

coaXmedia®



Series 6000
SD230 Access Appliance
User's Guide

Preliminary
September 2003
601004-00X

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Limited Warranty

coaXmedia guarantees that every SD-Series Access Appliance will be free from physical defects in material and workmanship under normal use for one (1) year from the date of purchase. If the product is determined to be defective during the warranty period, please call coaXmedia's or your equipment provider's Customer Support to obtain a Returned Material Authorization (RMA) number. The RMA number should be clearly marked on the outside of the package, when it is shipped. If returned product is determined to be functioning properly, a nominal processing fee may be charged to cover shipping and handling.

This product contains no end-user serviceable parts; authorized technicians should perform all service.

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coaXmedia reserves the right to revise or update its products, software, or documentation without obligation to notify any individual or entity.

FCC Compliance

The coaXmedia access appliance has been tested and found to comply with the limits for a Class B personal computer and peripherals, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this unit does cause harmful interference to radio or television reception, which can be determined by turning the unit off and on, the user is encouraged to try to correct the interference by one of more of the following measures:

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

Warning: FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authorization to operate this equipment.

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The radiated output power of this device is below the FCC radio frequency exposure limits. However, this device should still be installed and used in such a manner that the potential for human contact during normal operation is minimized. In order to comply with RF exposure limits, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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Contact Information

If after reading through the provided documentation you still have questions regarding your Access Appliance, use these contact points to request the information you need:

Support

Phone: 877-885-COAX / 877-885-2629 (toll free)

Fax: 678-990-5457

E-mail: support@coaXmedia.com

Sales

Phone: 678-990-5450

Fax: 678-990-5457

E-mail: sales@coaXmedia.com

The coaXmedia Web Page

<http://www.coaXmedia.com>

See your Service Contract/Agreement for the appropriate customer service or technical support phone numbers.

1 Important Rules for Safe Operation



The Access Appliance has been engineered with both performance and safety in mind. However, safety is also your responsibility. Read and observe all these recommended safety precautions.

Check power sources. Plug this device only into the recommended power source indicated on the product's marking label. If you are not sure what type of power source is provided at your location, consult your local power company or other certified expert.

Always use the provided power adapter. Always use the power adapter provided with the product. And do not use any substitutes. If the provided adapter becomes damaged or misplaced, see page 17.

Be careful of overloading. Do not overload wall outlets or extension cords, as this can result in the risk of fire or electric shock. Don't use any frayed power cords. Don't stretch cords to reach the appliance or other devices: tension at the connectors is a fire hazard.

Avoid damaging power cords. Arrange power supply cords so that they are out of the way. Route them through areas where it is unlikely they will be walked on or objects rolled over them.

Avoid placing the product near any heat source. Never place this product near any heat source. This includes any kitchen appliances (ovens, toasters, etc.), heating vents, or any other heat source. This is a fire hazard.

Do not use the product near water. Never use this product anywhere near a water source or in a damp area. Don't use it near bathroom or kitchen water sources such as sinks or washing appliances. Don't use it near pools. Don't use it in a damp area such as a basement.

Avoid stacking. Avoid stacking this item on top of or under other devices that can generate or radiate heat. Such stacking can concentrate heat sources in a small area and creates a fire hazard.

Use caution when moving the product. Use caution whenever moving the Access Appliance. If dropped, resulting damage could render the appliance inoperable or a fire hazard.

Ground the cable system. Be sure the outside cable system is grounded to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984 (section 54 of the Canadian Electrical Code, Part 1) provides information with respect to proper grounding of the cable system. Always refer to local building codes to ensure compliance with all applicable grounding requirements.

Do not connect or disconnect the RF coax cable to or from your access appliance while it is plugged into the power source.

Unplug the power adaptor before cleaning. Do not use liquid cleaner or any aerosol cleaner. Use only a damp cloth for cleaning.

Protect from lightning. For added protection for this product during a lightning storm, unplug the all devices from the coaxial cable and power sources when they are not in use, especially for any extended time.

Wait at least 10 seconds after disconnecting the power adaptor before re-connecting it.

