

**USRobotics®**

# Professional Access Point



## Quick Installation Guide



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# Getting Started

## Package Contents

- Access Point
- Installation CD-ROM
- Quick Installation Guide
- Ethernet Cable
- Power Adapter
- Two 5 dBi antennas
- Mounting kit
  - Instruction Sheet
  - Mounting Hardware

## What You Need in Order To Begin

- An administrator computer. This is the computer that you will use to set up and test your new wireless network before adding live wireless clients. On this computer, you must have
  - Administrator rights
  - A CD-ROM drive
  - An HTML 4.01-compliant Web Browser (such as Internet Explorer 5.5 or later or Netscape 7.0 or later) with JavaScript enabled
  - An Ethernet connection to your existing network

The instructions in this guide require that you use a DHCP server. If you do not have a DHCP server and you want to assign a static IP address to the access point, see “Setting Up and Launching Your Wireless Network” in the *Administrator Guide* on the Installation CD-ROM.
- Your Professional Access Point product number, serial number, and MAC addresses, which are on the label on the bottom of the access point.

Product Number	Serial Number	MAC Address
5453		LAN ____ : ____ : ____ : ____ : ____
		WLAN ____ : ____ : ____ : ____ : ____

USRobotics periodically updates both firmware and documentation for the Professional Access Point. For the latest updates, visit [www.usr.com/support/](http://www.usr.com/support/).

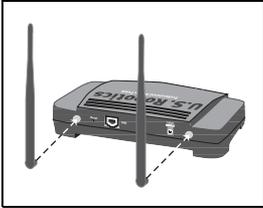
## Installing the Access Point

When you install the first Professional Access Point to create a wireless network, you must provide basic configuration information. Subsequently-added access points automatically use the same configuration information as the first access point. This guide leads you through the steps for installing the first access point, including basic configuration. For more information about installing multiple access points, see the *Administrator Guide* on the Installation CD-ROM.

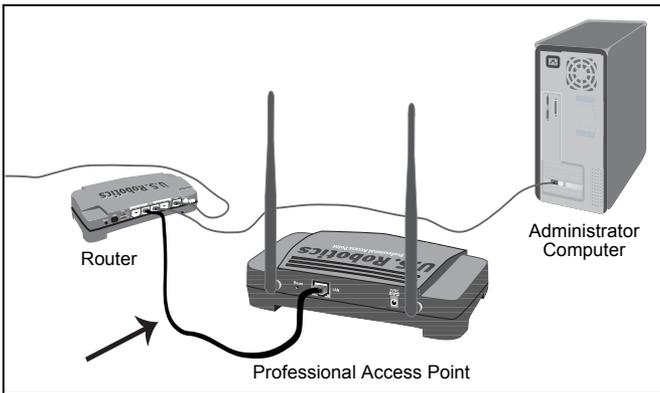
## Step 1: Connect the Access Point to the Network and to Power.

The first USRobotics Professional Access Point in your network must be installed and configured using an Ethernet cable. Make the following hardware connections:

1. Attach the antennas to the access point.

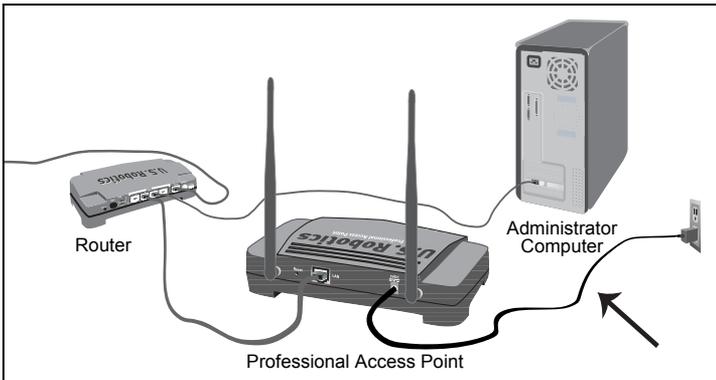


2. Connect one end of the supplied Ethernet cable to the LAN port on the access point, and connect the other end to the same network that the administrator computer uses.



3. Connect the supplied power adapter to the 5.0 VDC port on the access point, and plug the power adapter into a standard power outlet.

**Note to UK Users:** Replace the plug on the power adapter with the UK standard plug that is supplied in your USRobotics package. Apply enough pressure to cause a click and firmly seat the new plug in the adapter.



