# SuperStack® 3 Switch 4300 10/100/1000BASE-T Module (3C17121) and Dual Module (3C17122) User Guide

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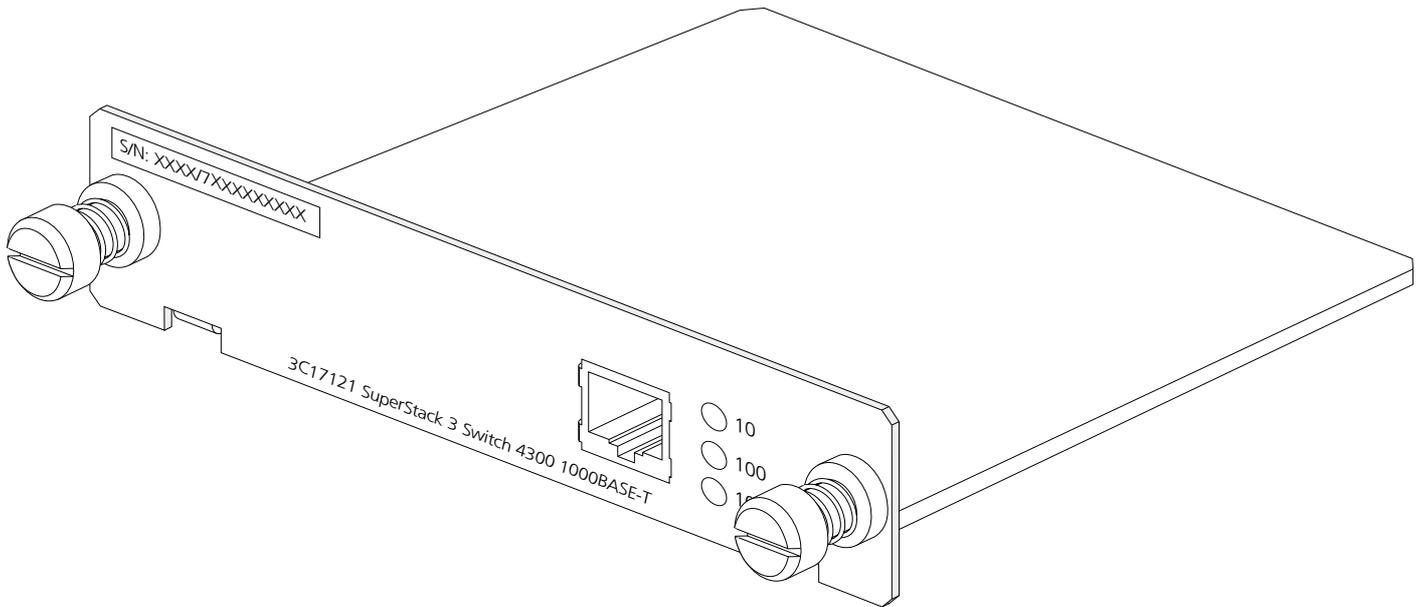
INTRODUCTION

This guide covers the following products:

- SuperStack® 3 Switch 4300 10/100/1000BASE-T Module (3C17121) provides one Ethernet port for connection to your network.

- SuperStack 3 Switch 4300 10/100/1000BASE-T Dual Module (3C17122) provides two Ethernet ports for connection to your network.

The procedures described in the User Guide assume that you have a single port Module. If you have a Dual Module the procedures are the same, except that procedures relating to the port apply to each port on the Dual Module.

The Module conforms to the full duplex implementation of the Gigabit Ethernet standard, IEEE 802.3ab and has an auto-negotiating 10/100/1000BASE-T port configured as Auto MDI (crossover).

Alternatively, you can manually set the port to 10BASE-T half duplex, 10BASE-T full duplex, 100BASE-TX half duplex or 100BASE-TX full duplex. You can also manually set the port to 1000BASE-T. The port uses Category 5 copper cabling with an RJ-45 connector. The maximum segment length is 100 m (328 ft) over Category 5 twisted pair cable.

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.

LEDs

You can gather information about the status of the Module and its packet activity using the Expansion Module port LEDs on the front of the Switch.

Switch Front Panel LED's

Module Packet LED

Appearance	Color	Meaning
On	Green	Packets are being transmitted or received on the Module port.
Off	No color	There are no packets being transmitted or received on the Module port.

Module Status LED

Appearance	Color	Meaning
On	Green	The Module is installed.
Off	No color	There is no Module installed or an unsupported Module is fitted.

