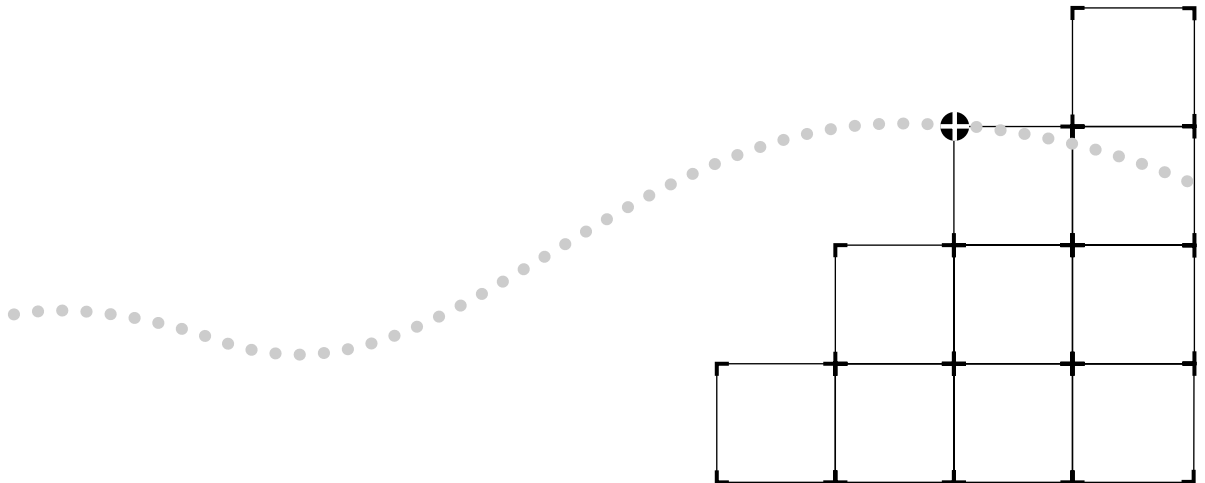




# SUPERSTACK II HUB TR RING IN/RING OUT AND ONTRUNK MODULES INSTALLATION GUIDE

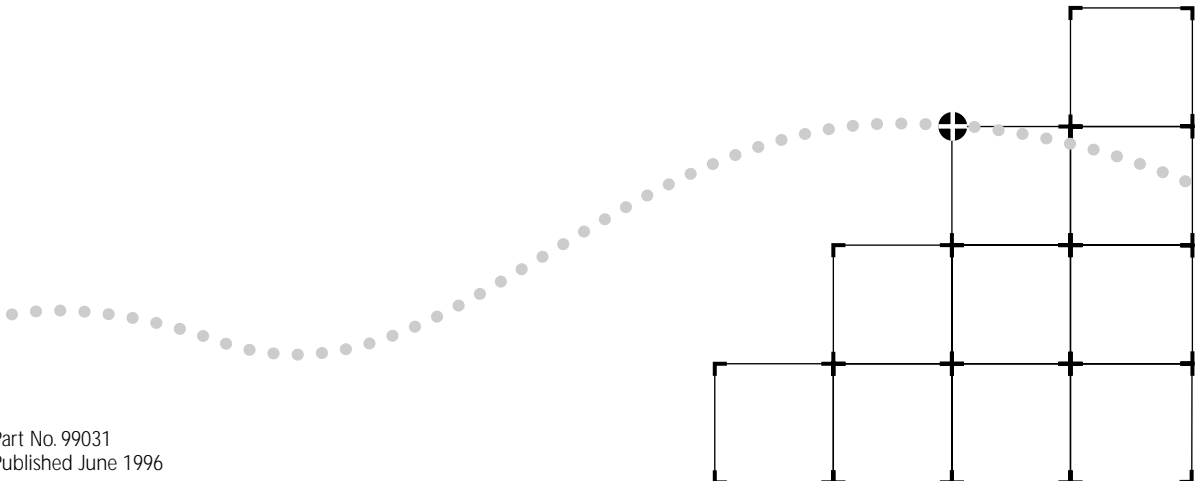




# SUPERSTACK II HUB TR RING IN/RING OUT AND ONTRUNK MODULES

## INSTALLATION GUIDE

- 3C510503
- 3C510504
- 3C510506
- 3C510513
- 3C510514



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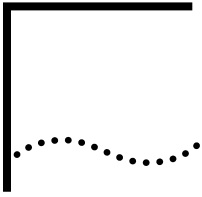
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Guide written, illustrated, and produced by Chris Flisher.



