



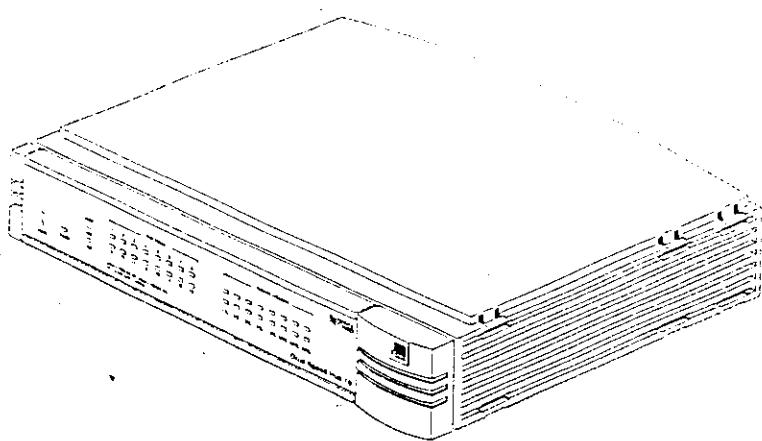
# OFFICECONNECT® DUAL SPEED HUB 16

3C16751

## USER GUIDE



### BETA DRAFT



Part No.  
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Welcome to the world of networking with 3Com®.

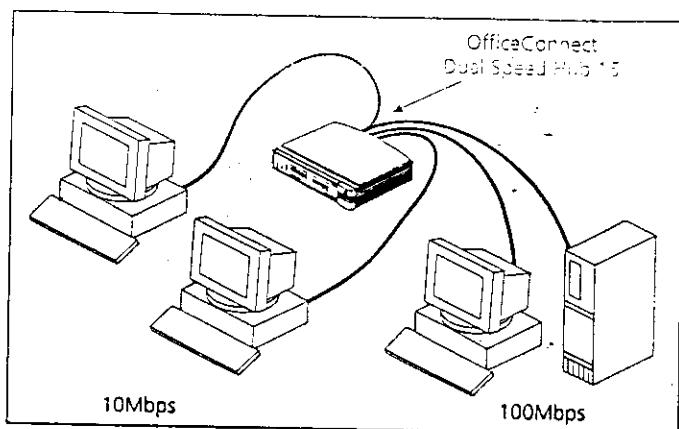
In the modern business environment, communication and sharing information are crucial. Computer networks have proved to be one of the fastest modes of communication. The OfficeConnect® product range from 3Com brings the power of computer networks to the small office.

The OfficeConnect Dual Speed Hub 16 is an easy-to-use Class II hub (repeater) with sixteen 10/100BASE-TX ports. It allows you to set up a network with both Ethernet (10Mbps) and Fast Ethernet (100Mbps) workstations and other devices (a Class II hub can be connected to another Fast Ethernet hub, a Class I hub cannot).

*When referring to the OfficeConnect Dual Speed Hub 16, this guide uses the term 'Hub'.*

Each port on the Hub can be connected to either a 10BASE-T (Ethernet) or a 100BASE-TX (Fast Ethernet) device. The port senses the speed of the connected equipment and operates at the appropriate speed.

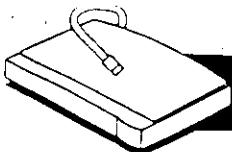
If you wish to extend an existing Ethernet network into Fast Ethernet, adding a Dual Speed Hub 16 can



