AP2750 Managed Access Point

3CRWX275075A

The 3Com AP2750 Managed Access Point provides IEEE 802.11a or 802.11b/g wireless access to the network. The access point is designed for use with a 3Com Wireless LAN Switch, and requires hardware installation only. All configuration for the access point takes place on the 3Com Wireless LAN Switch.

You must have a wireless switch device to operate the access point. Two WLAN switch devices can be connected to the access point:

- 3Com WX4400
- 3Com WX1200

Power can be supplied via Power Over Ethernet (PoE) or by an external power supply. Four 3Com PoE devices supply power to the access point:
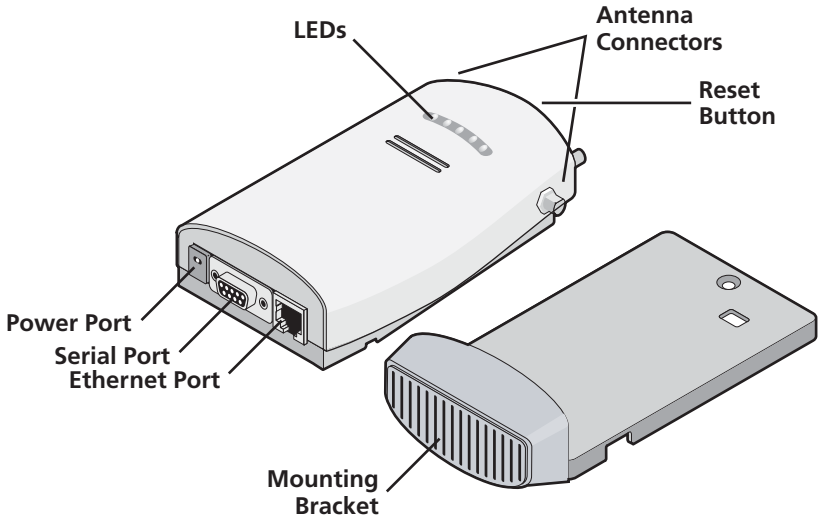
- 3Com PoE Injector
- 3Com 4400PWR PoE Switch
- 3Com Multi-port PoE power supply
- 3Com WX1200

About This Guide

This Quick Start Guide describes the basic installation of the access point. It covers the following topics:

- 3Com AP2750 Managed Access Point Features
- Observing Safety Precautions
- Step 1: Unpacking the Access Point
- Step 2: Preparing for Installation
- Step 3: Attaching the Antennas
- Step 4: Mounting the Access Point
- Step 5: Connecting the Access Point to a Switch
- Step 6: Checking the LED Indicators
- Troubleshooting

3Com AP2750 Managed Access Point Features

Feature	Description
Power Port	The access point can be powered either via Power Over Ethernet (PoE), or by an external power supply (not included) that is plugged into the Power Port.
Serial Port	The serial port is not supported.
Ethernet Port	The Ethernet port provides a 10/100BASE-TX Ethernet connection to a 3Com Wireless LAN switch. The connection can be direct to a 3Com switch or indirect through an intermediate Layer 2 or Layer 3 network.
	Use a standard Category 5 cable with straight-through signaling and standard RJ-45 connectors to connect the access point to the switch on the network.
LEDs	The LEDs indicate power and activity. See "Checking the LED Indicators" on page 7 for details.
Antenna Connectors	Two SMA-female antenna connectors allow you to connect antennas that operate in 2.4 GHz and 5.3 GHz bands.
Reset Button	The reset button is accessible from the back of the access point as well as through the mounting bracket. Push the reset button to restore the access point to its factory default settings.
Mounting Bracket	The mounting bracket comes attached to the access point. This mounting bracket allows the access point to be mounted to a wall or ceiling.

Observing Safety Precautions

This equipment must be installed in compliance with local and national building codes, regulatory restrictions, and FCC rules. For the safety of people and equipment, only professional network personnel should install the access point.

WARNING: To comply with FCC radio frequency (RF) exposure limits, a minimum body-to-antenna distance of 20 cm (8 in.) must be maintained when the access point is operational.

