

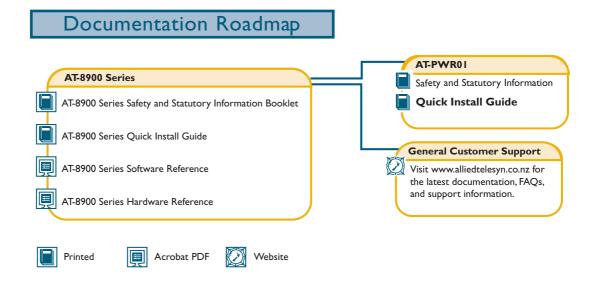
AT-PWR01 Quick Install Guide Document Number C613-04049-01 REV B.

Copyright © 2004 Allied Telesyn International, Corp. 19800 North Creek Parkway, Suite 200, Bothell, WA 98011, USA.

All rights reserved. No part of this publication may be reproduced without prior written permission from Allied Telesyn.

Allied Telesyn International, Corp. reserves the right to make changes in specifications and other information contained in this document without prior written notice. The information provided herein is subject to change without notice. In no event shall Allied Telesyn be liable for any incidental, special, indirect, or consequential damages whatsoever, including but not limited to lost profits, arising out of or related to this manual or the information contained herein, even if Allied Telesyn has been advised of, known, or should have known, the possibility of such damages.

All trademarks are the property of their respective owners.



## **Models Covered By This Guide**

This Quick Install Guide includes information on the following models:

- AT-PWR01 (AC power supply unit)
- AT-PWR01 (DC power supply unit)
- AT-FAN01 (fan only module)

# **Package Contents**

AT-8900 Series switches are supplied with a single power supply unit (PSU), either AC or DC, and a fan only module (FOM) pre-installed at factory as standard.

The following items are included with each power supply unit pre-installed in a AT-8900 Series switch at the factory. Contact your sales representative if any items are damaged or missing.

- One AC power cord (AC model)
- One power cord retaining clip (AC model)
- One Safety and Statutory Information booklet
- One warranty card

4 AT-PWR01 & AT-PWR01-80

For power supply units purchased separately, the following items are included with each unit.

- One power supply unit (AC or DC)
- One AC power cord (AC model)
- One power cord retaining clip (AC model)
- One AT-PWR01 Quick Install Guide
- One Safety and Statutory Information booklet
- One warranty card

## **Installing A Power Supply Unit (PSU)**



All AC and DC versions of this equipment must be earthed.

#### Follow these steps to install a PSU:

#### 1. Read the safety information

The AT-PWR01 Safety and Statutory Information booklet includes all relevant safety information. A copy of this booklet is supplied with the PSU, and can also be downloaded from <a href="www.alliedtelesyn.co.nz/support/at8900/">www.alliedtelesyn.co.nz/support/at8900/</a>.

### 2. Gather the tools and equipment you will need

To loosen or secure the PSU's mounting screws you will need a Phillips #2 screwdriver.

To install a DC version of the PSU, you will need an appropriate DC power source, DC supply cable, ring connectors, and a crimp tool.

#### 3. Unpack the PSU

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

Verify the package contents. If any items are damaged or missing, contact your sales representative.



Do not attempt to install a power supply unit without observing correct antistatic procedures. Failure to do so may damage the power supply unit or switch. If you are unsure what the correct procedures are, contact your authorised Allied Telesyn distributor or reseller.

#### 4. For AC models only, fit the power cord retaining clip

There is one retaining clip for the AC power inlet on the PSU.

#### 5. Remove an existing PSU or FOM



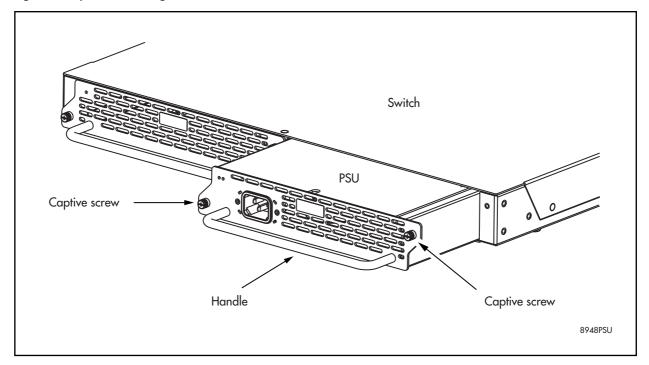
Disconnect the power cord before removing the PSU.



The PSU and switch may overheat or be damaged by dust and debris if bays are left uncovered.

Loosen the two Phillips screws on the PSU or FOM until the screws disengage from the switch chassis (see Figure 1).

Figure 1: Captive mounting screws on the AT-PWR01 and AT-FAN01



Slowly and carefully slide the PSU or FOM out of the switch's power supply bay.



If you remove a PSU, or FOM, from the switch replace the PSU, or FOM, to prevent dust and debris from entering the switch chassis and to maintain proper airflow.

#### 6. Insert a PSU

Slowly and carefully slide the PSU into the switch's power supply bay. Firmly press the PSU home (until its front panel engages or nearly engages the switch chassis).

#### 7. Secure the PSU



Keep the PSU in a straight alignment and insert it slowly. Forcing a misaligned PSU is likely to damage the chassis and PSU.

Tighten the two Phillips screws on the PSU's faceplate (see Figure 1 on page -5).

