



Installation Guide

802.11a mini-PCI Radio Module

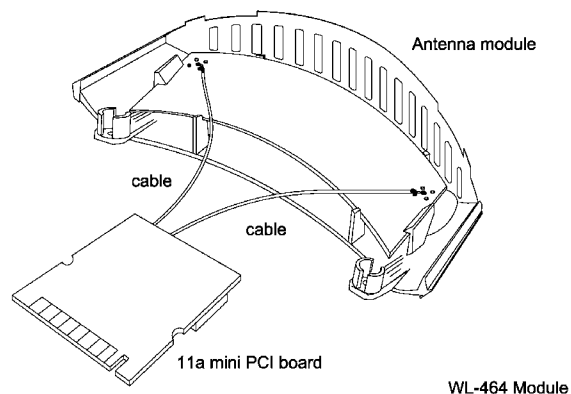
MODEL WL-464

The 3Com 802.11a mini-PCI Radio Module Kit contains everything you need to install an additional radio and antenna into your 3Com Access Point.

Kit Contents

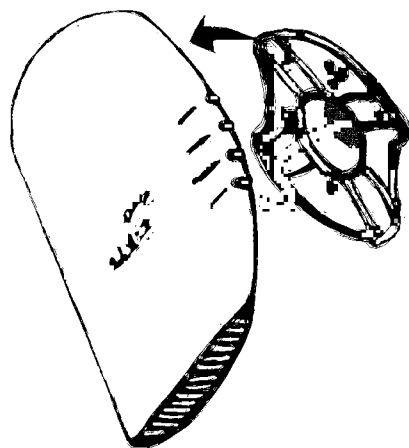
The upgrade kit contains these items:

- One antenna module
- One 802.11a mini-PCI Radio Module
- Two cables connect the antenna module and mini PCI card by direct soldering.



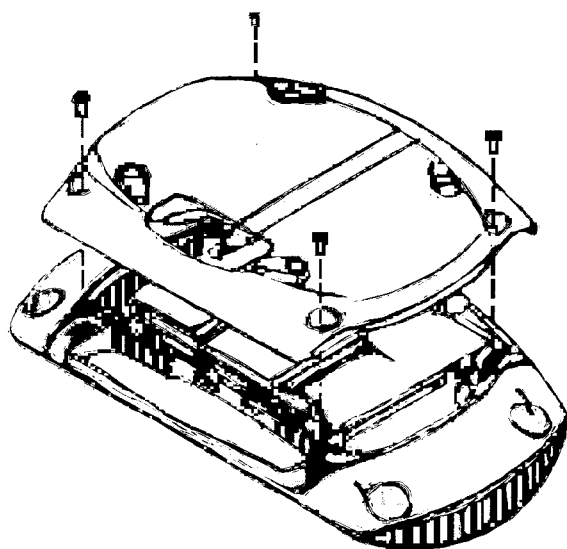
1 Detach and disconnect the access point

If the access point is mounted on the wall, turn the unit counterclockwise to disengage it from the mounting plate. Disconnect the Ethernet cable. Place the access point face down on a static-free surface.



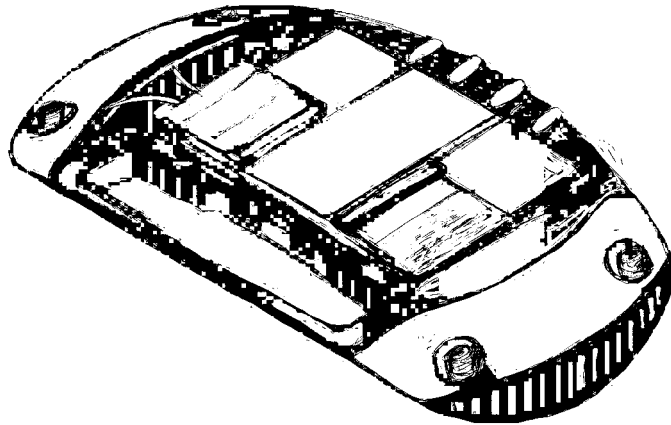
2 Remove the back cover

Using a cross-tip screwdriver, remove the four screws from the back cover. Remove the cover from the unit. Set the cover and screws aside.



