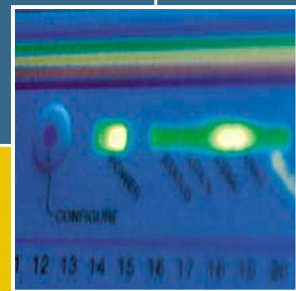
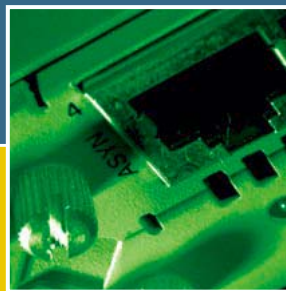
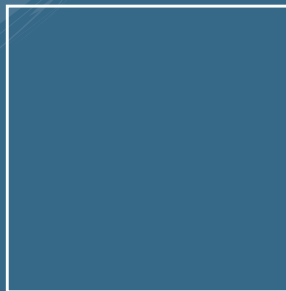


UPLINK MODULE

QUICK INSTALL GUIDE



Uplink Module Quick Install Guide
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Models Covered By This Guide

This Quick Install Guide includes information on the following models:

- AT-A35/SX
- AT-A35/LX
- AT-A39/T
- AT-A40/SC
- AT-A40/MT
- AT-A41/SC
- AT-A41/MT
- AT-A42/GBIC

Quick Install Guide updates can be found at www.alliedtelesyn.co.nz/support/support.html.

Compatible Switch Units

This section lists all uplink module models, and indicates which switches each model can be installed in.

- AT-A35/SX: All Rapier Switches, Rapier *i* switches, and AR800 Modular Switching Routers
- AT-A35/LX: All Rapier Switches, Rapier *i* switches, and AR800 Modular Switching Routers
- AT-A39/T: All Rapier Switches, Rapier *i* switches, and AR800 Modular Switching Routers
- AT-A40/SC: Rapier G6 and G6F switches and all Rapier *i* switches
- AT-A40/MT: Rapier G6 and G6F switches and all Rapier *i* switches
- AT-A41/SC: Rapier G6 and G6F switches and all Rapier *i* switches
- AT-A41/MT: Rapier G6 and G6F switches and all Rapier *i* switches
- AT-A42/GBIC: All Rapier Switches, Rapier *i* switches, and AR800 Modular Switching Routers

Package Contents

The following items are included with each Uplink Module. Contact your sales representative if any items are damaged or missing.

- One Uplink Module.
- One Uplink Module Quick Install Guide.
- One warranty card.

Installing an Uplink Module

Follow these steps to install an uplink module:

1. Read the safety information

For safety information, see the *Safety and Statutory Information* booklet for your switch. A copy of this booklet is supplied with each switch, and can also be downloaded from www.alliedtelesyn.co.nz/support/support.html.



AT-82xx Expansion Modules are not compatible with AR800 Series Modular Switching Routers or Rapier Switches. Attempting to install an AT-82xx Expansion Module into an AR800 Series Modular Switching Router or Rapier Switch may damage the switch unit and Expansion Module. If you are unsure of a Module's compatibility, before installing it, contact an authorised Allied Telesyn distributor or reseller.

2. Gather the tools and equipment you will need

A medium-sized flat-bladed screwdriver may be useful when loosening the Uplink Module thumbscrews.

You should also have any cables required for connecting the Uplink Module to other network devices.

AT-A42/GBIC uplink modules require a GBIC before they can be connected to a network.

3. If connected, disconnect the switch unit from its redundant power supply

4. Disconnect the switch unit from the mains power supply



Be sure to disconnect the power cord and the redundant power supply cable before installing an Uplink Module. Installing an Uplink Module with the switch unit powered ON can damage the Uplink Module.