Module Panel LED

Appearance	Color	Meaning
On	Green	The Port has a link and is running at the speed indicated.
Off	No color	The Port does not have a link.

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INSTALLATION AND REMOVAL

⚡ **WARNING**: *Installation and removal of the Module must be carried out by qualified personnel only. Before installing the Module into a unit, you must first disconnect the unit from the mains power supply. For full safety instructions, refer to the user guide that accompanies the unit.*

⚡ **AVERTISSEMENT**: *Confiez l'installation et la dépose de ce Module à un personnel qualifié. Avant d'installer ce Module dans un groupe, vous devez au préalable débrancher ce groupe de l'alimentation secteur. Pour prendre connaissance des consignes complètes de sécurité, consultez le guide utilisateur qui accompagne ce groupe.*

⚡ **WARNHINWEIS**: *Die Installation und der Ausbau des Moduls darf nur durch Fachpersonal erfolgen. Vor dem Installieren des Moduls in einem Gerät muß zuerst der Netzstecker des Geräts abgezogen werden. Vollständige Sicherheitsanweisungen sind dem Benutzerhandbuch des Geräts zu entnehmen.*

⚡ **WARNING**: *When the Module is inserted into the switch, the captive screws securing the Module must be tightened with a suitable tool. Keep the blanking plate and the fixings in a safe place. If you remove the Module at any time, you must then replace the blanking plate.*

⚡ **AVERTISSEMENT**: *Quand le Module est inséré dans le commutateur, visser le module, en le securisant fortemant avec un outil adapté. Conservez la plaque d'obturation et les fixations en lieu sûr. Si vous retirez le Module à tout instant, vous devez alors replacer la plaque d'obturation.*

⚡ **WARNHINWEIS**: *Beim Einsetzen des Moduls in dem Switch sind die unverlierbaren Schrauben mit einem passenden Werkzeug festzuziehen. Die Distanzplatte und die Befestigungselemente an einem sicheren Ort aufbewahren. Beim Austausch des Moduls ist auch die Distanzplatte zu ersetzen.*

⚡ **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. Ceux-ci sont protégés par des prises de données. Ils ne peuvent pas être utilisés comme prises de téléphone conventionnelles standard, ni pour la connection de l'unité à un réseau téléphonique central privé ou public. Raccorder seulement connecteurs de données RJ-45, systèmes de réseaux de téléphonie ou téléphones de réseaux à ces prises.*
Il est possible de raccorder des câbles protégés ou non protégés avec des jacks protégés ou non protégés à ces prises de don

⚡ **WARNHINWEIS**: *RJ-45-Porte. Diese Porte sind geschützte Datensteckdosen. Sie dürfen weder wie normale traditionelle Telefonsteckdosen noch für die Verbindung der Einheit mit einem traditionellem privatem oder öffentlichem Telefonnetzwerk gebraucht werden. Nur RJ-45-Datenanscluße, Telefonnetzsysteme or Netztelefone an diese Steckdosen anschließen.*

Entweder geschützte oder ungeschützte Buchsen dürfen an diese Datensteckdosen angeschlossen werden.

Handling the Module

The Module can be easily damaged by electrostatic discharge. To prevent damage, observe the following:

- Always wear an anti-static wristband connected to a suitable earth point.
- Do not remove the Module from its packaging until you are ready to install it into a Switch.
- Do not touch any of the pins, connections or components on the Module.
- Handle the Module only by its edges and front panel.
- Always store or transport the Module in anti-static packaging.

Installing the Module into a Switch

⚠ **CAUTION:** *This Module is not hot-swappable. Always make sure that the Switch is powered down and disconnected from the mains before installing or removing a Module. Use the following instructions when installing or removing a Module.*

To install the Module:

1 Ensure that the Switch is disconnected from the mains power supply and that you are wearing an anti-static wristband connected to a suitable earth point.

2 Undo the two screws securing the blanking plate at the rear of the Switch using a suitable screwdriver. Do not remove any other screws from the rear of the Switch.

3 Remove the blanking plate.

4 Hold the Module so that the text on the front panel is upright and insert it into the Switch, ensuring the connectors are fully engaged (see Figure 1). Make sure the Module is pushed fully in.

