

AR700 Series Router Installation and Safety Guide



AR725
AR745
AR750S

AR700 Series Router Installation and Safety Guide
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19800 North Creek Parkway, Suite 200, Bothell, WA 98011, USA.

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Electrical Safety Statements

Electrical Safety

IMPORTANT: This equipment must be installed in accordance with safety precautions (Safety, page 26).

Elektrische Sicherheit

WICHTIG: Für die Installation dieses Gerätes ist die Einhaltung von Sicherheitsvorkehrungen erforderlich (Sicherheit, Seite 27).

Elektrisk sikkerhed

VIGTIGT: Dette udstyr skal installeres i overensstemmelse med sikkerhedsadvarslerne (Sikkerhed, side 29).

Elektrische veiligheid

BELANGRIJK: Dit apparaat moet in overeenstemming met de veiligheidsvoorschriften worden geïnstalleerd (Veiligheid, pagina 31).

Sécurité électrique

IMPORTANT: Cet équipement doit être utilisé conformément aux instructions de sécurité (Sécurité, page 33) .

Sähköturvallisuus

TÄRKEÄÄ: Tämä laite on asennettava turvaohjeiden mukaisesti (Turvallisuus, sivu 35).

Sicurezza elettrica

IMPORTANTE: questa apparecchiatura deve essere installata rispettando le norme di sicurezza(Norme di Sicurezza, pagina 37).

Elektrisk sikkerhet

VIKTIG: Dette utstyret skal installeres i samsvar med sikkerhetsregler (Sikkerhet, side 39).

Segurança eléctrica

IMPORTANTE: Este equipamento tem que ser instalado segundo as medidas de precaução de segurança(Segurança, página 41).

Seguridad eléctrica

IMPORTANTE: La instalación de este equipo deberá llevarse a cabo cumpliendo con las precauciones de seguridad (Seguridad, página 43).

Elsäkerhet

OBS! Alla nödvändiga försiktighetsåtgärder måste vidtas när denna utrustning används (Säkerhet, sida 45).

Models Covered By This Guide

This Quick Install Guide includes information on these models:

- AR725
- AR745
- AR750S

Documentation updates can be found at

www.alliedtelesyn.co.nz/documentation/documentation.html.

Package Contents

These items included for each router:

- One AR700 Series router
- One AC power cord (AC models)
- One power cord retaining clip
- One serial cable for connecting the router to a terminal or PC
- Two UTP network cables
- One 19 inch rack-mount kit (AR725, AR745 only)
- One *AR700 Series Router Installation and Safety Guide*
- One AR700 Series Router Documentation and Tools CD-ROM (includes the complete AR700 Series Document Set and utilities)
- One warranty card

Contact your authorised distributor or reseller if any items are damaged or missing.

Installing the AR725 and AR745

Selecting a Site

You can install the router on a level surface such as a desktop or bench, or in a standard 19-inch rack, using the rack-mount kit supplied with the router.

When you install the router, choose a site that:

- allows adequate airflow around the router and its vents.
- is free of dust and moisture.
- will maintain an ambient temperature range of 0° C to 40° C (32° F to 104° F) and a humidity range of 5% to 80% non-condensing.
- has a reliable and earthed (grounded) power supply, preferably dedicated and filtered.
- does not expose cabling to sources of electrical noise such as radio transmitters, broadband amplifiers, power lines, electric motors, and fluorescent fixtures.
- allows easy access to the router's power and cable connections.

Before Installing

- Read the safety information “Safety” on page 26.
- Gather the tools and equipment you will need.

If you are also installing an optional Port Interface Card (PIC), you will need the PIC and the *PIC Quick Install Guide*. (“Installing expansion options” on page 7)

If the router is to be connected to a redundant power supply, you will need a redundant power supply unit and cable. (“Applying power to AC models of AR725 and AR745” on page 7)

If installing a DC version of the router, you will need a DC power source, DC supply cable, and wire strippers. (“Applying power to DC models of AR725 and AR745” on page 7)

- Unpack the router. Verify the package contents. If any items are damaged or missing, contact your sales representative.
- Place the router in its operating location. See the previous section “Selecting a Site” on page 6 for guidelines on choosing a suitable location.

Installing expansion options

If you purchased optional Port Interface Cards (PICs) or Network Service Modules (NSMs), install them now by following their individual Quick Install Guides. That guide can be found with the PIC or NSM, on the Documentation and Tools CD-ROM, or can be downloaded from www.alliedtelesyn.co.nz/documentation/documentation.html.

Applying power to AC models of AR725 and AR745

1. Check the supply voltage and the router's rated voltage. AC versions of AR725 and AR745 routers are fitted with a universal power supply that will function over the range 100-240 VAC and 50–60Hz.



Warning The specific power supply requirements for a particular model are clearly displayed on the rear or underside of the router. If the supply is outside the accepted range for the router, the router may not operate or damage to the router may result.



Warning This equipment must be earthed.

2. Connect the redundant power supply (optional).

If you purchased an AR740 RPS (redundant power supply), install it now by following the instructions in its Quick Install Guide. The guide can be found on your router's Documentation and Tools CD-ROM, or can be downloaded from www.alliedtelesyn.co.nz/documentation/documentation.html.

3. Fit the power cord retaining clip to the AC power inlet on the router's rear panel.

Connect the provided power cord to the AC power inlet and clip it in place. Switch the router's power switch to the ON position. The Power LED lights continuously and the System LED lights briefly. The Port LEDs also light briefly. If the LEDs fail to light, check that the router is receiving power.

Applying power to DC models of AR725 and AR745

Before connecting the DC supply, read "Safety" on page 26, or the translations on the pages following.

Check the supply voltage and the router's rated voltage. DC versions of AR725 and AR745 routers require a supply voltage in the range 38-60V DC.



Warning The specific power supply requirements for a particular model are clearly displayed on the rear or underside of the router. If the supply is outside the accepted range for the router, the router may not operate or damage to the router may result.



Warning This equipment must be earthed.



Warning Only trained and qualified personnel should connect a DC power supply. Due to exposed terminals, DC powered routers should be installed only in restricted access areas.

DC supply cable specifications:

- Number of wires (cores): 3
- Minimum size: 2.1mm² (14 AWG)
- Minimum cable rating: 600V, 90 degrees Celsius

DC power supply specifications:

- 48V DC (38-60V DC is acceptable)
- Either positive grounded or negative grounded

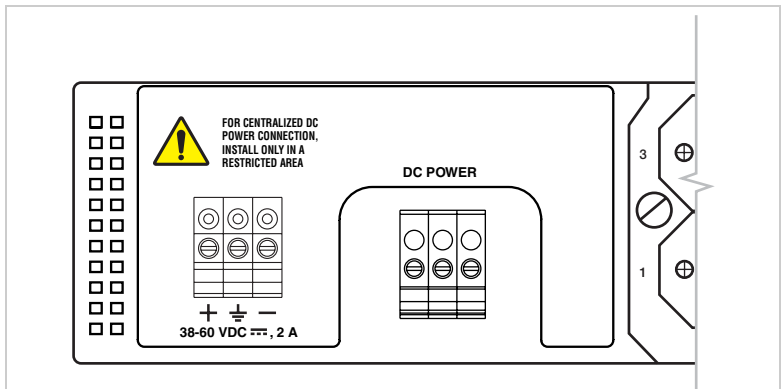
Circuit protection:

- Use a 15 Amp circuit breaker

To connect the DC supply:

1. Ensure the supply cable is not live.
2. Strip the supply cable wires to expose 8mm (0.31 in.) of bare conductor.
3. At the router, connect the ground wire to the ground terminal. Terminals can be identified by the diagram on the router's rear panel, see figure below. Tighten the terminal to between 0.6 and 0.8 Nm (0.041 to 0.055 pound-force per foot).

Figure 1: DC Power inlet terminals on an AR725 or AR745



4. At the router, connect the positive feed to the + (positive) terminal and the negative feed to the - (negative) terminal. Tighten the terminals to between 0.6 and 0.8 Nm (0.041 to 0.055 pound-force per foot).
5. Ensure there are no exposed conductor strands.
6. Secure the supply cable (to the rack framework or similar object) so that the connections are isolated from any force applied to the cable.
7. Ensure the circuit breaker (for the supply circuit) and the power switch (on the router) are in the OFF position.
8. Connect the supply-cable wires to the circuit breaker.
9. Energise the circuit breaker.
10. Switch the power switch to the ON position. The System LED should light for a few seconds as the router runs internal tests. If the LED continues to flash or remains lit contact your authorised distributor or reseller.

DC models do not have RPS connectors.

Configuring the AR725 and AR745

You can configure the AR725 and AR745 routers using the Command Line Interface (CLI) or Graphical User Interface (GUI). You must first use the CLI to assign an IP address to the router, using the procedure below (Configure the AR725 and AR745 using the CLI). You may then use the CLI or the GUI (“Configure the AR725 and AR745 using the GUI” on page 10) to complete the configuration.

Configure the AR725 and AR745 using the CLI

1. Initiate router start-up.

Using the terminal cable supplied, connect a VT100-compatible terminal, or the COM port of a PC running a terminal emulation program such as Windows Hyper Terminal, to the asynchronous console port (labelled PORT0, referred to by software as asyn0) on the router’s rear panel.

Set the communication parameters on your terminal or terminal emulation program to:

- Baud rate: 9600
- Data bits: 8
- Parity: None
- Stop bits: 1
- Flow control: Hardware

See the *AR700 Series Router Hardware Reference* for more information on configuring emulation software.

2. Log in and set the password.

The login prompt appears on the terminal or PC. If the login prompt does not appear, press [Enter] two or three times.

When the router boots for the first time it automatically creates an account with manager privileges. The account has the login name “manager” and the password is “friend”. Passwords are case sensitive.

At the login prompt, enter the login name and password.

```
Login: manager
Password: friend
```

The router’s command prompt appears and you can now configure the router using the command line interface.



Caution Change the password as soon as possible. Leaving the manager account with the default password is a serious security risk. Make sure you remember the new password as there is no way to retrieve it if it is lost.

Use the following command to change the account password:

```
set password
```

To display a list of help topics, enter:

```
help
```

To display help on a specific topic, enter:

```
help topic
```

Alternatively, type a question mark (?) at the end of a partially completed command to see a list of valid options.

See the *AR700 Series Router Software Reference* for more information on router start-up and configuration procedures (including a list of message definitions).

Configure the AR725 and AR745 using the GUI

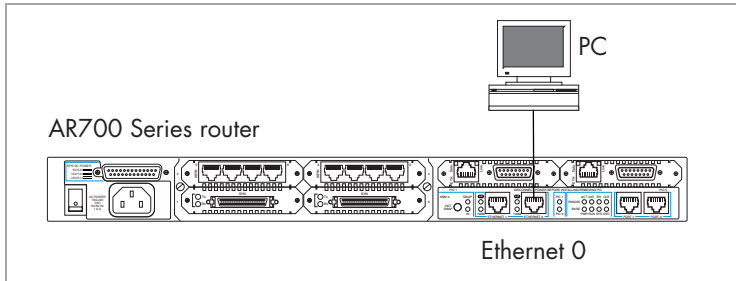
This section describes how to access the GUI via the Ethernet0 port, when the PC and the router are in the same subnet, in order to configure the router.