■ Small Network with OfficeConnect Dual Speed Hub 16

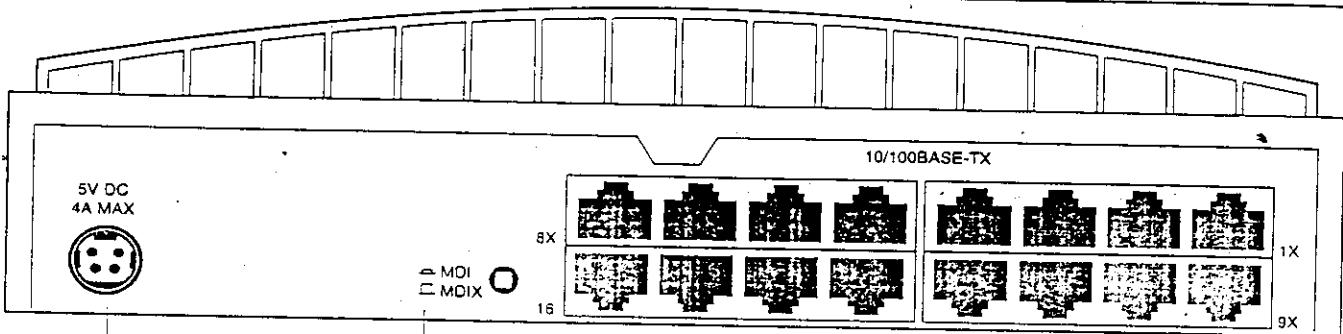
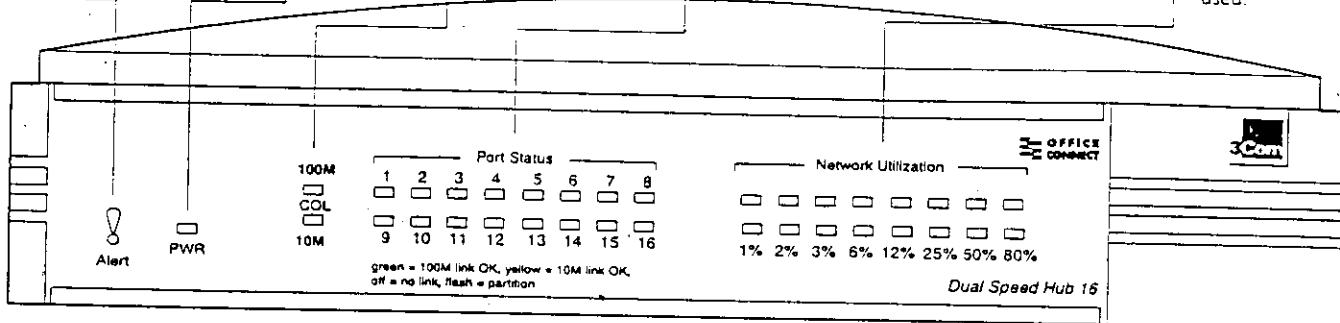
The Hub is ideal for use with other OfficeConnect products. The OfficeConnect product range is compact and attractively designed for desktop use, and neatly stacks together with clips. For further information, refer to the "OfficeConnect Product Range" sheet that accompanies the Hub.

This guide helps you get the most out of your Hub.



# CREATING YOUR NETWORK

- ▶ **Alert LED**  
orange  
Off when the Hub is operating correctly. Lit for a short period of time after power on, for self test. If the LED is continuously lit, there may be a problem. Refer to the "Problem Solving" section.
- ▶ **Power LED**  
green  
Indicates that the power supply to the Hub is present.
- ▶ **Collision LEDs**  
yellow  
Flash each time a collision is detected on the Hub's 100Mbps or 10Mbps segment. Collisions are a normal part of network operation.
- ▶ **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 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). If flashing, the port is partitioned, possibly due to a network loop.
- ▶ **Network Utilization LEDs**  
green / yellow / orange (top row: 100Mbps; bottom row: 10Mbps)  
Indicate how much the 100Mbps and 10Mbps segments of your network are being used.



▶ **Power Adapter socket**  
Only use the power adapter that is supplied with the OfficeConnect Dual Speed Hub 16. Do not use any other adapter.

▶ **MDI/MDIX switch**  
Affects the operation of port 16. If you are connecting another hub to port 16, set to MDI (in), otherwise set to MDIX (out). Refer to the "Connecting Another OfficeConnect Hub" section.

▶ **Sixteen 10/100BASE-TX ports**  
Use suitable TP cable with RJ45 connectors. You can connect the Hub to any workstation or other equipment that has a 10BASE-T or 100BASE-TX port. Each port is capable of autosensing for 10Mbps or 100Mbps operation.

## Networking Terminology

**A Network** is a collection of workstations (for example, IBM-compatible PCs) and other equipment (for example, printers), connected for the purpose of exchanging information or sharing resources. Networks vary in size; some are within a single room, others span continents.

**A Local Area Network (LAN)** is a network, usually in an office, that spans no more than a single site.

**Ethernet** is a type of LAN, referring to the technology used to pass information around the network. It operates at 10Mbps (megabits per second).

**Fast Ethernet** is a type of LAN that runs up to 10 times faster than standard Ethernet. It operates at 100Mbps.

**10BASE-T** is the name given to the Ethernet protocol that runs over **Twisted Pair (TP)** cable at 10Mbps.

A **Network Loop** occurs when two pieces of network equipment are connected by more than one path.

A **Segment** is the length of cable connected to a port.

**Packets** are the units of information your workstations and other equipment send to each other over the network. A **Frame** is the data part of the packet and can be **Unicast** (sent to a single device), **Multicast** (sent to multiple devices), or **Broadcast** (sent to all devices).

**Bandwidth** refers to the amount of network traffic the network can hold at any one time (information capacity) measured in **bits per second (bps)**. Workstations or applications that use the network heavily are referred to as using high bandwidth (these are usually users who do a lot of graphical or multi-media work across the network). Fast Ethernet has a higher bandwidth than Ethernet, so it can cope with larger amounts of traffic, which results in faster operation.

In a **Half Duplex** link, information can flow in either

## Before You Start

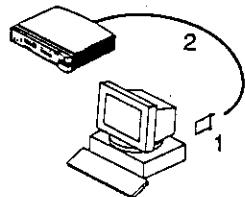
Your OfficeConnect Dual Speed Hub 16 comes with:

- One power adapter for use with the Hub
- One power cord
- A Warranty Registration card for you to fill out and return
- Four rubber feet
- Four stacking clips
- An OfficeConnect Product Range sheet
- CD-ROM ((?))
- This guide

### Workstation Connections

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

- 1 One 10BASE-T, 10/100BASE-TX, or 100BASE-TX adapter card for each workstation.
- 2 3Com produce a range of easy to install network adapters, which provide your workstation with a suitable connection.



