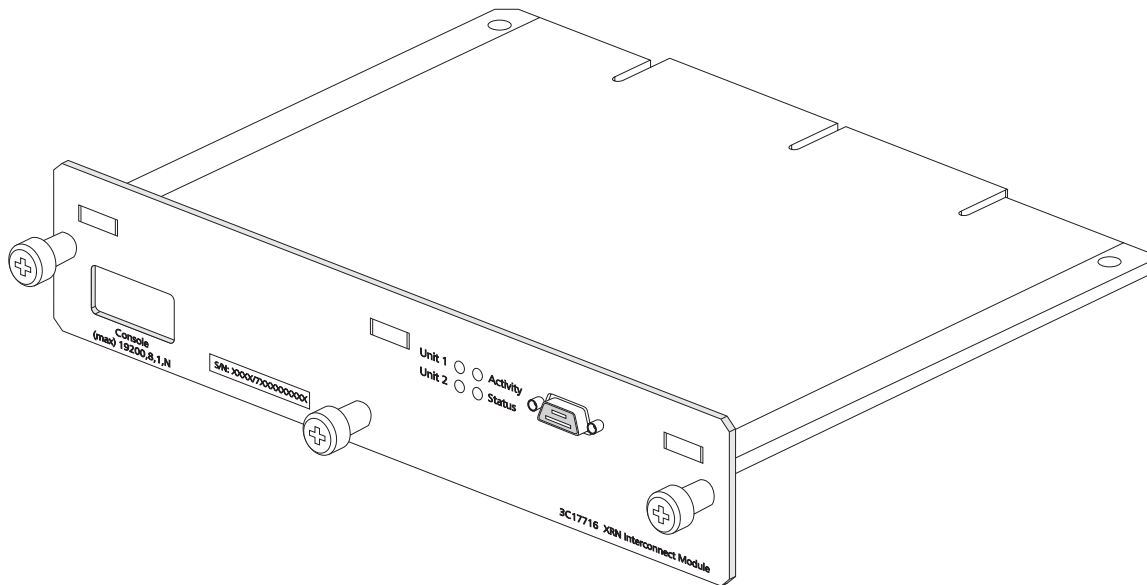# XRN Interconnect Module (3C17716)
XRN Interconnect Module Kit (3C17715)

User Guide

DUA1771-5AAA02

3com

INTRODUCTION

Introducing the XRN Interconnect Module Kit

With an XRN Interconnect Module Kit (3C17715) you can interconnect two Switch units.

This kit contains:

- Two XRN Interconnect Modules (3C17716)
- One standard XRN Interconnect Cable (3C17721)

The Switches that support this module are:

- SuperStack® 3 Switch 4900
- SuperStack 3 Switch 4900 SX
- SuperStack 3 Switch 4924
- SuperStack 3 Switch 4950
- 3Com® Switch 4060
- 3Com Switch 4050

The Interconnect Module requires management software version 3.0 or later to be installed on the Switch. For instructions on upgrading the management software, refer to the documentation supplied with your Switch.

You can gather information about the status of the Module and its packet activity using the Expansion Module LEDs on the front of the Switch and the LEDs on the front panel of the Module. For explanations on how the LEDs work, see the "LED Function Tables" on page 3.

The Interconnect Cable

The Interconnect Cable is used to interconnect two Switch units, both fitted with Interconnect Modules.

The standard Interconnect Cable is 1 m (3.28 ft) long and color-coded with a yellow marker at one end and a blue marker at the other end.

The end of the Interconnect Cable that you connect to the Switch determines the identity of the Switch. The Switch that has the blue end of the cable connected to it will be Unit 1. The Switch that has the yellow end of the cable connected to it will be Unit 2.

The terms Unit 1 and Unit 2 are used simply to identify the Switch units for management purposes only.

Figure 1 The Interconnect Cable

Blue Marker / Unit 1   Yellow Marker / Unit 2

INSTALLING AND REMOVING THE MODULE

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.

VORSICHT: 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.

VORSICHT: 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.

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.

CAUTION: The Interconnect Module is not hot-swappable or hot-insertable. 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.

Installing the Module into a Switch

To install the Module:

1 Ensure that the power supply and the backbone connection cables are disconnected from the Switch. Always wear an anti-static wristband connected to a suitable earth point.

2 Undo the three 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 2). Make sure the Module is pushed fully in.

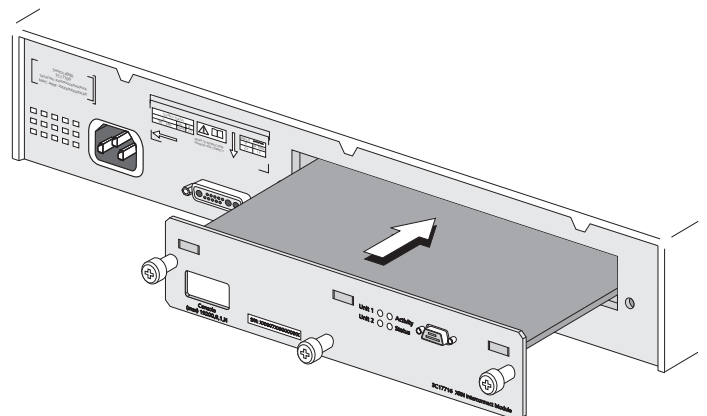5 Secure the Module by tightening the three captive screws with a suitable screwdriver.