The GUI requires a PC and web browser. Supported browsers are Internet Explorer 5.0 and greater and Netscape 6.2.2 or greater, with JavaScript enabled. If you are using a toolbar or plug-in on your browser to block pop-ups, disable it while using the GUI. The GUI displays detailed configuration options and information in pop-up windows.

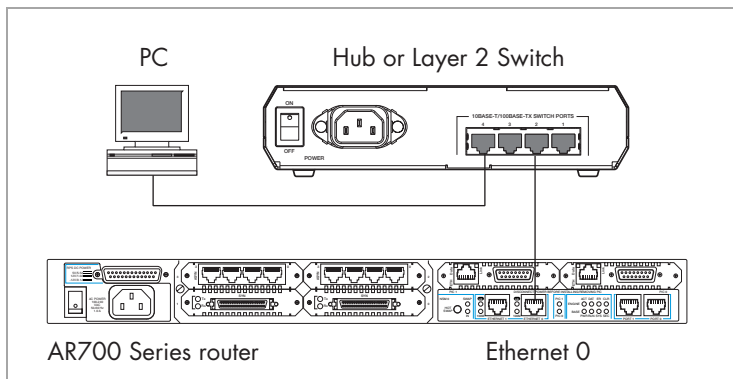
I. Connect the PC to the router Ethernet port.

The PC can be connected directly, or through your LAN.

To connect the PC directly to the router, use a straight-through Ethernet cable to connect an Ethernet card on the PC to the router's Ethernet0 port (see below). Note the PC's IP address and mask. (You can browse to the router through any ETH port, as long as you give that interface an IP address. These instructions assume you will use Eth0 as the LAN interface.)



To connect via a LAN, use an Ethernet cable to connect the router's Ethernet0 port to the device on the LAN (see below). Select the LAN PC from which you wish to configure the router. The PC should be in the same subnet as the part of the LAN that contains the router (for example, the PC could be connected to a hub or Layer 2 switch that is directly connected to the router's Ethernet0 port). Note the PC's IP address and mask.



2. Access the CLI on the router.

Follow the instructions in "Configure the AR725 and AR745 using the CLI" on page 9.

3. Enable IP.

At the CLI, enter the command:

```
enable ip
```

4. Assign an IP address to the eth0 interface.

Assign the eth0 interface an IP address in the subnet that the PC uses, using the command:

```
add ip interface=eth0 ip=ipaddress mask=mask
```

5. Save the configuration. and set the router to use it on startup

Save the configuration you have created to a file, and set the router to use this configuration file when the router restarts.

```
create config=your-name.cfg
```

```
set config=your-name.cfg
```

6. Browse to the GUI.

If you access the Internet through a proxy server, set your browser to bypass the proxy for the IP address you assigned to the eth0 interface.

Point your web browser at the IP address of the eth0 interface.

7. Log in and set the password.

At the login prompt, enter the login name and password. Passwords are case-sensitive.

```
User Name: manager
```

```
Password: friend
```

The system status page appears and you can now use the GUI to configure the router.

Important To ensure configuration settings are saved correctly, use the GUI menus and buttons to navigate, not your browser's buttons.



Caution As a security precaution, change the password as soon as possible.

To change the password, select Management > Users from the sidebar menu. Select the Manager account and click Modify.

8. To access context-sensitive help in the GUI.

Click on the Help Button [Help]. The Help button is located at the top of the sidebar menu or on any popup page.

Connecting Data Cables to AR725 or AR745

Connect the AR725 or AR745 router to your network:

1. Connect to the LAN.

If you have not already done so, use straight-through Ethernet patch cables to connect the device(s) on your private network (LAN) to the router's Ethernet ports.

2. Connect to the DMZ port.

If you have a public server, use an Ethernet patch cable to connect it to the router's Ethernet I port. Separating public servers from your LAN allows the firewall to provide greater protection for your LAN. If you have multiple public servers, you can connect them to a hub or Layer 2 switch and connect that device to the router's DMZ port.

3. Connect to the WAN.



Caution If you intend to use a firewall, configure it before you activate the WAN link.

Once initial configuration is complete, connect the router to the WAN: connect a PIC port to a WAN connection. See the *Port Interface Card Quick Install Guide* and *Hardware Reference*.

LEDs on the AR725 and AR745

LED	State	Function	
Power/PVWR	Lit	Power is supplied and the router is switched on.	
Run	Lit	The internal processor is executing code.	
	Off	The processor has stopped, usually a fault.	
System/SYS	Off	Normal operation.	
	Lit	Lit briefly during router start up, or the router is malfunctioning.	
	1 Flash	A router fan has failed.	
	2 Flashes	If RPS monitoring is enabled, and an RPS is connected, the RPS fan has failed.	
	3 Flashes	If an RPS is connected, the router's PSU (Power Supply Unit) has failed.	
	4 Flashes	If RPS monitoring is enabled, the RPS PSU has failed.	
Clear/CLR	5 Flashes	If RPS monitoring is enabled, an RPS is not connected or is not operational	
	Lit	A secure router has enabled PPP interfaces or Frame Relay circuits that are configured to send clear text.	
	Security/SEC	Lit	A user is logged in with security officer privilege and the router is in security mode.
		ACT	A Mini Accelerator Card (MAC) or PCI Accelerator Card (PAC) is installed.
	ERR	Lit	An error in data transmission to or from a PAC.

Installing the AR750S

Selecting a Site

You can install the router on a level surface such as a desktop or bench, in a standard 19-inch rack using an optional rack mount kit, or on a firm wall using an optional wall mount kit, both ordered from your authorised distributor or reseller.

When you install the router, choose a site that:

- allows adequate airflow around the router and its vents.
- is free of dust and moisture.
- will maintain an ambient temperature range of 0° C to 50° C (32° F to 122° F) and a humidity range of 5% to 80% non-condensing.
- has a reliable and earthed (grounded) power supply, preferably dedicated and filtered.
- does not expose cabling to sources of electrical noise such as radio transmitters, broadband amplifiers, power lines, electric motors, and fluorescent fixtures.
- allows easy access to the router's power and cable connections.

Before installing

- Read the safety information “Safety” on page 26.
- Gather the tools and equipment you will need

To install the router in a **rack** you will need a rack mount bracket kit. (Order this from your authorised Allied Telesyn distributor or reseller.) You will also need a Phillips #1 screwdriver, and screws and cage nuts to attach the brackets to your rack. (*Installing the AR750S router in a rack*)

To install the router on a **wall** you will need a wall mount bracket kit (ordered from your authorised Allied Telesyn distributor or reseller), a Phillips #1 screwdriver and a Phillips #2 screwdriver. If you are fixing the router to a solid masonry or hollow wall, you need equipment to drill a 6 mm hole. The wall mount brackets are supplied with screws and plugs to fasten the brackets to a masonry or plasterboard wall. If you are fixing it to a wooden wall, the screws are self-tapping. (*Installing the AR750S on a wall*)

If you are also installing an optional Port Interface Card (PIC), you need the PIC and the *PIC Quick Install Guide* (*Installing expansion options*).

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

- Place the router in its operating location. See the previous section “Selecting a Site” on page 15 for guidelines on choosing a suitable location.

Installing the AR750S router in a rack

1. Check the rack.

Ensure that the rack is safely secured and that it will not tip over. Devices in a rack should be installed starting at the bottom, with the heavier devices near the bottom of the rack.

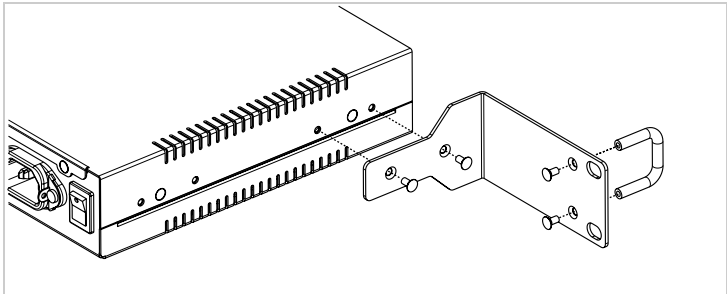
Ensure the rack has sufficient space for the router and its associated cables. The router is 1U high.

2. Unscrew the feet.
3. Connect the handles to the brackets.

Screw the handles to the wider side of each bracket, using the supplied screws (see the figure below).

4. Connect the brackets to the router.

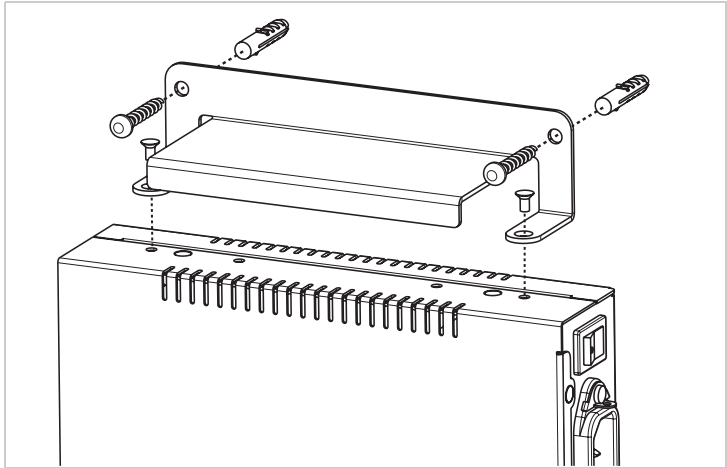
Screw the brackets to the sides of the router; using the supplied screws (see figure below). The router can be front or rear mounted.



5. Mount the router in the rack.
Use appropriate rack mounting screws (not supplied).

Installing the AR750S on a wall

1. Screw the brackets to the router. Screw a wall mount bracket to the outer screw holes on each side of the router using the shorter screws supplied (see figure below).



2. Screw the wall brackets to the wall with the brackets at the top and bottom of the router, the feet against the wall, and the power inlet near the top.

Installing expansion options

If you purchased optional Port Interface Cards (PICs), install them by following their Quick Install Guide. That guide can be found with the PIC, on the Documentation and Tools CD-ROM, or can be downloaded from www.alliedtelesyn.co.nz/documentation/documentation.html.

Applying power to the router

Check that the supply voltage and the router's rated voltage match. The AR750S router is fitted with a universal power supply that will function over the range 100–240 VAC and 50–60Hz.



Warning The specific power supply requirements for a particular model are clearly displayed on the rear or underside of the router. If the supply is outside the accepted range for the router, the router may not operate or damage to the router may result.



Warning This equipment must be earthed.

Fit the power cord retaining clip to the AC power inlet on the router's rear panel.

Connect the provided power cord to the AC power inlet and clip it in place. Switch the router's power switch to the ON position. The Power LED lights continuously and the System LED lights briefly. The Port LEDs also light briefly. If the LEDs fail to light, check that the router is receiving power.

