

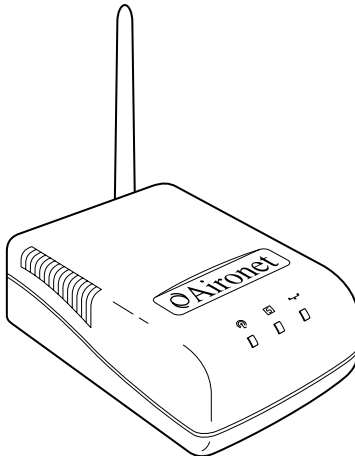


# ***User's Guide***

## ***Clients for Ethernet or Serial***

Products supported:  
UC4500, MC4500, UC4800, MC4800

DOC-710-004244-B0



---

Aironet Wireless Communications, Inc. • 3875 Embassy Parkway  
Akron, Ohio 44333-8357  
[www.aironet.com](http://www.aironet.com)

## **Aironet Wireless Communications, Inc.**

No part of this document may be reproduced or transmitted in any means, electronic or mechanical, for any purpose, without the written permission of Aironet. Information in this document is subject to change without notice. Aironet makes no representation or warranties with respect to the contents of this manual and specifically disclaims any express or implied warranties of merchantability or fitness for any particular purpose.

© 1999 Aironet Wireless Communications, Inc.  
All rights reserved.

LM4500™, LM4800™, AP4500™, AP4800™, PC4500™, PC4800™, MC4500™, MC4800™, UC4500™, UC4800™, ISA4500™, ISA4800™, PCI4500™, PCI4800™, BR100™, BR500™, BRE100™, BRE500™, and Aironet™ are trademarks of Aironet Wireless Communications, Inc.

Other trademarks used are properties of their respective owners.

Printed in USA

DOC-710-004244-B0

## Table of Contents

---

<b>Introduction .....</b>	<b>1-1</b>
Purpose of the Manual .....	1-2
Serial Client .....	1-3
Ethernet Client .....	1-6
Universal Client .....	1-6
Multi-Client .....	1-7
Safety Information .....	1-8
Dipole Antenna .....	1-9
High Gain Antennas .....	1-9
Other Devices in the Wireless Infrastructure .....	1-9
Before You Start .....	1-10
Terminology .....	1-11
<b>Installation .....</b>	<b>2-1</b>
Installing the Antenna .....	2-1
Installing the Console Port Cable .....	2-2
Installing the Ethernet Connection .....	2-3
Attaching the AC/DC Power Pack and Powering On .....	2-4
Viewing the Indicator Displays .....	2-5
Top Panel Indicators .....	2-5
Back Panel Indicators (Ethernet Only) ...	2-8
Using the Mounting Bracket .....	2-9
<b>Configuration .....</b>	<b>3-1</b>
Accessing the Console System .....	3-1
Configuring the Aironet Wireless Client .....	3-4
SSID Identifier (SSID) .....	3-4
Verifying Association .....	3-4
Configuring the Port .....	3-5
Disconnecting the Terminal .....	3-7
Ethernet Client .....	3-7
Serial Client .....	3-7

<b>Appendix A .....</b>	<b>A-1</b>
DC Power Jack Connector .....	A-1
<b>Appendix B .....</b>	<b>B-1</b>
Serial Port Pinout .....	B-1
Ethernet RJ-45 Port Pinout .....	B-2
Sample Application Cable Pinout .....	B-3
<b>Appendix C.....</b>	<b>C-1</b>
Manufacturers Federal Communication Commission Declaration of Conformity Statement.....	C-1
Department of Communications–Canada European Telecommunications Standards Institute Statement of Compliance Information to User.....	C-4
Declaration of Conformity.....	C-5
<b>Appendix D .....</b>	<b>D-1</b>
Technical Support .....	D-1
Technical Reference Manual .....	D-1
Communications .....	D-1
Web Site .....	D-1

# Introduction

The Wireless Client from Aironet is another member of the company's broad array of wireless LAN solutions. Aironet has pioneered the design and manufacture of wireless LAN products that use advanced spread spectrum radio technologies for reliable data communications.

By using RF technology to rapidly send and receive data over the airwaves, Aironet's wireless LAN products enable portable and mobile users to access all the resources of a wired infrastructure without sacrificing roaming and mobility capabilities. These wireless users enjoy network connectivity with the "real-time" speed and response that users have come to expect from wired LANs. The mobility and portability of Aironet's wireless LAN products has spurred implementation among many vertical markets – including retail, health care, manufacturing, and distribution.

The Aironet Wireless Client system is compliant with IEEE 802.11 standards for wireless LAN. Compliance with this standard provides assurance of technical excellence as well as capability of interoperability with products from other wireless vendors.

All Aironet products include the company's patented software architecture that enables users to roam seamlessly between Access Points without losing infrastructure connections. This exclusive software also provides load balancing, easy network expansion, and advanced power management for battery-powered mobile devices. Aironet's array of wireless LAN solutions (including Access Points, Bridges, Adapters, PC Cards, Universal Clients, antennas, and infrastructure management software) enables you to experience infrastructure performance while enjoying the mobility and portability of wireless communications.

### ***Purpose of the Manual***

The purpose of this User's Guide is to allow you to easily install and configure your Aironet Wireless Client.