5 Secure the Module by tightening the two captive screws with a screwdriver.

ℹ️ *Keep the blanking plate in a safe place. If you remove the Module at any time, you must replace the blanking plate to prevent dust and debris entering the Switch. Replacing the blanking plate will also help circulate cooling air through the Switch.*

ℹ️ *Each Switch has the facility to accept up to two Expansion Modules, allowing Gigabit Ethernet or Fast Ethernet connections. Modules can be inserted into either Expansion Module slot.*

Figure 1 Inserting the Module into the Switch
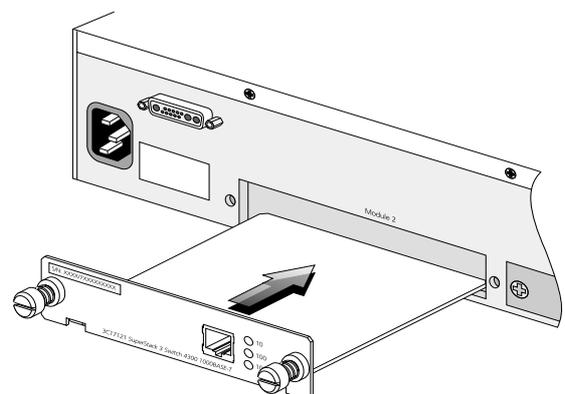
Activating the Module

1 Ensure that the Switch is powered-up.

2 Plug the RJ-45 connector on the Category 5 cable into the RJ-45 port on the Module.

3 Connect the other end of the Category 5 cable to a device that supports 1000BASE-T.

4 Check the LEDs on the front of the Switch to ensure that the Module is operating correctly. Refer to "LEDs" for more information.

Removing the Module from a Switch

1 Ensure that the power supply and the backbone connection cables are disconnected from the Switch.

2 Undo the Module's two captive screws with a suitable screwdriver. Do not remove any other screws from the Switch.

3 Remove the Module.

4 If you are not fitting another Module immediately, you must replace the blanking plate to ensure that dust and debris do not enter the Switch. Replacing the blanking plate will also help circulate cooling air through the Switch.

MANAGING THE MODULE

When the Module is installed, you can configure it through your Switch to add extra functionality. Refer to the documentation that accompanies your Switch 4300 for more information.

The Switch 4300 dynamically assigns port numbers to each Module installed, so if you add, replace or remove a Module, the port number of the other Module may change. The port numbers allocated depend on the type of Module; the number of Modules installed and the slots into which they are fitted.

Figure 2 shows how a single port Module, inserted into Slot 2, will be assigned a port number of 49. If you then insert an additional dual or a single port Module into Slot 1 (see Figure 3 and Figure 4) the port numbering will change. The port number originally assigned to the Module in Slot 2 (and any port parameters you may have set against that port number) will be re-assigned to the Module installed into Slot 1. Similarly, if you then remove the Module from Slot 1, the port number and parameter settings will be re-assigned to the Module in Slot 2.

CAUTION: *Always check that each port number has the correct parameter settings after adding, changing or removing a Module. This is due to the method in which the Switch dynamically assigns port numbers.*

Figure 2 Rear View of Switch 4300 Module Port Number Allocation
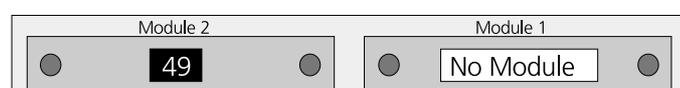
Figure 3 Rear View of Switch 4300 Installing a Dual Port Module into Slot 1

Figure 4 Rear View of Switch 4300 Installing a Single Port Module into Slot 1

MODULE PORT RESTRICTIONS

When using the Module port, note the following:

- The Module only operates in full duplex mode for 1000BASE-T.

- The Module operates in half and full duplex mode for 10BASE-T and 100BASE-TX.

- The Module is not hot-swappable

- The Module is not hot-insertable.

- The Module only operates with Category 5 Ethernet cable.

PROBLEM SOLVING

If you suspect a problem, carry out these steps *before* contacting your supplier:

- Ensure that the Module is correctly installed in the Switch.

- Ensure that the Switch in which the Module is fitted is powered-up.

- Ensure that the device at the far end of the line is powered-up and operating correctly.

- Check that all connectors on the Category 5 cable are correctly engaged.

For information about technical support , refer to the documentation supplied with your Supplier.

TECHNICAL SUPPORT

The following options are available for technical support:

- In the first instance contact your Network Supplier

- Check the 3Com knowledgebase at **http://knowledgebase.3com.com**

- Browse the 3Com web site on **http://www.3com.com**

Please have your product model name, part number, hardware revision number and serial number along with all relevant details of the problem to hand before calling your Network Supplier or 3Com on the numbers below.