**►** In order to comply with the 10BASE-T standard, ports designed for workstation connections have been marked with the graphical symbol 'X'. This denotes a crossover in the port's internal wiring, for example 1X, 2X, 3X...

You also need a network operating system running on your workstations.

### Twisted Pair (TP) Cables

To connect your workstations and other equipment to the Hub, use 'straight-through' TP cables with RJ45 connectors (all OfficeConnect products use RJ45 type connectors). A 'straight-through' cable is one where each pin of one connector is connected to the same pin of the other connector.

Cables can be shielded (screened) or unshielded; we recommend that you use shielded cable. Cables used for 100BASE-TX or 10/100BASE-TX connections must be data grade (Category 5).

Your supplier should stock suitable cables.

The maximum length of a single cable is 100m (328ft). Refer to "Fast Ethernet (100Mbps) Configuration Rules" on page 5 for further information on cable lengths in a 100Mbps network.

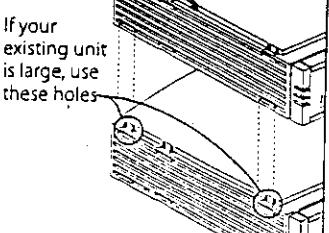
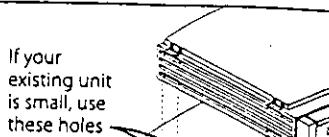
### Hub Connections

## Using the Rubber Feet and Stacking Clips

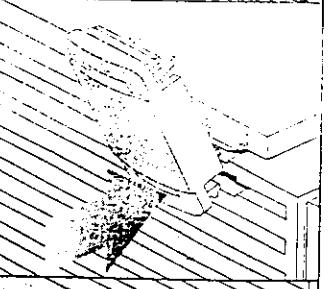
The four self-adhesive rubber feet prevent your Hub from sliding around on your desk. Stick the feet to the marked areas at each corner of the underside of your Hub.

The four stacking clips are used for neatly and securely stacking your OfficeConnect units together. You can stack up to four units. Small units must be stacked above large units. To stack your units, secure the clips on one side and then on the other. Use the following method to secure one side:

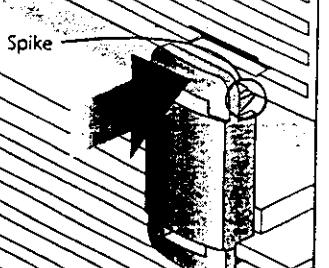
- 1 Place your new unit on a flat surface. Your clips fit in these positions on the side of the unit:



- 2 Position a clip over one of these holes and push it in until it clicks into place. Repeat this for the other clip position on the same side.



- 3 Keeping the front of the units aligned, rest the bottom of the existing unit on the clips' spikes. Push the clips firmly into the existing unit until they click into place.



Repeat these steps to secure the other side.

To remove a clip, hold the units firmly with one hand and hook the first finger of your other hand around the back of the clip. Use reasonable force to pull it off.



Wall mounting screw hole guide  
142 mm (5.6 in)

## Positioning Your OfficeConnect Hub

When installing your Hub, 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.

## Wall Mounting the OfficeConnect Hub



**CAUTION:** Only wall mount single units. Do not wall mount stacked units.

There are two slots on the underside of the Hub, which are used for wall mounting. You can mount the unit with the LEDs facing upwards or downwards, to suit your needs.



*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 142mm (5.6in.) apart. Use the guide at the top of this page to mark the position of the holes. Fix the screws into the wall, leaving their heads (2mm (0.12in)) clear of the wall surface.

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

## Connecting Workstations and Other Equipment to Your Hub



**WARNING:** Ensure you have read the Important Safety Information section carefully before you start.

**ACHTUNG:** Versichern Sie sich, daß Sie den Abschnitt mit den wichtigen Sicherheitshinweisen gelesen haben, bevor Sie das Gerät benutzen.

**AVERTISSEMENT:** Assurer que vous avez lu soigneusement la section de l'information de Sécurité importante avant que vous commenciez.



**CAUTION:** The equipment connected to the Hub must be set to operate in auto-negotiate or half duplex mode.

Connecting workstations and other equipment to your Hub is easy. To connect a workstation to any of the Hub's ports, use a 'straight-through' TP cable. Refer to "Twisted Pair (TP) Cables" on page 3 for further information.



*If you are using port 16 to connect a workstation, ensure the MDI/MDIX switch is set to MDIX (out).*

TP cables are very easy to use. To connect a cable, simply slot the connector into the appropriate RJ45 port. When the connector is fully in, its latch locks it in place. To disconnect the cable, push the connector's latch in and remove it.