For detailed technical and configuration procedures, see the Technical Reference Manual document number 710-004245.

The Aironet Wireless Client is a small, stand-alone unit that provides a wireless infrastructure connection for a device that is unable to use a standard wireless LAN adapter. A Wireless Client-equipped peripheral device is able to establish radio connections with any Aironet Access Point (Ethernet and/or Token Ring models) or devices equipped with Aironet wireless products installed throughout a facility. The Multi-Client can connect up to four end nodes to an Ethernet infrastructure.

For greater installation and application flexibility, Aironet Wireless Clients are offered with a choice of radio frequencies and interfaces. The Aironet Wireless Client offers radio communications to 2.4 GHz direct sequence compliant with IEEE 802.11 specifications.

There are two interface options:

- Serial Universal Client
- Ethernet Universal Client or Multi-Client

## ***Serial Client***

The Serial Client has a standard EIA-232-E port for use with a wide range of devices that support standard serial input/output. Many serial devices such as point-of-sale registers, weigh stations, and printers cannot support wireless LAN cards, however they can be connected using a Wireless Client serial connection. The Wireless Client's Serial Port connects directly to the device's Serial Port. This allows the device to communicate with the infrastructure or another computer over a wireless radio link. The Serial Client appears as a serial node in the infrastructure. It routes packets from the wired LAN to remote workstations, such as PCs and handhelds, on the radio network.

The Serial Client can provide wireless data communication between:

- A Wired LAN and fixed, portable, or mobile devices that each contain a radio.
- A single client on a remote serial LAN and other nodes in a wired LAN.
- A Single EIA-232-E serial device connected to a Wireless Client Serial Port and another serial device or host computer connected to another Wireless Client.

## Introduction

---

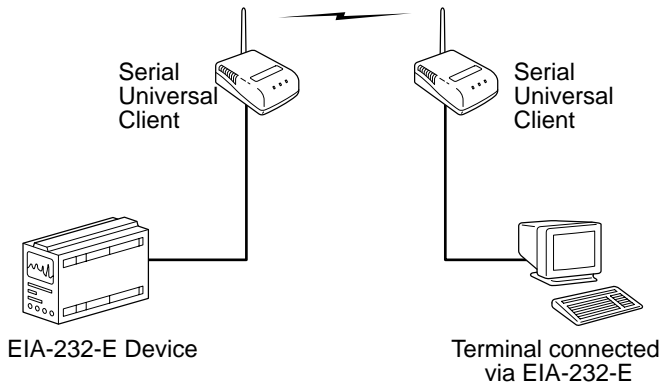
There are two common applications for the Serial Client:

- Replacing a serial cable with a wireless link. The cable between a serial device and its host can be eliminated.

---

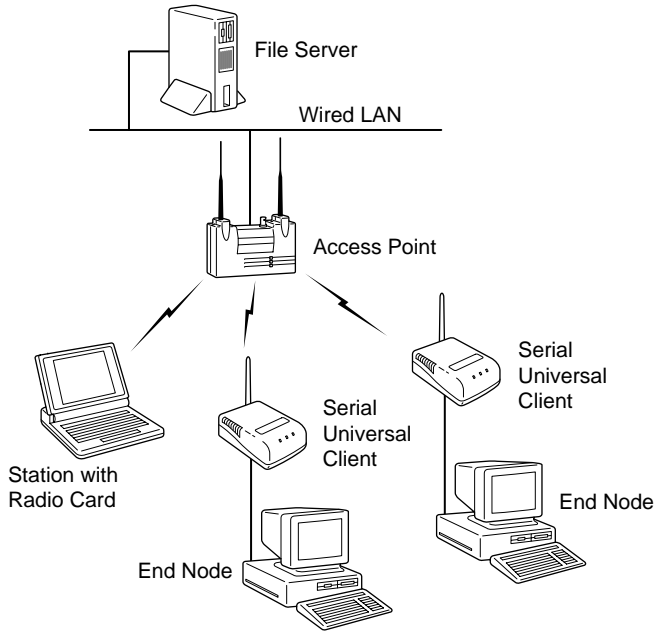
**NOTE:** For this application, two Wireless Clients are required.

---





- Connecting a serial device to a LAN using an Access Point.

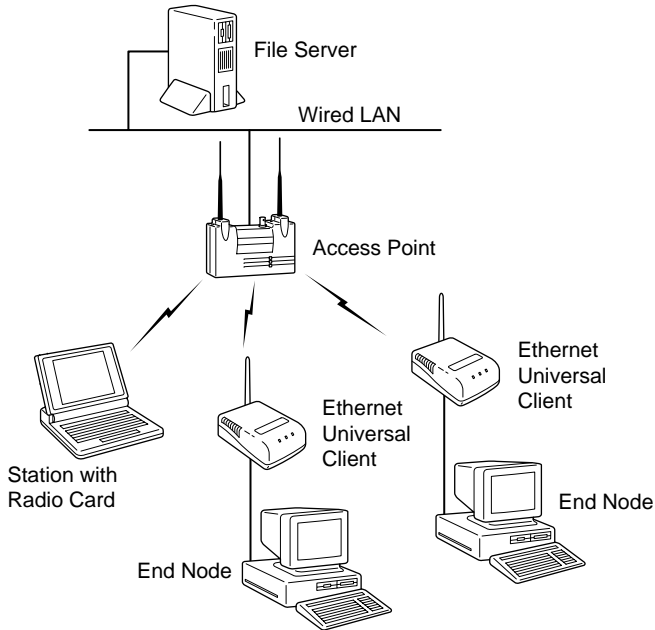


## ***Ethernet Client***

The Universal Client and the Multi-Client can connect nodes to an Ethernet infrastructure.