Keep the blanking plate and screws 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 cool air through the Switch.

Removing the Module from a Switch

To remove the Module:

1 Ensure that the power supply and the backbone connection cables are disconnected from the Switch. Always wear an anti-static wristband connected to a suitable earth point.

2 Undo the three captive screws on the Module with a suitable screwdriver. Do not remove any other screws from the rear of 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 cool air through the Switch.

Figure 2 Installing the Module

INTERCONNECTING TWO SWITCHES

Interconnecting Two Switches

To interconnect two Switches, you will need the XRN Interconnect Module Kit (part number 3C17715). This kit contains:

- Two XRN Interconnect Modules (3C17716)
- One standard XRN Interconnect Cable (3C17721)

You can interconnect two Switch units that are located in separate racks with a 5 m (16.40 ft) long Interconnect cable (3C17722). Contact your network supplier for further information.

CAUTION: *It is important that you only plug an XRN Interconnect Cable (3C17721 or 3C17722) into the connector on the XRN Interconnect Module (3C17716).*
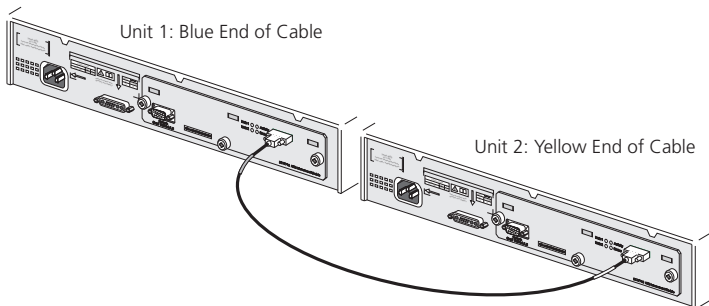
Connecting any other 9-way plug into the connector on the XRN Interconnect Module could result in damage to your hardware.

The end of the Interconnect Cable that you connect to the Switch determines the identity of the Switch. The Switch that has the blue end of the cable connected to it will be Unit 1. The Switch that has the yellow end of the cable connected to it will be Unit 2.

The terms Unit 1 and Unit 2 are used simply to identify the Switch units for management purposes only.

Figure 3 Interconnecting Two Switches

Unit 1: Blue End of Cable

Unit 2: Yellow End of Cable

To interconnect two Switches:

1 Install the Interconnect Modules into the Switch units, as described on page 2.

2 Connect the Interconnect Cable to the Interconnect Modules (see Figure 3).

3 Power-up the Switch units.

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

Always secure the Interconnect Cable to the Interconnect Modules by tightening its securing screws.

CAUTION: *3Com recommends that you do not connect or disconnect the Interconnect Cable when the Switches are in use. If you do, the flow of data will be affected and your network configuration settings may change.*

LED Function Tables

You can gather information about the status of the Module and its packet activity using the Expansion Module LEDs on the front of the Switch (see Table 1) and the Port LEDs on the front panel of the Module (see Table 2).

Table 1 Switch LED Function Table

Expansion Module Activity LED		
Status	**Color**	**Meaning**
On	Yellow	Packets are being transmitted or received on the Module.
Off	No color	There are no packets being transmitted or received on the Module.

Expansion Module Status LED		
Status	**Color**	**Meaning**
Off	No color	The Module is not installed.
Flashing	Yellow	The Module is installed but is not recognised (faulty or unsupported).
On	Yellow	The Module is installed but no link is present.
On	Green	The Module is installed and a link is present.

Unit 1—4 LED		
Status	**Color**	**Meaning**
On	Green	Determines the identity of the Switch when interconnected to another Switch to create an XRN Distributed Fabric and that a link is present.
Off	No color	A fault has occurred.

Table 2 Module LED Function Table

Activity LED		
Status	**Color**	**Meaning**
On	Yellow	Packets are being transmitted or received on this port.
Off	No color	There are no packets being transmitted or received on this port.

Status LED		
Status	**Color**	**Meaning**
On	Green	A link is present and the port is enabled.
Off	No color	There is no link present.

Unit 1—2 LED		
Status	**Color**	**Meaning**
On	Green	Determines the identity of the Switch when interconnected with another Switch. The LEDs indicate 'Unit 1' and 'Unit 2' respectively.

