

airBridge Outdoor Wireless Ethernet Client
airPointPRO Outdoor Wireless Access Point
airPoint Outdoor Wireless Access Point

User Manual Revision 1.42

For Windows 98 / ME / NT / 2000 / XP

RF Safety Precaution

airBridge Outdoor , airPoint PRO Outdoor and airPoint Outdoor gives out electromagnetic Radiation through the antenna . It is harmful to be in contact with the antenna or to be in close proximity when the airBridge Outdoor or airPointPRO Outdoor or airPoint Outdoor is powered ON . The safe distance is 20 centimeters from all antenna . The indication for RF radiation is the lighting up of Blue LED on the device .

Introduction : airBridge Outdoor

airBridge Outdoor is a wireless client which can be used to connect any PC with Ethernet port to a network / PC / Internet wirelessly. It is a simple plug and play device needing no configuration. It operates at 2.4 GHz ISM band. Using external directional antennas it can provide range of upto 32 Kilometers. It provides data rates upto 11Mbps and encryption capability of 64 bits or 128 bits. It can interface with any wireless LAN device complying to 802.11b specifications.

airBridge Outdoor can be used as a client device in a client to access point communication mode. Numerous applications like Broadband connectivity to farflung neighbourhood homes, wireless networking of PC's in a campus with lot of foliage, wireless networking across waterways, Roads, Valleys and rough terrain. The PC gets connected to the Internet through the airBridge Outdoor and Access point.

airPointPRO Outdoor :

airPointPRO Outdoor is wireless Access Point . It operates at 2.4 GHz ISM band and conforms to IEEE 802.11b specs. Using high gain external Omni / Directional antennas it can provide a range of upto 32 kilometers . It can provide data rates upto 11 Mbps . Encryption capability of 64 bits or 128 bits provides network security . airPointPRO Outdoor can provide network connection to any Wi – Fi compliant device .

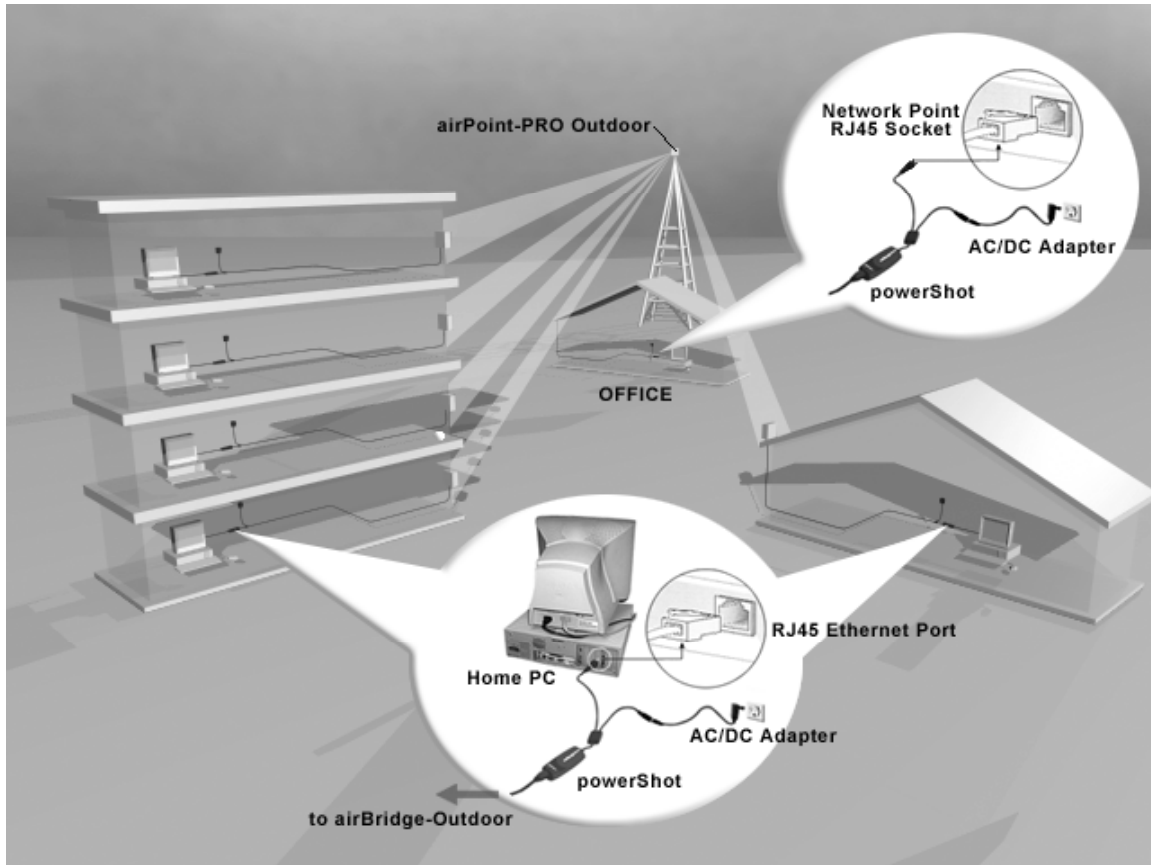
airPointPRO can be used as Access Point or as Client Bridge or as Wireless Bridge . The home PC gets connected to the internet through the airBridge Outdoor and airPointPRO Outdoor . The airPoint PRO Outdoor is identical to airBridge Outdoor .