3 Remove the antenna housing.

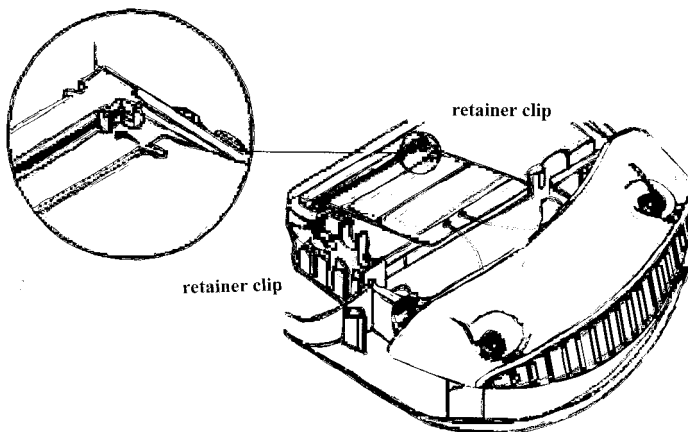
Grasp the inside edge of the antenna housing and pull up to disengage the housing from the unit, as shown below. This part is no longer needed.



4 Install the 11a upgrade kit.

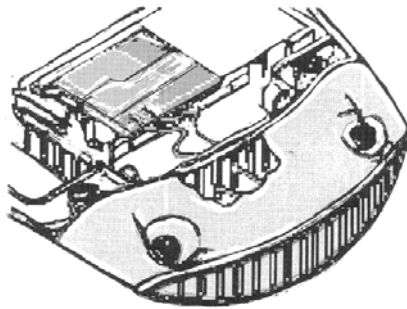
4.1. 11a mini PCI card side:

Holding the radio board at an angle, align the contact edge with the mini PCI connector on the unit. Make sure the keying notch on the contact edge line up with the key on the connector, as shown in the detail below. Slide the board into the connector and press down gently until the two retainer clips snap into place.



4.2. Antenna module side:

- 1 Align the antenna module with the snaps and posts on the unit and press until the module snaps firmly into place.
- 2 Align the cables to be routed through the slots in the unit.
- 3 After the cables are aligned, press them down out of the way inside the housing.

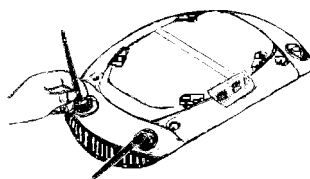


5 Replace the back cover.

Make sure that the cables are tucked away inside the housing so that they do not obstruct the cover. Align the back cover with the unit and settle the cover into place. Tighten the four screw.

6 Attach the antennas.

Being careful not to touch the antenna tips, screw the antennas onto the SMA connectors and hand tighten them. After network startup , you may need to adjust the antennas to fine tune radio coverage.



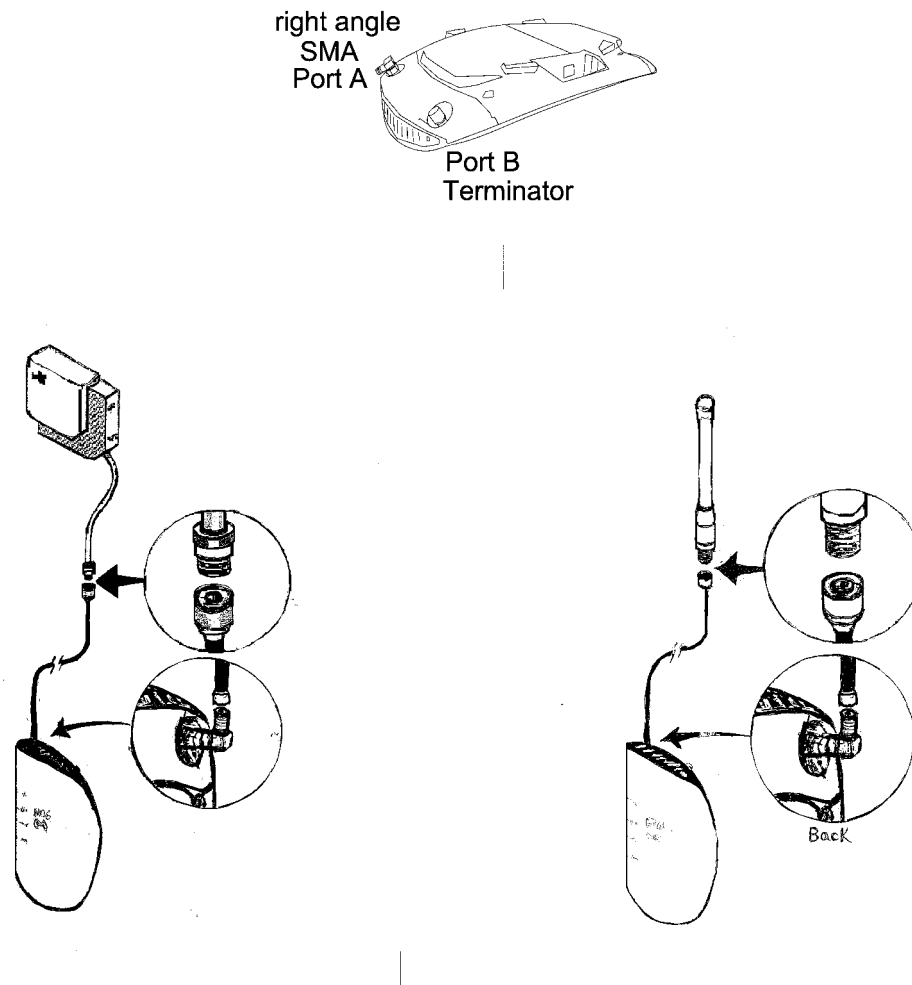
7 Reinstall the access point.