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

## Connecting Another OfficeConnect Hub

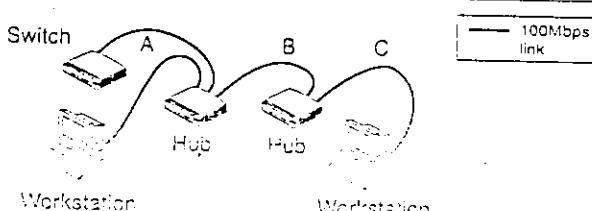
You may wish to connect another OfficeConnect hub to your Dual Speed Hub 16. Alternatively, you may wish to add your Hub to an existing 10Mbps network. When extending your network, you should be aware of the configuration rules given below.

**If you connect two Dual Speed Hub 16 units directly together, the link between them operates at 100Mbps.**

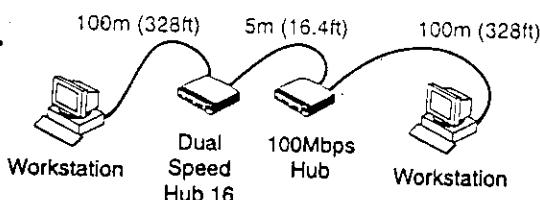
### Fast Ethernet (100Mbps) Configuration Rules

The Dual Speed Hub 16 is a Class II hub. You can connect directly two Class II Fast Ethernet hubs (Class I Fast Ethernet hubs cannot be connected directly to other Fast Ethernet hubs). The total length of cable (A + B + C below) between two workstations, or between a workstation and a non-repeater piece of equipment (such as a switch), must not exceed 205m (672ft). Each cable (A, B, or C) must not exceed 100m (328ft).

3Com recommends that the cable (B) between the Fast Ethernet hubs is no longer than 5m (16.4ft). This allows the maximum hub-to-workstation cable length (A or C) of 100m (328ft) to be used, as shown in the example.



#### Example:

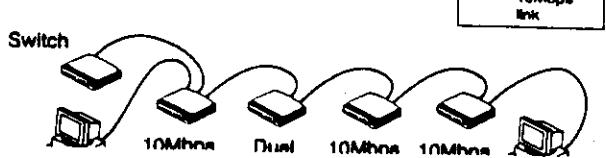


Configuration Rules and Example of a Fast Ethernet (100Mbps) Network

### Ethernet (10Mbps) Configuration Rules

You can connect a maximum of four Ethernet (10Mbps) hubs in series between workstations, or between a workstation and a non-repeater piece of equipment (such as a switch). Each cable must not exceed 100m (328ft). An example is shown below.

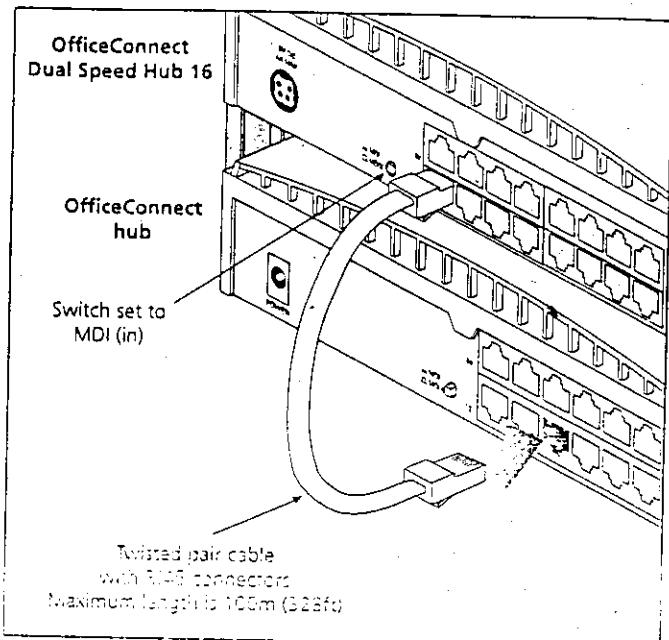
#### Example:



## Making the Connection to Another Hub

You can connect a 10BASE-T, 100BASE-TX, or another 10/100BASE-TX OfficeConnect hub to any port on the Dual Speed Hub 16. Use the following method:

- 1 Using a straight-through cable, connect the MDI/MDIX port of the Dual Speed Hub 16 to any of the ports on the other hub (as shown in the diagram below). If using an MDI/MDIX port on the other hub set its MDI/MDIX switch to MDIX (out).
- 2 Set the MDI/MDIX switch for the MDI/MDIX port on the Dual Speed Hub 16 to MDI (in).



Correct Connections for OfficeConnect Hubs

## Powering Up and Checking Connections

When you have connected all the appropriate workstations and other equipment to the Hub, power on the Hub. For each port with a connection, the corresponding Port Status LED should be on. If the LED is off, check your connections.