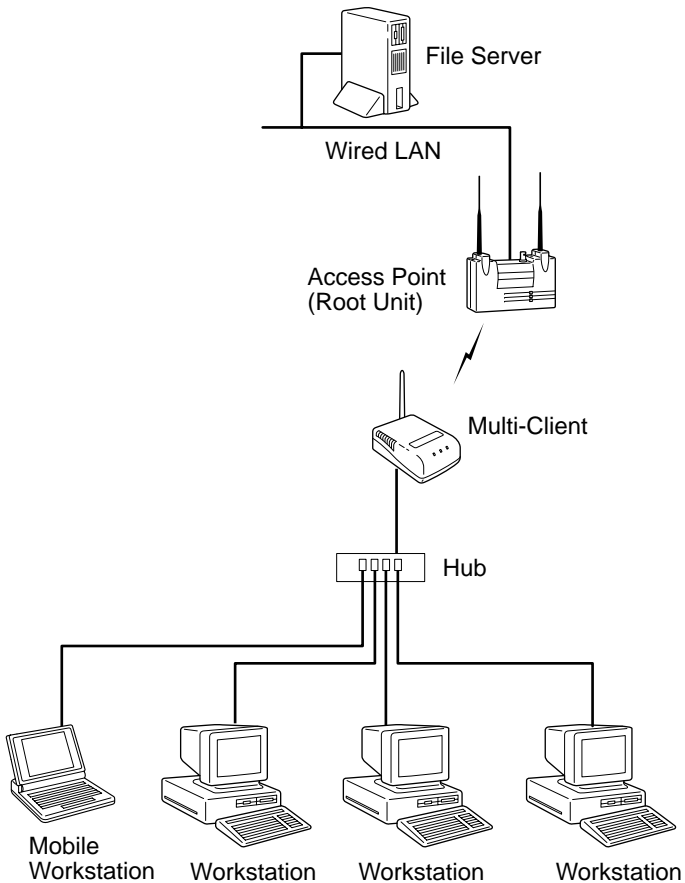
### **Universal Client**

The Ethernet Client connects to a standard Ethernet port using a 10BaseT/RJ-45 (twisted pair) connector. The Ethernet Client supports ad hoc networking or Ethernet connectivity to a wired LAN using Access Points. The Ethernet Client can be used in a variety of infrastructure system configurations. The figure below shows Ethernet Universal Clients connected to a file server over a wired LAN through the Access Point.



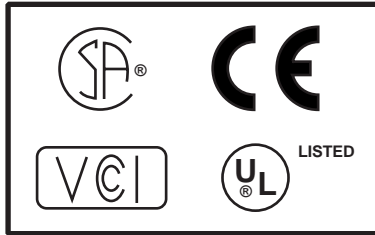
## Multi-Client

The Multi-Client connects to a standard 10BaseT/RJ-45 (twisted pair) connector. The Multi-Client can connect up to four end nodes through a hub to an Ethernet infrastructure.



## ***Safety Information***

The FCC with its action in ET Docket 96-8 has adopted a safety standard for human exposure to radiated frequency (RF) electromagnetic energy emitted by FCC certified equipment. The Aironet products meet the uncontrolled environmental limits found in OET-65 and ANSI C95.1, 1991. Proper operation of this radio according to the instructions found in this manual will result in the user exposure to be substantially below the FCC recommended limits.



- Do not touch or move antenna(s) while the unit is transmitting or receiving.
- Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate a portable transmitter near unshielded blasting caps or in an explosive environment unless it is a type especially qualified for such use.
- Do not operate radio or attempt to transmit data unless the antenna is connected, if not, the radio may be damaged.

## **Dipole Antenna**

Always orient antenna such that it is at least 15 cm (6 inches) away from your body.

## **High Gain Antennas**

High gain wall mount or mast mount antennas are designed to be professionally installed and should be located at a minimum distance of 30 cm (12 inches) or more from your body. Please contact your professional installer, VAR, or antenna manufacturer for proper installation requirements.

## **Other Devices in the Wireless Infrastructure**

Refer to the User's Guide and Technical Reference Manual for the Access Point, Universal Client, PC Card, or Bridge for additional information.

### ***Before You Start***

After unpacking the system, make sure the following items are present and in good condition.

- Aironet Wireless Client (Universal Client or Multi-Client)
- Power Pack. The power pack will be either 120VAC/60Hz or 90-264VAC/47-63Hz to 12-18VDC, whichever is appropriate for country of use.
- Standard RP-SMA 2 dBi dipole antenna
- Mounting Kit

If any item is damaged or missing, contact your Aironet supplier. Save all shipping and packing material in order to repack the unit should service be required.

