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DIGITAL RoamAbout Remote Antenna Module Installation Quick Start

The DIGITAL RoamAbout Remote Antenna Module (RAM) is the next generation of DIGITAL's RoamAbout product. This module lets you connect to an external antenna, which enables building-to-building communication. This guide explains how to quickly install the RoamAbout RAM. You need the items listed below to install this product.

Contents of the box:

- RoamAbout PC Card

- RoamAbout Remote Antenna Module (RAM) with external antenna connector

- Network warranty card

- Indoor omni antenna

- Software (two 3½" diskettes)

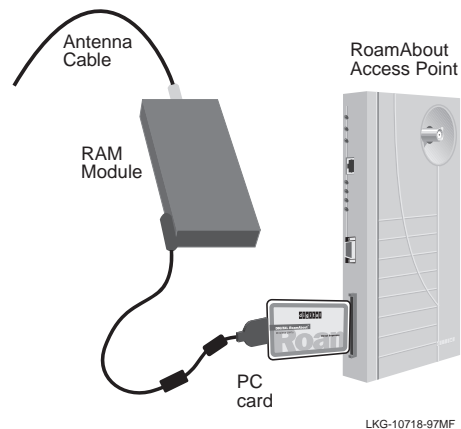- *DIGITAL RoamAbout Remote Antenna Module Installation Quick Start*

Hardware Installation

Follow these steps to install the RoamAbout Remote Antenna Module:

Step	Action
1	Unpack the RoamAbout RAM kit and check its contents.
2	Connect the external antenna cable (pigtail connector) to the antenna outlet of the RAM located at the top of the module. See Figure 1.
3	Connect the cable connector of the RAM to the PC Card.
4	Insert the RoamAbout PC Card into the card socket of the Access Point.
5	Secure the radio module and all cables. Do not let modules or cables hang free.

Figure 1: Connecting the RAM to the External Antenna and Access Point
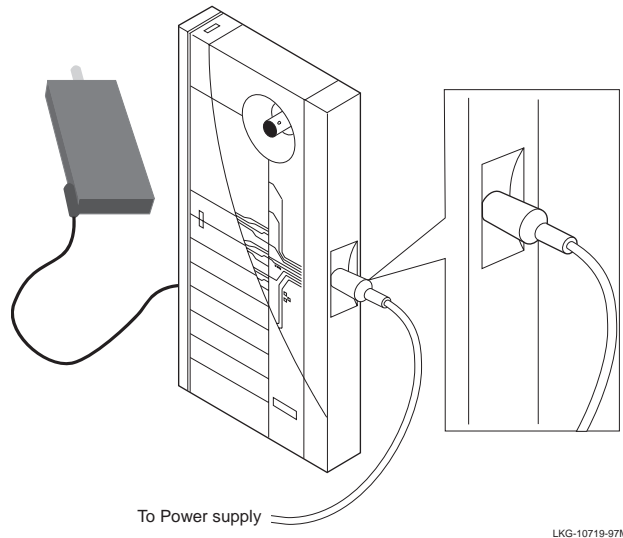

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Access Point Installation

Installing the Access Point (AP) into a Standalone Configuration

Step	Action
1	Complete the steps described in the section Hardware Installation on page 1.
2	Connect the Access Point to the wired network using either the 10BaseT or ThinWire connectors. Read the *RoamAbout Access Point Owner's Manual* for more information.
3	Connect the Access Point's power supply cable to the power connector on the back panel of the module.
4	Connect the power supply to an AC outlet to turn on the Access Point.

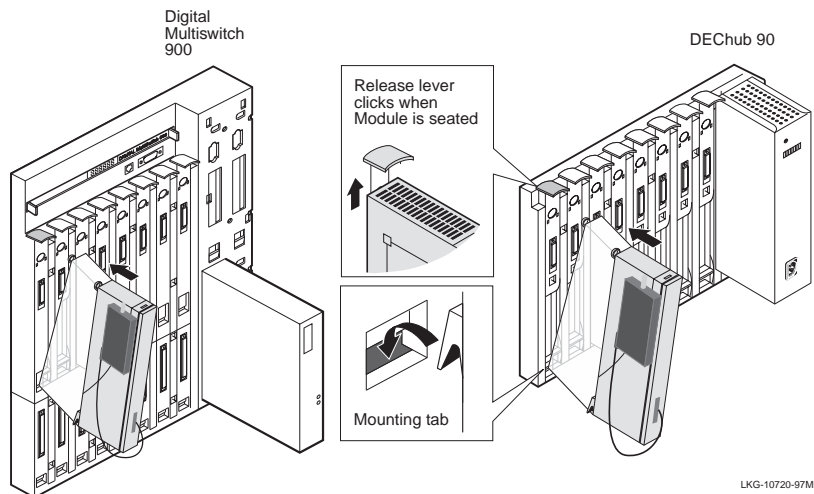### Figure 2: Connecting the Power Supply Cable