**CAUTION:** Do not power the Hub off and on quickly. Wait about 5 seconds between power cycles.

## Spot Checks

At frequent intervals, visually check that:

- The Alert LED is off — this is the best way to find out if there are problems with your network
- Case vents are not obstructed
- Cabling is secure and not pulled taut

If you suspect a problem, refer to "Problem-Solving" on page 7.



# IMPORTANT SAFETY INFORMATION



**WARNING:** Warnings contain directions that you must follow for your personal safety. Follow all instructions carefully. Please read the following information carefully before installing the OfficeConnect unit.

- Exceptional care must be taken during installation and removal of the unit.
- Only stack one OfficeConnect unit with other OfficeConnect units.
- Only use the power adapter that is supplied with the unit to ensure compliance with international safety standards.
- It is important that the power outlet is located near the unit and is accessible. You can easily remove the unit to the OfficeConnect unit by disconnecting the power adapter from the unit or from the socket outlet.
- This unit operates under SELV conditions (Safety Extra Low Voltage) according to IEC 950, the conditions of which are maintained only if the equipment to which it is connected is also operational under SELV.
- There are no user-replaceable fuses or user-serviceable parts inside the unit. If you have a physical problem with the unit that cannot be solved with problem solving actions in this guide, contact your supplier.
- Disconnect the power adapter before moving the unit.



**WARNING:** Twisted Pair RJ45 ports. These are RJ45 data sockets. They cannot be used as telephone sockets. Only connect RJ45 data connectors to these sockets.

**Power Cord Set:**

This must be approved for the country where it is used.

USA and  
Canada

The cord set must be UL approved and CSA certified.

The minimum specification for the flexible cord is

No. 18 AWG

Type SV or SJ

3 conductors

The cord set must have a rated current capacity of at least 10A.

The attachment plug must be an earth-grounding type with a NEMA 5-15P (15A, 125V) or NEMA 6-15P (15A, 250V) configuration.

Denmark

The supply plug must comply with section 107-2-D1, standard DK2-1a or DK2-5a.

Switzerland

The supply plug must comply with SEV1ASE 1011.



# WICHTIGE SICHERHEITSHINWEISE



**ACHTUNG:** Die Warnungen enthalten Anweisungen, die Sie zur eigenen Sicherheit zu befolgen haben. Lesen Sie bitte die folgenden Informationen sorgfältig durch, bevor Sie das Gerät einbauen:

- Auf besondere Vorsicht muß während des Ein- und Ausbaus des Gerätes geachtet werden.
- Stapeln Sie das Gerät nur mit anderen OfficeConnect Geräten zusammen.
- Verwenden Sie nur das mit dem Gerät mitgelieferte Netzteile um die internationalen Sicherheitsstandards zu erfüllen.
- Die Netzteckdose muß sich in unmittelbarer Nähe des Gerätes befinden und frei zugänglich sein. Sie können das Gerät nur spannungsfrei schalten, indem Sie das Steckernetzteil aus der Netzteckdose ziehen oder die Verbindung zum Gerät unterbrechen.

■ Dieses Gerät arbeitet mit SELV-Spannung (Safety Extra Low Voltage, Sicherheitskleinspannung) gemäß IEC950. Diese Bedingungen werden nur eingehalten, wenn die Geräte mit denen des Gerätes verbunden ist ebenfalls mit SELV-Spannung arbeiten.

■ Es sind keine von dem Benutzer zu ersetzen oder zu wartende Teile in dem Gerät vorhanden. Wenn Sie ein Problem mit dem Gerät haben, das nicht mittels der Fehleranalyse in dieser Anleitung behoben werden kann, setzen Sie sich mit Ihrem Lieferanten in Verbindung.

■ Bevor das Gerät ausgebaut wird ist das Netzteile zu ziehen.

**ACHTUNG: Gedrehte paarfache RJ45 Anschlüsse. Es sind RJ45 Datenanschlußbuchsen. Sie dürfen nicht als Telefonanschluß verwendet werden. Verbinden Sie nur RJ45 Datensteckdose mit diesen Anschlüssen.**

**AVERTISSEMENT: Les instructions suivantes doivent être suivies pour votre sécurité personnelle. Suivre toutes les instructions avec soin.**

**Veuillez lire la toute l'information suivante avant d'installer l'appareil:**

- La plus exceptionnelle doit être pris pendant l'installation et l'entretien de l'appareil.
- Seulement entasser l'appareil avec les autres appareils OfficeConnect.
- Seulement utiliser la pièce de raccordement d'alimentation qui est fournie avec l'appareil pour assurer la conformité avec les normes de sécurité internationales.
- C'est essentiel que le socle de prise de courant du réseau soit localisé proche de l'appareil et soit accessible. Vous pouvez seulement enlever l'alimentation de l'appareil en débranchant la pièce de raccordement d'alimentation de l'unité ou du socle de prise de courant.
- Cet appareil fonctionne sous les conditions SELV (Sécurité du Voltage le plus Bas) d'après IEC950. les conditions desquelles sont maintenues seulement si le matériel à qui il est branché est aussi en exploitation sous SELV.
- Il n'y a pas de parties remplaçables par les utilisateurs ou entretenues par les utilisateurs à l'intérieur de l'appareil. Si vous avez un problème physique avec l'appareil qui ne peut pas être résolu avec les actions de la résolution des problèmes dans ce guide, contacter votre fournisseur.