airPoint Outdoor :

airPoint Outdoor is wireless Access Point . It operates at 2.4 GHz ISM band and conforms to IEEE 802.11b specs . Using high gain external Omni / Directional antenna it can provide a range up to 32 Kilometers . It can provide data rates upto 11 Mbps . Encryption capability of 64 bits or 128 bits provides network security . airPoint Outdoor can provide network connection to any Wi – Fi compliant device.

airPoint Outdoor can be used as Client Bridge also . The home PC gets connected to the internet through the airBridge Outdoor as client and airPoint PRO Outdoor or airPoint Outdoor as Access Point . The airPoint Outdoor is identical to airBridge Outdoor .

The following description up to “ Configuration “ is common to airBridge Outdoor , airPoint PRO Outdoor and airPoint Outdoor .



Assigning the Temporary IP Address to airPoint-PRO Outdoor

- 1.start the DOS prompt on your Windows PC.
- 2.Please note down the MAC No. of your airPoint-PRO.(The MAC Address label is pasted on the bottom of the airPoint-PRO Outdoor)
- 3.MAC No. is a HEX no.(0-9, A-F) so Please make sure when typing that you are not typing English alphabet "O" instead of numeric "0" (Zero).
- 4.Please get the Temporary "IP Address" to be assigned to airPoint-PRO Outdoor from your LAN Administrator.
- 5.Type the following command in the DOS Prompt window:(Replace xx-xx-xx with the actual MAC No. of your airPoint-PRO Outdoor)
- 6.arp -s IP Address 00-30-1A-xx-xx-xx
- 7.For more help about arp command type "arp/?" in the DOS Prompt window.

If the Temporary IP Address is set Properly you should be able to Ping the airPoint-PRO Outdoor.

- 1.start the DOS prompt on your Windows PC.
- 2.Type the following command in the DOS Prompt Window:
- 3.ping IP Address

4.If you get the ping response without error the Temporary IP is set.

Once the configuration of airPoint-PRO Outdoor is over please delete the Temporary IP Address assigned to airPoint-PRO Outdoor.

Deleting the Temporary IP Address assigned to airPoint-PRO Outdoor

- 1.start the DOS prompt on your Windows PC.
- 2.Type the following command in the DOS Prompt Window:

3.arp -d IP Address

NOTE :- Temporary IP Address can be assigned to airPoint-PRO Outdoor only within first 3 minutes after airPoint-PRO Outdoor is Powered ON.

Setting the Temporary IP Address to the PC

Click on Start -> Settings -> Control Panel, then Network.

- 1.Click on the network adapter associated with the TCP/IP and click Properties.
- 2.Note your current settings in order to restore your TCP/IP configuration.
- 3.Select Specify an IP address and enter the following values as per your Network Configuration:
e.g.

- IP – 192.168.0.30,
- Subnet Mask- 255.255.255.0
- Default Gateway- 192.168.0.1

4.Click OK and click OK again in the Network window.

5.Restart the computer if asked.