---

**NOTE:** Any remote antennas or associated coaxial cables are ordered and packed separately.

---

## ***Terminology***

When configuring your system, and when reading this manual, keep in mind the following terminology:

**Association** – Each root unit or repeater in the infrastructure contains an association table that controls the routing of packets between the Access Point and the wireless infrastructure. The association table maintains entries for all the nodes situated below the Access Point on the infrastructure including repeaters and client nodes.

**End Node** – A client node that is located at the end of the Network Tree.

**Infrastructure** – The wireless infrastructure is the communications system that combines Access Points, mobile nodes, and fixed nodes. Access Points within the infrastructure can be either root units, which are physically wired to the LAN backbone, or can act as wireless repeaters. Other RF enabled devices serve as fixed nodes or mobile nodes.

**Parent/Child Node** – Refers to the relationships between nodes in the wireless infrastructure. The complete set of relationships is sometimes described as a Network Tree. For example, the Access Point (at the top of the tree) would be the parent of the end nodes. Conversely, the end nodes would be the children of the Access Point.

**Repeater** – A repeater is an Access Point that extends the radio range of the infrastructure. A repeater is not physically attached to the wired LAN, but communicates via radio to another Access Point, which is either a root unit or another repeater.

**Root Unit** – The root unit is an Access Point that is located at the top, or starting point, of a wireless infrastructure. A root unit provides the physical connection to the wired LAN (such as Ethernet or Token Ring) and contains configuration information in its association table that covers all nodes that access the wired infrastructure. All Access Points directly attached to the wired LAN backbone are root units.

**Service Set Identifier** – A unique identifier that is attached to selected packets sent out over the radio network. This functions as a password to join the radio network.



# Installation

This section describes the procedures for installing the Aironet Wireless Client.

## *Installing the Antenna*

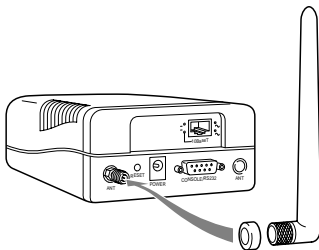
Install your Aironet Wireless Client using the following instructions.

1. With the unit disconnected from the power source, attach the antenna to the antenna connector.

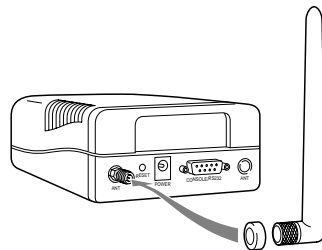
---

**NOTE:** Do not over-tighten; finger tight is sufficient. Position the antenna vertically for best omni-directional signal reception.

---



Ethernet Wireless Client



Serial Wireless Client

---

**NOTE:** The rubber grommet exerts pressure on the antenna-threaded nut to maintain antenna position.

---

**NOTE:** If you are using a remote antenna with your Aironet Wireless Client, connect the coaxial cable to the antenna connector. Use only Aironet antennas and cables. Refer to the Aironet Antenna Guide (document number 710-003725) for available antennas and cables.

---

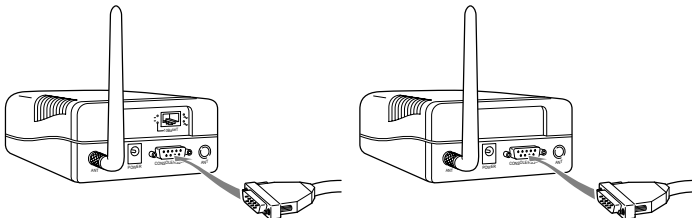
### ***Installing the Console Port Cable***

1. With the unit unplugged, attach the Console Port cable to the Serial Port. Attach the other cable end to the Serial Port on a terminal or a PC running a terminal emulation program. Use a 9-pin male to 9-pin female straight through cable. See Appendix B for cable pinout.

---

**NOTE:** This connection is required for setting up initial configuration information. After configuration is completed, this cable may be removed until additional configuration is required via the Serial Port. This port is also used as the data port for the Serial Client.

---



Ethernet Wireless Client

Serial Wireless Client

2. Set the terminal to **9600** Baud, **No-Parity**, **8** data bits, **1** Stop bit, and ANSI compatible.

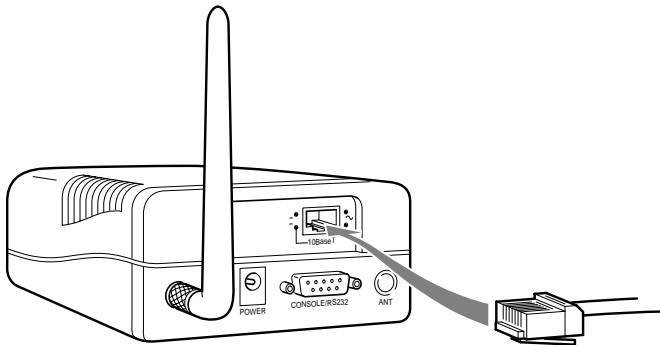
---

**NOTE:** If you are using a Serial Client, go to *Attaching the AC/DC Power Pack and Powering On*.

---

## ***Installing the Ethernet Connection***

1. Make sure the unit is disconnected from the power source.
2. Plug the RJ-45 connector into the 10BaseT port (Twisted Pair).
3. Connect the other end of the Twisted Pair cabling to the LAN connection (such as the crossover part of a hub for the Multi-Client or wired LAN for the Universal Client).