Configuring the AR750S

You can configure the AR750S routers using the Command Line Interface (CLI) or Graphical User Interface (GUI). We recommend starting to configure the router using the GUI. You can then use the CLI if necessary to complete your configuration (“Configure the AR750S using the CLI” on page 20). The AR750S router has a default configuration (“AR750S Default Configuration” on page 22).

Configure the AR750S using the GUI

This section describes how to access the GUI via a switch port in VLAN1, when the PC and the router are in the same subnet, in order to configure the router. The router's switch ports all belong to VLAN1 by default.

The GUI requires a PC and web browser. Supported browsers are Internet Explorer 5.0 or later and Netscape 6.2.2 or later, with JavaScript enabled. If you are using a toolbar or plug-in on your browser to block pop-ups, disable it while using the GUI. The GUI displays detailed configuration options and information in pop-up windows.

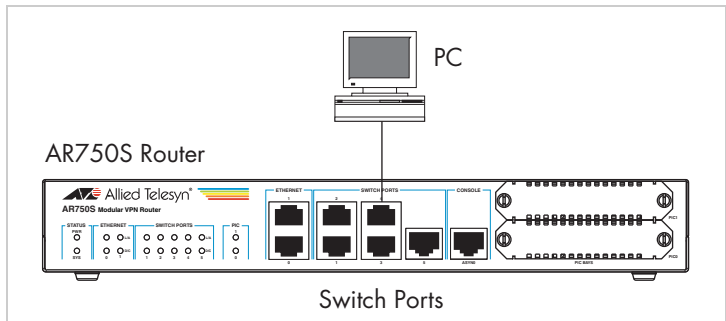


Caution If another device on your network already uses the router's default IP address, 192.168.1.1, do not connect the router to the network until you have changed the management port's address by using the command line.

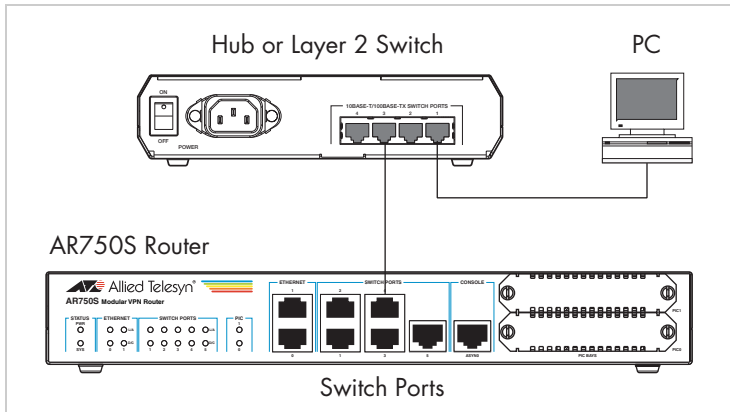
I. Connect the PC to a router switch port.

The PC can be connected directly, or through your LAN.

To connect the PC directly to the router, use a straight-through Ethernet cable to connect an Ethernet card on the PC to any one of the router's switch ports.



To connect via a LAN, use an Ethernet cable to connect the router's switch port(s) to the device(s) on the LAN. Select the LAN PC from which you wish to configure the router. The PC should be in the same subnet as the part of the LAN that contains the router (for example, the PC could be connected to a hub or Layer 2 switch that is directly connected to one of the router's switch ports).



2. Assign the PC an IP address in the same subnet as the router.

The router's default IP address is 192.168.1.1.

3. Browse to the GUI.

If you access the Internet through a proxy server, set your browser to bypass the proxy for 192.168.1.1. Point your web browser at 192.168.1.1.

4. Log in and set the password.

At the log in prompt, enter the log in name and password. Passwords are case sensitive.

User Name: **manager**

Password: **friend**

The system status page appears and you can now use the GUI to configure the router.

Important To ensure configuration settings are saved correctly, use the GUI menus and buttons to navigate, not your browser's buttons.



Caution As a security precaution, change the password as soon as possible. Remember the new password, as there is no way to retrieve it if it is lost.

To change the password, select Management > Users from the sidebar menu. Select the Manager account and click Modify.

5. Change the default IP address.

Change the default IP address to match the addressing system on your LAN. Select Quick Start > LAN.



Caution Do not leave the management port IP address set to its default because this may constitute a serious security risk.

6. To access context-sensitive help in the GUI.

Click on the Help Button [Help]. The Help button is located at the top of the sidebar menu or on any popup page.

Configure the AR750S using the CLI



Caution If another device on your network already uses the router's default IP address, 192.168.1.1, do not connect the AR750S to the network until you have changed the IP address of the router's default VLAN by using the command line.

1. Initiate router start-up.

Using the terminal cable supplied, connect a VT100-compatible terminal, or the COM port of a PC running a terminal emulation program such as Windows Hyper Terminal, to the Console RS-232 (ASYNO) port on the router's front panel.

Set the communication parameters on your terminal or terminal emulation program to:

- Baud rate: 9600
- Data bits: 8
- Parity: None
- Stop bits: 1
- Flow control: Hardware

See the *AR700 Series Router Hardware Reference* for more information on configuring emulation software.

2. Log in and set the password.

The login prompt appears on the terminal or PC. If the login prompt does not appear, press [Enter] two or three times.

When the router boots for the first time it automatically creates an account with manager privileges. The account has the login name "manager" and the password is "friend". Passwords are case sensitive.

At the log in prompt, enter the log in name and password.

Login: **manager**

Password: **friend**

The router's command prompt appears and you can now configure the router using the command line interface.



Caution Change the password as soon as possible. Leaving the manager account with the default password is a serious security risk. Make sure you remember the new password as there is no way to retrieve it if it is lost. Passwords are case sensitive.

Use the following command to change the account password:

```
set password
```

To display a list of help topics, enter:

```
help
```

To display help on a specific topic, enter:

```
help topic
```

Alternatively, type a question mark (?) at the end of a partially completed command to see a list of valid options.

See the *AR700 Series Router Software Reference* for more information on router start-up and configuration procedures (including a list of message definitions).

Connecting Data Cables to the AR750S

Connecting the router to your network:

1. Connecting to the LAN.

If you have not already done so, use Ethernet patch cables to connect the devices on your private network (LAN) to the router's switch ports. By default, all switch ports are members of VLAN 1.

2. Connecting a DMZ

If you have a public server, use an Ethernet patch cable to connect it to either:

- one of the router's Ethernet ports (for example, Ethernet1) , or
- switch ports in a different VLAN than the rest of your LAN.

Separating public servers from your LAN allows the firewall to provide greater protection for your LAN. If you have multiple public servers, you can

connect them to a hub or Layer 2 switch and connect that device to the router's DMZ port. For information about configuring VLANs, see the *Switching* chapter in the *Software Reference*.

3. Connecting to the WAN.



Caution If you intend to use a firewall, configure it before you activate the WAN link.

Once initial configuration is complete, connect the router to the WAN. Either:

- Connect a PIC port to a WAN connection (see the *Port Interface Card Quick Install Guide* and *Hardware Reference*), or
- Use an Ethernet patch cable to connect the router's Ethernet WAN (ETH0) port to the Ethernet port of a WAN device (such as a modem).

AR750S Default Configuration

The default configuration file *boot.cfg* loads automatically when the router starts up. This file is stored in the router's flash memory.

Figure 2: Default configuration file for the AR750S router

```
# IP Configuration
#
ena ip
add ip int=vlan1 ip=192.168.1.1
```

The *boot.cfg* file on the AR725 and AR745 routers contains no significant default configuration.

LEDs on the AR750S

LED	State	Function
Power/PWR	Green	The router is receiving power and the power switch is ON.
System/SYS	Off	Normal operation.
	Amber	Lit briefly during router start up, or the router is malfunctioning.
	Flashing	The router fan has failed.
PIC0 PIC1	Green	A port interface card (PIC) is correctly installed and has been detected by the router.
ETH0 / ETH1 L/A	Green	The Eth port has a 100 Mbps link.
	Amber	The Eth port has a 10 Mbps link.
	Flashing	Data is being transmitted or received on the Eth port.
ETH0 / ETH1 D/C	Green	The Eth port is operating at full duplex..
	Amber	The Eth port is operating at half duplex.
	Amber flashing	There is a collision on the Eth port.
PORT 1..5 L/A	Green	The switch port has a 100 Mbps link.
	Amber	The switch port has a 10 Mbps link.
	Flashing	Data is being transmitted or received on the switch port.
PORT 1..5 D/C	Green	The switch port is operating at full duplex.
	Amber	The switch port is operating at half duplex..
	Amber flashing	There is a collision on the switch port.

Documentation and Tools CD-ROM

The Documentation and Tools CD-ROM bundled with each router contains the complete Document Set for your router. The CD-ROM also includes tools for managing your router.

The Document Set on the CD-ROM includes:

- This Installation and Safety Guide.
- The *AR700 Series User Guide*, which provides an introduction to the router and its operational features and characteristics.
- The *AR700 Series Router Hardware Reference*, which provides detailed information on the hardware features of AR700 Series routers.
- The *AR700 Series Router Software Reference*, which provides detailed information on configuring the router and its software.
- The *Port Interface Card Quick Install Guide*, which provides instructions for installing a Port Interface Card in your router.
- The *Port Interface Card Hardware Reference*, which provides detailed information on the hardware features of Port Interface Cards.
- The *Network Service Module Quick Install Guide*, which provides instructions for installing a Network Service Module in your router.
- The *Network Service Module Hardware Reference*, which provides detailed information on the hardware features of Network Service Modules.
- The *AR740 RPS Safety and Statutory Information*
- The *AR740 RPS Quick Install Guide*
- AT-TFTP Server for Windows, for downloading software releases.
- Adobe Acrobat Reader, for viewing online documentation.

Updates of these documents can also be downloaded from the Support Site at www.alliedtelesyn.co.nz/documentation/documentation.html.

Emission Compliance Statements

STANDARDS: The AR700 Series routers meet the following standards:

Category	Approval Agency and Requirement
Safety for AR725, AR745	UL60950 CAN/CSA-C22.2 No. 60950-00 EN60950 AS/NZS 3260, ACA TS001
Safety for AR750S	UL60950-1 CAN/CSA-C22.2 No. 60950-1-03 EN60950-1 AS/NZS 60950
Electromagnetic Compliance	FCC CFR47 Part 15 Class A EN55022 Class A VCCI Class A AS/NZS CISPR22 Class A
Immunity	EN55024
Network Interface (where applicable)	ISDN Limited Network Protocol Analysis FCC Part 68, Subpart D IC CS-03, Issue 8, Part I and IV TBR3 TBR4 ACA TS031

U.S. Federal Communications Commission

RADIATED ENERGY

Note: 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 this instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Note: Modifications or changes not expressly approved by the manufacturer or the FCC can void your right to operate this equipment.

Canadian Department of Communications

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.