1.1 Service

Do not remove covers from or attempt to service the product yourself. Opening or removing covers may expose you to dangerous voltage or other hazards and void the product warranty.

Refer servicing of this product to qualified service personnel under the conditions listed here:

- When the power supply or cord is damaged.
- If liquid has been spilled onto or objects have fallen onto the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions.
- If the product had been dropped or its enclosure has been damaged.
- When the product exhibits a distinct change in performance, such as the inability to perform basic functions, indicating a need for service.

2 Introduction

CoaXmedia welcomes you to the world of Broadband. Through the use of our SD230 WAP (Wireless Access Point) Access Appliance and your wireless PC, you can take advantage of the many Internet services available today, and will be ready with high-speed connectivity that is required for the services of tomorrow. The SD230 Access Appliance was designed with the general computer user in mind, to insure fast, easy installation and operation. CoaXmedia has alleviated the typical concerns of installing new computer equipment, making this product's setup easier than that of a VCR. And once it's set up, using the product is as simple as double-clicking an icon.

2.1 Features

- Provides access to Broadband services
- Easy to install and use
- Doesn't require opening the PC or changing existing network settings
- Unique geometric design with clearly marked status indicators
- Multiple units can operate in a single building or within a single dwelling
- Operates over existing cable TV or CATV wiring without interfering with reception or other services in any way
- Utilizes patented transmission techniques specifically designed to overcome topology issues commonly found in the on-premises cable distributions networks of Multi-Dwelling Units (MDUs)

2.2 What You Have

Check the SD230 Access Appliance package. In addition to this *User's Guide (CD)*, the package should contain:

- 1 Access Appliance
- 1 External 2dBi Antenna
- 2 coaxial cables
- 1 Diplex-Filter or splitter (depending on SD model)
- 1 power adapter with attached power cord

If you are missing an item, please contact your service provider.

2.3 What You Need

In addition the Access Appliance package, you will need the following:

- 1 Personal Computer - see requirements below
- 1 $\frac{7}{16}$ " or adjustable wrench (optional) — may be needed to loosen and tighten cable connections.
- 1 CATV wall outlet

2.3.1 Building Requirements

This unit will only operate in buildings utilizing coaXmedia Internet Access Solutions.

2.3.2 Personal Computer Requirements

The Personal Computer (PC) must meet the following:

- Have an 802.11b wireless client device installed.
- Microsoft Internet Explorer 4.0 or later, or Netscape Navigator 4.0 or later

Using this Guide

This *User's Guide* has been provided to assist you in the installation and operation of your Access Appliance. Throughout this guide, special icons have been used to highlight specific points. Although many of these highlights are simply informative in nature, several denote points of user safety and should be read thoroughly and understood. The icons used in this manual are defined below:



Important Notes or Required Reading Note



Warnings and Safety Information



Stop, review before proceeding

3 About the Access Appliance

3.1 Front Panel

The LED indicators on the front of the Access Appliance indicate its current operation status. These five indicators are described below. There are 3 red LEDs on the WAP that can be seen through the front panel above and behind the 5 front panel LEDs. From left to right these are Link, Activity, and WAP Power. Under normal operation all LEDs are lit. The Activity LED will flicker during Transmit or Receive activity.



LED	Description	Operation
P	Power	On when power is being provided by the power adapter
S	Sync	Off when the Access Appliance is not receiving a service signal from the central access equipment Blinks when the Access Appliance has not been activated by the central access equipment On steadily when the Access Appliance has been activated by the central access equipment (making Internet connection possible)
T	Transmit Data	On when data is ready to be transmitted. (May blink fast when sending streams of data.)
R	Receive Data	On when the Access Appliance is waiting for the PC to read data. (May blink fast when receiving streams of data.)
D	Diagnostics/Disable	On when maintenance or diagnostics is being performed by the central access equipment, or when the Access Appliance is disabled – preventing access to the Internet May blink randomly if a fault is detected by the Access Appliance

3.2 Rear Panel

The ports at the back of the Access Appliance connect the appliance to your computer, power, and to coax network. When making these connections, the TV/VCR and computer should be unplugged from the power source as a precaution.