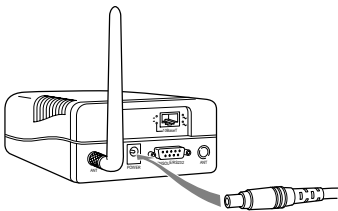
## ***Attaching the AC/DC Power Pack and Powering On***

1. Insert the small plug on the end of the AC/DC power pack cord into the power port.
2. Plug the AC/DC power pack into an electrical outlet (120VAC/60Hz or 90-264VAC/47-63Hz as appropriate).

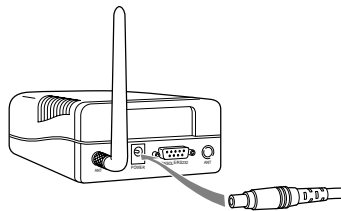
---

**NOTE:** Connecting the power pack powers on the Aironet Wireless Client.

---



Ethernet Wireless Client



Serial Wireless Client

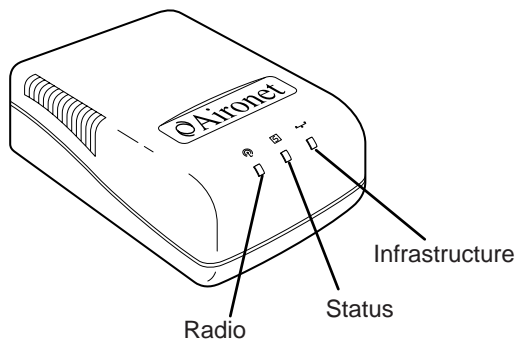
When power is initially applied to the Aironet Wireless Client, all three indicators will blink in sequence to test the functionality of the indicators.

## Viewing the Indicator Displays

### Top Panel Indicators

The indicators are a set of displays located on the top panel of the Aironet Wireless Client unit.

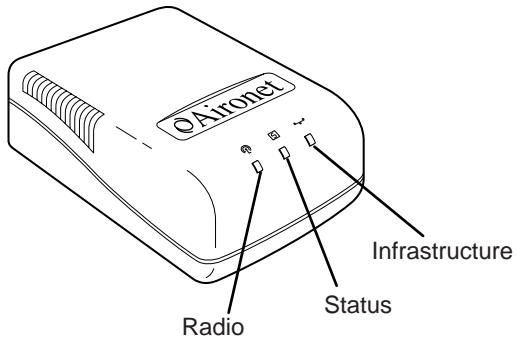
- **Radio Indicator** – Used to indicate radio traffic activity. The light is normally off, but will blink green whenever a packet is received or transmitted over the radio.
- **Status Indicator** – Used to indicate operational status. Blinking green indicates the Aironet Wireless Client is operating normally but is not in RF communication. Solid green indicates the unit has associated with an Access Point.
- **Infrastructure Indicator** – Used to indicate infrastructure activity. The light is normally off, but will blink green whenever a packet is received or transmitted over the infrastructure.



## Installation

---

When the Aironet Wireless Client is initially powered up, all three displays will blink amber, red and then green, in sequence. If a power-on test fails, the status indicator will go solid red and the unit will stop functioning. See **Table 2.1** for a detailed explanation of the Top Panel indicators.



**Table 2.1 – Top Panel Indicator Description**

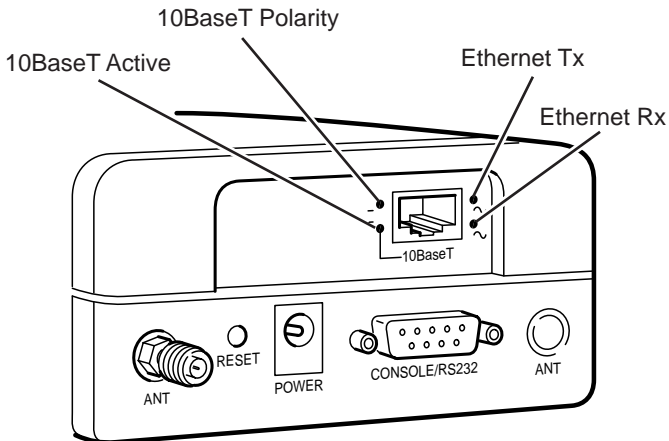
Type	Indicator Display			Description
	Radio	Status	Infrastructure	
Nonassociated Node		Blinking Green		Not associated to an Access Point
		Green		Associated to an Access Point
Operational	Blinking Green	Green		Transmitting/Receiving Radio packets
		Green	Blinking Green	Transmitting/Receiving packets
	Blinking Amber	Green		Maximum retries/buffer full occurred on radio*
Error/Warning		Green	Blinking Amber	Transmit/Receive errors*
		Blinking Amber		General warning, check the logs*
Failure	Red	Red	Red	Software failure*
Firmware Upgrade		Red		Flashing the firmware*

\*See the Technical Reference Manual for instructions

### Back Panel Indicators (Ethernet Only)

The back panel indicators are:

- **10BaseT polarity:** Solid amber to indicate the 10BaseT polarity is reversed. Check cable connections.
- **10BaseT active:** Solid green to indicate the 10BaseT has been configured as the active port.
- **Ethernet Rx:** Blinks green when an Ethernet packet has been received.
- **Ethernet Tx:** Blinks green when an Ethernet packet has been transmitted.