Safety



WARNING: In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



ELECTRICAL NOTICES

WARNING: ELECTRIC SHOCK HAZARD

To prevent ELECTRIC shock, do not remove the cover. No user-serviceable parts inside. This unit contains HAZARDOUS VOLTAGES and should only be opened by a trained and qualified technician.



LIGHTNING DANGER

DANGER: DO NOT WORK on equipment or CABLES during periods of LIGHTNING ACTIVITY.



CAUTION: POWER CORD IS USED AS A DISCONNECTION DEVICE. TO DE-ENERGIZE EQUIPMENT, disconnect the power cord.



ELECTRICAL - TYPE CLASS I EQUIPMENT

THIS EQUIPMENT MUST BE EARTHED. Power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltages on accessible metal parts.



PLUGGABLE EQUIPMENT, the socket outlet shall be installed near the equipment and shall be easily accessible.



CAUTION: Air vents must not be blocked and must have free access to the room ambient air for cooling.



OPERATING TEMPERATURE: AR725, AR745: This product is designed for a maximum ambient temperature of 40 degrees C.
AR750S: This product is designed for a maximum ambient temperature of 50 degrees C.



ELECTRICAL - AC MAINS CIRCUIT OVERLOADING

When installing product, consideration must be given to the accumulative nameplate ratings when connecting the equipment to the AC supply wiring.



CAUTION: MECHANICAL LOADING - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven loading.



Lithium Battery - Should only be changed by authorised service personnel.

CAUTION: Danger of explosion if battery incorrectly replaced. Replace only with Lithium Battery, type CR2032, and dispose of in accordance with the manufacturer's recommendations and all local codes.



ALL COUNTRIES: Install product in accordance with local and National Electrical Codes.



WARNING: For centralized DC power connection, install only in a restricted access area.



A tray cable is required to connect the power source if the unit is powered by centralized DC power. The tray cable must be UL listed Type TC tray cable and rated at 600 V and 90 degrees C, with three conductors, minimum 14 AWG.



WARNING: Only trained and qualified personnel are allowed to install or replace this equipment.



WARNING: As a safety precaution, a 15 Amp circuit breaker should be installed at the supply end of the cable to be used with this LAN equipment.

Always connect the wiring to the LAN equipment first before connecting the wiring to the breaker. To avoid the danger of physical injury from electrical shock, do not work with HOT feeds. Always be sure that the breaker is in the OFF position before connecting the wiring to the breaker.



WARNING: Do not strip more than the recommended amount of wire. Stripping more than the recommended amount can create a safety hazard by leaving exposed wire on the terminal block after installation.



WARNING: When installing this equipment, always ensure that the frame ground connection is installed first and disconnected last.



WARNING: Safety Hazard - Check to see if there are any exposed copper strands coming from the installed wires. When this installation is done correctly there should be no exposed copper wire strands extending from the terminal block. Any exposed wiring can conduct harmful levels of electricity to persons touching the wires.



DC versions of this system will work with a positive grounded or negative grounded DC system.

Sicherheit



WARNUNG: Bei Verwendung zu Hause kann dieses Produkt Funkstörungen hervorrufen. In diesem Fall müßte der Anwender angemessene Gegenmaßnahmen ergreifen.



ACHTUNG: GEFÄHRLICHE SPANNUNG

Das Gehäuse nicht öffnen. Das Gerät enthält keine vom Benutzer wartbaren Teile. Das Gerät steht unter Hochspannung und darf nur von qualifiziertem technischem Personal geöffnet werden.



GEFAHR DURCH BLITZSCHLAG

GEFAHR: Keine Arbeiten am Gerät oder an den Kabeln während eines Gewitters ausführen.



VORSICHT: DAS NETZKABEL DIENST ZUM TRENNEN DER STROMVERSORGUNG. ZUR TRENNUNG VOM NETZ, KABEL AUS DER STECKDOSE ZIEHEN.



GERÄTE DER KLASSE I
DIESE GERÄTE MÜSSEN GEERDET SEIN. Der Netzstecker darf nur mit einer vorschriftsmäßig geerdeten Steckdose verbunden werden. Ein unvorschriftsmäßiger Anschluß kann die Metallteile des Gehäuses unter gefährliche elektrische Spannungen setzen.



STECKBARES GERÄT: Die Anschlußbuchse sollte in der Nähe der Einrichtung angebracht werden und leicht zugänglich sein.

VORSICHT

Die Entlüftungsöffnungen dürfen nicht versperrt sein und müssen zum Kühlen freien Zugang zur Raumluft haben.



BETRIEBSTEMPERATUR: AR725, AR745: Dieses Produkt wurde für den Betrieb in einer Umgebungstemperatur von nicht mehr als 40° C entworfen. AR750S: Dieses Produkt wurde für den Betrieb in einer Umgebungstemperatur von nicht mehr als 50° C entworfen.



NETZSICHERUNG

Bei der Installation muß der auf dem Typenschild angezeigte Nennwert des Gerätes für den Anschluß an das Netz beachtet werden.



VORSICHT: RAHMENEINBAU

Die Geräte müssen so in den Rahmen montiert werden, daß keine Gefahren durch unebenen inbau des Rahmens verursacht werden.



Lithium-Batterie - Sollte nur von einem geschulten qualifizierten Techniker ausgetauscht werden.

VORSICHT: Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Nur mit einer gleichen Batterie oder einem gleichwertigen Batterietyp nach Empfehlung des Herstellers ersetzen. Gebrauchte Batterien nach Anweisungen des Herstellers beseitigen.



ALLE LÄNDER: Installation muß örtlichen und nationalen elektrischen Vorschriften entsprechen.



Warnung: Bei zentralisierten gleichstromverbindungen sollte die installation nur an einem standort mit beschränktem zugang erfolgen.



Hinweis: Für den Anschluß der Stromquelle ist ein für den Einsatz in Kabelrinnen geeignetes Installationskabel (Tray Cable) erforderlich, falls die Einheit durch zentralisierten Gleichstrom angetrieben wird. Das Installationskabel muß ein dem UL-Standard entsprechendes Kabel des Typs TC mit einer Nennspannung von 600 V und einer Nenntemperatur von 90 Grad Celsius sein, das drei Leiter hat. Stärke mind. 14 AWG (American Wire Gage – amerikanische Einheit für Drahtdurchmesser).



Warnung: INSTALLATION UND WARTUNG DIESER EINRICHTUNG NUR DURCH AUSGEBILDETES FACHPERSONAL.



Warnung: Aus Sicherheitsgründen sollte am Netzteilende des mit dieser LAN-Einrichtung verwendeten Kabels ein 15-Ampere-Leistungsschalter installiert werden.

Nehmen Sie STETS zuerst die Verkabelung der LAN-Einrichtung vor, bevor Sie die Kabel an den Leistungsschalter anschließen. Arbeiten Sie nie mit SPANNUNGSFÜHRENDEN Kabeln, um Körperverletzungen durch Stromschlag zu vermeiden. Achten Sie stets darauf, daß sich der Leistungsschalter in der Position OFF (Aus) befindet, bevor Sie Kabel an den Leistungsschalter anschließen.



Warnung: Ziehen Sie nicht mehr als die empfohlene Drahtlänge ab. Wird mehr als die empfohlene Länge abisoliert, stellt dies ein Sicherheitsrisiko dar, da auf dem Anschlußklemmblock nach der Installation möglicherweise freiliegende Drähte verbleiben.



Warnung: Bei der Installation dieser Einrichtung ist stets sicherzustellen, daß der Masseanschluß jeweils zuerst installiert und zuletzt getrennt wird.



Warnung: "Sicherheitsrisiko" Prüfen Sie, daß aus dem installierten Draht keine freiliegenden Kupferlitzen herausragen. Bei korrekter Installation sollten aus dem Anschlußklemmblock keine freiliegenden Kupferlitzen vorstehen. Freiliegende Kabel führen genug Spannung, um Personen zu gefährden, die diese Drähte berühren.



Hinweis: Dieses System kann mit positiv geerdeten oder negativ geerdeten Gleichstromsystemen betrieben werden.

Sikkerhed



ADVARSEL: I et hjemligt miljø kunne dette produkt forårsage radio forstyrrelse. Bliver det tilfældet, påkræves brugeren muligvis at tage tilstrækkelige foranstaltninger.



ELEKTRISKE FORHOLDSREGLER

ADVARSEL: RISIKO FOR ELEKTRISK STØD

For at forebygge ELEKTRISK stød, undlad at åbne apparatet. Der er ingen indre dele, der kan repareres af brugeren. Denne enhed indeholder LIVSFARLIGE STRØMSPÆNDINGER og bør kun åbnes af en uddannet og kvalificeret tekniker.



FARE UNDER UVEJR

FARE: UNDLAD at arbejde på udstyr eller KABLER i perioder med LYNAKTIVITET.



ADVARSEL: DEN STRØMFØRENDE LEDNING BRUGES TIL AT AFBRYDE STRØMMEN. SKAL STRØMMEN TIL APPARATET AFBRYDES, tages ledningen ud af stikket.



ELEKTRISK - KLASSE I-UDSTYR
DETTE UDSKYR KRÆVER JORDFORBINDELSE. Stikket skal være forbundet med en korrekt installeret jordforbunden stikkontakt. En ukorrekt installeret stikkontakt kan sætte livsfarlig spænding til tilgængelige metaldele.



UDSTYR TIL STIKKONTAKT, stikkontakten bør installeres nær ved udstyret og skal være lettilgængelig.



ADVARSEL: Ventilationsåbninger må ikke blokeres og skal have fri adgang til den omgivende luft i rummet for afkøling.



BETJENINGSTEMPERATUR: AR725, AR745: Dette apparat er konstrueret til en omgivende temperatur på maksimum 40 grader C. AR750S: Dette apparat er konstrueret til en omgivende temperatur på maksimum 50 grader C.



ELEKTRISK-OVERBELASTNING AF SPÆNDINGSKREDSLØBET
Ved installation af produktet, bør der tages hensyn til den kumulative kapacitet der angives på navneskiltet, når udstyret forbindes med vekselstrømsledning.



ADVARSEL: MEKANISK OPSTILLING-Udstyret skal opstilles i stativet, på en sådan måde, at der ikke opstår fare p.g.a. ujævn opstilling.



Lithium batteri - Bør kun udskiftes af uddannet og kvalificeret tekniker.
ADVARSEL : Eksplosionsfare, hvis batteriet udskiftes ukorrekt. Udskift kun med samme eller en tilsvarende type der anbefales af producenten. Kassér brugte batterier i overensstemmelse med producentens instruktioner.



ALLE LANDE: Installation af produktet skal ske i overensstemmelse med lokal og national lovgivning for elektriske installationer.



Advarsel: ETABLERES FORBINDELSEN TIL ET JÆVNSTRØMSNET, BØR INSTALLERING FORETAGES I ET OMRÅDE HVOR UVEDKOMMENDE IKKE HAR ADGANG.