Port	Description	Usage
RF	Coax Connector	Used for connecting the Appliance to the coax network via the coaxial cable. The other end of this cable connects to the diplex-filter connector labeled X . (The diplex-filter is in turn connected by cable to the existing TV coax cable.)
PWR	Power	Used to provide power to the unit. One end of the power cord should be attached to the Access Appliance and the transformer end plugged into a wall power outlet.
Antenna	RSMA Connector	Used to connect the external antenna to the Access Appliance.

4 Installing the Access Appliance

These sections provide step-by-step instructions on installing you Access Appliance.

4.1 Overview

The SD230 Access Appliance is easy to install taking an average of 15 minutes to setup. However, before getting started, it is important for you to read the following information.

4.1.1 Before Installing

The WAP should be setup with the administrator specified settings before the unit is connected to the coax feed (Section 10).

4.1.2 Building Requirements

This unit will only operate in buildings utilizing coaXmedia Internet Access Solutions.



4.1.3 PC Requirements

The SD230 Access Appliance requires the use of an 802.11b client Wireless Network Interface Card installed in your PC; if you PC does not have this Network Interface Card, one must be installed before you can use the Access Appliance. Many computer retail stores and service centers can perform this task, if you require assistance.



4.1.4 Review the Safety Recommendations

It is important to review the Safety Recommendations to insure the proper installation and operation of your Access Appliance. See the Safety Recommendations Section of this User's Guide.



4.1.5 Gather Tools

Although most installations do not require any special tools, it may be necessary to use a 7/16" **wrench** or **pliers** to loosen an existing coax cable connection on a TV or CATV wall outlet. It is also desirable to lightly tighten all coax cable connections associated with installing the Access Appliance to insure solid, reliable connections; this can be done with a wrench, with pliers or by hand.