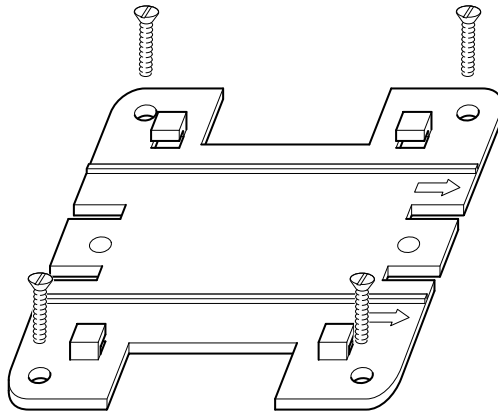




## ***Using the Mounting Bracket***

To mount the Aironet Wireless Client to a wall, use the mounting bracket.

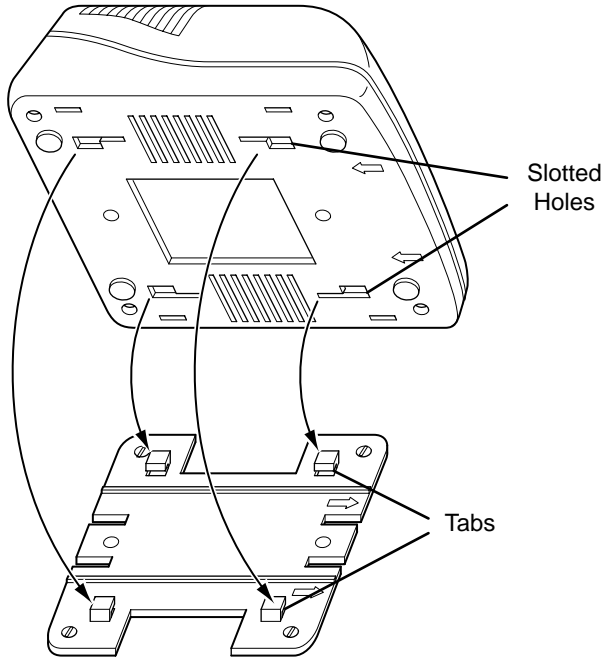
1. Select the location to mount the unit.
2. Place the flat side (without tabs) of the bracket against the wall with the arrows pointing to the right or left.
3. Using four No. 6 pan screws, screw the mounting bracket into the wall.



## Installation

---

4. Align the 4 slotted holes at the back of the unit with the 4 tabs on the bracket.



5. Push the unit slightly against the bracket. Slide the unit in the direction of the arrows on the bottom of the unit until it locks into place.
6. Position the antenna vertically.

# Configuration

This section describes the methods used to access and configure the Console system of the Aironet Wireless Client. This system contains all commands necessary to configure and monitor the operation of the unit.

## *Accessing the Console System*

There are many ways in which you may configure and monitor the Aironet Wireless Client. When the unit is first powered up, basic configuration must initially be performed by accessing the Console Serial Port.

To gain access through the Serial Port, the Aironet Wireless Client must be connected to a terminal or a PC running a terminal emulation program.

1. Set the terminal to **9600** Baud, **No-Parity**, **8** data bits, **1** stop bit, and ANSI compatible.
2. Start communication between the terminal or PC and the Aironet Wireless Client.

---

**NOTE:** If you are configuring an Ethernet Client, proceed to Step 4.

---

3. The Serial Client will be in data mode when first powered on. To enable console mode, send two break commands from the terminal to the Serial Client.

---

**NOTE:** Use the documentation for your terminal or terminal emulation package to determine the keystrokes necessary to send a break command.

---

## Configuration

---

For example:

Software	Keyboard Sequence*
Windows 3.x	<ctrl> <break>, <ctrl> <break>
Windows 95 Hyperterminal	<ctrl> <break>, <ctrl> <break>
Procomm Plus 2.0 Win 3.x	<alt> <b>, <alt> <b>
Procomm for DOS v 2.4.2	<alt> <7>, <alt> <7>

\*Press both keys at the same time, release, then repeat.

The following message appears on the terminal's screen:

*Are you using an ANSI compatible terminal [y/n]:*

- If you are using an ANSI compatible terminal, type “y” at the prompt and press **Enter**.

---

**NOTE:** An ANSI terminal shows formatted text and clears the screen before each new screen displays.

---

- If you are using a Teletype (TTY) terminal, type “n” at the prompt and press **Enter**.

---

**NOTE:** The TTY terminal scrolls information as it arrives at the terminal's screen.

---

The Main Menu appears on the terminal screen.

Main Menu		
Option	Value	Description
1 - Configuration	[ menu ]	- General configuration
2 - Statistics	[ menu ]	- Display statistics
3 - Logs	[ menu ]	- Alarm and log control
4 - Diagnostics	[ menu ]	- Maintenance and testing commands
5 - Privilege	[ menu ]	- Set privilege level
6 - Exit	[ menu ]	- Exit the menus
7 - Help	[ menu ]	- Introduction

Enter an option number or name  
>

---

**NOTE:** The Main Menu that appears on your screen will look similar to the example above. Menu options depend on the Aironet Wireless Client model.