Bemærk: Hvis switchen forbindes til jævnstrømsnet skal den føres med skinnekabel, der skal være UL mærket type TC normeret til 600 V, 908C, med tre ledere af mindst tykkelse 14 AWG (amerikansk ledningsmål).



Advarsel: INSTALLERING OG UDSKIFTNING AF DETTE UDSKYR BØR KUN UDFØRES AF AUT. EL-INSTALLATØR.



Advarsel: Der bør indskydes en 15 A automatsikring på forsyningsenden af kablet til dette LAN-udstyr.

Man skal **ALTID** først forbinde ledningerne med LAN-udstyret inden de forbindes med automatsikringen. Ved ledningsarbejde skal strømmen altid være AFBRUDDT til forebyggelse af fare for elektrisk stød. Man skal altid SLUKKE automatsikringen inden man forbinder ledninger med den.



Advarsel: Man bør ikke afisolere mere af ledningerne end anvist, for så kan sådanne blanke ledninger udgøre et faremoment efter montering på klemmerækken.



Advarsel: Ved installering af dette udstyr skal steljord altid forbindes først og aftages sidst.



Advarsel: "Fare" Se omhyggeligt efter om der stikker blanke kobbertråde ud fra klemmeforbindelserne. Ved korrekt montering er det ikke tilfældet. Enhver afisoleret leder kan lede farlig strømstyrke til personer, som kommer til at røre ved dem.



Bemærk: Dette udstyr kan køre både på jævnstrøm med positiv og med negativ jord.

Veiligheid



WAARSCHUWING: Binnenshuis kan dit product radiostoring veroorzaken, in welk geval de gebruiker verplicht kan worden om gepaste maatregelen te nemen.



WAARSCHUWINGEN MET BETREKKING TOT ELEKTRICITEIT
WAARSCHUWING: GEVAAR VOOR ELEKTRISCHE SCHOKKEN
 Verwijder het deksel niet, teneinde ELEKTRISCHE schokken te voorkomen. Binnenin bevinden zich geen onderdelen die door de gebruiker onderhouden kunnen worden. Dit toestel staat onder GEVAARLIJKE SPANNING en mag alleen worden geopend door een daartoe opgeleide en bevoegde technicus.



GEVAAR VOOR BLIKSEMINSLAG
GEVAAR: NIET aan toestellen of KABELS WERKEN bij BLIKSEM.



WAARSCHUWING: HET TOESTEL WORDT UITGESCHAKELD DOOR DE STROOMKABEL TE ONTKOPPELEN. OM HET TOESTEL STROOMLOOS TE MAKEN: de stroomkabel ontkoppelen.



ELEKTRISCHE TOESTELLEN VAN KLASSE I
 DIT TOESTEL MOET GEAARD WORDEN. De stekker moet aangesloten zijn op een juist geaarde contactdoos. Een onjuist geaarde contactdoos kan de metalen onderdelen waarmee de gebruiker eventueel in aanraking komt onder gevaarlijke spanning stellen.



AAN TE SLUITEN APPARATUUR, de contactdoos wordt in de nabijheid van de apparatuur geïnstalleerd en is gemakkelijk te bereiken.



OPGELET: De ventilatiegaten mogen niet worden gesperd en moeten de omgevingslucht ongehinderd toelaten voor afkoeling.



BEDRIJFSTEMPERATUUR: AR725, AR745: De omgevingstemperatuur voor dit produkt mag niet meer bedragen dan 40 graden Celsius.
AR750S: De omgevingstemperatuur voor dit produkt mag niet meer bedragen dan 50 graden Celsius.



ELEKTRISCH: OVERBELASTING VAN WISSELSTROOM HOOFDCIRCUIT
Tijdens de installatie van het produkt dient men rekening te houden met de gecombineerde waarden op de naamplaatjes bij het aansluiten van het toestel op de wisselstroom-voedingsdraden.



LOPGELET: MECHANISCH LADEN - De montage van het toestel in het rek dient zo uitgevoerd te worden dat geen gevaar ontstaat door een ongelijke lading.



Lithium batterij. Mag alleen worden vervangen door een daartoe opgeleide en bevoegde technicus.

OPGELET: Gevaar voor ontploffing indien de batterij verkeerd wordt vervangen. Alleen vervangen door hetzelfde of een gelijkwaardig, door de fabrikant aanbevolen type.



ALLE LANDEEN: het toestel installeren overeenkomstig de lokale en nationale elektrische voorschriften.



Waarschuwing: Bij GECENTRALISEERDE DC-AANSLUITING: INSTALLATIE UITSLUITEND UITVOEREN IN EEN GEBIED MET BEPERKTE TOEGANG.



Opmerking: U hebt een PVC/nylon-kabel nodig voor aansluiting op de voedingsbron als de eenheid van stroom wordt voorzien door een gecentraliseerde DC-voeding. De PVC/nylon-kabel moet een TC-kabel zijn (met een vermelding op de UL-lijst), die geschikt is voor 600 V en 90 °C, met drie geleiders en een minimumdikte van 14 AWG.



Waarschuwing: ALLEEN GESCHOOLD EN GEKVALIFICEERD PERSONEEL MAG DEZE APPARATUUR INSTALLEREN OF VERVANGEN.



Waarschuwing: Op de kabel die op de LAN-apparatuur wordt aangesloten dient een zekering van 15 amp te worden gemonteerd aan de zijde van de aansluiting op de voeding.

Sluit bedrading **ALTIJD** eerst op de LAN-apparatuur aan en pas daarna op de zekering. Voorkom het risico op een elektrische schok en schakel eerst de voeding uit. Controleer voordat u de bedrading op de zekering aansluit altijd of de zekering zich in de stand UIT bevindt.



Waarschuwing: Verwijder niet meer dan de aanbevolen hoeveelheid isolatiemateriaal. Als u meer dan de aanbevolen hoeveelheid verwijdert, kan dit een veiligheidsrisico veroorzaken doordat draden bloot blijven liggen na aansluiting op het blok.



Waarschuwing: Zorg er tijdens installatie van de apparatuur altijd voor dat de aardeaansluiting van het frame als eerste wordt geplaatst en als laatste wordt losgemaakt.



Waarschuwing: “Veiligheidsrisico” Controleer of er bij de aangesloten bedrading geen koper blootligt. Als de installatie juist is uitgevoerd, is er bij het aansluitblok geen koperdraad zichtbaar. Blootliggende bedrading kan schadelijke elektriciteitsniveaus geleiden naar personen die met de draden in aanraking komen.



Opmerking: Dit systeem werkt met positief geaarde of negatief geaarde DC-systemen.

Sécurité



MISE EN GARDE : dans un environnement domestique, ce produit peut provoquer des interférences radioélectriques. Auquel cas, l'utilisateur devra prendre les mesures adéquates.



INFORMATION SUR LES RISQUES ÉLECTRIQUES

AVERTISSEMENT: DANGER D'ÉLECTROCUTION

Pour éviter toute ÉLECTROCUTION, ne pas ôter le revêtement protecteur du matériel. Ce matériel ne contient aucun élément réparable par l'utilisateur. Il comprend des TENSIONS DANGEREUSES et ne doit être ouvert que par un technicien dûment qualifié.



DANGER DE Foudre

DANGER: NE PAS MANIER le matériel ou les CÂBLES lors d'activité orageuse.



ATTENTION: LE CORDON D'ALIMENTATION SERT DE MISE HORS CIRCUIT. POUR COUPER L'ALIMENTATION DU MATÉRIEL, débrancher le cordon.



ÉQUIPEMENT DE CLASSE I ÉLECTRIQUE

CE MATÉRIEL DOIT ÊTRE MIS A LA TERRE. La prise de courant doit être branchée dans une prise femelle correctement mise à la terre car des tensions dangereuses risqueraient d'atteindre les pièces métalliques accessibles à l'utilisateur.



EQUIPEMENT POUR BRANCHEMENT ELECTRIQUE, la prise de sortie doit être placée près de l'équipement et facilement accessible”.



ATTENTION: Ne pas bloquer les fentes d'aération, ceci empêcherait l'air ambiant de circuler librement pour le refroidissement.



TEMPÉRATURE DE FONCTIONNEMENT: AR725, AR745: Ce matériel est capable de tolérer une température ambiante maximum de ou 40 degrés Celsius.

AR750S: Ce matériel est capable de tolérer une température ambiante maximum de ou 50 degrés Celsius.



SURCHARGE DES CIRCUITS PRINCIPAUX DE COURANT ALTERNATIF ÉLECTRIQUE

Lors de l'installation du matériel, il faut prendre en compte la somme des puissances indiquées sur les étiquettes au moment de connecter le matériel à une source de courant alternatif.



ATTENTION : RÉPARTITION DE LA CHARGE MÉCANIQUE - Le montage du matériel dans le bâti doit être effectué de telle manière que la répartition de la charge mécanique ne pose aucun danger.



Pile en Lithium-Doit uniquement être remplacée par un technicien dûment qualifié

ATTENTION : Un danger d'explosion existe en cas de remplacement incorrect de la pile. Remplacer uniquement avec une pile du même type ou d'un type recommandé par le fabricant. Mettre au rebut les piles usagées conformément aux instructions du fabricant).



POUR TOUS PAYS: Installer le matériel conformément aux normes électriques nationales et locales.



Avertissement: POUR UNE CONNEXION A UNE SOURCE D'ALIMENTATION C.C. CENTRALISEE, L'INSTALLATION DOIT ETRE UNIQUEMENT EFFECTUEE DANS UNE ZONE D'ACCES LIMITE.



Remarque: Un câble de chariot est requis pour connecter la source de courant si l'unité est alimentée par une source de C.C. centralisée. Il doit s'agir d'un câble agréé UL de type TC, d'une puissance de 600 V et de 90 degrés C, avec trois fils conducteurs et un calibre minimum de 14 AWG (norme américaine exprimant la section des fils).



Avertissement: SEUL UN PERSONNEL QUALIFIE ET ENTRAINE EST AUTORISE A INSTALLER OU REMPLACER CET EQUIPEMENT.



Avertissement: Par mesure de sécurité, un disjoncteur de 15 A doit être installé au point d'alimentation électrique du câble devant être utilisé avec cet équipement de réseau local (LAN).

Connectez **TOUJOURS** le câblage à l'équipement LAN avant de le connecter au disjoncteur. Pour éviter tout risque de blessure corporelle par électrocution, ne travaillez pas lorsque le matériel est sous tension. Assurez-vous toujours que le disjoncteur est bien en position d'ARRET avant de le connecter au câblage.



Avertissement: Ne coupez pas une quantité de câble supérieure à celle qui est recommandée. Cela pourrait constituer un risque de sécurité en laissant du câblage à nu sur le bornier après l'installation.



Avertissement: Lors de l'installation de cet équipement, vérifiez toujours que la connexion de terre du châssis est installée en premier et débranchée en dernier.



Avertissement: "Risque de sécurité" Vérifiez qu'aucun fil de cuivre dénudé ne sort du câble installé. Lorsque cette installation est effectuée correctement, aucun fil de cuivre ne devrait dépasser du bornier. Tout câblage dénudé peut être conducteur de tensions dangereuses pour les personnes touchant les câbles.