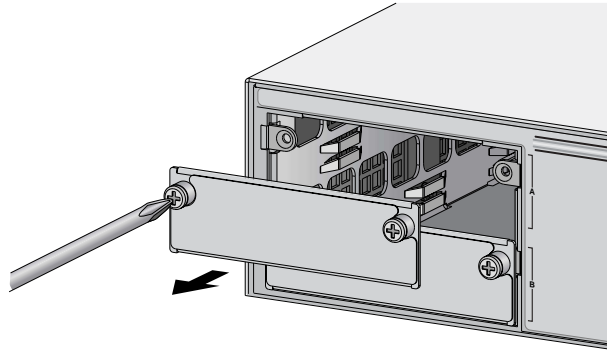
The power cord and the redundant power supply cable are used to disconnect AC switch units. To de-energise the equipment, disconnect the power cord and the redundant power supply cable.

5. Remove the appropriate uplink bay face-plate on the switch unit's front panel

AR800 Series Modular Switching Routers and Rapier Switches have two uplink module expansion bays. If this is the first Uplink Module to be installed, it should be installed in the top bay (to simplify VLAN configuration). Remove the face-plate as shown in Figure 1.



Keep the face-plate for future use. If you should remove the Uplink Module, replace the face-plate to prevent dust and debris from entering the switch unit and to maintain proper airflow.

Figure 1: Removing a blank face-plate.**6. Prepare the Uplink Module**

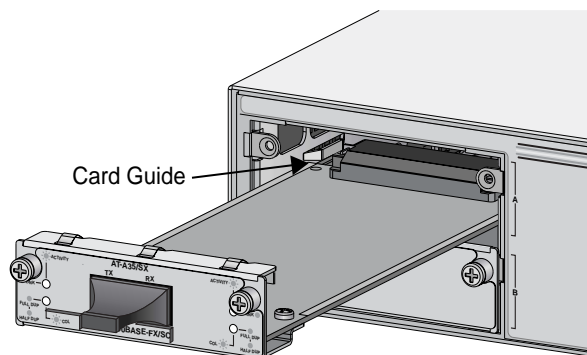
In an antistatic environment, remove the Uplink Module from its packing material. Be sure to observe ESD precautions.



Do not attempt to install an Uplink Module or any other expansion option without observing correct antistatic procedures. Failure to do so may damage the switch unit or Uplink Module. If you are unsure what the correct procedures are, contact your authorised Allied Telesyn distributor or reseller.

7. Slide the Uplink Module into place

Make sure that the module is aligned with the card guides on each side of the bay (see Figure 2).

Figure 2: Installing an Uplink Module.**8. Secure the Uplink Module to the switch unit**

Firmly press the Uplink Module until its connectors engage the uplink bay connectors inside the switch unit.

Use a screwdriver to tighten the Uplink Module's screws. Do not over-tighten the screws.

9. For AT-A42/GBIC uplink modules, install the GBIC

Slide the GBIC into the uplink's GBIC slot. Press the GBIC firmly into place.



A range of GBICs have been tested and approved for use with AT-A42 uplink modules, contact your authorised Allied Telesyn distributor or reseller for more information, or visit www.alliedtelesyn.co.nz.



RX and TX terminal locations on SC fibre GBIC ports are the reverse of TX and RX terminal locations on fixed SC fibre ports. When looking at an SC fibre GBIC from the front, the RX terminal is on the left and the TX terminal is on the right.

10. Apply power to the switch unit

The switch's Fault LED should flash for approximately 10 seconds as it runs internal tests.

11. If you disconnected a redundant power supply in step 3, reconnect it

12. Check that the Power LED on the switch unit's front panel lights green

If the LED fails to light, refer to the Troubleshooting section of the *Uplink Module Hardware Reference*.

13. Connect the data cables

If fitted, remove the Uplink Module's port dust cover, and connect the data cable. Make sure that each cable connection is secure.

14. Check the Uplink Module's LEDs

The following tables outline the Uplink Module LEDs. Information on Switch System and Switch Port LEDs can be found in the Troubleshooting section of the Hardware Reference for your switch unit.