WARNING: To avoid possible injury or damage to equipment, you must use power supply equipment that is safety certified according to UL, CSA, IEC, or other applicable national or international safety requirements for the country of use. All references to power supply in this document refer to equipment meeting these requirements.

1   Unpacking the Access Point

Make sure that you have the following items, which are included with the access point:

- Two external 2.4 GHz and 5.3 GHz dual-band antennas
- Mounting bracket (attached to the access point)
- Wall-mounting hardware:
  - Locking bar (used for securing a wall- or ceiling-mounted installation)
  - Two sheet metal screws
  - Two thread screws
  - Two wall anchors
- Four adhesive rubber feet (used for a flat-surface installation).

2   Preparing for Installation

It is advisable to connect the power (if using an external power supply) and check the Ethernet cables and LEDs before installing the access point in a hard-to-reach location. Additionally, observe the following items before mounting or connecting the access point:

Installation Item	Description
Switch port	3Com recommends that you install and configure the 3Com Wireless LAN switch before installing the access point. Set the port type on the switch to an AP2750 access point.
Cabling	Make sure that standard Category 5 cable with straight-through signaling is installed at the site before you install the access point.
	Make sure that the cable is highly flexible and that there is no extra covering on the RJ-45 connector that could prevent the cable from being routed through the mounting bracket.
Power Requirements	Power can be supplied via an 802.3af Power Over Ethernet (PoE)-compliant device or by an external power supply with a minimum 5v @ 2.0 amp.
	If using an external power supply, make sure the power outlet is accessible. The power supply plug is the only means of disconnecting the access point from power.
MAC Address	Record the access point MAC address in a safe place before the access point is installed in a hard-to-reach location.
	The MAC address is printed on the back of the access point. Additional MAC address labels are shipped with the access point.

3   Attaching the Antennas

Carefully unpack the standard detachable antennas. Screw the antennas on to the antenna connectors on the access point and hand-tighten them. After network startup, you may need to adjust the antennas to fine-tune coverage in your area.

For best results, adjust the antennas so that they are perpendicular with the floor and ceiling.

> **!**   **CAUTION:** Do not handle the antenna tips, especially after they are connected to the access point. This could lead to electrostatic discharge (ESD), which could damage the equipment.

4   Mounting the Access Point

The access point can be mounted on the following types of surfaces:

- Wall, ceiling, or electrical box (NEMA enclosure)
- Tabletop

> **!**   **CAUTION:** The access point is intended for indoor use only. Do not install the access point outdoors unless you install it in a properly installed outdoor access point enclosure.

Wall, Ceiling, or Electrical Box Mounting

To mount the access point to a wall, ceiling, or electrical box:

1 **Remove the access point from the mounting bracket.**

2 **Screw the mounting bracket to a wall, ceiling, or electrical box (NEMA enclosure):**
   - If mounting to a solid surface wall or ceiling, use the two sheet metal screws.
   - If mounting to drywall, use the two sheet metal screws and two wall anchors.
   - If mounting to an electrical box (NEMA enclosure), use the two threaded screws.

3 **Route the power cable (if using an external power supply) and Ethernet cable through the large opening on the back of the mounting bracket.**

> **!**   **CAUTION:** For easy installation and removal of the access point from the mounting bracket, make sure that there is sufficient flexibility with the cable and that there is adequate service loop (that is, enough cable routed through the mounting bracket to easily connect the cable to the access point.) If not enough cable is routed through the back of the mounting bracket, or if the cable is inflexible, it can be difficult to install or remove the access point from the mounting bracket.