---

You can select an option from any of the Console System menus by typing its name or number at the prompt (>). Pressing Esc returns you to the preceding menu. Pressing “=” returns you to the Main Menu from any other menu in the system.

The Console system is organized as a set of menus. Each selection in a menu list may either take you to a sub-menu or display a command that will configure or display information controlling the unit.

## ***Configuring the Aironet Wireless Client***

To configure the Aironet Wireless Client so it will communicate with other nodes or repeaters, use the Console Port to set the appropriate parameters.

### **SSID Identifier (SSID)**

The SSID (Service Set Identifier) is a unique identifier that is attached to selected packets sent out over the radio network. This functions as a password to join the radio network. Nodes associating to the Aironet Wireless Client must use the same identifier in their configurations, or their association requests will be ignored.

To define an SSID:

1. Select **Configuration** from the Main Menu.
2. Select **Radio** from the Configuration Menu.
3. Select **SSID**.
4. Enter a value for the SSID option. You may use up to 32 characters. All devices in the same radio network must use the same SSID.

### **Verifying Association**

Once you have configured the Aironet Wireless Client and node devices with the correct parameters, the Radio Indicator will blink green indicating RF data traffic. The Status Indicator will be solid green indicating the Aironet Wireless Client has associated to an Access Point.

## Configuring the Port

If your installation should require any type of configuration changes, see the appropriate Wireless Client Technical Reference Manual (document number 710-004245) for more information.

### *Ethernet Port*

The Ethernet port is on by default and its default frame size is 1518. The default Ethernet settings are correct for most standard installations.

### *Serial Port*

---

**NOTE:** The following instructions are for the Serial Client only. The Serial Data Port configuration is separate from the Console Port configuration.

---

The Wireless Client's Serial Port must be configured with the communication parameters of the Serial Client you intend to connect to the Wireless Client. These parameters specify how information is transferred to and from the client. The default values for this port are:

- **9600** Baud
- **No-Parity**
- **8** data bits
- **Xon/Xoff** flow control

## Configuration

---

### *Partner Address*

If the Wireless Client is configured to operate in Ad Hoc Mode, it is necessary to enter a Partner Address. To enter a Partner Address:

1. Select **Configuration** from the Main Menu.
2. Select **Partner** from the Configuration Menu.
3. Type the appropriate Partner Address at the prompt and press **Enter**.

---

**NOTE:** The Partner Address is required for one of the two Serial Client units. The other unit must be set to None.

---

### *Serial Data Port*

To configure the Serial Data Port:

1. Select **Configuration** from the Main Menu.
2. Select **Port** from the Configuration Menu.
3. Select the appropriate parameters on the Configuration Serial Port Menu and press **Enter** after each selection.



## ***Disconnecting the Terminal***

---

**NOTE:** If the same device used to configure the Serial Client is used for data, the unit does not need to be disconnected.

---

### **Ethernet Client**

1. Turn off the terminal (or PC).
2. Disconnect the Aironet Wireless Client power connector.
3. Remove the serial cable from the terminal (or PC) Serial Port.
4. Disconnect the serial cable from the Aironet Wireless Client Serial Port.
5. Plug in the Aironet Wireless Client power supply and turn on the terminal (or PC). The Aironet Wireless Client will now associate with the infrastructure.

### **Serial Client**

1. Select **Exit** from the Main Menu.
2. Type “y” at the “Are you sure [y/n]?” prompt to put the Aironet Wireless Client’s port back into data mode. This is required for proper operation.
3. Turn off the terminal (or PC).
4. Disconnect the Aironet Wireless Client power connector.
5. Remove the serial cable from the terminal (or PC) Serial Port.
6. Disconnect the serial cable from the Aironet Wireless Client.
7. Plug in the Aironet Wireless Client power supply and turn on the terminal (or PC). The Aironet Wireless Client will now associate with the infrastructure.



# Appendix A

## *DC Power Jack Connector*

The DC power jack used on the Aironet Wireless Client device has +12V center pin. The sleeve of the power jack is ground.



# Appendix B

## *Serial Port Pinout*

9-Pin AT*	Name	Abbr.	DTE**
3	Transmit Data	TD	Output>
2	Receive Data	RD	Input<
7	Request to Send	RTS	Output>
8	Clear to Send	CTS	Input<
6	Data Set Ready	DSR	Input<
5	Signal Ground	SG	
1	Data Carrier Detect	DCD	Input<
4	Data Terminal Ready	DTR	Output>
9 N/C	Ring Indicator	RI	Input<

- \* The 9-Pin AT column indicates the pin numbers used on the 9-pin Aironet Wireless Client Console Port connector.
- \*\* The DTE column indicates the data direction in terms of the DTE.

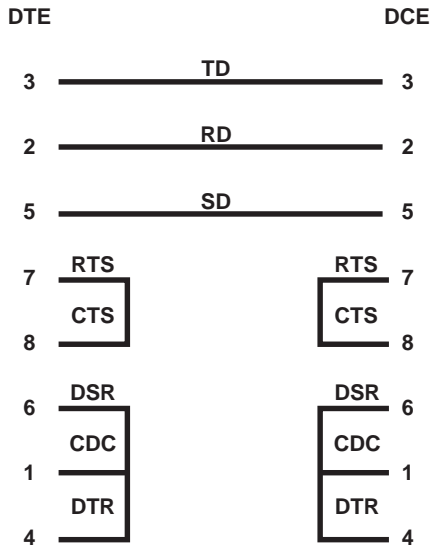
## ***Ethernet RJ-45 Port Pinout***

The Ethernet RJ-45 port is configured as a hub device. The pinout is noted below.