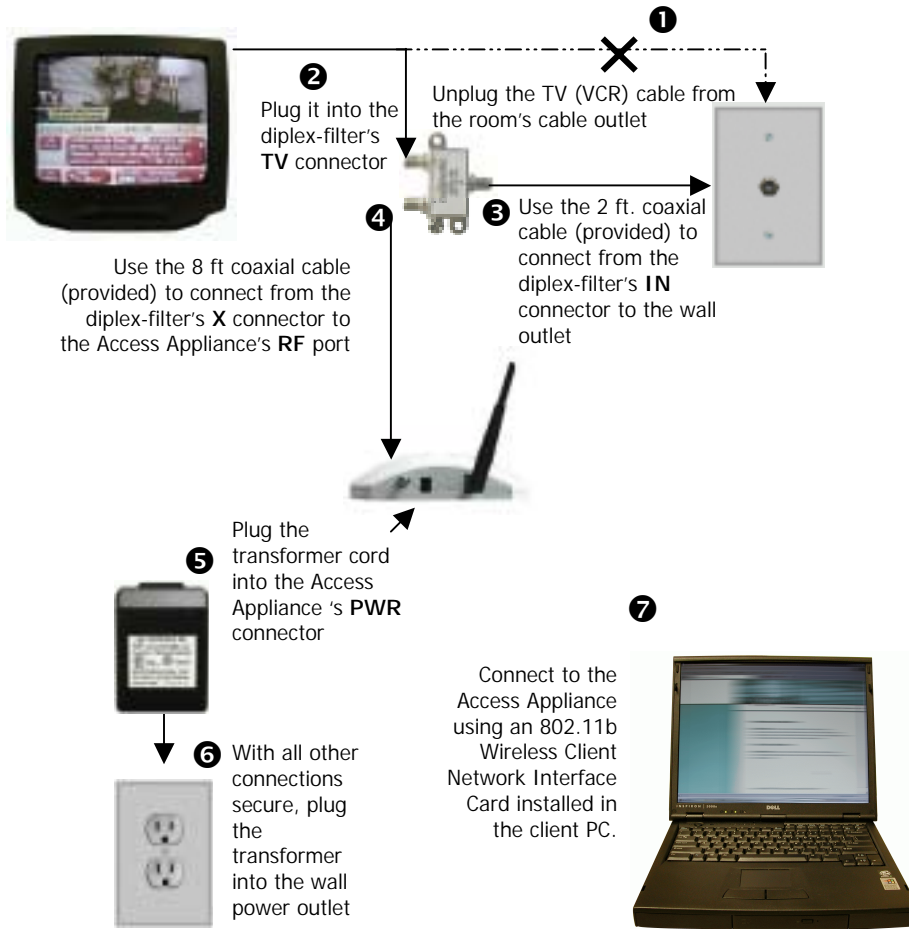
Select Location




The first aspect of installing your new Appliance will be selecting a CATV outlet that is located near your computer. When making your selection, consider where you use your PC/laptop and the distance between that location and the CATV outlet. Although coaxial cables are provided with your Appliance, they may not be long enough for your installation; if this is the case, longer cables can be obtained at a local store (RG-6 or RG-59 with F-type connectors).

4.2 Connecting the Access Appliance

This illustration diagrams the series of steps involved in connecting the parts together. Many parts have labeled connectors; those labels are in **bold type**. Two pieces of cable come packaged with the appliance; they are referred to as the “provided” cables.



 **Note:** To ensure proper operation and UL compliance of product in the USA, only use Fairway model WN10A-050 power supply



Turn off power to the computer and TV (or VCR) before connecting up the cables as a precaution. It is recommended to disconnect them from the wall power outlets.

4.3 Step by Step

1 Disconnect the TV from the CATV Outlet

Locate the cable connecting your TV (or VCR) to the wall cable TV/CATV outlet. Unscrew the end from the wall connector. Leave the other end connected to the TV/VCR. If you aren't using a TV in the room, just skip this step.

2 Connect the TV to the Diplex-Filter

Connect the end of the coaxial cable that was unscrewed from the TV/CATV outlet to **TV** port of the included diplex-filter. If a TV or other device is not being used, leave the **TV** port unconnected.



Do not substitute a generic cable splitter for the provided diplex-filter; although doing so will not damage the TV or Access Appliance, the diplex-filter improves the Appliance's operational reliability

If you are not connecting to a TV in the room, you should use the provided diplex-filter, leaving the **TV** connector unconnected.

If you use one or more cable splitters in the room, you may continue to use them; however, you should install the diplex-filter so that it is the first device connected to the TV/CATV outlet.

3 Connect the Diplex-Filter to the CATV Outlet

- a) Locate the shortest coaxial cable included with the Access Appliance and connect one end to the **IN** port of the diplex-filter.
- b) Connect the loose end of that coaxial cable to the CATV wall Outlet.

4 Connect the Access Appliance to the Diplexer

- a) Locate the remaining coaxial cable included with the Access Appliance and connect one end to the **X** port of the diplex-filter.
- b) Connect the loose end of that coaxial cable to the **RF** port of the Access Appliance.



Make sure all connections are secure; if necessary, use a wrench or pliers to lightly tighten the connections.

5 Connect the Power Adapter to the Appliance

Locate the included power adapter and connect the appropriate end to the **PWR** port on the Access Appliance.

6 Apply Power to the Access Appliance

Before plugging the adapter into the power outlet, consult these important notes:



Please check the voltage requirements printed on the power adapter before plugging it into an AC power outlet. If the power adapter's input voltage specification does not match what is being provided at your AC outlet, contact your service provider or coaXmedia for a replacement.

Power can now be applied to the Appliance by plugging the power adapter into a unused AC power outlet (on a wall, power strip, surge protector, or UPS).



The **P** indicator on the Appliance front panel should light up when power is applied. (See also a description of the front panel lights on page 15.)

Now that the Access Appliance setup has been completed, you can set up your computer to use the connection.

5 Configuring Your PC

Now that all the necessary hardware connections have been made, your computer's network configuration may need to be adjusted. Often when using the Ethernet connection, Internet Service Providers require your Ethernet card to be configured to obtain an IP address automatically (DHCP). Instructions for making the necessary adjustment can be found below, however your Internet service provider may supply you with additional instructions that should take precedence. Please refer to these instructions if supplied.

