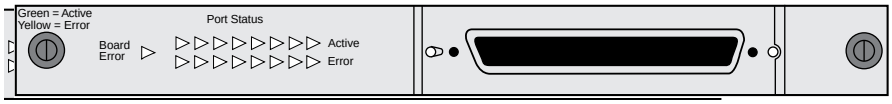
ETHERNET RJ-21 MODULE INSTALLATION GUIDE

For the LANplex 2500/2016

Module Description

This option module contains eight (8) Ethernet 10BASE-T ports with one (1) Telco connector. The ports are implemented as "MDI-X" connections, meaning that a workstation can be connected directly to a port with a straight cable. For a description of how to configure this module into your network, see the *Planning Your Site* guide for your LANplex system.



Status LEDs

The option module contains one **Board Error** LED, eight port status **Active** LEDs, and eight port status **Error** LEDs. Depending on the condition, the port status LED is either **Active** (green) or **Error** (yellow). See the table below for a description of the status LEDs.

LED	Name	Color	Description
Module Status	Board Error	Yellow	Indicates that either an error has occurred or the option module has failed a diagnostic procedure
Port Status	Active	Green	Indicates that the associated port is active
	Error	Yellow	Indicates that an error condition has occurred with the associated port

Safety Information

Electrostatic discharge (ESD) can damage components on the module. ESD occurs when the module is improperly handled and can cause complete or intermittent failures. To prevent ESD-related damage:

- Always wear the ESD wrist strap provided with the LANplex system, ensuring that it makes good skin contact
- Keep the module in its antistatic shielded bag until you are ready to install it
- Do not touch the components, pins, leads, or solder connections
- Always handle the module by its edges

Prior to Installation

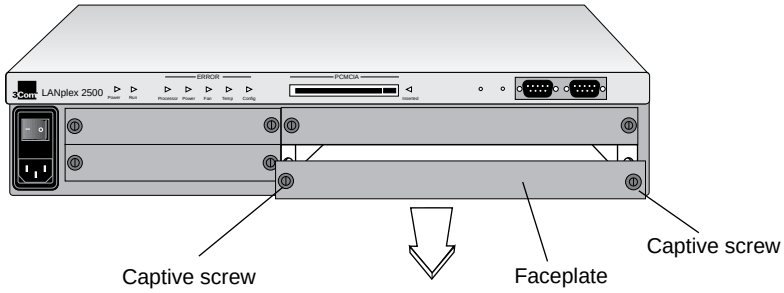
Before you install your new module, follow the appropriate pre-installation instructions:

Read if initial installation

Your LANplex system is shipped without modules installed and with protective faceplates covering the installation slots. Initial installation requires that you remove the protective faceplate covering the selected installation slot prior to installing the option module.

CAUTION: *When handling modules, 3Com recommends that you always use a wrist strap connected to a proper ground. This helps prevent the module from being damaged by electrostatic discharge. Additionally, when not in use, the module should be stored in an antistatic bag.*

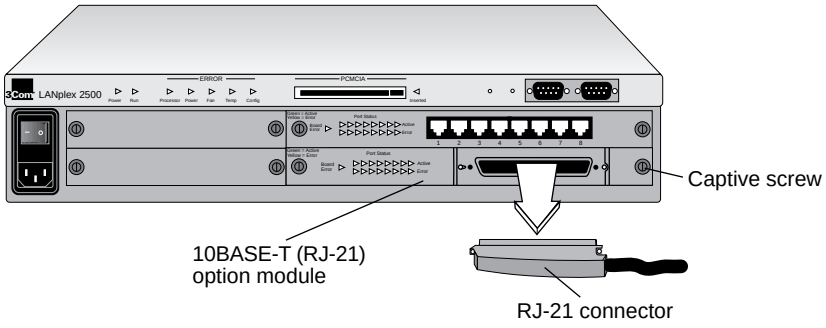
To remove the faceplate: 1) loosen the two captive screws securing the faceplate to the chassis, and 2) pull the faceplate away from the system.



Read if replacing a module

You can replace a module while the system is powered on. Replacing the module requires that you remove the attached cables from the module's ports prior to installing the new module.

To replace a module: 1) disconnect the cables from the module's ports, 2) loosen the two captive screws securing the module to the chassis, and 3) pull the module out of the chassis.