## Step 2: Open the Access Point's Web User Interface.

### For Windows Operating Systems

1. Insert the USRobotics Installation CD-ROM into the CD-ROM drive on the administrator computer and select **Setup** from the menu.

The Professional Access Point Detection Utility starts automatically and displays its Welcome screen:



If the CD-ROM does not start automatically, navigate to the CD-ROM drive and double-click **setup.exe**.

**Note:** If you receive a Windows Security Alert from your Windows Firewall, click **Unblock** to enable the java program to access your network. If network access is blocked, the Detection Utility cannot find your access point.

2. Click **Next** and wait until the Detection Utility finds your access point.



If the Detection Utility does not find the access point, click **Back** and then click **Next** to restart the scan. If the second scan does not find the access point, go to the "Troubleshooting" section of this guide and follow the instructions under "The Detection Utility does not find the access point."

3. Click **Next** to display the page that will start the configuration process.



4. In the Detection Utility window, click **Administration Console**.

## For Non-Windows Operating Systems

1. Using the configuration program for the networking device, such as a router, to which the access point is connected, view the device's client list.
2. Find the LAN MAC address of the access point in the client list.
3. Note the IP address that corresponds to the LAN MAC address of the access point.
4. Open a Web browser, enter the IP address in the address or navigation bar, and click Enter.

## Step 3: Configure Basic Settings.

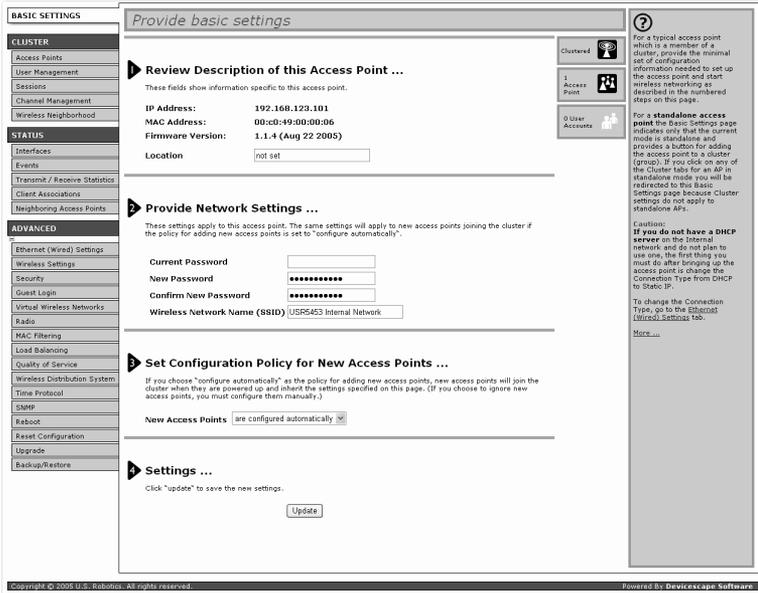
Before giving you access to the Web User Interface, the system prompts you for a user name and password:



The default value for both User Name and Password is **admin**.

Both of these fields are case sensitive.

Enter the password and click **OK**. The Basic Settings page appears.



#### ▶ Review Description of this Access Point

Type a description of the access point's location.

#### ▶ Provide Network Settings

- In **Current Password**, type `admin`.
- Type a **New Password** that is eight or fewer alphanumeric characters (0–9, a–z, A–Z). Do not use special characters or spaces.

**Note:** The Password field is case sensitive, so be sure to remember exactly how you enter it.

- Type the new password in **Confirm New Password**.
- Type a **Network Name**. This is the SSID of the network and must be 32 or fewer alphanumeric characters.

#### ▶ Set Configuration Policy for New Access Points

Leave this value set to the factory default, **are configured automatically**.

#### ▶ Settings

Click **Update** to save your basic settings.