<b>RJ-45 Connector 1</b>	<b>RJ-45 Connector 2</b>
Pin 1 (TX+)	Pin 1 (TX+)
Pin 2 (TX-)	Pin 2 (TX-)
Pin 3 (RX+)	Pin 3 (RX+)
Pin 6 (RX-)	Pin 6 (RX-)

## Sample Application Cable Pinout

A typical Aironet Wireless Client application cable is a 9-pin serial cable. The following diagram shows a simple 3-wire interface between a DTE device and the Aironet Wireless Client DCE connector.







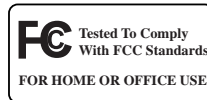
# Appendix C

## ***Manufacturers Federal Communication Commission Declaration of Conformity Statement***

**Models: UC4500-E, UC4500-S, MC4500  
UC4800-E, UC4800-S, MC4800**

**Manufacturer:**

**Aironet Wireless Communications, Inc.  
3875 Embassy Parkway  
Akron, OH 44333-8357  
330-664-7900**



This device complies with Part 15 rules. Operation is subject to the following two conditions:

1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits of a Class B 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 residential environment. This equipment generates, uses, and radiates radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference. However, there is no guarantee that interference will not occur. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from which the receiver is connected.
- Consult the dealer or an experienced radio\TV technician.

### **User Warning**

The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by Aironet could void the user's authority to operate this device.

### **Professional Installation**

Per the recommendation of the FCC, the installation of high gain directional antenna to the system, which are intended to operated solely as a point-to-point system and whose total power exceeds +36dBm EIRP, require professional installation. It is the responsibility of the installer and the end user that the high power systems are operated strictly as a point-to-point system.

Systems operating as a point-to-multipoint system or use non directional antennas cannot exceed +36dBm EIRP power requirement under any circumstances and do not require professional installation.

***Department of Communications—Canada  
Canadian Compliance Statement***

This Digital apparatus meets all the requirements of the Canadian Interference - Causing Equipment Regulations.

Cet appareil numérique respecte les exigences du Règlement sur le matériel brouilleur du Canada.

This device complies with RSS-210 of Industry of Canada. Operation is subject to the following two conditions: 1) this device may cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

The device is certified to the requirements of RSS-139-1 for 2.4 GHz spread spectrum devices. The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations. For further information, contact your local Industry Canada office.

***European Telecommunication Standards Institute  
Statement of Compliance  
Information to User***

This equipment has been tested and found to comply with the European Telecommunications Standard ETS 300.328. This standard covers Wideband Data Transmission Systems referred in CEPT recommendation T/R 10.01.

This type accepted equipment is 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 the instruction manual, may cause harmful interference to radio communications.

## ***Declaration of Conformity***

### ***Aironet Model Number: 4500 Series***

Models included: UC4500-E, UC4500-S, MC4500

Radio CE Type Certificate Number: BCL/EC/98-0309/B

Radio Type Approval Examination Number: CPC/ARLAN/DK/9815

Application of Council Directive: 89/336/EEC

Application of Council Directive: 72/23/EEC

Standards which Conformity is Declared:

EN 55022 (B)

EN 55011 (B)

EN 50082-1

EN 60950

Manufacturer: Aironet Wireless Communication  
3875 Embassy Parkway  
Akron, OH 44333

*The undersigned hereby declares the above specified equipment conforms to the above Directives and standards.*



A handwritten signature in black ink, appearing to read "Michael Smedley", is written over a solid horizontal line.

Michael Smedley  
Director, Manufacturing Engineering  
Aironet Wireless Communications, Inc.

***Declaration of Conformity***

***Aironet Model Number:  
4800 Series***

Models included: UC4800-E, UC4800-S, MC4800

Radio CE Type Certificate Number:  
Radio Type Approval Examination Number:

Application of Council Directive: 89/336/EEC  
Application of Council Directive: 72/23/EEC

Standards which Conformity is Declared:

EN 55022 (B)  
EN 55011 (B)  
EN 50082-1  
EN 60950

Manufacturer: Aironet Wireless Communication  
3875 Embassy Parkway  
Akron, OH 44333

*The undersigned hereby declares the above specified equipment conforms to the above Directives and standards.*



A handwritten signature in black ink, appearing to read "Michael Smedley", is written over a solid horizontal line.

Michael Smedley  
Director, Manufacturing Engineering  
Aironet Wireless Communications, Inc.

# Appendix D

## *Technical Support*

### **Technical Reference Manual**

Use the Technical Reference Manual document number 710-004245 to learn more about your Aironet unit.

### **Communications**

Use the following information to contact the Aironet Technical Support group:

Telephone - (330) 664-7903  
Fax - (330) 664-7990  
e-mail - techsupp@aironet.com

### **Web Site**

For additional product information and technical support, including the capability to download new firmware and drivers, use the Aironet web site at:

<http://www.aironet.com>