**AVERTISSEMENT: Utilisez une prise de courant de réseau accessible à proximité de l'appareil.**

**AVERTISSEMENT: Les ports RJ45 de paire torsadée. Ceux-ci sont les sockets de données RJ45. Ils ne peuvent pas être utilisés comme sockets de téléphone. Seulement brancher les connecteurs de données RJ45 à ces sockets.**

**Cordon électrique:**  
Il doit être agréé dans le pays d'utilisation:

Etats-Unis et  
Canada

Le cordon doit avoir reçu l'homologation des UL et un certificat de la CSA.

Le cordon souple doit respecter, à titre minimum, les spécifications suivantes:  
calibre 18 AWG  
type SV ou SJ  
à 3 conducteurs

Le cordon doit être en mesure d'acheminer un courant nominal d'au moins 10 A.

La prise femelle de branchement doit être du type à mise à la terre (mise à la masse) et respecter la configuration NEMA 5-15P (15 A, 125 V) ou NEMA 6-15P (15 A, 250 V).

3Com Corporation, 5400 Bayfront Plaza, Santa Clara, California, 95052-8145, U.S.A.

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## PROBLEM SOLVING

The Hub 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.

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 an identical OfficeConnect power adapter. **Do not use any other power adapter with the Hub.**

**Port Status LED not lit for a port that has a connection.** Check that you are using a 'straight-through' cable which is properly connected at both ends, and is not damaged. Refer to "Twisted Pair (TP) Cables" on page 3. Also check that the equipment connected to the Hub is powered on, operating correctly and contains the correct type of connection.

**Port Status LED lit yellow for a port with a 100Mbps device connected.** This may be because the cable is not of a high enough quality to carry Fast Ethernet signals (we recommend you use a Category 5 cable). You can check this by using a network sniffer (NFS) of the attached equipment.

**Port Status LED flashing.** The port is partitioned, probably due to a network loop. Examine your connections and remove the loop. Each piece of equipment needs only one connection to your Hub.

**Link between the Hub and another OfficeConnect hub not working.** Check your connections; follow the information given in the "Connecting Another OfficeConnect Hub" section on page 5. It is likely that an MDI/MIDX switch is incorrectly set.

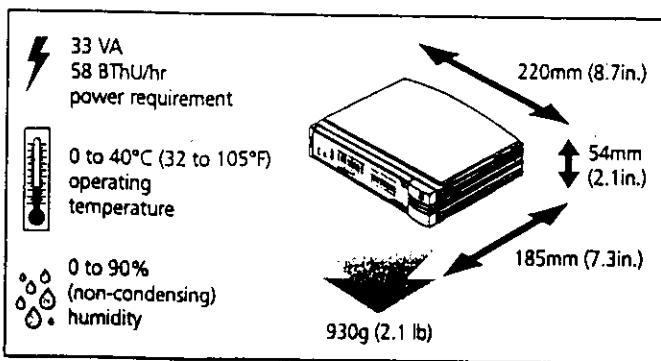
**Alert LED continuously lit.** There is a problem with the network. Check the Port Status LEDs to try to identify the port that is causing the problem. If one of the Port Status LEDs is flashing, that port has partitioned, probably due to a network loop. Examine your connections and remove the loop. Each piece of equipment needs only one connection to your Hub.

If you cannot identify such a port, remove the port connections one at a time, waiting a few seconds between each port. If the Alert LED goes off, there is either a network loop (see above), or an excessive amount of traffic on that port connection. Check the Network Utilization LEDs to see if the network is heavily loaded (over 80%). Some pieces of network equipment operate by sending out frames regularly. Refer to the documentation that accompanies the piece of network equipment.

If the Alert LED is still lit after removing all of your connections, there may be a problem with your Hub. Power it off, wait about 5 seconds and then power it on. If the Alert LED comes back on continuously, contact your supplier.



### Dimensions and Operating Conditions



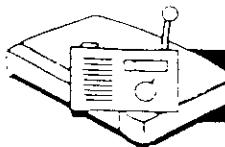
OfficeConnect Dual Speed Hub 16

### Standards

<b>Functional:</b>	ISO 8802/3 IEEE 802.3, 802.3u
<b>Safety:</b>	UL 1950, EN 60950 CSA 22.2 #950, IEC 950
<b>Emissions:</b>	EN 55022 Class B* FCC Part 15 Class B* ICES-003 Class B* VCCI Class B* AS/NZS 3548 Class B* EN50082-1

\* Screened (shielded) cables must be used to ensure compliance with these EMC standards. Refer to "EMC Statements" on page 8 for conditions of operation.