Remarque: Ce système peut fonctionner avec des systèmes C.C. dotés d'une mise à la terre positive ou négative.

Turvallisuus



VAROITUS: Kotiolosuhteissa tämä laite voi aiheuttaa radioaaltojen häiröitä, missä tapauksessa laitteen käyttäjän on mahdollisesti ryhdyttävä tarpeellisiin toimenpiteisiin.



SÄHKÖÖN LIITTYVIÄ HUOMAUTUKSIA

VAROITUS: SÄHKÖISKUVAARA

Estääksesi SÄHKÖISKUN älä poista kantta. Sisällä ei ole käyttäjän huollettavissa olevia osia. Tämä laite sisältää VAARALLISIA JÄNNITTEITÄ ja sen voi avata vain koulutettu ja pätevä teknikko.



SALAMANISKUVAARA

HENGENVAARA: ÄLÄ TYÖSKENTELE laitteiden tai KAAPELEIDEN KANSSA SALAMOINNIN AIKANA.



HUOMAUTUS: VIRTajoHTOA KÄYTETÄÄN

VIRRANKATKAISULAITTEENA. VIRTA KATKAISTAAN irrottamalla virtajohto.



SÄHKÖ - TYYPPILUOKAN I LAITTEET

TÄMÄ LAITE TÄYTY MAADOITTAA. Pistoke täytyy liittää kunnollisesti maadoitettuun pistorasiaan. Virheellisesti johdotettu pistorasia voi altistaa metalliosat vaarallisille jännitteille.



PISTORASIAAN KYTKETTÄVÄ LAITE; pistorasia on asennettava laitteen lähelle ja siihen on oltava esteetön pääsy.



HUOMAUTUS: Ilmavaihtoreikiä ei pidä tukkia ja niillä täytyy olla vapaa yhteys ympäröivään huoneilmaan, jotta ilmanvaihto tapahtuisi.



KÄYTTÖLÄMPÖTILA: AR725, AR745: Tämä tuote on suunniteltu ympäröivän ilman maksimilämpötilalle 40°C.

AR750S: Tämä tuote on suunniteltu ympäröivän ilman maksimilämpötilalle 50°C.



SÄHKÖ-VAIHTORVIRTASÄHKÖPIIRIN YLIKUORMITUS

Tuotetta asennettaessa on otettava huomioon osien nimikilvissä osoitettu teho silloin kun osat liitetetään vaihtovirtaverkkoon.



HUOMAUTUS: MEKAANINEN KUORMITUS--Osien asennuksen alustaan tulee tapahtua siten, että epätasainen kuormitus ei aiheuta vaaraa.



Litiumparisto - Vaihdon voi suorittaa vain koulutettu ja pätevä teknikko.

Varoitus: Räjähdyksivaara, jos paristo on vaihdettu väärin. Vaihda vain samaan tai vastaavaan tyyppiin, jota valmistaja suosittelee. Hävitä käytetyt paristot valmistajan ohjeiden mukaan.



KAIKKI MAAT: Asenna tuote paikallisten ja kansallisten sähköturvallisuusmääräysten mukaisesti.



Varoitus: KESKITETTY TASAVIRTAKYTKENTÄ ASENNETTAVA AINOASTAAN TILAAN, JOHON ON RAJOITETTU PÄÄSY.



Huomaa: Virtalähteen kytkemiseen tarvitaan levykaapeli, jos yksikkö saa tehonsa keskitetystä tasavirtalähteestä. Levykaapelin on oltava UL-luetteloitu tyyppiin TC levykaapeli ja nimellisarvoiltaan 600 V ja 90 (C, kolmijohdittainen, minimi 14 AWG (American Wire Gauge -lankamitta).



Varoitus: TÄMÄN LAITTEEN SAA ASENTAA TAI VAIHTAA AINOASTAAN KOULUTETTU JA AMMATTITAITOINEN HENKILÖKUNTA.



Varoitus: Tämän LAN-laitteen kanssa käytettävän kaapelin syöttöpäähän tulee turvallisuuksista asentaa 15 A virrankatkaisin.

Yhdistä johdot AINA ensin LAN-laitteeseen ennen virrankatkaisimeen kytkemistä. Sähköiskusta johtuvien vammojen välttämiseksi älä käsittele JÄNNITTEELLISIÄ johtoja. Varmista aina, että virrankatkaisin on pois päältä (OFF) ennen kuin yhdistät johdot katkaisimeen.



Varoitus: Älä poista johtimesta päällystettä enempää kuin on suositeltu. Päällysteen poistaminen suositusta pidemmältä matkalta voi aiheuttaa turvallisuusriskin, sillä riviliittimeen jää asennuksen jälkeen paljaita johtimia.



Varoitus: Kun asennat tätä laitetta, varmista aina, että runkomaadoitettu liitin kytketään ensin ja irrotetaan viimeiseksi.



Varoitus: Turvallisuusriski Tarkista, ettei asennetusta johtimesta näy paljaita kuparisäikeitä. Kun asennus suoritetaan oikein, riviliittimestä ei pitäisi näkyä paljaita kuparijohdinsäikeitä. Paljaat johtimet voivat aiheuttaa sähköiskuvaaran, jos niihin kosketaan.



Huomaa: Tämä järjestelmä toimii positiivisesti tai negatiivisesti maadoitettujen tasavirtajärjestelmien kanssa.

Norme di Sicurezza



AVVERTENZA: in ambiente domestico questo prodotto potrebbe causare radio interferenza. In questo caso potrebbe richiedersi all'utente di prendere gli adeguati provvedimenti.



AVVERTENZE ELETTRICHE

ATTENZIONE: PERICOLO DI SCOSSE ELETTRICHE

Per evitare SCOSSE ELETTRICHE non asportare il coperchio. Le componenti interne non sono riparabili dall'utente. Questa unità ha TENSIONI PERICOLOSE e va aperta solamente da un tecnico specializzato e qualificato.



PERICOLO DI FULMINI

PERICOLO: NON LAVORARE sul dispositivo o sui CAVI durante PRECIPITAZIONI TEMPORALESCHIE.



ATTENZIONE: IL CAVO DI ALIMENTAZIONE È USATO COME DISPOSITIVO DI DISATTIVAZIONE. PER TOGLIERE LA CORRENTE AL DISPOSITIVO staccare il cavo di alimentazione.



ELETTRICITÀ - DISPOSITIVI DI CLASSE I

QUESTO DISPOSITIVO DEVE AVERE LA MESSA A TERRA. La spina deve essere inserita in una presa di corrente specificamente dotata di messa a terra. Una presa non cablata in maniera corretta rischia di scaricare una tensione pericolosa su parti metalliche accessibili.



APPARECCHIATURA COLLEGABILE, la presa va installata vicino all'apparecchio per risultare facilmente accessibile.



ATTENZIONE: le prese d'aria non vanno ostruite e devono consentire il libero ricircolo dell'aria ambiente per il raffreddamento.



TEMPERATURA DI FUNZIONAMENTO: AR725, AR745: Questo prodotto è concepito per una temperatura ambientale massima di 40 gradi centigradi. AR750S: Questo prodotto è concepito per una temperatura ambientale massima di 50 gradi centigradi.



ELETTRICITÀ - SOVRACCARICO DEL CIRCUITO DI RETE A C.A.

Durante l'installazione ed il collegamento del dispositivo alla rete di alimentazione a corrente alternata, è necessario tenere in considerazione le capacità cumulative riportate sulla targhetta.



ATTENZIONE: CARICAMENTO MECCANICO - Il montaggio del dispositivo sul supporto va effettuato in maniera tale da evitare qualsiasi potenziale condizione di pericolo eventualmente dovuta al montaggio irregolare.



Batteria al litio - Va sostituita solo da un tecnico specializzato e qualificato.

ATTENZIONE: l'errata sostituzione della batteria può causare pericolo di esplosioni. Sostituire solamente con lo stesso tipo o con uno equivalente raccomandato dal produttore. Eliminare le batterie usate secondo le istruzioni del produttore.



TUTTI I PAESI: installare il prodotto in conformità delle vigenti normative elettriche nazionali.



Avvertenza: AI FINI DEL COLLEGAMENTO CENTRALIZZATO DI ALIMENTAZIONE A CC, INSTALLARE SOLO IN UN'AREA AD ACCESSO LIMITATO.



Nota: Se l'unità è alimentata a corrente continua centralizzata, per collegare l'alimentatore è necessario un cavo a piatto di tipo TC, listato UL, avente caratteristiche nominali di tensione e temperatura di 600 V e 90°C, tre conduttori ed un diametro minimo di 14 AWG.



Avvertenza: L'INSTALLAZIONE E LA SOSTITUZIONE DI QUESTA APPARECCHIATURA DEVONO ESSERE EFFETTUATE SOLAMENTE DA PERSONALE SPECIALIZZATO E QUALIFICATO.



Avvertenza: A titolo di cautelativo, installare un interruttore di sicurezza da 15 ampere sull'estremità in entrata del cavo di alimentazione di questa apparecchiatura LAN.

Collegare **SEMPRE il cablaggio** prima all'apparecchiatura LAN e poi all'interruttore. Per evitare i infortuni causati da folgorazione, non lavorare su cavi SOTTO TENSIONE. Prima di collegare il cavo all'interruttore di sicurezza, accertarsi sempre che quest'ultimo sia disinserito.



Avvertenza: Per evitare i possibili pericoli associati all'esposizione dei fili sulla morsettiera dopo l'installazione, non rimuovere l'isolamento oltre le misure specificate.



Avvertenza: Quando si installa questo apparecchio, accertarsi sempre che il collegamento a massa del telaio sia sempre il primo ad essere effettuato e l'ultimo ad essere scollegato.



Avvertenza: "Pericolo!" Controllare che il filo installato non abbia trefoli in rame esposti. Se l'installazione è stata effettuata in modo corretto, non vi deve protrudere dalla morsettiera alcun trefolo in rame esposto. In caso di contatto, un filo esposto può condurre livelli di elettricità pericolosi a quanti lo tocchino.



Nota: Questo sistema funziona con sistemi a CC con massa positiva o negativa.

Sikkerhet



ADVARSEL: Hvis dette produktet benyttes til privat bruk, kan produktet forårsake radioforstyrrelse. Hvis dette skjer, må brukeren ta de nødvendige forholdsregler.



ELEKTRISITET

ADVARSEL: FARE FOR ELEKTRISK SJOKK

For å unngå ELEKTRISK sjokk, må dekslet ikke tas av. Det finnes ingen deler som brukeren kan reparere på innsiden. Denne enheten inneholder FARLIGE SPENNINGER, og må kun åpnes av en faglig kvalifisert tekniker.



FARE FOR LYNNEDSLAG

FARE: ARBEID IKKE på utstyr eller KABLER i TORDENVÆR.