Setting the Temporary IP Address to airPoint-PRO Outdoor

- 1.start the DOS prompt on your Windows PC.
- 2.Please note down MAC No. of your airPoint-PRO Outdoor.(The MAC Address label is pasted on the bottom of the airPoint-PRO Outdoor)
- 3.MAC No. is a HEX no.(0-9, A-F) so Please make sure when typing that you are not typing English alphabet "O" instead of numeric "0" (Zero).
- 4.Type the following command in the DOS Prompt window:(Replace xx-xx-xx with the actual MAC No. of your airPoint-PRO Outdoor)
- 5.arp -s 192.168.0.24 00-30-1A-xx-xx-xx

If the Temporary IP Address is set Properly you should be able to Ping the airPoint-PRO Outdoor.

- 1.start the DOS prompt on your Windows PC.
- 2.Type the following command in the DOS Prompt Window:
- 3.ping 192.168.0.24
- 4.If you get the ping response without error the Temporary IP is set.
- 5.Once you have completed the airPoint-PRO Outdoor Configuration, you can set the PC back to its previous
- 6.Mode and delete the temporary IP Address assigned to airPoint-PRO Outdoor.

Restoring the Original IP Configuration of PC

- 1.Follow steps 1 and 2 in the instructions in "Setting the Temporary IP Address to the PC".
- 2.Select either Specify an IP address or Obtain IP address automatically and enter in the original values you noted earlier.
- 3.Click OK and click OK again in the Network window.
- 4.Restart your computer.

Deleting the Temporary IP Address assigned to airPoint-PRO Outdoor:

- 1.start the DOS prompt on your Windows PC.
- 2.Type the following command in the DOS Prompt Window:
3. arp -d 192.168.0.24

NOTE :- Temporary IP Address can be assigned to airPoint-PRO Outdoor only within first 3 minutes after airPoint-PRO Outdoor is Powered ON.

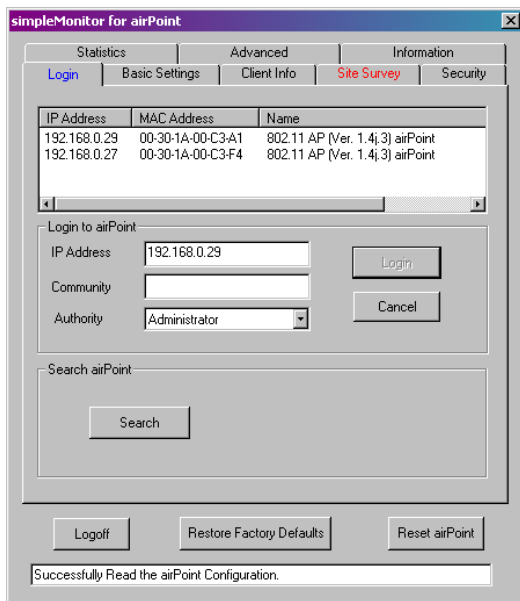
Configuring the airPoint Outdoor

Configuring airPoint Outdoor Connected to the Ethernet LAN

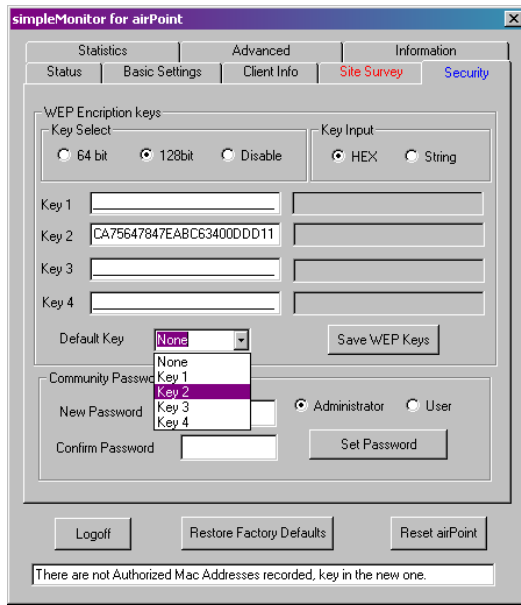
By Default airPoint Outdoor runs a DHCP Client. So the IP Address will be acquired from the DHCP Server. If your LAN doesn't have a DHCP server but instead you run the PCs with Static IPs then you need to assign a Temporary IP Address to airPoint in order to configure it (see Appendix A for detailed instructions).