**Environmental:** EN 60068 (IEC 68)



## EMC STATEMENTS

**FCC STATEMENT:** This Equipment has been tested and found to comply with the limits for a class B digital device. Pursuant to Part 15 of the FCC rules, These Limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

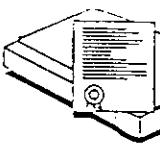
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio /TV technician for help.

**CSA STATEMENT:** This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

**Warning:** A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment. Used only shielded cables to connect I/O devices to this equipment.

警告使用者

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。



**LIFETIME LIMITED WARRANTY**

The duration of the warranty for the OfficeConnect Dual Speed Hub 15 (3C16751) is lifetime, including the power supply, but excluding the fan, which has one (1) year warranty.

Advance hardware exchange is available during the first year from your date of purchase in accordance with 3Com's standard terms and conditions for such service. After the first year, the warranty reverts to 3Com's standard lifetime limited warranty.

To qualify for the lifetime limited warranty and the advanced hardware exchange, you must submit the appropriate product warranty registration card to 3Com. Once registered, this product will be warranted for a period of one (1) year without advanced hardware exchange assistance.

**HARDWARE.** 3Com warrants its hardware products to be free from defects in craftsmanship and materials, under normal use and service. For the following 4 years or

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Product does not operate as warranted above during the applicable warranty period, 3Csm shall, at its option and expense, repair the defective product or part, replace it with a new or reconditioned product or part, or refund the purchase price of the defective product. All or parts that are replaced will become the property of 3Csm. Replacement products may be new or reconditioned. Any replaced or repaired product or part has a ninety (90) day warranty on the remainder of the initial warranty period, whichever is longer.

3Com shall not be responsible for any software, firmware, information, or memory data contained in, stored on, or integrated with any products returned to 3Com for repair, whether under warranty or not.

**SOFTWARE:** 3Com warrants that the software programs licensed from it will perform in substantial conformance to the program specifications therefor for a period of ninety (90) days from the date of purchase from 3Com or its Authorized Reseller. 3Com warrants the media containing software against failure during the warranty period. No updates are provided. 3Com's sole obligation with respect to this express warranty shall be (at 3Com's discretion) to refund the purchase price paid by Customer for any defective software products, or to replace any defective media with software which substantially conforms to 3Com's applicable published specifications. Customer assumes responsibility for the selection of the appropriate applications program and associated reference materials. 3Com makes no warranty or representation that its software products will work in combination with any hardware or applications software products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected. For any third party products listed in the 3Com software product documentation or specifications as being compatible, 3Com will make reasonable efforts to provide compatibility, except where the non-compatibility is caused by a "bug" or defect in the third party's product.

**STANDARD WARRANTY SERVICE:** Standard warranty service for hardware products may be obtained by delivering the defective product, accompanied by a copy of the dated

proof of purchase, to 3Com's Corporate Service Center or to an Authorized 3Com Service Center during the applicable warranty period. Standard warranty service for software products may be obtained by telephoning 3Com's Corporate Service Center or an Authorized 3Com Service Center, within the warranty period. Products returned to 3Com's Corporate Service Center must be pre-authorized by 3Com with a Return Material Authorization (RMA) number marked on the outside of the package, and sent prepaid, insured, and packaged appropriately for safe shipment. The repaired or replaced item will be shipped to Customer at 3Com's expense, not later than thirty (30) days after receipt of the defective item by 3Com.

**WARRANTIES EXCLUSIVE:** IF A ZCOM PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, CUSTOMER'S SOLE REMEDY FOR BREACH OF THAT WARRANTY SHALL BE REPAIR, REPLACEMENT OR REFUND OF THE PURCHASE PRICE AND, AT ZCOM'S OPTION, TO THE FULL EXTENT ALLOWED BY LAW, THE FOLLOWING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND REPLACE ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ZCOM'S LIABILITY FOR DEFECTIVE PRODUCTS IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT. ZCOM IS NOT LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, NEGLIGENCE, TORT OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

**LIMITATION OF LIABILITY.** TO THE FULL EXTENT ALLOWED BY LAW 3COM ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS, EVEN IF 3COM OR ITS AUTHORIZED RESELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID. AT 3COM'S OPTION, THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

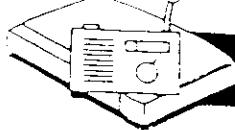
Some countries, states, or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers or the limitation of liability for personal injury, so the above limitations and exclusions may be limited in their application to you. This warranty gives you specific legal rights which may vary depending on local law.

**GOVERNING LAW:** This Limited Warranty shall be governed by the laws of the state of California.

**3Com Corporation, 5400 Bayfront Plaza, Santa Clara, CA, 95052-8145, U.S.A.**  
**Tel. (408) 764-5000**

**Year 2000 Compliance:** For information on Year 2000 compliance and 3Com products, visit the 3Com Year 2000 Web page:  
<http://www.3com.com/products/yr2000.html>

**Environmental Statement:** Please recycle this user guide after use.



# EMC STATEMENTS

**FCC STATEMENT:** This Equipment has been tested and found to comply with the limits for a class B digital device, Pursuant to Part 15 of the FCC rules. These Limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

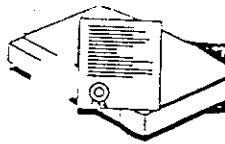
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio /TV technician for help.