# SUPERSTACK II HUB TR RING IN/RING OUT MODULES ONTRUNK MODULES

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## Overview

The SuperStack II Hub TR Ring In/Ring Out modules allow you to expand your Token Ring network beyond the capacity of a single stack to adjacent wiring closets. In addition, the Ring In/Ring Out modules provide access to the sophisticated management functions of Transcend Enterprise Manager when used with a Network Management Module. RI/RO modules are available in two families for connecting to two families of products.

### SuperStack II Hub TR Ring In/ Ring Out Modules

These modules connect to SuperStack II Hub TR hubs, LinkBuilder FMS TR hubs, LinkBuilder TR hubs, LinkBuilder TRi hubs, and LinkBuilder Focus hubs.

- SuperStack II Hub TR Fiber Ring In/Ring Out Module -#3C510503
  - Four ST fiber optic connectors
- SuperStack II Hub TR Copper Ring In/Ring Out Module -#3C510504
  - Two RJ45 shielded connectors (UTP or STP cable)
- SuperStack II Hub TR Copper/Fiber Ring In/Ring Out Module -#3C510506
  - One RJ45 and Two ST fiber optic connectors

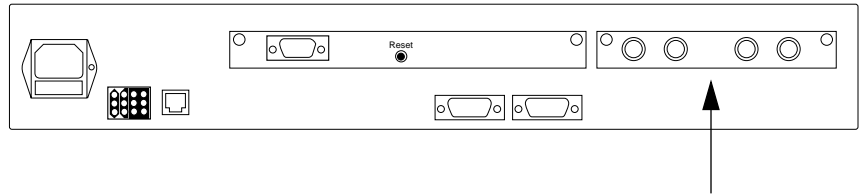
### SuperStack II Hub TR ONtrunk Modules

The SuperStack II Hub TR ONtrunk modules support Ring In/Ring Out connections with ONcore, ONline, ONsemble, and IBM™ 8230, 8250, 8260, 8238 Token Ring devices and operate in SuperStack II Hub TR hubs only.

- SuperStack II Hub TR ONtrunk Fiber Module -#3C510513
  - Four ST fiber optic connectors
- SuperStack II Hub TR ONtrunk Copper Module -#3C510514
  - Two RJ45 shielded connectors

## Installation

The SuperStack II Hub TR Ring In/Ring Out and ONtrunk modules slide into a slot on the rear panel of SuperStack II Hub TR. Refer to Figure 1 or to the SuperStack II Hub TR User Manual for the location of the module slot.



**Figure 1** Rear Panel Location of the SuperStack II Hub TR Ring In/Ring Out Slot

Proceed as follows:

- 1 Disconnect the Hub TR from the AC power source, or from the Redundant Power System.
- 2 Remove the filler plate by removing the screws that hold it in place. You should keep the filler plate in a safe place in case you need it at a later date.
- 3 Hold the Ring In/Ring Out module flat and position the module into the card guides located inside the module slot.
- 4 Slide the module into the card guides until the backplane connector mates with the corresponding connector inside the Hub TR.
- 5 Secure the Ring In/Ring Out module in place with the two screws from the filler plate.

## Configuring Phantom Current

Phantom Current provides a method for checking Ring In/ Ring Out cables when connecting to 3Com hubs. If a cable break occurs (on fiber or copper) the link will be isolated immediately. When a good cable is inserted the RI/RO link is re-enabled.