FORSIKTIG: STRØMLEDNINGEN BRUKES TIL Å FRAKOBLE UTSTYRET. FOR Å DEAKTIVISERE UTSTYRET, må strømforsyningen kobles fra.



ELEKTRISK - TYPE I- KLASSE UTSTYR

DETTE UTSTYRET MÅ JORDES. Strømkontakten må være tilkopleet en korrekt jordet kontakt. En kontakt som ikke er korrekt jordet kan føre til farlig spenninger i lett tilgjengelige metalleder.



UTSTYR FOR STIKKONTAKT. Stikkontakten skal monteres i nærheten av utstyret og skal være lett tilgjengelig.



FORSIKTIG: Lufteventilene må ikke blokkeres, og må ha fri tilgang til luft med romtemperatur for avkjøling.



DRIFTSTEMPERATUR: AR725, AR745: Dette produktet er konstruert for bruk i maksimum romtemperatur på 40 grader celsius. AR750S: Dette produktet er konstruert for bruk i maksimum romtemperatur på 50 grader celsius.



ELETRISK OVERBELASTNING PÅ AC HOVEDKRETSLØP

Når produktet installeres, må de samlede navneplateverdiene kontrolleres nøye når strøm påsettes.



FORSIKTIG: MEKANISK LASTNING Installering av utstyret på hyllen må utføres på en slik måte at ingen farlige situasjoner oppstår som en følge av ujevn lastning.



Litiumbatteri — Må kun byttes ut av en faglig kvalifisert tekniker.

FORSIKTIG: Eksplosjonsfare hvis batteriet feilinnsettes. Batteriet må bare erstattes med samme type eller en tilsvarende type som er anbefalt av fabrikanten. Batteriene må kasseres i samsvar med fabrikantens instruksjoner.



ALLE LAND: Produktet må installeres i samsvar med de lokale og nasjonale elektriske koder.



Advarsel: VED TILKOPLING TIL ET LIKESTRØMSNETT, SKAL DU BARE MONTERE UTSTYRET PÅ ET STED HVOR UVEDKOMNE IKKE HAR ADGANG.



Merknad: En kanalkabel er nødvendig for å kople til strømkilden hvis enheten drives av strøm fra et likestrømsnett. Kanalkabelen må være utstyrt med UL-merke med type TC, normert for 600 V og 90 °C med tre ledere som har en tykkelse på minst 12AWG (amerikansk ledningsmål).



Advarsel: DETTE UTSTYRET SKAL BARE MONTERES ELLER SKIFTES UT AV KVALIFISERT PERSONELL SOM HAR GJENNOMGÅTT OPPLÆRING.



Advarsel: Av sikkerhetshensyn bør en automatsikring på 15 A monteres i forsyningsenden av kabelen som skal brukes sammen med dette LAN-utstyret.

Du skal ALLTID først kople ledningene til LAN-utstyret før du kopler ledningene til automatsikringen. Arbeid aldri med ledninger uten at strømmen er slått av, ettersom det ellers kan være fare for personskader som følge av elektrisk støt. Pass alltid på at automatsikringer er slått AV før du kopler ledningene til automatsikringen.



Advarsel: Du skal ikke avisolere mer av ledningen enn det som er anbefalt. Dersom du avisolerer mer enn det som er anbefalt, kan dette forårsake en sikkerhetsfare, ettersom det vil finnes uisolert ledning på rekkeklemmen etter montering.



Advarsel: Når du monterer dette utstyret, skal du alltid passe på at forbindelsen til rammejordingen monteres først og koples fra sist.



Advarsel: "Sikkerhetsfare" Kontroller om uisolerte koppertråder stikker ut av den monterte ledningen. Hvis monteringen er riktig utført, skal det ikke finnes uisolerte kobbertråder som stikker ut fra rekkeklemmen. Uisolerte ledninger kan lede skadelige mengder strøm til personer som berører ledningene.



Merknad: Systemet fungerer med positivt og negativt jordede likestrømssystemer.

Segurança



AVISO: Num ambiente doméstico este produto pode causar interferência na radiorrecepção e, neste caso, pode ser necessário que o utente tome as medidas adequadas.



AVISOS SOBRE CARACTERÍSTICAS ELÉTRICAS

ATENÇÃO: PERIGO DE CHOQUE ELÉTRICO

Para evitar CHOQUE ELÉTRICO, não retire a tampa. Não contém peças que possam ser consertadas pelo usuário. Este aparelho contém VOLTAGENS PERIGOSAS e só deve ser aberto por um técnico qualificado e treinado.



PERIGO DE CHOQUE CAUSADO POR RAI

PERIGO: NÃO TRABALHE no equipamento ou nos CABOS durante períodos suscetíveis a QUEDAS DE RAI.



CUIDADO: O CABO DE ALIMENTAÇÃO É UTILIZADO COMO UM DISPOSITIVO DE DESCONEXÃO. PARA DESELETRIFICAR O EQUIPAMENTO, desconecte o cabo de ALIMENTAÇÃO.



ELÉTRICO - EQUIPAMENTOS DO TIPO CLASSE I

DEVE SER FEITA LIGAÇÃO DE FIO TERRA PARA ESTE EQUIPAMENTO. O plugue de alimentação deve ser conectado a uma tomada com adequada ligação de fio terra. Tomadas sem adequada ligação de fio terra podem transmitir voltagens perigosas a peças metálicas expostas.



EQUIPAMENTO DE LIGAÇÃO, a tomada eléctrica deve estar instalada perto do equipamento e ser de fácil acesso.”



CUIDADO: As aberturas de ventilação não devem ser bloqueadas e devem ter acesso livre ao ar ambiente para arrefecimento adequado do aparelho.



TEMPERATURA DE FUNCIONAMENTO: AR725, AR745: Este produto foi projetado para uma temperatura ambiente máxima de 40 graus centígrados. AR750S: Este produto foi projetado para uma temperatura ambiente máxima de 50 graus centígrados.



ELÉTRICO - SOBRECARGA DA REDE DE CORRENTE ALTERNADA (AC)

Antes de instalar o produto, verifique o efeito cumulativo da conexão de diversos aparelhos à rede de corrente alternada através das etiquetas que indicam potência ou amperagem.



CUIDADO: CARREGAMENTO - O equipamento deverá ser montado no suporte de montagem de forma tal que não cause perigo devido a carregamento não uniforme.



Bateria de lítio - Só deve ser trocada por técnico qualificado e treinado.

CUIDADO: Se a bateria não for devidamente instalada há perigo de explosão. Substitua somente pelo mesmo tipo ou equivalente, conforme recomendado pelo fabricante. Descarte baterias usadas, de acordo com as instruções fornecidas pelo fabricante.



TODOS OS PAÍSES: Instale o produto de acordo com as normas nacionais e locais para instalações elétricas.



Aviso: PARA UMA LIGAÇÃO CC CENTRALIZADA, INSTALE APENAS NUMA ZONA DE ACESSO RESTRITO.



Nota: É necessário um cabo de bandeja para ligar a fonte de energia se a unidade for alimentada por um fonte CC centralizada. O cabo de bandeja deve fazer parte da lista UL do Tipo TC cabo de bandeja para 600 V e 90 graus C, com três condutores, com um mínimo de 14 AWG.



Aviso: SÓ PESSOAL TREINADO E QUALIFICADO PODE INSTALAR OU SUBSTITUIR ESTE EQUIPAMENTO.



Aviso: Como medida de precaução, deve instalar-se um disjuntor de 15 Amp na extremidade de alimentação do cabo a ser usado com este equipamento LAN.

Ligue **SEMPRE** os cabos ao equipamento LAN primeiro antes de os ligar ao disjuntor. Para evitar o perigo de ferimentos por choque eléctrico, não trabalhe com alimentadores LIGADOS. Verifique sempre se o disjuntor está na posição OFF (desligado) antes de ligar os cabos ao mesmo.



Aviso: Não corte mais fio do que recomendado. Cortar mais do que o recomendado pode ser perigoso, por deixar fio exposto no terminal depois da instalação.



Aviso: Ao ligar este equipamento, instale sempre primeiro a ligação à terra e desligue-a sempre em último.



Aviso: “Perigo” Verifique se há algum fio de cobre exposto a sair do fio instalado. Quando esta instalação é feita correctamente não deve haver qualquer fio de cobre exposto a sair do terminal. Qualquer fio exposto pode conduzir níveis perigosos de electricidade para a pessoa que toque nos fios.



Nota: Este sistema funciona com sistemas CC com ligações à terra Positivas ou Negativas.

Seguridad



ADVERTENCIA: en un entorno doméstico, este producto puede causar radiointerferencias, en cuyo caso, puede requerirse del usuario que tome las medidas que sean convenientes al respecto.



AVISOS ELECTRICOS

ADVERTENCIA: PELIGRO DE ELECTROCHOQUE

Para evitar un ELECTROCHOQUE, no quite la tapa. No hay ningún componente en el interior al cual puede prestar servicio el usuario. Esta unidad contiene VOLTAJES PELIGROSOS y sólo deberá abrirla un técnico entrenado y calificado.



PELIGRO DE RAYOS

PELIGRO: NO REALICE NINGUN TIPO DE TRABAJO O CONEXION en los equipos o en LOS CABLES durante TORMENTAS ELECTRICAS.



ATENCION: EL CABLE DE ALIMENTACION SE USA COMO UN DISPOSITIVO DE DESCONEXION. PARA DESACTIVAR EL EQUIPO, desconecte el cable de alimentación.



ELECTRICO - EQUIPO DEL TIPO CLASE I

ESTE EQUIPO TIENE QUE TENER CONEXION A TIERRA. El cable tiene que conectarse a un enchufe a tierra debidamente instalado. Un enchufe que no está correctamente instalado podría ocasionar tensiones peligrosas en las partes metálicas que están expuestas.



EQUIPO CONECTABLE, el tomacorriente se debe instalar cerca del equipo, en un lugar con acceso fácil”.



ATENCION: Las aberturas para ventilación no deberán bloquearse y deberán tener acceso libre al aire ambiental de la sala para su enfriamiento.



TEMPERATURA REQUERIDA PARA LA OPERACIÓN:

AR725, AR745: Este producto está diseñado para una temperatura ambiental máxima de 40 grados C.

AR750S: Este producto está diseñado para una temperatura ambiental máxima de 50 grados C.



ELECTRICO - SOBRECARGA DEL CIRCUITO PRIMARIO DE CORRIENTE ALTERNA

Al instalarse el producto deberán considerarse las potencias nominales acumulativas, cuando se conecta el equipo al cable de alimentación de corriente alterna.



ATENCION: CARGA MECANICA - El montaje del equipo en el bastidor debe realizarse de manera tal que no cause una condición peligrosa debido a la distribución desigual del peso.



Batería de litio - Sólo deberá ser cambiada por un técnico entrenado y calificado.
ATENCIÓN: Peligro de explosión si la batería no se reemplaza en forma correcta. Reemplace sólo con el mismo tipo o equivalente que recomienda el fabricante. Deseche las baterías usadas según las instrucciones del fabricante.