## Step 4. Configure Security.

Your wireless network is now open to wireless devices within operating range. To prevent access by unauthorized users, you must apply security to the access point as follows:

1. From the **Advanced** menu, select **Security**.

**BASIC SETTINGS** Modify security settings that apply to the Internal Network

**CLUSTER**

- Access Points
- User Management
- Sessions
- Channel Management
- Wireless Neighborhood

**STATUS**

- Interfaces
- Events
- Transmit / Receive Statistics
- Client Associations
- Neighboring Access Points

**ADVANCED**

- Ethernet (Wired) Settings
- Wireless Settings
- Security**
- Guest Login
- Virtual Wireless Networks
- Radio
- MAC Filtering
- Load Balancing
- Quality of Service
- Time Protocol
- SNMP
- Reboot
- Reset Configuration
- Upgrade
- Backup/Restore

Broadcast SSID  Allow  Prohibit

Station Isolation  Off  On

Security Mode

**?** Use this page to configure a security mode for the access point.

None

Static Wired Equivalent Privacy (WEP)

IEEE 802.1x

WPA/WPA2 Enterprise (EAP) with Pre-Shared Key (PSK)

WPA/WPA2 Enterprise (EAP) with Remote Authentication Dial-In User Service (RADIUS)

WPA/WPA2 Enterprise (EAP) is the recommended mode because it leverages TKIP and CCMP/AES encryption algorithms and dynamic pre-shared keys.

The NONE security mode is only recommended for initial setup or problem-solving use.

These settings apply to the Internal network; the Guest network always uses NONE security mode.

[More ...](#)

2. Select a **Security Mode** other than **None**, and mode-specific options appear on the screen.

USRobotics recommends that you use one of the WPA/WPA2 options so that you have the maximum level of security on your network. For more information about the security modes available on the Professional Access point, see the *Administrator Guide* on the Installation CD-ROM.

3. Enter the mode-specific security options, including a security key, and click **Update**.

**Congratulations! The installation procedure is complete!**

Please register your Professional Access Point by going to [www.usr.com/productreg/](http://www.usr.com/productreg/). For configuration details, regulatory information, and warranty information, see the *Administrator Guide* on the USRobotics Installation CD-ROM.

## What's Next?

### Backing Up the Access Point Configuration

Now that you have configured your first access point, U.S. Robotics recommends that you back up your configuration. If you ever need to reset your access point to its factory default settings, having a configuration backup will quicken the process of restoring your network configuration.

1. From the **Advanced** menu, select **Backup/Restore**.
2. Click **download configuration**.
3. When the File Download window appears, click **Save**.
4. Browse to the location where you want your configuration saved and click **Save**.

For information about restoring a saved configuration, see the *Administrator Guide* on the Installation CD-ROM.

## Adding a Wireless Client

You can now connect wireless devices to your new wireless network. To access the network, the wireless adapter in each device must support the same mode as the access point—either 802.11b or 802.11g—and must be configured with the same security mode and security key as the access point. For information about configuring the adapter in your wireless device, refer to the adapter’s documentation.

## Defining Virtual Networks

The Professional Access Point lets you use VLANs to establish both an internal network and a guest network as well as two additional VLANs. The guest network is a way for you to allow unsecured wireless access to the Internet or to public areas of your network. While the internal network may use either dynamic or static IP addressing, the guest network must use dynamic IP addressing through a DHCP server on the wired network.

For more information about the guest network, see “Setting Up Guest Access” in the *Professional Access Point Administrator Guide*.

For more information about VLANs, see “Configuring Virtual Wireless Networks” in the *Professional Access Point Administrator Guide*.

## Adding Another Access Point

When you add a Professional Access Point to your new wireless network, it automatically clusters with existing Professional Access Points that reside on the same wired network. The basic configuration settings of the first access point are shared with the additional access points automatically. Note, however, that guest network settings are not shared among access points in a cluster: each access point needs its own guest settings.

Up to eight access points can belong to a single cluster. For more information about clusters, see “Managing Access Points and Clusters” in the *Professional Access Point Administrator Guide*.

## Interpreting the Access Point Indicators

The front of the Professional Access Point has the following LED indicators:

Symbol	Name	State	Condition
	Power	Off	Not receiving power.
		Solid	Receiving power.
	WLAN	Off	Radio is off.
		Flashing	Radio is on.
	LAN	Off	Not connected to LAN.
		Solid	Ethernet LAN link is achieved.
		Flashing	Sending or receiving Ethernet data.

# Troubleshooting

## The installation procedure does not begin when I insert the Installation CD-ROM.

### Possible Solution:

You may be running a program that interferes with the autolaunch feature of the CD-ROM. Navigate to your CD-ROM drive and launch **Startup.exe**.