To Power supply

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Installing the Access Point into a DIGITAL MultiSwitch 900 (formerly DEChub 900 MultiSwitch) and DEChub 90

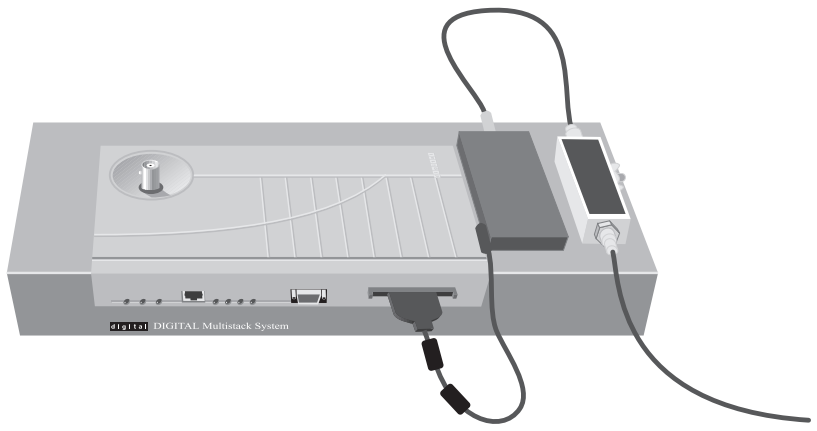| Step	Action
1	Complete the steps described in the section Hardware Installation on page 1.
2	Place the module's mounting tab into the first mounting slot on the DIGITAL MultiSwitch 900 or DEChub 90.
3	Pivot the module on the mounting tab and align the connectors.
4	Firmly push the module onto the backplane connectors until the release lever clicks.
5	Press down on the release lever to ensure that it is locked.

Figure 3: Installing into a DIGITAL MultiSwitch 900 or DEChub 90

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Installing the Access Point (AP) into a MultiStack System

Step	Action
1	Complete the steps described in the section Hardware Installation on page 1.
2	Seat the Access Point into the MultiStack system, firmly snapping it in place.
3	Secure the RAM and the lightning arrestor to the top of the MultiStack system.

Figure 4: Installing into a MultiStack System

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Access Point (AP) Configuration Settings

Access Point settings for building-to-building connection must be configured as specified here:

- Full bridge mode for both APs.

- Domain ID = 0 (roaming disabled).

- NWID must be the same on both building-to-building APs, but ensure that they are different than any internal AP.

- Beacon key – not required when roaming is disabled (Domain ID = 0).

- Frequency – same

- DES key – same

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Software Diagnostics

Software for DOS, Windows 3.1, Windows 95, and Windows NT diagnostic utilities is included. Refer to the Readme file on the appropriate diskette. Access Point firmware V 2.4 or greater is recommended. If your AP is an earlier version, download the latest version from the DIGITAL RoamAbout World Wide Web site. The RoamAbout configurator is also at this WWW site. Version 2.4 and the configurator will help with settings without the use of a local console.

Specifications

Mechanical Specifications

Physical Specifications

Dimensions, PC Card	8.5 cm x 5.4 cm x 0.5 cm (3.4 in x 2.1 in x 0.2 in)
Dimensions, Radio Module (RAM)	12.9 cm x 6.8 cm x 1.9 cm (5.0 in x 2.7 in x 0.7 in)
Total weight	284 grams (0.63 lb)
Cable length	22 cm (8.6 in)
Antenna connector	Proprietary coaxial connector
Temperature range, host equipment	0 to + 40 C

Data Communication

Data rate	2Mb/sec
Media access protocol	Ethernet variety (CSMA/CA)
Bit error rate	Better than 10^{-8}

Power Consumption

Receive mode	1.575 W
Transmit mode	1.825 W

RF Specifications

Modulation Technique: Spread Spectrum — DQPSK

Frequency Bands	**2.4 GHz**
Sub-channel selectivity	Yes (subject to local radio regulations) Note: For installation of the RAM using an external antenna in Australia, the frequency setting must be fixed at 2.422 GHz.
Output power	14 dBm
Receiver sensitivity	-80 dBm
Threshold	-70 dBm (10 dBm fade margin)
FCC regulations	No site license required
ETSI regulations	No site license required

RoamAbout Access Point software upgrades and current release note information are distributed on the World Wide Web (WWW).

DIGITAL RoamAbout

Americas:	http://www.networks.digital.com/dr/wireless
Asia Pacific:	http://www.networks.digital.com.au/dr/wireless
Europe:	http://www.networks.europe.digital.com/dr/wireless

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