The figures below show the mounting bracket being mounted to a wall, and then a cable being routed through the large opening on the back of the mounting bracket.
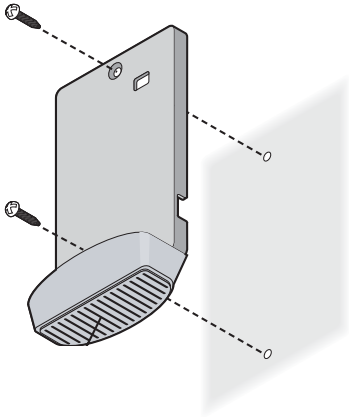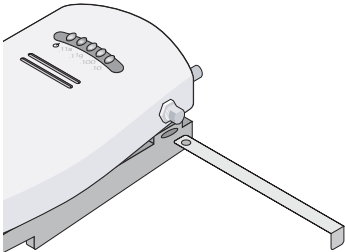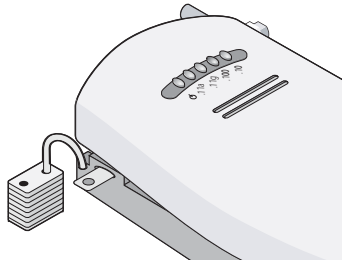

Installing the mounting bracket
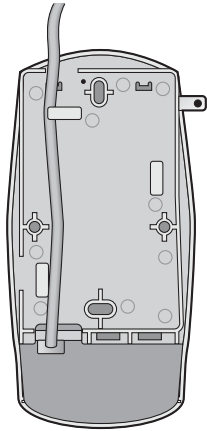
Routing a cable

4   **Connect the Ethernet cable (and power cable, if applicable) to the port(s) on the front of the access point.**

5   **Snap the access point onto the mounting bracket.**

To install the locking bar, push the locking bar through the opening in the side of the mounting bracket until the hole on the locking bar is exposed. Insert a lock (not provided) through the hole on the locking bar, and then close the lock to secure it in place.

Inserting the locking bar

Securing the bar with a lock

Tabletop Mounting

To install the access point on a flat surface such as a table or desktop:

> **!** **CAUTION:** Do not place the access point on any type of metal surface. Select a location that is clear of obstructions and provides good reception.

1. **Remove the backing from the four rubber feet and attach them on the bottom of the mounting bracket that is attached to the access point.**
2. **Place the access point on the table.**
3. **Connect the Ethernet cable (and power cable, if applicable) to the port(s) on the front of the access point.**

5   Connecting the Access Point to a Switch

3Com recommends that you install and configure the 3Com Wireless LAN switch before installing the access point. If the switch is already installed and configured for the access point, you can immediately verify the cable connection when you plug the cable into the access point.

> **⚡** **WARNING:** Do not connect or disconnect cables or otherwise work with the access point during periods of lightning activity.

You can connect the access point directly to a 3Com Wireless LAN Switch port or indirectly to 3Com Wireless LAN switches through an intermediate Layer 2 or Layer 3 network. In either case, use Category 5 cable with straight-through signaling for each access point connection.

- To connect the access point directly to a 3Com Wireless LAN Switch, configure the switch port as an AP2750 access point and then insert the cable into the switch and verify the link.

- To connect the access point indirectly to a 3Com Wireless LAN Switch through the network, configure a Distributed Access Point connection on the switch.

> **!** **Note:** For instructions on configuring the access point, see the *Mobility System Configuration Guide* or the *3Com Wireless LAN Switch Reference Manual*.

6   Checking the LED Indicators

When the access point is connected to power, LEDs indicate activity as follows (solid LED indicates connection; blinking LED indicates activity):
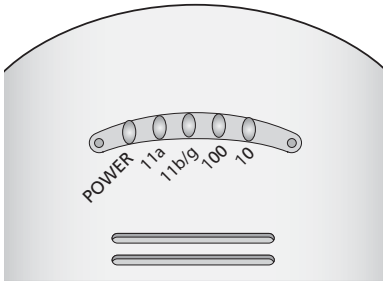
LED	Color	Indicates
Power	Green	The access point is powered up and operating normally.
	Off	The access point is not receiving power or there is a fault with the power supply.
11a	Green	The access point has WLAN frame transmission over the 802.11a 5.3 GHz radio band.
	Off	No link is present.
11b/g	Green	The access point has WLAN frame transmission over the 802.11g 2.4 GHz radio band.
	Off	No link is present.
100	Green	The access point has a 100 Mbps Fast Ethernet connection.
	Off	No link is present.
10	Green	The access point has a 10 Mbps Ethernet connection.
	Off	No link is present.