LED legend

- LED is On and Green
- ☀ LED is Flashing Green
- LED is On and Amber
- ☀ LED is Flashing Amber
- LED is Off.

Table: 1 AT-A35/SX and AT-A35/LX LEDs.

LED	State	Function
Link	Green	The port is receiving light
	Off	No link is present
Activity	Flashing Amber	Frames are being transmitted or received through the port
	Off	No activity is occurring

Table 2: AT-A39/T LEDs.

LED	State	Function
Full Dup/Half Dup/Col	Green	The port is operating at full-duplex
	Amber	The port is operating at half-duplex
	Flashing amber	Collisions are occurring
	Off	No link is present
Activity	Green	A 1000 Mbps link is open
	Flashing green	1000 Mbps activity is occurring
	Amber ¹	A 10/100 Mbps link is open
	Flashing Amber ¹	10/100 Mbps activity is occurring
	Off	No link is present

1. 10/100/1000 Mbps operation is available only if the AT-A39/T Uplink Module is installed in a Rapier G6, Rapier G6F or Rapier *i* model, otherwise operation is fixed at 1000 Mbps. Early versions of the AT-A39/T operate at 1000 Mbps only, regardless of the switch model.

Table: 3 AT-A40/SC, AT-A40/MT, AT-A41/SC and AT-A41/MT LEDs¹.

LED	State	Function
Activity/Link/Fault	Green	A link is open and the port is enabled
	Flashing green	100 Mbps activity is occurring
	Flashing amber (and lower LED is Off)	The link has failed at the remote end
	Off	No link is present
Full Dup/Half Dup/Col	Green	The port is operating at full-duplex
	Amber	The port is operating at half-duplex
	Flashing amber	Collisions are occurring
	Off	No link is present
Both LEDs	Alternate flashing of upper and lower LED, amber	The switch does not support this model of uplink module

1. AT-A40 and AT-A41 Uplink Modules can only be installed in Rapier G6, G6F and Rapier *i* switches.

Table: 4 AT-A42/GBIC LEDs .

LED	State	Function
L/A Link/Activity	Green	A 1000 Mbps link is open
	Flashing green	1000 Mbps activity is occurring
	Flashing amber (and GBIC LED is Off)	A TX fault has occurred
	Off	No link is present
GBIC	Green	The switch has recognised the GBIC, the GBIC is a valid model
	Green (and L/A LED is flashing GREEN)	The port is operating at full-duplex
	Amber (and L/A LED is OFF)	The switch has not recognised the GBIC, the GBIC is not a valid model
	Amber (and L/A LED is flashing GREEN)	The port is operating at half-duplex
	Flashing amber (and L/A LED is flashing GREEN)	Collisions are occurring
	Off	No GBIC is installed, or a TX fault has occurred
Both LEDs	Slow alternate flashing of L/A and GBIC LED, amber	The switch has not recognised the GBIC, or the GBIC is not a valid model

Where To Find More Information

Sources of further information.

Information on Uplink Modules:

- The *Uplink Module Hardware Reference*, which provides detailed information on Uplink Modules.

Information on Switches and Switching Routers:

- The *Hardware Reference* for your switch or switching router, which provides detailed information on the switch unit and its hardware features.
- The *Software Reference* for your switch or switching router, which provides detailed information on configuring the switch unit and its software.
- The *User Guide* for your switch or switching router, which provides an introduction to the switch unit's Graphical User Interface and its Layer 2 switching features.

Information on other expansion options for the AR800 and Rapier Series:

- The *Network Service Module Quick Install Guide*, which outlines the procedure for installing an NSM; and the *Network Service Module Hardware Reference*, which provides detailed information on NSMs.
- The *Port Interface Card Quick Install Guide*, which outlines the procedure for installing PICs; and the *Port Interface Card Hardware Reference*, which provides detailed information on PICs.

All of these documents can be found on the Documentation and Tools CD-ROM bundled with each Switch or Switching Router, or at www.alliedtelesyn.co.nz/support/support.html.