Refer to the chart and steps below:

### Phantom Current LED States

Phantom LED	RI/RO Cable State	Trunk LED State
ON	Bad cable or disconnected	OFF
ON	Good cable	ON (green)
OFF	Bad cable or disconnected	Flashing yellow
OFF	Good cable	ON (green)

### Phantom Current Settings

FROM	TO	Phantom Current Setting
Hub TR RI/RO	Hub TR*	ON
Hub TR RI/RO	Hubs other than Hub TR	OFF
Hub TR ONtrunk	ONcore, ONsemble, ONline, IBM 8238, 8250, 8260	ON
Hub TR ONtrunk	Other hubs or equipment, including IBM 8230, 5202M-FR, 5208M-TP	OFF

\*Hub TR, including: LinkBuilder FMS TR 12/24, LinkBuilder TR/TRi, LinkBuilder Focus, 82x,

## Configuring Hub TR ONtrunk Modules

Use the SuperStack Hub TR ONtrunk Ring In/Ring Out Module to communicate between a Hub TR and the following devices:

- ONcore System
- ONline Systems
- ONsemble Stack Systems

When using the ONtrunk RI/RO Module to connect to ONcore, ONsemble, or ONline equipment from a SuperStack II Hub TR you must enable Phantom Current on the Hub TR Ring In/ Ring Out Module.

Refer to the following modes

- ONcore mode (default) in ONcore System
- ONsemble mode (default) in ONsemble Stack System
- Phantom mode (default) in ONline Systems with the 5204M-CR



**NOTE:** Refer to the appropriate system manuals for further information.

## Connecting to non-3Com Equipment

When Phantom Current is turned OFF, the Token Ring data path attempts to use the Ring In or Ring Out port. If no cable is connected to the port, beaconing occurs and forces the port to isolate using DRI and ADRI features of the Hub TR. This causes the RI/RO status LED on the front panel of the Hub TR to flash yellow. The steps below prevent this from happening by turning Phantom Current OFF after providing a good data path (cable).

Follow the steps below when connecting to non-3Com equipment. Refer to "Cable Pin-outs" for more information.

- 1 Turn Phantom Current ON for the RI or RO port.
- 2 Plug cable into RI or RO connector on the 3Com hub.
- 3 Turn Phantom Current OFF by pressing the switch on the front panel of the Hub TR until you achieve the desired combination of settings. Refer to the SuperStack II Hub TR manual.

**Cable Pin-outs**

The following charts provide the pin-outs for connecting to a SuperStack II Hub TR. Note that pins 3 & 6 and 4 & 5 are always twisted pairs as shown below.

	SuperStack II Hub TR	LinkBuilder FMS TR/ ONcore/ONline/ONsemble
Twisted Pairs <	3	3 (Backup -)
	6	6 (Backup +)
<	4	4 (Primary +)
	5	5 (Primary -)

	SuperStack II Hub TR*	LinkBuilder TRI/Focus/82x*
<	3	5 (Primary -)
<	6	4 (Primary +)
<	4	3 (Backup -)
	5	6 (Backup +)

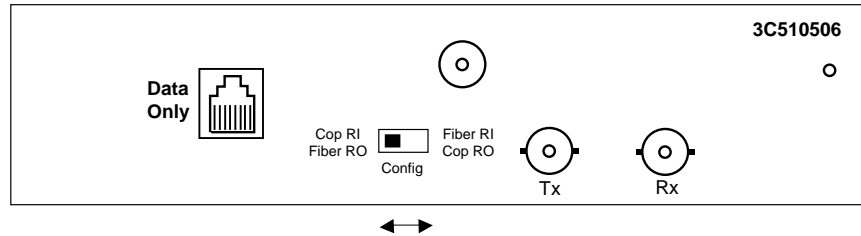
\*Asymmetrical connections. Label each end appropriately

	SuperStack II Hub TR RJ45 Pins	8228 Type 1 UDC
<	3	Green (Backup -)
<	6	Red (Backup +)
<	4	Orange (Primary +)
	5	Black (Primary -)



## Module Switch Settings (#3C510506 only)

The following module switch settings pertain to the dual-media module (#3C510506) only. The mixed-media module provides a switch-selectable interface between copper and fiber optic cables. With this module you can select to have either a copper ring-in/fiber ring-out or a fiber ring-in/copper ring-out.



### To select copper ring-in/fiber ring-out

- Slide the switch located on Copper/Fiber RI/RO module to the left (facing the module panel).

### To select fiber ring-in/copper ring-out

- Slide the switch located on the Copper/Fiber RI/RO module to the right (facing the module panel).



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