Troubleshooting

Refer to the *Mobility System Configuration Guide* or to the *3Com Wireless LAN Switch Reference Manual* to obtain the access point status.

REGULATORY INFORMATION

The 3Com AP2750 Managed Access Point (3CRWX275075A) must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. This device complies with the following radio frequency and safety standards.

This product contains encryption. It is unlawful to export out of the U.S. without obtaining a U.S. Export License.

This product does not contain any user serviceable components. Any unauthorized product changes or modifications will invalidate 3Com's warranty and all applicable regulatory certifications and approvals. This product must be installed by a professional technician/installer.

CAUTION: EXPOSURE TO RADIO FREQUENCY RADIATION.

This device generates and radiates radio-frequency energy. In order to comply with FCC radio-frequency exposure guidelines for an uncontrolled environment, this equipment must be installed and operated while maintaining a minimum body to antenna distance of 20 cm (approximately 8 in.).

This device must not be co-located or operated in conjunction with any other antenna or transmitter.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hc-sc.gc.ca/rpb.

This product must maintain a minimum body to antenna distance of 20 cm. Under these conditions this product will meet the Basic Restriction limits of 1999/519/EC [Council Recommendation of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)].

USA - RADIO FREQUENCY REQUIREMENTS.

This device is for indoor use only when using channels 36, 40, 44 or 48 in the 5.15 to 5.25 GHz frequency range.

High power radars are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

USA-FEDERAL COMMUNICATIONS COMMISSION (FCC)

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 operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

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

The user may find the following booklet prepared by the Federal Communications Commission helpful:

The Interference Handbook

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 004-000-0034504.

3Com is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this 3Com AP2750 Managed Access Point (3CRWX275075A), or the substitution or attachment of connecting cables and equipment other than specified by 3Com.

The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

MANUFACTURER'S DECLARATION OF CONFORMITY

3Com Corporation
350 Campus Drive
Marlborough, MA 01752-3064, USA
(800) 527-8677

Date: November 8, 2004

Declares that the Product:
Brand Name: 3Com Corporation
Model Number: AP2750
Equipment Type: AP2750 Managed Access Point

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 operation.

FC   3Com AP2750 Managed Access Point
Model AP2750

Canada – Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device."

L ' utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l' utilisateur du dispositif doit étre prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication. To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empecher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit etre utilize a l'interieur et devrait etre place loin des fenetres afin de Fournier un ecram de blindage maximal. Si le matriel (ou son antenne d'emission) est installe a l'exterieur, il doit faire l'objet d'une licence.

High power radars are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

Industry Canada (IC) Emissions Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.

Avis de Conformité à la Réglementation d'Industrie Canada

Cet appareil numérique de la classe B est conform à la norme NMB-003 du Canada.

Safety Compliance Notice

This device has been tested and certified according to the following safety standards and is intended for use only in Information Technology Equipment which has been tested to these or other equivalent standards:

- UL Standard 60950 (3rd Edition) or 60950-1
- CAN/CSA C22.2 No. 60950 or 60950-1
- IEC 60950 or 60950-1
- EN 60950 or 60950-1

C E   ①

Marking by the above symbol indicates compliance with the Essential Requirements and other relevant provisions of the R&TTE Directive of the European Union (1999/5/EC). This equipment meets the following conformance standards:

EN300 328, EN301 893, EN301 489-17, EN60950

NOTE: To ensure product operation is in compliance with local regulations, select the country in which the product is installed. Refer to the Wireless LAN Mobility System, Wireless LAN Switch and Controller Configuration Guide.