Configuring airPoint Outdoor using a standalone PC

Connect the airPoint Outdoor to your PC using cross Ethernet cable. You can convert straight Ethernet cable to cross using a cross connector provided. Make sure the power to the airPoint Outdoor is ON. To use the simple Monitor for configuring airPoint Outdoor you must assign a temporary IP address to your computer and to the airPoint Outdoor (see Appendix B for detailed instructions).



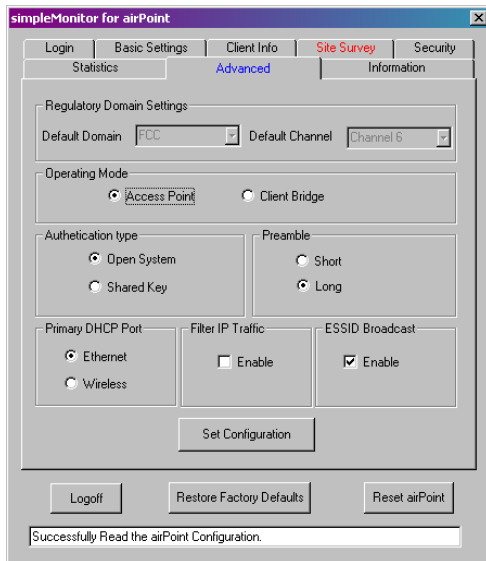
- Start the simpleMonitor by clicking on the shortcut Start -> Programs -> smartBridges -> airPoint -> simpleMonitor.
- Click on Search.
- Select the airPoint Outdoor and enter the community password as "public" (case sensitive) and click on login.
- You will get the message 'Successfully read the Configuration' in the message window.



By default encryption is disabled which means the communication is not secure. In case you want to have a secure communication, ensure that the WEP encryption keys are set.

To set the encryption keys click on security tab :

- Select the Desired Encryption Key(64Bit/128Bit).
- Select HEX & enter hex data.
- Select the desired key to be used(Default Key).
- Save the WEP Keys....
- You will get a pop up window with the message 'WEP Encryption Keys Saved Successfully'.



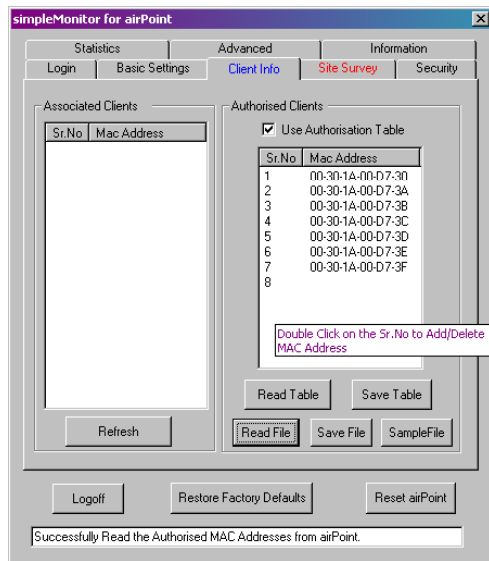
airPoint Outdoor can work in two different modes:

1. Access Point - Normal 802.11b compliant Access Point. In this mode Client Info Tab will be enabled.
2. Client Bridge - airPoint Outdoor acting as ethernet client, working in infrastructure mode. In this mode Site Survey Tab will be enabled.

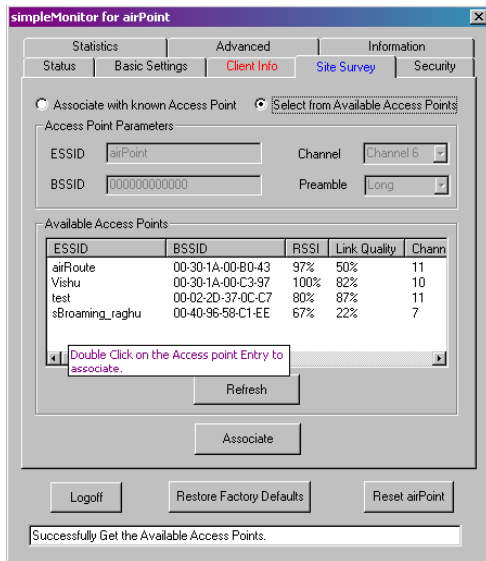
Note: In Client Bridge mode airPoint Outdoor works with only those Access Points which support "Address 4" field in IEEE 802.11b specifications.