Country	Telephone Number	Country	Telephone Number	Country	Telephone Number
Asia, Pacific Rim				**Latin America**	
Australia	1 800 678 515	P.R. of China	10800 61 00137 or	Brazil	0800 13 3266
Hong Kong	800 933 486		021 6350 1590 or	Mexico	01 800 849CARE
India	+61 2 9937 5085 or		00800 0638 3266	Puerto Rico	800 666 5065
	000800 6501111	Singapore	800 6161 463	Central and South	AT&T +800 998 2112
Indonesia	001 800 61 009	S. Korea:	00798 611 2230 or	America	
Japan	03 5783 1270		02 3455 6455		
Malaysia	1800 801 777	Taiwan, R.O.C.	0080 611 261		
New Zealand	0800 446 398	Thailand	001 800 611 2000		
Pakistan	+61 2 9937 5083				
Philippines	1235 61 266 2602				
Europe, Middle East and Africa					
From anywhere in these regions, call:	+44 (0)1442 435529 phone +44 (0)1442 436722 fax				
Europe and South Africa From the following countries, you may use the following toll-free numbers:					
Austria	0800 297468	Ireland	1800 553117	Portugal	0800 831416
Belgium	0800 71429	Israel	1800 9453794	South Africa	0800 995014
Denmark	800 17309	Italy	800 8 79489	Spain	900 983125
Finland	0800 113153	Luxembourg	0800 3625	Sweden	020 795482
France	0800 917959	Netherlands	0800 0227788	Switzerland	0800 55 3072
Germany	0800 1821502	Norway	800 11376	U.K.	0800 966197
Hungary	06800 12813	Poland	00800 3111206		
North America	1 800 NET 3Com (1 800 638 3266) Enterprise Customers: 1 800 876 3266				

TECHNICAL SPECIFICATIONS

Operating Temperature	0 to 40°C (32 to 105°F)
Operating Humidity	10 to 95% non-condensing
Power Consumption	10.6 W maximum
Safety Standards	UL 1950 EN60950 CSA 22.2#950 IEC 60950
Electromagnetic Compatibility	CISPR22 Class A EN55022 Class A AS/NZS 3548 Class A FCC Part 15 Class A ICES-003 Class A VCCI Class A CNS 13438 Class A Korean EMC Approval EN55024

REGULATORY NOTICES

FCC Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference to radio communications, in which case the user will be required to correct the interference at their own expense.

Information To The User

If this equipment does cause 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 the receiving antenna.

- Relocate the equipment in relation to the receiver.

- Move the equipment away from the receiver.

- Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

How to Identify and Resolve Radio-TV Interference Problems

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

In order to meet FCC emissions limits, this equipment must be used only with cables which comply with IEEE 802.3.

CE Statement (Europe)

This product complies with the European Low Voltage Directive 73/23/EEC and EMC Directive 89/336/EEC as amended by European Directive 93/68/EEC.

CSA Statement

This Class A digital apparatus meets all requirements of the Canadian interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

VCCI Statement

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＡ情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

BSMI Statement

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。

LEGAL NOTICES

ENVIRONMENTAL STATEMENTS

General Environmental Statement

It is the policy of 3Com Corporation to be environmentally-friendly in all operations. To uphold our policy, we are committed to:

- Establishing environmental performance standards that comply with national legislation and regulations
- Conserving energy, materials and natural resources in all operations
- Reducing the waste generated by all operations
- Ensuring that all waste conforms to recognized environmental standards
- Maximizing the recyclable and reusable content of all products
- Ensuring that all products can be recycled, reused and disposed of safely
- Ensuring that all products are labelled according to recognized environmental standards
- Improving our environmental record on a continual basis

End Of Life Statement

3Com processes allow for the recovery, reclamation and safe disposal of all end-of-life electronic components.

Regulated Materials Statement

3Com products do not contain any hazardous or ozone-depleting material.

Environmental Statement about the Documentation

The documentation for this product is printed on paper that comes from sustainable, managed forests; it is fully biodegradable and recyclable, and is completely chlorine-free. The varnish is environmentally-friendly, and the inks are vegetable-based with a low heavy-metal content.

Product Registration

You can now register your 10/100/1000BASE-T Module (3C17121) and 10/100/1000BASE-T Dual Module (3C17122) on the 3Com web site at:

http://support.3com.com/registration/frontpg.pl

Documentation Feedback

Your suggestions are very important to us. They will help make our documentation more useful to you. Please e-mail comments about this document to 3Com at:

pddtechpubs_comments@3Com.com

Please include the following information when commenting: the document title, part number, and page number, if appropriate.