5.1 How to Configure your PC for DHCP

The following DHCP configuration procedure applies to the following Operating Systems:

Windows 98	Windows 2000
Windows Me	Windows XP

For Windows 98:

1. Click on **Start, Settings**, then **Control Panel**.
2. Double-click on the **Network** icon.
3. Double-click on **TCPIP**. Select the **IP Address** tab. * **See note below**.
4. At the **IP Address** tab, place a check in the **Obtain an IP Address automatically** circle.
5. Click **OK**, then on **OK** once more. If the computer prompts you to reboot, please do so now.

For Windows 2000 and Windows ME:

1. Click on **Start, Settings**, then **Control Panel**.
2. Double-click on the **Network and Dial-Up Connections** icon.
3. Right-click on the **Local Area Connection** icon and select **Properties**.
4. Double-click on **Internet Protocol (TCP/IP)**. * **See note below**.
5. At the **General** tab, place a check in the **Obtain an IP Address automatically** circle.
6. Place a check in the **Obtain DNS server address automatically** circle.
7. Click **Apply**, and then click **OK**. If the computer prompts you to reboot, please do so now.

For Windows XP:

1. For Windows XP, click on **Start, Settings**, then **Control Panel**.
2. Click on **Network and Internet Connections** then click on **Network Connection**.
3. Right-click on the **Local Area Connection** icon and select **Properties**.
4. Double-click on **Internet Protocol (TCP/IP)**. * See note below.
5. At the **General** tab, place a check in the **Obtain an IP Address automatically** circle.
6. Place a check in the **Obtain DNS server address automatically** circle.
7. Click **Apply**, and then click **OK**. If the computer prompts you to reboot, please do so now.



Note: *If information is already entered in these fields, be sure to write down all this information before making any changes. You will need to reenter this after you're done using the coaXmedia SD200. Under Windows 2000, you must be logged in using an account with administrators' rights in order to make the necessary changes.*

For Unlisted Operating Systems:

If you are using a PC with an Apple, Linux or any other operating systems not mentioned previously, please refer to your operating system's documentation for instructions on how to enable DHCP client operation.

6 Using your Access Appliance

6.1 Using the Connection

Your Access Appliance provides you with an "Always-On" connection to the Internet so simply start up your e-mail client, Web browser, newsgroup reader, or other Internet applications and use them as usual.

Note: If you are concerned that someone may attempt to access your computer via the Internet, you can use any number of firewall or Internet security software tools to prevent remote access. Another solution is to disconnect the computer cable or disconnect power from your Access Appliance.

6.2 Disconnecting

If you have any security concerns about leaving your PC connected while it is not in use, simply close the wireless connection between the PC and WAP.

7 Troubleshooting Connection Problems

The **P** (Power) and **S** (Sync) LEDs should be ON; and you should see the **T** (Transmit) and **R** (Receive) LEDs flash when you attempt to browse the Internet. All three (unlabeled) LEDs should be illuminated on the access point card.

If the **S** or **D** LED is blinking or no LEDs are on, check all the hardware connections and cables (refer to *Connecting to the Access Appliance*).

If this problem persists, contact your service provider for assistance. (See also page 7 for a description of the Front Panel status LEDs.)

8 Specifications

Client Interface

Wireless transfer speed	Up to 11Mb/s (up to 22Mb/s with compatible client card)
Indicators	Front panel LEDs
Connectivity	Wireless 802.11b

Electrical Specifications

AC Adaptor	<u>Option 1</u> Inputs: 100-240VAC 50/60 Hz Output: 5VDC, 2A
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Environmental Specifications

Operating temperature	0° to +40° C
Storage temperature	-40° to +75° C
Humidity	10% to 90% non-condensing

Physical Specifications

Dimensions	7.125" wide, 7.875" deep, 1.875" height
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Agency and Regulatory Compliance

Certifications	FCC UL / ULc
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9 Optional Equipment and Replacement Parts

Many optional and replacement parts are available for the SD230 access appliance.

If you need to replace or add a part, consult the service provider from whom you obtained this product.

These appliance options and replacements are available. Specify the part number(s) as well as description(s) of any part when ordering to ensure correct identification of the item.