To change the operating mode:

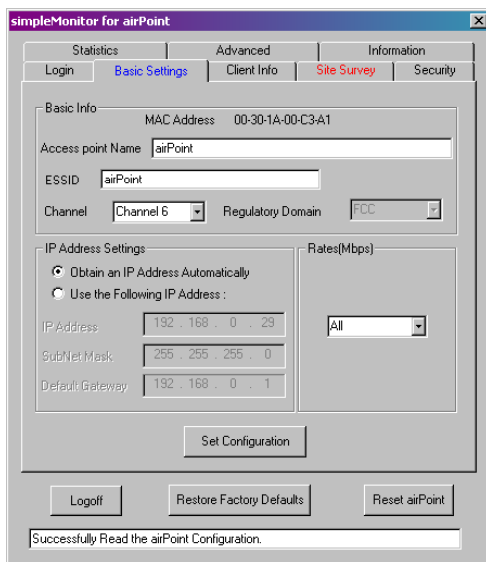
- . Select Advanced Tab.
- . Select the Operating mode.
- . Click on Set Configuration.
- You will get a pop up window with the message "Operating mode changed successfully".



- Client authorisation is a mechanism by which only authorised Wireless Clients are allowed to communicate with airPoint.
- By default the authorized client table is disabled and any Wireless Client can associate with airPoint.
- You can configure airPoint to associate with the predetermined Wireless Clients by enabling the authorized Client table. To do this select Client Info Tab and check 'Use Authorisation Table' option.
- Please key in the MAC addresses of the predetermined Clients in the window and click on 'Save Table'.



- If you want to associate with known Access Point, select the "Associate with Known Access Point" option Key in ESSID, BSSID, Channel, Preamble of known Access Point and click on "Set Values".
- If you want to associate with one of the Access Point in the vicinity select "Select from Available Access Points" option. Double click on the desired Access Point Entry. After successful association, a confirmation Message will be shown.
- If airPoint outdoor fails to associate, please ensure:
 1. The WEP Key Settings for airPoint Outdoor and desired Access Point are same.
 2. airPoint Outdoor is authorised to associate with the desired Access Point.
 3. The desired Access Point supports "address 4" field in IEEE 802.11b specifications.



- Select the 'Basic Settings' Tab.

- Enter the desired ESSID, Access Point Name, Channel, and Rates in the respective tabs.
- If you want to assign a new network settings to airPoint Outdoor, then enter the new IP address, Subnet Mask, Default Gateway as per your network settings and click on 'Set configuration', you will get a pop up window with the message "Basic Configuration Set Successfully".

Restore Factory Default Settings

If you forget the critical settings like WEP or Administrator Password of the airPoint Outdoor, you can restore the airPoint Outdoor to the Factory Default Settings as,

1. Make sure that the Power to the airPoint Outdoor is ON. (indicated by PWR LED)
2. Locate and Press the "RESET" button continuously. (The "RESET" button is located on the bottom side of the powerShot and you need some pointing device to press the button)
3. The TxRx LED will reduce its light intensity and stop flashing for few seconds.
4. Release the button after the TxRx LED restores back to its original bright intensity and starts flashing again.
5. After restoring the Factory Default Settings, please configure the airPoint Outdoor again.

Appendix A

Assigning the Temporary IP Address to airPoint Outdoor

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- 7.For more help about arp command type "arp/?" in the DOS Prompt window.

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- 4.If you get the ping response without error the Temporary IP is set.

Once the configuration of airPoint Outdoor is over please delete the Temporary IP Address assigned to airPoint. Outdoor

FCC Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, 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 equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

FCC Information:

This device complies with Part 15 of the FCC 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 operations.

FCC Warning:

This equipment generates or uses radio frequency energy. Changes or modifications not expressly approved in writing may cause harmful interference and void the user's authority to operate this equipment.