NOTE: *The LANplex system will automatically reset when a module has been installed with the power on.*

NOTE: *If you physically change the configuration of the system after defining an IP interface, the port designated for that interface may no longer be valid. You may have to redefine the interface. For information on defining an IP interface, see the Administration Console User Guide for your LANplex system.*

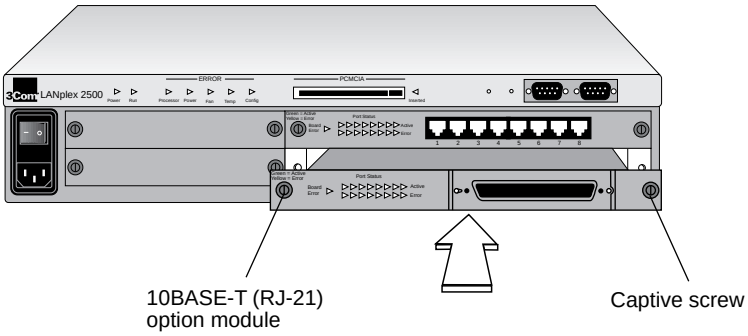
Installing the Module

To install the new module into the LANplex system perform the following steps:

1. Ensure that you are properly grounded.
2. Remove the module from its antistatic bag.

WARNING: *If the system is powered on when you are replacing the module, do not insert any metal objects into the open slot (for example, a screwdriver or a finger with jewelry). This could cause burns or other bodily harm.*

3. Place the module between the guides of the selected slot and slide the module into the chassis. See the figure below.



4. To seat the module, firmly push the module forward to engage the module and backplane connectors. You will feel a slight resistance as the connectors engage.

CAUTION: *If the resistance is too great, the module and backplane connectors may not be aligned. Forcing the module forward could damage the board or backplane connectors. If necessary, remove and reinsert the module, ensuring that the connectors are properly aligned. You should not have to seat the module by tightening the captive screws.*

5. Tighten the captive screws to secure the module in the chassis.

Once the module is installed, see Chapter 4: *Cabling the System* in your *Getting Started* guide for information on cabling the module to the network.

Option Module Diagnostics

Module diagnostics run at power up or when replacing a module with the power on. During diagnostics, the module's port status **Error** LEDs are lit yellow. When diagnostics are successfully completed, the port status **Active** LEDs turn green for those ports that are cabled. If any port status **Error** LEDs remain yellow, the port is not operational. If the module's **Board Error** LED is lit yellow, the module has failed a diagnostic test. To troubleshoot module failures see Chapter 7: *Troubleshooting the System* in your *Getting Started* guide.

Pin-out Information

The table below provides punch-down block pin assignments for the eight 10BASE-T (RJ-21) ports.

Pin/Port	Color Code	Signal	Pin/Port	Color Code	Signal	Pin/Port	Color Code	Signal
1/1	blue_white	Receive -	18	green_yellow	unused	35/5	red_gray	Receive +
2/1	orange_white	Transmit -	19	brown_yellow	unused	36/6	black_blue	Receive +
3/2	green_white	Receive -	20	gray_yellow	unused	37/6	black_orange	Receive +
4/2	brown_white	Transmit -	21	blue_violet	unused	38/7	black_green	Receive +
5/3	gray_white	Receive -	22	orange_violet	unused	39/7	black_brown	Receive +
6/3	blue_red	Transmit -	23	green_violet	unused	40/8	black_gray	Receive +
7/4	orange_red	Receive -	24	brown_violet	unused	41/8	yellow_blue	Receive +
8/4	green_red	Transmit -	25	gray_violet	unused	42	yellow_org	unused
9/5	brown_red	Receive -	26/1	white_blue	Receive +	43	yellow_green	unused
10/5	gray_red	Transmit -	27/1	white_orange	Transmit +	44	yellow_brown	unused
11/6	blue_black	Receive -	28/2	white_green	Receive +	45	yellow_gray	unused
12/6	orange_black	Transmit -	29/2	white_brown	Transmit +	46	violet_blue	unused
13/7	green_black	Receive -	30/3	white_gray	Receive +	47	violet_orange	unused
14/7	brown_black	Transmit -	31/3	red_blue	Transmit +	48	violet_green	unused
15/8	gray_black	Receive -	32/4	red_orange	Receive +	49	violet_brown	unused
16/8	blue_yellow	Transmit -	33/4	red_green	Transmit +	50	violet_gray	unused
17	org_yellow	unused	34/5	red_brown	Receive +			

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