Sales Part #	Description
MK200-001	SD200 Wall Security Bracket Kit
UD230-001	SD230 Access Appliance User's Guide

10 SD230 Wireless Access Point Administrator Setup

The default settings for the coaXmedia SD230 Wireless Access Point (WAP) are pre-set from the factory. These settings are slightly different from the default settings of the stand-alone WAP and will be outlined here. It must be noted that if for some reason the reset button on the WAP* (or through the browser utility) is activated, the settings will have to be re-defined. The changes are as follows: **DHCP Server** under the **IP Setting** tab on the WAP is selected to **Off** and the **Diversity Antenna** option is selected under the **Advanced Setting** tab under **Antenna Selection**.

The default LAN IP of the access point is 192.168.1.1. To set up the SD230 Access Point for configuration changes, connect the unit to the 5V supply only, leaving the RF cable feed disconnected. Using a desktop or laptop computer with a wireless client card, configure the TCP/IP settings to use the following IP: 192.168.1.5 and subnet mask: 255.255.255.0. Select *ok* and *ok* to enable the new settings. You can use the command prompt under the accessories tab in the programs menu on Windows based machines and type in the command *ipconfig* then enter to verify the settings. Open a web browser and type *http://192.168.1.1* in the address field then enter. The **Enter Network Password** window should come up (figure 1). Type *admin* in the **User Name** field and type *admin* in the **Password** field followed by the enter key. The Access Point Status screen will come up and display the menu bar along with access point status information (figure 2).

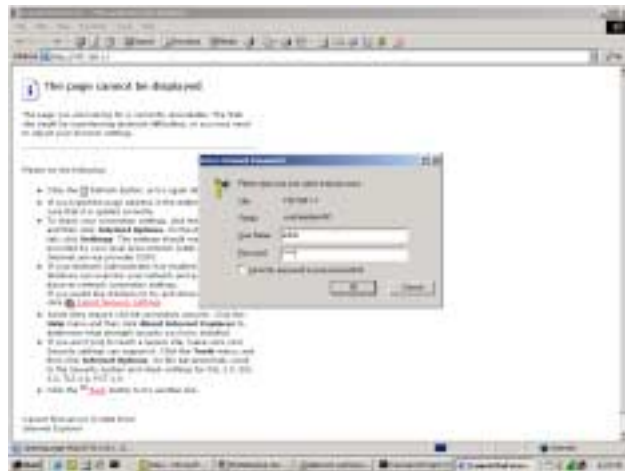


Figure 1



Figure 2

*note: The SD230 reset button is internal to the unit and requires separation of the housing to access.

Select the **Basic Setting** tab (figure 3). This is where you can assign the access point a unique name, SSID (Service Set Identifier) identifier label, channel, and WEP (Wired Equivalency Privacy) encryption. We are currently defining the WAP's **AP Name** and **SSID** as *coaXmediaWAP*. The access point factory defaults are *TEW310APB* for the AP Name and *default* for the SSID field. The default **Channel** is *1*. Channel 1 through 13 can be selected on the WAP and is dependant upon which channel is subjected to the least interference from other devices operating in the 2.4GHz range (portable phones, adjacent access points, etc.). The default for **WEP Key** encryption is *disable*. Encryption **Mode** default is *HEX* but can be selected for *ASCII*. If WEP Key encryption is enabled, 64-bit encryption requires 10 HEX values (or 5 ASCII characters), 128-bit encryption requires 26 HEX values (or 10 ASCII characters), and 256-bit encryption requires 58 HEX values (or 29 ASCII characters). Hex values are the numbers 0 through 9 and the letters A through F, ASCII characters are any of the alphanumeric keys on the keyboard. There are 4 encryption keys that can be set, they must all be the same type (ie 124bit and ASCII or 64bit and HEX). If key 1 is set for the default key, then key 1 on the client computer must match these settings. Please make a note of the SSID identifier and encryption WEP Key(s), Mode, and values for future reference. (**Note:** Confirm that the wireless card on the client computer being used to set up the WAP is compatible with the encryption modes selected on the WAP as it will be necessary to apply the matching WEP encryption settings to the client computer to continue setup of the access point.) Select the *Apply* key for the changes to take effect. The access point will restart. Make the appropriate changes to the client computer WEP values to proceed with the WAP setup.