Reconnect the Ethernet cable and reattach the access point to the wall mounting plate. Adjust the antennas to improve the radio signal, if necessary.

SELECTING AND CONNECTING A DIFFERENT ANTENNA MODEL

The standard detachable antennas supplied with the WL-464 11a mini-PCI radio module and are suitable for a broad variety of environments. If you require a different type of antenna several options are available by model number from the 3Com Web site(www.3Com.com).

For each of the antenna models, you will need either a 6-foot accessory cable (model 3CWE480), a 20-foot accessory cable (model 3CWE481), or a 50-foot accessory cable (model 3CWE482) to provide the transition from the SMA connector on the access point to the N-type connector on the antenna. To ensure the physical safety of anyone near the antenna and to prevent damage to the access point, follow the building code for antenna installations in your area. Also, when connecting the optional antenna to the access point, remember to use only the A-side connector on the access point, on the right when properly installed. B-side install a terminator at the same time.



- 1 Position the antenna so that there are minimal obstacles between it and any client with which it will communicate. While maintaining a direct line of sight between the antenna and a client is not strictly necessary, such an arrangement helps to ensure a strong signal. Ensure that access is available for routing the antenna cable from the antenna to the access point.
- 2 If they are installed, remove both arms of standard detachable antenna, making sure not to handle the tips of antenna.
- 3 Connect one end of the optional antenna cable to the antenna and secure the antenna in place.
- 4 Connect the free end of the antenna cable to the right-hand side connection on the access point, as shown in the illustration above.
- 5 Make certain that the antennas and antenna masts are appropriately ground to prevent injury or damage from lightning strikes.

Regulatory Compliance Information

3Com 802.11a Wireless LAN Access Point Upgrade Kit

Federal Communication Commission Interference Statement

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 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.

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 30cm between the radiator & your body.

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

This device is intended only for OEM integrators under the following condition - The antenna must be installed such that 30 cm is maintained between the antenna and users. As long as the condition above is met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 30 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains TX FCC ID: O9CWL464".

Manual Information That Must be Included

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the users manual of the end product which integrate this module.

The users manual for end users must include the following information in a prominent location " IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 30 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter".

If the end product integrating this module is going to be operated in 5.15 ~ 5.25GHz frequency range, the warning statement in the user manual of the end product should include the restriction of operating this device in indoor could void the user's authority to operate the equipment.

3Com Model WL-464

US: FCC ID : O9CWL464

Canada: IC ID: 2299AWL464

Industry Canada Statement

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 the device

This device has been designed to operate with an antenna having a maximum gain of 8 dB. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the EIRP is not more than required for successful communication.

Avis de Conformité à la Réglementation d'Industrie Canada

Pour empêcher toute interférence aux services faisant l'objet d'une licence, cet appareil doit être utilisé à l'intérieur seulement et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal.

L'installateur du présent matériel radio doit s'assurer que l'antenne est située ou pointée de manière à ce que cette dernière n'émette pas de champs radioélectriques supérieurs aux limites spécifiées par Santé Canada pour le grand public; consulter le Code de sécurité 6, disponible sur le site Web de Santé Canada, à l'adresse suivante: www.hc-sc.gc.ca/rpb.