6 AT-PWR01 & AT-PWR01-80

#### 8. Apply power to the PSU

#### For AC Models:

Read the *AT-PWR01 Safety and Statutory Information* booklet before connecting a PSU to an external AC power source. A copy of the safety booklet is included with each PSU.

Plug the provided AC power cord into the AC power inlet on the rear panel of the PSU and connect the PSU to the mains power supply.

#### Important information for service personnel only:

- CAUTION: double pole/neutral fusing
- The ratings of fuses FH101 and FH102 is 250 V, 5 A

#### For DC models:

Read the *AT-PWR01 Safety and Statutory Information* booklet before connecting a PSU to a DC power source. A copy of the safety booklet is included with each PSU.



Only trained and qualified personnel should connect a DC power supply.



For centralized DC power connection, the switch should be installed only in Restricted Access Areas (Dedicated Equipment Rooms, Equipment Closets, or the like) in accordance with Articles 110-16, 110-17, and 110-18 of the National Electrical Code, ANSI/NAPA 70.

DC supply cable specifications:

- Three core cable is required
- Minimum core size: 3.3 mm<sup>2</sup> (12 AWG) high strand count copper wire
- Minimum cable rating: 600 V, 90 degrees Celsius

DC power supply specifications:

- 40 to 60 V, 48 V nominal
- Supports either positive grounded or negative grounded operation

### Circuit protection:

• 10 Amp certified/Listed circuit breaker is required for branch circuit protection

### To connect the DC supply:



Ensure that the supply cable is not live.

- 1. Remove the transparent protective terminal cover.
- 2. Strip the supply cable wires to expose 7.5mm (0.31 in.) of bare conductor. Terminate with JST FN5.5-5 or equivalent, using a crimp tool.
- 3. Connect the ground wire to the ground terminal. Terminals can be identified by the diagram on the switch's rear panel. Tighten the terminal to between 2.4 and 4.0 Nm (21.3 and 35.4 lbf in).

4. Connect the positive feed to the + (positive) terminal and the negative feed to the - (negative) terminal. Tighten the terminals to between 2.4 and 4.0 Nm (21.3 and 35.4 lbf in).



Check that the PSU terminals are wired to the correct polarity. A PSU will be damaged if incorrectly connected.

- 5. Ensure there are no exposed cable strands.
- 6. Replace the transparent plastic terminal cover.



The transparent plastic terminal cover must be replaced.

- 7. Secure the supply cable (to the rack framework or similar object) so that the connections are isolated from any force applied to the cable.
- 8. Ensure the circuit breaker (for the supply circuit) and the Run/Standby switch (on the switch) are in the OFF position.
- 9. Connect the supply cable wires to the circuit breaker.
- 10. Switch the power switch to the ON position.

#### 9. Check the PSU LEDs

Each PSU has LEDs that indicate the PSU's operational status.

Once you have inserted the PSUs and powered on the chassis, check the LEDs for correct operation using the table below as a guide (see Table 2).

Table 2: LEDs on AC and DC PSUs

LED	State	Function
Fault	Red	There is either a fan failure, or the temperature has exceeded the specified limit of 75° C (167° F).
PWR	Green	A PSU is installed and supplying power to the switch.

On the front panel of the switch there are two LEDs that indicate the operational status of each PSU installed in the switch (see Table 3).

8 AT-PWR01 & AT-PWR01-80

Table 3: PSU LEDs found on all AT-8900 Series switches

PSU 1	Green	PSU 1 is installed and supplying power to the switch, and the voltage output is within specification.
	Red	PSU 1 is installed in the switch, a fan has failed, or the PSU has exceeded its recommend temperature threshold of 75° C (167° F).
		A FOM is installed in the switch and a fan has failed.
		The bay is empty (no PSU or FOM installed).
	Not lit	A FOM is installed and the fan is good.
PSU 2	Green	PSU 2 is installed and supplying power to the switch, and the voltage output is within specification.
	Red	PSU 2 is installed in the switch, a fan has failed, or the PSU has exceeded its recommend temperature threshold of 75° C (167° F).
		A FOM is installed in the switch and a fan has failed.
		The bay is empty (no PSU or FOM installed).
	Not lit	A FOM is installed and the fan is good.

If the PSU does not function as expected, follow these steps:

- 1. Check all cable connections are correct and secure.
- 2. For DC models, check that the standby switch has been pressed and is in the ON position.
  - For AC models, check the PSU is receiving the correct AC voltage.
- 3. If the LEDs indicate a PSU fault, replace the PSU or have it serviced by authorised service personnel.

More troubleshooting information can be found in the *AT-8900 Series Hardware Reference*.

## Where to Find More Information

Sources of further information:

- The *AT-PWR01 Statutory and Safety Information* booklet, which provides safety and statutory information for the power supply units.
- The *AT-8900 Series Statutory and Safety Information* booklet, which provides important safety information and statutory declarations for AT-8900 Series switches.
- The *AT-8900 Series Quick Install Guide*, which outlines the procedure for installing a AT-8900 Series switch.
- The *AT-8900 Series Hardware Reference*, which includes detailed hardware specifications for the AT-8900 Series switch.
- The *AT-8900 Series Software Reference*, which provides detailed information on configuring the AT-8900 Series switch and its software.

You can download these documents from <a href="https://www.alliedtelesyn.co.nz/support/at8900/">www.alliedtelesyn.co.nz/support/at8900/</a>.