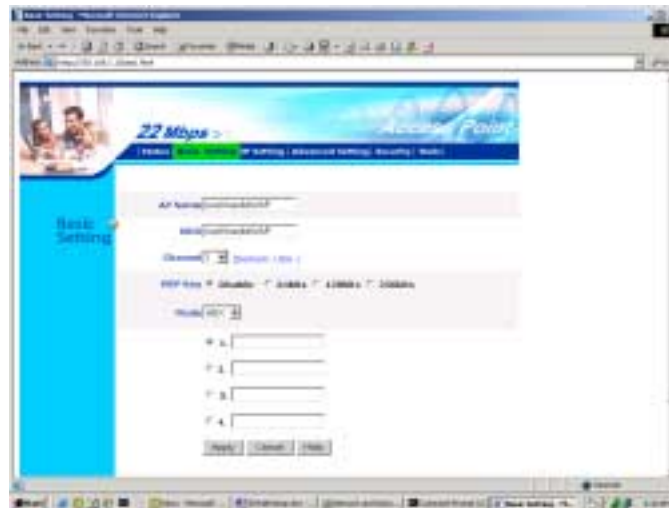


Figure 3

Select the **IP Setting** tab (figure 4). This is where you can change the Fixed IP, Subnet Mask, and Gateway address if so desired. Please add this information to the encryption data taken earlier if it is changed. Currently it is advised to set the Fixed IP to 1 less than the coaXmedia Gateway and decrement the gateways DHCP upper address pool by 1. If multiple WAPs are to be installed, decrement the fixed IPs and adjust the DHCP upper address pool as deemed appropriate. On the WAP, insert the coaXmedia gateways subnet mask and rLAN IP in the **Subnet Mask** and **Gateway** fields. Doing this will allow future control of the WAP through the computer running the coZmo network control application. **DO NOT** select **Obtain IP Automatically**. Select **DHCP Server Off** if it is not already selected. Select the *Apply* key for the changes to take effect. The access point will re-start. (**Note:** If the fixed IP is changed and you want to continue with the WAP setup, you must reconfigure the IP of the client computer to one that is within the same IP group that was assigned to the WAP.)



Figure 4

Select the **Advanced Setting** tab (figure 5). This is where the access point operation mode is defined. The default **AP Mode** is *AP* and is where the access point will normally be set (in some instances it may be desired to run the access point in bridge mode). This is also where the antenna selection is made. The default value for **Antenna Selection** is **Left Antenna**, which is the externally mounted antenna on the SD200 WAP. It is desired to have **Diversity Antenna** selected for the best performance. Select the *Apply* key for the changes to take effect. The access point will re-start.

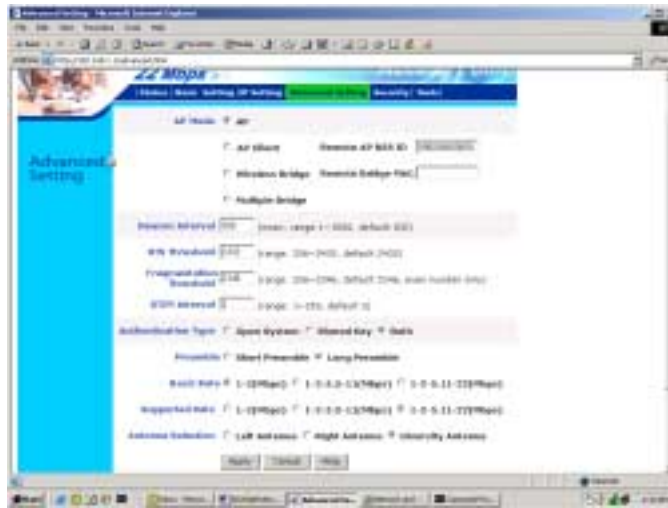


Figure 5

The **Security** tab brings up the screen that allows the access point **Administrator id** and **AP Password** to be changed (figure 6). The default values for the Administrator ID and AP Password are *admin* and *admin*. Please note the new ID and password if they are changed. The MAC Filter section is disabled by default but can be enabled to allow or deny PCs with a particular MAC ID as specified in the list.



