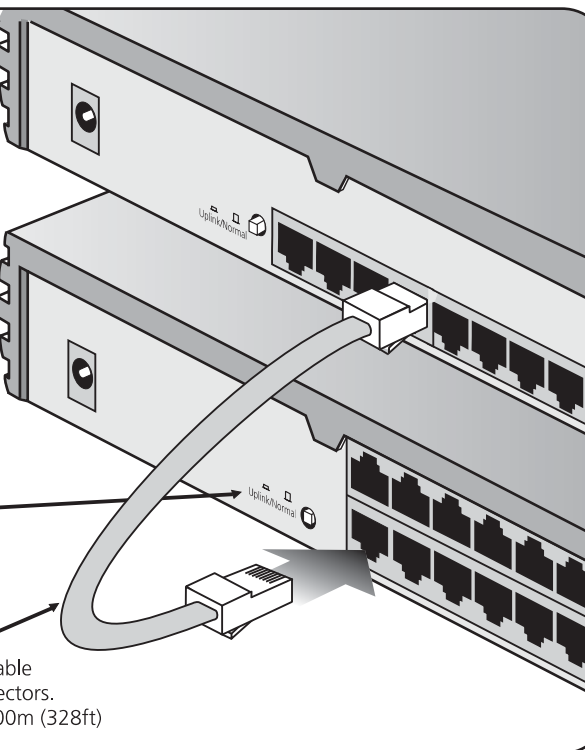


Figure 3 Correct Connections for an OfficeConnect Switch

4 HOW YOUR SWITCH CAN BE USED

Switching

When a network of repeater hubs is in operation, any information that is sent by the workstations is passed around the whole network (regardless of the destination of the information). This can result in a lot of unnecessary traffic that can slow the network down. The Switch solves this problem because it 'listens' to the network and automatically learns what workstations can be reached through its ports. It can then selectively pass on any information by transmitting the traffic from the relevant port only (instead of all ports like a repeater hub). This operation is called 'switching'.

The Switch effectively divides up your network, localizing the network traffic and passing on traffic as necessary. If you have workstations that communicate frequently in the same part of the network, traffic between them is not passed on unnecessarily to the remainder of the network, thereby reducing the load. If you have any high performance workstations that require a lot of bandwidth, connect them directly to the Switch.

Connecting 10BASE-T and 100BASE-TX Networks

The 10/100 ports can each be connected to either a 10BASE-T or 100BASE-TX network. If you have both types of network, you can join them together using the Switch allowing all your workstations to communicate. Alternatively, if you use 10BASE-T and want to improve network performance by introducing 100BASE-TX technology, the Switch protects the investment in your existing workstations because it maintains 10BASE-T connections to them.

5 PROBLEM SOLVING

The Switch has been designed to aid you when detecting and solving possible problems with your network. These problems are rarely serious; the cause is usually a disconnected or damaged cable, or incorrect configuration. If this section does not solve your problem, contact your supplier for information on what to do next.

Perform these actions first:

- Ensure all network equipment is powered on.
- Power each piece of network equipment off, wait about 5 seconds and then power each one on.

! CAUTION: Do not power the Switch off and on quickly. Wait about five seconds between power cycles.

Check the following symptoms and solutions:

Power LED not lit. Check your power adapter connection. If there is still no power, you may have a faulty power adapter which needs replacing with another OfficeConnect power adapter. **Do not use any other power adapter with the Switch.**

Port Status LED not lit for a port that has a TP cable connected. After connection it may take several seconds for the port status LED's to illuminate. The port status LED should turn Green or Yellow for each port that is connected. Please refer to 'About Your Switch' for a full description of the LEDs.

If the Port Status LED has not lit after several seconds ensure the connected device is powered, the TP cable is not damaged and that it is correctly inserted at both ends.

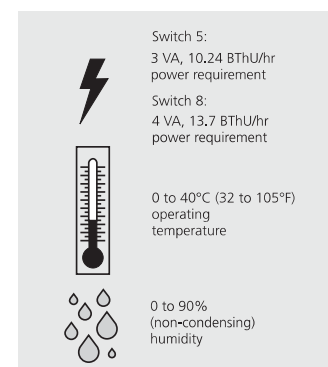
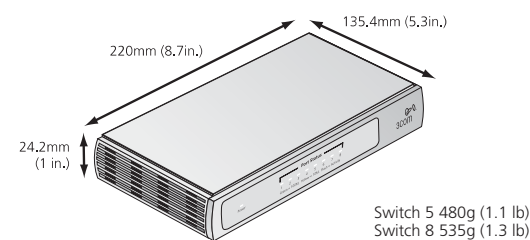
Also check whether the correct cable is being used (i.e. straight-through or crossover), if the uplink port is being used, and whether the Uplink/Normal Switch is in the correct position.

6 DIMENSIONS AND STANDARDS

Dimensions and Operating Conditions

Standards	EMC:	EN 55022 Class B
Functional:	ISO 8802/3	EN 55024
	IEEE 802.3, 802.3u	FCC Part 15 Class B*
Safety:	UL 1950, EN 60950	ICES-003 Class B
	CSA 22.2 #950, IEC60950	VCCI Class B
		CNS 13438 Class A
	Environmental:	EN 60068 (IEC 68)

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



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