## The Detection Utility does not find the access point.

### Possible Solution 1:

1. Ensure that all cables are plugged in firmly, and verify that the access point's power indicator is lighted.
2. In the Detection Utility, click **Back** and then click **Next** to restart the discovery process.

### Possible Solution 2:

You can open the access point's Web User Interface without using the Detection Utility by typing the IP address in your Web browser's navigation or address bar. To find the IP address of the access point,

1. Using the configuration program for the networking device, such as a router, to which the access point is connected, view the device's client list.
2. Find the LAN MAC address of the access point in the client list.
3. Note the IP address that corresponds to the LAN MAC address of the access point.

### Possible Solution 3:

You can perform access point configuration by using a direct connection. For more information about using this method, see "Setting Up and Launching Your Wireless Network" in the *Administrator Guide* on the Installation CD-ROM.

## I cannot access the Web User Interface.

### Possible Solution 1:

Verify that you are entering the correct IP address in your Web browser.

### Possible Solution 2:

Reboot the access point by disconnecting and then reconnecting its power adapter.

### Possible Solution 3:

Verify the connection setting of your Web browser, and verify that the HTTP Proxy feature of your Web browser is disabled.

### Internet Explorer users:

1. Click **Tools**, click **Internet Options**, and then click the **Connections** tab.
2. Select **Never dial a connection**, and then click the **LAN Settings** button.
3. Clear all the checkboxes and click **OK**.
4. Click **OK** again to apply the connection setting.

### Mozilla-based browser users:

1. Click **Edit, Preferences**, and then double-click **Advanced** in the Category window.
2. Click **Proxies**, select **Direct connection to the Internet**, and then click **OK**.

## **My wireless device cannot find the wireless network.**

### **Possible Solution 1:**

Ensure that the access point is broadcasting its SSID:

1. Open the Web User Interface of the access point.
2. From the **Advanced** menu, select **Security**.
3. Verify that **Broadcast SSID** is set to **Allow**.
4. Click **Update** to save any change.

### **Possible Solution 2:**

Reboot the access point by disconnecting and then reconnecting its power adapter.

## **My wireless device cannot connect to the wireless network.**

### **Possible Solution 1:**

Ensure that the wireless device is set to **Infrastructure** mode and has the following settings in common with the access point:

- SSID, also called **Network Name**.
- Kind of security (for example, WPA/WPA2)
- Security key value

If you change the settings on the access point, remember to change the settings on your wireless devices also.

### **Possible Solution 2:**

## **I am experiencing poor wireless link quality.**

### **Possible Solution 1:**

Reposition the access point or the wireless device so that environmental factors, such as lead-based paint or concrete walls, do not interfere with your wireless signal.

### **Possible Solution 2:**

Create a wireless connection on a different channel so that electronic devices, such as 2.4 GHz phones, do not interfere with your wireless signal. For more information about changing channels, see “Channel Management” in the *Administrator Guide*.

## **I need to configure the access point with an operating system other than Windows.**

### **Possible Solution:**

You must configure the access point through its Web User Interface as follows:

1. Find the access point’s IP address:
  - Using the configuration program for the networking device, such as a router, to which the access point is connected, view the device’s client list.
  - Find the LAN MAC address of the access point in the client list.
  - Note the IP address that corresponds to the LAN MAC address of the access point.
2. Launch a Web browser, type the IP address of the access point in the browser’s navigation bar, and press Enter.
3. You can now log in and perform access point configuration as described in “Step 3: Configure Basic Settings.”

## Are You Still Having Trouble?

1. Refer to the *Administrator Guide* on the Installation CD-ROM for additional installation and troubleshooting information.
2. Go to the Support section of the U.S Robotics Web site at [www.usr.com/support/](http://www.usr.com/support/). Many of the most common difficulties that users experience have been addressed in the FAQ and Troubleshooting Web pages for your product. The product number of the Professional Access Point is 5453. You may need to know this to obtain information on the U.S. Robotics Web site.
3. Submit your technical support question using an online form at [www.usr.com/emailsupport/](http://www.usr.com/emailsupport/).
4. Contact the U.S. Robotics Technical Support Department. To receive assistance, you need your serial number.