PARA TODOS LOS PAÍSES: Monte el producto de acuerdo con los Códigos Eléctricos locales y nacionales.



Advertencia: PARA HACER CONEXIONES DE CC CENTRALIZADAS, INSTALE EL CONMUTADOR ÚNICAMENTE EN LUGARES CON ACCESO RESTRINGIDO.



Nota: Para conectar la fuente de alimentación, se necesita un cable de bastidor si el aparato es activado por una fuente de alimentación de CC. El cable de bastidor debe figurar en la lista de UL, ser de tipo TC, tener una clasificación de 600 V y 90 grados C, y disponer de tres conductores con un mínimo de 12 según el Patrón de Medidas Estadounidense (AWG - American Wire Gage).



Advertencia: ÚNICAMENTE EMPLEADOS CAPACITADOS Y COMPETENTES TIENEN LA AUTORIZACIÓN DE INSTALAR O REPONER DICHO EQUIPO.



Advertencia: Por razones de precaución, se debe instalar un cortacircuitos de 15 amperios en el extremo de alimentación del cable que se utilizará con este equipo LAN.

SIEMPRE conecte los cables al equipo LAN primero, antes de conectarlos al cortacircuitos. Para evitar el peligro de sufrir daños corporales a causa de sacudidas eléctricas, no trabaje con conductores CON CORRIENTE. Asegúrese siempre de que el cortacircuitos esté en la posición de APAGADO (OFF) antes de conectar los cables al cortacircuitos.



Advertencia: No pele el cable más de la cantidad recomendada, ya que si después de instalar el bloque terminal quedan cables pelados, habrá riesgos de seguridad.



Advertencia: Cuando instale dicho equipo, asegúrese siempre de que el bastidor se conecte a tierra primero y se desconecte por último.



Advertencia: “Riesgo de seguridad” Cerciórese de que no haya hilos de cobre pelados que salgan del alambre instalado. Cuando dicha instalación se realiza correctamente, los hilos de cobre pelados no deben salir del bloque terminal. Todo alambre pelado puede conducir niveles de electricidad nocivos a la persona que lo toca.



Nota: Este sistema funcionará con sistemas de CC con conexión positiva o negativa a tierra.

Säkerhet



WARNING: Denna produkt kan ge upphov till radiostörningar i hemmet, vilket kan tvinga användaren till att vidtaga erforderliga åtgärder.



TILLKÄNNAGIVANDEN BETRÄFFANDE ELEKTRICITETSRIK:
RISK FÖR ELEKTRISK STÖTFör att undvika ELEKTRISK stöt, ta ej av locket. Det finns inga delar inuti som behöver underhållas. Denna apparat är under HÖGSPÄNNING och får endast öppnas av en utbildad kvalificerad tekniker.



FARA FÖR BLIXTNEDSLAG
FARA: ARBETA EJ på utrustningen eller kablarna vid ÅSKVÄDER.



WARNING: NÄTKABELN ANVÄNDS SOM STRÖMBRYTARE FÖR ATT KOPPLA FRÅN STRÖMMEN, dra ur nätkabeln.



ELEKTRISKT - TYP KLASS I UTRUSTNING
 DENNA UTRUSTNING MÅSTE VARA JORDAD. Nätkabeln måste vara ansluten till ett ordentligt jordat uttag. Ett felaktigt uttag kan göra att närliggande metalldelar utsätts för högspänning. Apparaten skall anslutas till jordat uttag, när den ansluts till ett nätverk.



UTRUSTNING MED PLUGG. Uttaget skall installeras i utrustningens närhet och vara lättåtkomligt”.



WARNING: Luftventilerna får ej blockeras och måste ha fri tillgång till omgivande rumsluft för avsvaning.



DRIFTSTEMPERATUR: AR725, AR745: Denna produkt är konstruerad för rumstemperatur ej överstigande 40 grader Celsius.
 AR750S: Denna produkt är konstruerad för rumstemperatur ej överstigande 50 grader Celsius.



ELEKTRISKT - ÖVERBELASTNING AV VÄXELSTRÖMSNÄTET: När produkten installeras bör den sammanlagda effekten på namnplåten beaktas när apparaten ansluts till växelströmsnätet.



WARNING: MEKANISK BELASTNING: Utrustningen ska installeras i chassit på så sätt att fara inte uppstår p g a ojämn belastning.



Litium batteri - Får endast bytas av utbildade och kvalificerade tekniker.
WARNING: Risk för explosion om felaktigt batteri används. Byt endast mot samma eller likvärdig typ batteri, rekommenderat av tillverkaren. Kassera använda batterier i enlighet med tillverkarens instruktioner.



ALLA LÄNDER: Installera produkten i enlighet med lokala och statliga bestämmelser för elektrisk utrustning.



Warning: ANSLUTNING TILL LIKSTRÖMSNÄT FÅR ENDAST SKE I LOKAL DÄR OBEHÖRIGA EJ ÄGER TILLTRÄDE.



Anmärkning: Kanalkabel krävs för att ansluta strömkällan om enheten ansluts till likströmsnät. Kanalkabeln måste vara UL-märkt och av TC-typ. Kabeln måste ha en märkspänning på 600 V och en märktemperatur på 90 grader Celsius samt ha tre ledare med en tjocklek på minst 14 AWG (amerikanskt ledningsmått).



Varning: INSTALLATION OCH UTBYTE AV DENNA UTRUSTNING FÅR ENDAST UTFÖRAS AV AUKTORISERAD ELINSTALLATÖR.



Varning: Av säkerhetsskäl skall en 15 A automatsäkring anslutas till försörjningsänden på kabeln som används till denna LAN-utrustning.

Ledningar skall **ALLTID** anslutas till LAN-utrustningen innan ledningarna ansluts till automatsäkringen. För att förebygga uppkomsten av personsador orsakade av elektrisk stöt skall man inte vidröra strömförande uttag. Kontrollera alltid att automatsäkringen är i läget OFF (AV) innan anslutning av ledningar till automatsäkringen sker.



Varning: Skala inte av mer isolering än vad som anges ovan. Skalans för mycket isolering av kan fara uppstå om oskyddad tråd vidrörs på anslutningsplinten efter anslutningen.



Varning: Vid anslutning av denna utrustning skall man alltid se till att jordtråden ansluts först och lossas sist.



Varning: OBS! FARA! Kontrollera om små koppartrådar sticker ut ifrån den anslutna tråden. Om anslutningen utförts riktigt sticker inga trådar ut från anslutningsplinten. Oisolerade trådar kan överföra skadlig elektricitet till person som vidrör trådarna.



Anmärkning: Detta system fungerar både med positivt och negativt jordade likströmskällor.

Connection to mains voltage supply

This product is supplied with a power cord that incorporates a moulded plug and has been approved for use. It must only be used with the power cord supplied.

For continued protection against the risk of fire and shock hazard, replace fuses only with the same type and rating.

Telecommunications Interfaces



Warning To reduce risk of fire use only No.26 awg or larger telecommunications line cord if the cord supplied is not used with the apparatus.

Important Safety Instructions

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Do not use this product near water, for example near a bathtub, washbowl, kitchen sink, or laundry tub in a wet basement or near a swimming pool.
2. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be remote risk of electric shock from lightning.
3. Do not use the telephone to report a gas leak in the vicinity of the leak.
4. Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.
5. Remove the telephone cord from the unit prior to making changes to the expansion port.

Save these instructions

Connection to ISDN network

This product is supplied with an approved patch cord for connection to the ISDN Basic Rate Network.

Ports for the connection of other apparatus

The following interfaces normally operate at SELV (Safe Extra Low Voltage) levels:

- Asynchronous (console) ports
- Ethernet ports
- G703 ports
- Synchronous ports

Note SELV is a secondary circuit whose voltages do not exceed a safe value under normal operating conditions and under single fault conditions. Under normal operating conditions the voltages do not exceed 42.4V peak a.c. or 60V d.c.

TNVI

The following interfaces are Telecommunications Network Voltage (TNVI) circuits, which operate normally within the limits of SELV:

- BRI ports for connection to ISDN Basic Rate telecommunications networks
- PRI ports for connection to ISDN Primary Rate telecommunications networks
- E1/T1 ports for connection to E1/T1 services

Note A TNVI circuit is a circuit which under normal operating conditions does not exceed the limits for SELV and on which overvoltages from telecommunication networks are possible.

US Federal Communications Commission (FCC)

This equipment complies with Part 68 of the Federal Communications Commission (FCC) rules for the United States.

A label is located on the underside of the base unit containing the FCC registration number. You must, upon request, provide the following information to your local telephone company:

For the AR021U PIC

Facility Interface Code	021S5
Service Order Code	6.0Y
	The AR021U PIC has completed the ISDN Ordering Codes Translation Review and is registered for IOC S and EZ-ISDN I.
USOC Jack Type	RJ49C

Should you experience trouble with this telephone equipment, please contact:
 ALLIED TELESYN INTERNATIONAL
 19800 NORTH CREEK PARKWAY #200
 BOTHELL
 WASHINGTON 98011
 TEL: 425 487 8880
 FAX: 425 489 9191

If trouble is experienced with this equipment (AR021U PIC), for repair or warranty information, please contact the above. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

This equipment cannot be used on public coin phone service provided by the telephone company. Connection to party line service is subject to state tariffs.

Your telephone company may discontinue your service if your equipment causes harm to the telephone network. They will notify you in advance of disconnection, if possible. During notification, you will be informed of your right to file a complaint to the FCC.

Occasionally, your telephone company may make changes in its facilities, equipment, operation, or procedures that could affect the operation of your equipment. If so, you will be given advance notice of the change to give you an opportunity to maintain uninterrupted service.

Canadian Department of Communications

The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.



Warning Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

This digital apparatus does not exceed the limits for radio noise emissions from digital apparatus as set out in the Radio Interface Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministre des Communications du Canada.

EC Declaration of Conformity

We: **ALLIED TELESYN RESEARCH LIMITED**
27 NAZARETH AVENUE
CHRISTCHURCH 8002
NEW ZEALAND

Declare under our sole legal responsibility that the following product meets the safety, protection and conformity requirements of council directives 89/336/EEC and 73/23/EEC (as amended by directive 93/68/EEC) on the approximation of the laws of member states relating to electromagnetic compatibility, electrical safety and the mutual recognition of conformity of telecommunications terminal equipment

AR700 SERIES ROUTERS

to which this declaration relates are in conformity with the following relevant harmonized standards, the reference numbers of which have been published in the Official journal of the European community.

EN55022: 1998	Information Technology Equipment—Radio disturbance
EN55024: 1998	Information Technology Equipment—Immunity characteristics—Limits and methods of measurement.
EN60950: 2000	AR725, AR745 only: Safety of Information Technology Equipment, including electrical business equipment.
EN60950-1: 2001	AR750S only: Information Technology Equipment including electrical business equipment—General Requirements.

Name: Craig Thornton
On behalf of the Manufacturer

Position: Engineering Manager

Signature:

Date: 17 December 2004