**CSA STATEMENT:** This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

**Warning:** A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Used only shielded cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment. Used only shielded cables to connect I/O devices to this equipment.

## 警告使用者:

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。



# LIFETIME LIMITED WARRANTY

The duration of the warranty for the OfficeConnect Dual Speed Hub 15 (3C16751) is lifetime, including the power supply, but excluding the fan, which has one (1) year warranty.

Advance hardware exchange is available during the first year from your date of purchase in accordance with 3Com's standard terms and conditions for such service. After the first year, the warranty reverts to 3Com's standard lifetime limited warranty.

To qualify for the lifetime limited warranty and the advance hardware exchange, you must submit the appropriate product warranty registration card to 3Com. Otherwise, this product will be warranted for a period of one (1) year without advance hardware exchange.

**HARDWARE:** 3Com warrants its hardware products to be free from defects in craftsmanship and materials, under normal use and service, for the following lengths of time from the date of purchase from 3Com or an authorized 3Com distributor:

### Network Products

### Other hardware products

### Software, parts, and accessories

If a product does not operate as warranted above during the applicable warranty period, 3Com shall, at its option and expense, repair the defective product or replace it with a new or refurbished product. In either case, the repaired or replaced product will become the property of 3Com. Replacement products may be new or reconditioned. Any replaced or repaired product or part has a ninety (90) day warranty or the remainder of the initial warranty period, whichever is longer.

3Com shall not be responsible for any software, firmware, information, or memory data of Customer contained in, stored on, or integrated with any products returned to 3Com for repair, whether under warranty or not.

**SOFTWARE:** 3Com warrants that the software programs licensed from it will perform substantial conformance to the program specifications therefor for a period of ninety (90) days from the date of purchase from 3Com or its Authorized Reseller. 3Com warrants its media containing software against failure during the warranty period. No updates are provided. 3Com's sole obligation with respect to this express warranty shall be (at 3Com's discretion) to refund the purchase price paid by Customer for any defective software products, or to replace any defective media with software which substantially conforms to 3Com's applicable published specifications. Customer assumes responsibility for the selection of the appropriate applications program and associated reference materials. 3Com makes no warranty or representation that its software products will work in combination with any hardware or applications software products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected. For any third party products listed in the 3Com software product documentation or specifications as being compatible, 3Com will make reasonable efforts to provide compatibility, except where non-compatibility is caused by a "bug" or defect in the third party's product.

**STANDARD WARRANTY SERVICE:** Standard warranty service for hardware products may be obtained by delivering the defective product, accompanied by a copy of the dated

proof of purchase, to 3Com's Corporate Service Center or to an Authorized 3Com Service Center during the applicable warranty period. Standard warranty service for software products may be obtained by telephoning 3Com's Corporate Service Center or an Authorized 3Com Service Center, within the warranty period. Products returned to 3Com's Corporate Service Center must be pre-authorized by 3Com with a Return Material Authorization (RMA) number marked on the outside of the package, and sent prepaid, insured, and packaged appropriately for safe shipment. The repaired or replaced item will be shipped to Customer at 3Com's expense, not later than thirty (30) days after receipt of the defective product by 3Com.

**WARRANTIES EXCLUSIVE:** IF A 3COM PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, CUSTOMER'S SOLE REMEDY FOR BREACH OF THAT WARRANTY SHALL BE REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT 3COM'S OPTION, TO THE FULL EXTENT ALLOWED BY LAW. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. 3COM IS NOT LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR DAMAGES RESULTING FROM LOSS OF PROFITS, BUSINESS INTERRUPTION, OR LOSS OF INFORMATION, EVEN IF 3COM IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. 3COM'S LIABILITY FOR DAMAGES WILL NOT EXCEED THE PURCHASE PRICE PAID BY CUSTOMER FOR THE 3COM PRODUCT.

3Com shall not be liable under this warranty if its testing and examination of the product indicates that the damage resulted from (a) accident, (b) misuse or abuse, (c) faulty installation, (d) unauthorized repair or alteration, (e) damage for installation or testing unauthorized attempts to repair or modify, or (f) other cause beyond the range of the intended use, or by accident, fire, lightning, or other hazard.

**LIMITATION OF LIABILITY.** TO THE FULL EXTENT ALLOWED BY LAW 3COM ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR EXEMPLARY DAMAGES OR LOSSES, OR FOR DAMAGES ARISING OUT OF THE USE OF ANY PRODUCT, OR FOR LOSS OF REVENUE OR PROFITS,

由於原提供之 Manual 對 cable

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之更動之參考

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35052-8145, U.S.A.

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