Figure 6

The Tools menu (figure 7) allows the user to save the current setup of the access point as a *.bin* file on the local administrator client pc. This is useful for restoring the device back to its user-defined values if for some reason the access point has been reset to the factory default or any other non-desirable values. To back up the settings select the **Backup** tab. The file will be saved as *config.bin* by default in the directory you choose to save it in. The file can be renamed if multiple configurations are to be saved. To restore the settings select the **Browse...** tab then browse to the *.bin* configuration file you wish to restore. Select the **Restore** tab to load the file settings. The **Restore to default settings** tab will restore the access point back to its original default settings (not the coaXmedia default settings). Using this tab is not recommended unless it is absolutely necessary. It will probably not be accessible when it is absolutely necessary and the unit may have to be disassembled to access the hard reset button on the access point. If this does become necessary, apply power to the access point then depress the reset button for approximately 10 seconds. Access the access point as originally described then restore the saved configuration settings or reconfigure manually. Table 1 shows a list of the access point default settings as well as the coaXmedia-loaded settings. **Firmware Upgrade** is used to upgrade the firmware of the access point if one is made available. An upgrade procedure is similar to the restore settings procedure outlined above.

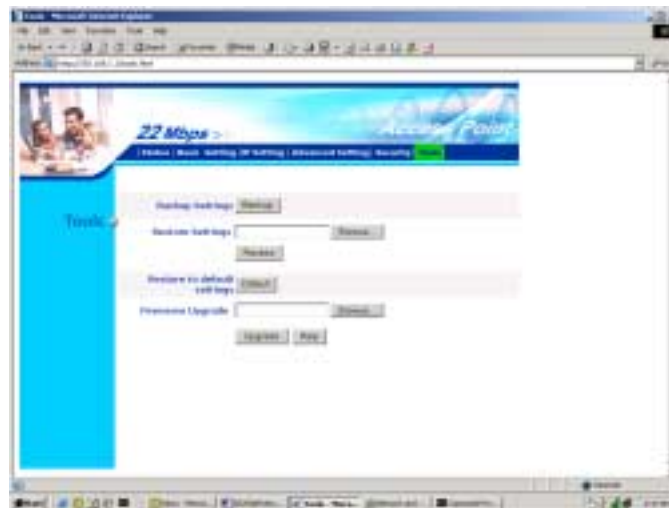


Figure 7

When the access point setup is complete, remember to reset the client computer to obtain an IP address and a DNS server automatically. Connect the RF cable to the SD230WAP.

TABLE 1 Access Point Default Settings

	Access Point Default Settings	coaXmedia Loaded Settings
Basic Setting		
AP Name	TEW310APB (or AP <i>macidx</i>)	coaXmediaWAP
SSID	default (or AP <i>macidx</i>)	coaXmediaWAP
Channel	1 (or 6)	1
WEP Key	Disable	Disable
Mode	HEX	HEX
IP Setting		
LAN IP	Fixed IP	Fixed IP
IP	192.168.1.1	192.168.1.1
Subnet Mask	255.255.255.0	255.255.255.0
Gateway	0.0.0.0	0.0.0.0
DHCP Server	On	Off
IP Range From	192.168.1.2	N/A
To	192.168.1.100	N/A
DNS Server	0.0.0.0	N/A
Advanced Setting		
AP Mode AP		AP
Beacon Int.	100	100
RTS Thres.	2432	2432
Frag. Thres.	2346	2346
DTIM Intv.	3	3
Auth. Type	Both	Both
Preamble	Long Preamble	Long Preamble
Basic Rate	1-2(Mbps)	1-2(Mbps)
Supp. Rate	1-2-5.11-22(Mbps)	1-2-5.11-22(Mbps)
Ant. Sel.	Left Antenna	Diversity Antenna
Password		
Admin. ID	admin	admin
AP Password	admin	admin
MAC Filter	Disabled	Disabled