MODULE PORT RESTRICTIONS

When using the Interconnect Module, note the following:

- Only one Interconnect Module may be fitted into the Switch.
- The Interconnect Module is not hot-swappable.
- The Interconnect Module is not hot-insertable.
- The Interconnect Module only operates with the Switch units listed on page 1.

PROBLEM SOLVING

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

- Check that the Interconnect Module is correctly installed in the Switch.

  When you insert the Module into the Switch, push the Module in until the Module's back plate is in full contact with the Switch's chassis. Secure the Module to the Switch by tightening the three captive screws fully with a screwdriver. If an error is indicated during the Power On Self Test, check that the module has been correctly inserted.

- Check that the Interconnect cabling is correctly connected and secured.

- Check that the Switch, into which the Interconnect Module is fitted, is powered-up.

- Check that the correct management software is being used on the Switch.

  If the Module Status LED on the front of the Switch is flashing yellow, the Module is installed but not supported by the Switch. The Switch will continue to operate normally but you must upgrade the management software on the Switch for it to recognize and support the Module and enable the Module's ports. You can download the latest version of the management software from the 3Com website at: **http://support.3com.com**

  Alternatively, if you received a CD-ROM with your Module, you can upgrade your Switch with the management software contained on the CD-ROM.

TECHNICAL SUPPORT

If you require assistance, contact your Network Supplier first. If you require further assistance, the following options are available for technical support:

Online Technical Services

3Com offers worldwide product support 24 hours a day, 7 days a week, through the following online systems:

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

Telephone Support

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					
Australia	1 800 678 515	Malaysia	1800 801 777	Singapore	800 6161 463
Hong Kong	800 933 486	New Zealand	0800 446 398	S. Korea	00798 611 2230 or
India	+61 2 9424 5179 or	Pakistan	+61 2 9937 5083		02 3455 6455
	000800 650 1111	Philippines	1235 61 266 2602 or	Taiwan	00801 611 261
Indonesia	001 803 61009		1800 1 888 9469	Thailand	001 800 611 2000
Japan	00531 616 439 or	P.R. of China	10800 61 00137 or		
	03 5977 7991		021 6350 1590 or		
			00800 0638 3266		
Europe, Middle East and Africa					
From anywhere in these regions, call:	+44 (0)1442 435529 phone				
From the following countries, you may use the numbers shown:					
Austria	01 7956 7124	Hungary	06800 14466	Poland	00800 441 1357
Belgium	070 700 770	Ireland	1800 509359	Portugal	707 200 123
Denmark	7010 7289	Israel	1800 943 2632	South Africa	0800 991196
Finland	01080 2783	Italy	199 161346	Spain	9 021 60455
France	0825 809 622	Luxembourg	800 29880	Sweden	07711 14453
Germany	01805 404 747	Netherlands	0900 777 7737	Switzerland	08488 50112
		Norway	815 33 047	U.K.	0870 241 3901
Latin America					
From the Caribbean, Central and South America, call:					
Antigua	1 800 988 2112	Colombia	AT&T +800 998 2112	Nicaragua	AT&T +800 998 2112
Argentina	0 810 444 3COM	Costa Rica	AT&T +800 998 2112	Panama	AT&T +800 998 2112
Aruba	1 800 998 2112	Curacao	1 800 998 2112	Paraguay	54 11 4894 1888
Bahamas	1 800 998 2112	Ecuador	AT&T +800 998 2112	Peru	AT&T +800 998 2112
Barbados	1 800 998 2112	Dominican Republic	AT&T +800 998 2112	Puerto Rico	1 800 998 2112
Belize	52 5 201 0010	Guatemala	AT&T +800 998 2112	Salvador	AT&T +800 998 2112
Bermuda	1 800 998 2112	Haiti	57 1 657 0888	Trinidad and Tobago	1 800 998 2112
Bonaire	1 800 998 2112	Honduras	AT&T +800 998 2112	Uruguay	AT&T +800 998 2112
Brazil	0800 13 3COM	Jamaica	1 800 998 2112	Venezuela	AT&T +800 998 2112
Cayman	1 800 998 2112	Martinique	571 657 0888	Virgin Islands	57 1 657 0888
Chile	AT&T +800 998 2112	Mexico	01 800 849CARE		
North America	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	3 W maximum
Safety Standards	UL 1950, EN 60950, CSA 22.2#950-93, IEC 950, AS/NZS 3260
Electromagnetic Compatibility	ICES-003 Class A, FCC Part 15 Class A, EN55022 Class A, VCCI Class A, AS/NZS 3548 Class A, CISPR22 Class A, CNS 13438 Class A, Korean EMI Class A

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 tele-vision 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 Interconnect Modules (3C17716) on the 3Com web site at:

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

From the Product Registration page, select the Product Category "Switches".

You cannot register the Interconnect Kit (3C17715). You can only register the individual modules with their associated serial numbers.

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.