Country	Webmail	Voice	Support Hours
United States	<a href="http://www.usr.com/emailsupport">www.usr.com/emailsupport</a>	(888) 216-2850	9:00 A.M.–6:00 P.M., M–F, Central
Canada	<a href="http://www.usr.com/emailsupport">www.usr.com/emailsupport</a>	(888) 216-2850	9:00 A.M.–6:00 P.M., M–F, Central
Austria	<a href="http://www.usr.com/emailsupport/de">www.usr.com/emailsupport/de</a>	07 110 900 116	9:00 A.M.–17:00 P.M., M–F
Belgium (Flemish)	<a href="http://www.usr.com/emailsupport/bn">www.usr.com/emailsupport/bn</a>	+32 (0)70 233 545	9:00 A.M.–17:00 P.M., M–F
Belgium (French)	<a href="http://www.usr.com/emailsupport/be">www.usr.com/emailsupport/be</a>	+32 (0)70 233 546	9:00 A.M.–17:00 P.M., M–F
Czech Republic	<a href="http://www.usr.com/emailsupport/cz">www.usr.com/emailsupport/cz</a>		
Denmark	<a href="http://www.usr.com/emailsupport/ea">www.usr.com/emailsupport/ea</a>	+45 7010 4030	9:00 A.M.–17:00 P.M., M–F
Finland	<a href="http://www.usr.com/emailsupport/ea">www.usr.com/emailsupport/ea</a>	+358 98 171 0015	10:00 A.M.–18:00 P.M., M–F
France	<a href="http://www.usr.com/emailsupport/fr">www.usr.com/emailsupport/fr</a>	082 507 0693	9:00 A.M.–17:00 P.M., M–F
Germany	<a href="http://www.usr.com/emailsupport/de">www.usr.com/emailsupport/de</a>	01805671548	9:00 A.M.–17:00 P.M., M–F
Hungary	<a href="http://www.usr.com/emailsupport/hu">www.usr.com/emailsupport/hu</a>	01805671548	9:00 A.M.–17:00 P.M., M–F
Ireland	<a href="http://www.usr.com/emailsupport/uk">www.usr.com/emailsupport/uk</a>	1890-252-130	9:00 A.M.–18:00 P.M., M–F
Italy	<a href="http://www.usr.com/emailsupport/it">www.usr.com/emailsupport/it</a>	848 80 9903	9:00 A.M.–17:00 P.M., M–F
Luxembourg	<a href="http://www.usr.com/emailsupport/be">www.usr.com/emailsupport/be</a>	+352 342 080 8318	9:00 A.M.–17:00 P.M., M–F
Middle East/Africa	<a href="http://www.usr.com/emailsupport/me">www.usr.com/emailsupport/me</a>	+44 870 844 4546	9:00 A.M.–17:00 P.M., M–F
Netherlands	<a href="http://www.usr.com/emailsupport/bn">www.usr.com/emailsupport/bn</a>	0900 20 25 857	9:00 A.M.–17:00 P.M., M–F
Norway	<a href="http://www.usr.com/emailsupport/ea">www.usr.com/emailsupport/ea</a>	+47 23 50 0097	9:00 A.M.–17:00 P.M., M–F
Poland	<a href="http://www.usr.com/emailsupport/pl">www.usr.com/emailsupport/pl</a>		
Portugal	<a href="http://www.usr.com/emailsupport/pt">www.usr.com/emailsupport/pt</a>	+351 (0)21 415 40349	9:00 A.M.–17:00 P.M., M–F
Spain	<a href="http://www.usr.com/emailsupport/es">www.usr.com/emailsupport/es</a>	902 117 964	9:00 A.M.–17:00 P.M., M–F
Sweden	<a href="http://www.usr.com/emailsupport/ea">www.usr.com/emailsupport/ea</a>	+46 (0) 77 128 1020	9:00 A.M.–17:00 P.M., M–F
Switzerland	<a href="http://www.usr.com/emailsupport/de">www.usr.com/emailsupport/de</a>	+0848 840 200	9:00 A.M.–17:00 P.M., M–F
Turkey	<a href="http://www.usr.com/emailsupport/tk">www.usr.com/emailsupport/tk</a>		
UK	<a href="http://www.usr.com/emailsupport/uk">www.usr.com/emailsupport/uk</a>	0870 844 4546	9:00 A.M.–17:00 P.M., M–F

For current support contact information, go to [www.usr.com/support/](http://www.usr.com/support/).