EUROPE - DECLARATION OF CONFORMITY IN LANGUAGES OF THE EUROPEAN COMMUNITY

English	Hereby, *3Com Corporation*, declares that this *RLAN device* is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Finnish	*3Com Corporation* vakuuttaa täten että *RLAN device* tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Dutch	Hierbij verklaart *3Com Corporation* dat het toestel *RLAN device* in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG Bij deze verklaart *3Com Corporation* dat deze *RLAN device* voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.
French	Par la présente *3Com Corporation* déclare que l'appareil *RLAN device* est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE Par la présente, *3Com Corporation* déclare que ce *RLAN device* est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables
Swedish	Härmed intygar *3Com Corporation* att denna *RLAN device* står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Danish	Undertegnede *3Com Corporation* erklærer herved, at følgende udstyr *RLAN device* overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF
German	Hiermit erklärt *3Com Corporation*, dass sich *dieser/diese/dieses Managed Accces Point* in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi) Hiermit erklärt *3Com Corporation* die Übereinstimmung des Gerätes *RLAN device* mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)
Greek	*ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ 3Com Corporation ΔΗΛΩΝΕΙ ΟΤΙ RLAN device ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ*
Italian	Con la presente *3Com Corporation* dichiara che questo *RLAN device* è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Spanish	Por medio de la presente *3Com Corporation* declara que el *RLAN device* cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE

Portuguese	*3Com Corporation* declara que este *RLAN device* está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Malti	Hawnhekk, *3Com Corporation*, jiddikjara li dan *RLAN device* jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC
Estonian	Käesolevaga kinnitab *3Com Corporation* seadme *RLAN device* vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Hungarian	Alulírott, *3Com Corporation* nyilatkozom, hogy a *RLAN device* megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
Slovak	*3Com Corporation* týmto vyhlasuje, že *RLAN device* spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Czech	*3Com Corporation* tímto prohlašuje, že tento *RLAN device* je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Slovene	Šiuo *3Com Corporation* deklaruoja, kad šis *RLAN device* atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Lithuanian	Šiuo *3Com Corporation* deklaruoja, kad šis *RLAN device* atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Latvian	Ar šo *3Com Corporation* deklarē, ka *RLAN device* atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

A copy of the signed Declaration of Conformity can be downloaded from the Product Support web page for the AP2750 (3CRWX275075A) at http://www.3com.com.

EUROPE – RESTRICTIONS FOR USE OF 2.4GHZ FREQUENCIES IN EUROPEAN COMMUNITY COUNTRIES

- This device may be operated **indoors or outdoors** in all countries of the European Community using the 2.4GHz band: Channels 1 – 13, except where noted below.

- In **Italy** the end-user must apply for a license from the national spectrum authority to operate this device outdoors.

- In **Belgium** outdoor operation is only permitted using the 2.46 – 2.4835 GHz band: Channel 13.

- In **France** outdoor operation is only permitted using the 2.4 – 2.454 GHz band: Channels 1 – 7.

Allowed Frequency Bands	Allowed Channel Numbers	Countries
5.15-5.25GHz	36, 40, 44, 48	Austria
5.15-5.35GHz	36, 40, 44, 48, 52, 56, 60, 64	Belgium, Cyprus, Czech Republic, France, Hungary, Liechtenstein, Slovakia, Switzerland
5.15-5.35 & 5.470-5.725GHz	36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140	Bulgaria, Denmark, Estonia, Finland, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, U.K.

- This device may be not be operated **outdoors** when using the bands 5150-5350MHz (Channels 36, 40, 44, 48, 52, 56, 50, 64).
- In **Italy** the end-user must apply for a license from the national spectrum authority to operate this device outdoors.
- To remain in conformance with European spectrum usage laws for Wireless LAN operation, the above
- 2.4GHz and 5GHz channel limitations apply. The user should check the current channel of operation. If operation is occurring outside of the allowable frequencies as listed above, the user must cease operating the Managed Access Point at that location and consult the local technical support staff responsible for the wireless network.
- The 5GHz Turbo mode feature is not allowed for operation in any European Community country.

- This device must be used with the radar detection feature required for European Community operation in the 5GHz bands. This device will avoid operating on a channel occupied by any radar system in the area. The presence of nearby radar operation may result in temporary interruption in communications of this device. The Access Point's radar detection feature will automatically restart operation on a channel free of radar. You may consult with the local technical support staff responsible for the wireless network to ensure the Access Point device(s) are properly configured for European Community operation.