digital™

Networks

Digital RoamAbout Access Point
Quick Start

August 1995

CE NOTICE – Class A Computing Device:
Warning!
This is a Class A product. In a domestic environment this
product may cause radio interference, in which case the user
may be required to take adequate measures.

Achtung!
Dieses ist ein Gerät der Funkstörgrenzwertklasse A. In
Wohnbereichen können bei Betrieb dieses Gerätes
Rundfunkstörungen auftreten, in welchen Fällen der Benutzer
für entsprechende Gegenmaßnahmen verantwortlich ist.

Attention!
Ceci est un produit de Classe A. Dans un environment
domestique, ce produit risque de créer des interférences
radioélectriques, il appartiendra alors à l'utilisateur de prendre
les mesures spécifiques appropriées.

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Introduction

This document provides the step-by-step procedure to install the Digital RoamAbout Access Point (AP).

There are two different ways you can install the AP:

- Installing the AP in a standalone configuration

- Installing the AP in a DEChub 900 or DEChub 90

Installing the AP involves the following four tasks:

- Installing the AP

- Configuring the AP

- Verifying the operation of the AP

- Verifying communications

For complete installation and configuration instructions, refer to the *Digital RoamAbout Access Point Owner's Manual*.
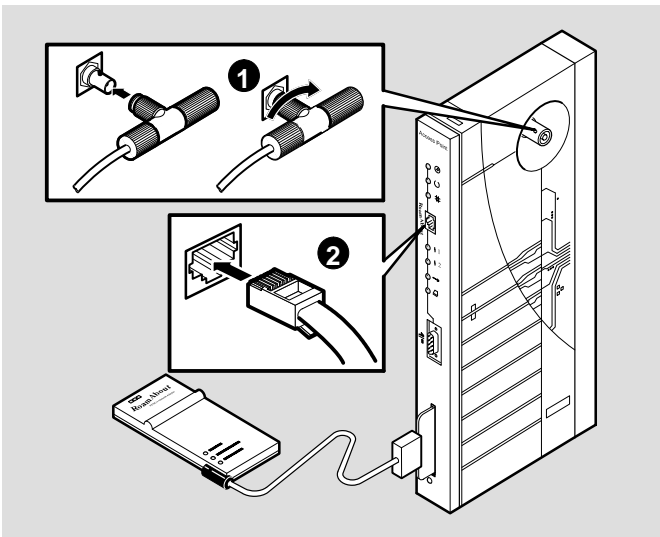
Task 1 – Installing the AP

You can install the AP either as a standalone into a wired Ethernet, or into a DEChub 900 or DEChub 90.

Installing the AP as a Standalone

1. Insert the PC card network adapter into the AP.

2. Connect the AP to the wired network using either the ThinWire connector or the 10BaseT connector (see Figure 1).

**Figure 1: Connecting to a Network**

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Item	Description
1	Connecting to the ThinWire connector
2	Connecting to the the 10baseT connector

3. Connect the other end of the ThinWire cable or
   10BaseT cable to an active Ethernet outlet, such as a
   DECconnect faceplate or other network device.

4. If you want to use a local setup port device, connect a
   9-pin serial cable to the AP's 9-pin, D-Sub,
   PC-compatible serial port, as shown in Figure 2. For
   setup port connections, assume only ANSI/ASCII or
   PC-based terminal interface. Cursor control, screen
   management escape sequences, or flow control are not
   supported.

**Figure 2: Connecting to the Setup Port**
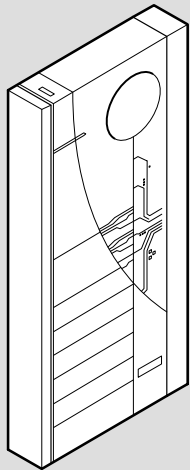
5. Connect the AP's power supply cable to the power
    connector on the back panel of the AP (see Figure 3).

Note

> Do not try to insert or swap a PC Card digital
> interface card in the AP after connecting the
> AP's power supply to an AC outlet.

6. Connect the power supply to an AC outlet to turn on the
   AP.

Figure 3: Connecting the Power Supply Cable

To
power
supply

LKG–8185-93I

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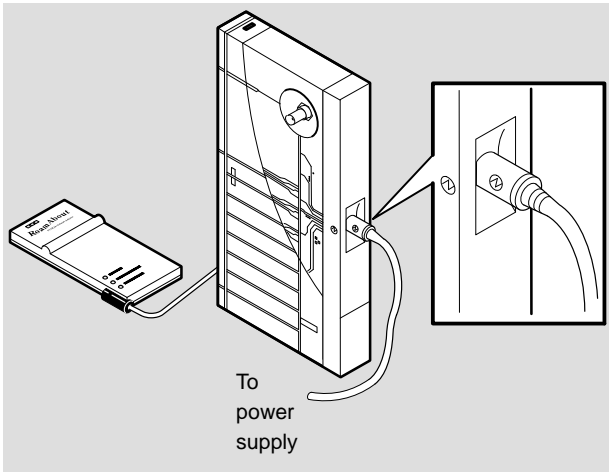
Installing in a DEChub 900 or DEChub 90

1. Insert the PC card network adapter into the AP.

2. If you want to use a local setup port device with a DEChub 90, connect a 9–pin serial cable to the AP's serial port with a powered terminal connected to the other end. When installing the AP into a DEChub 90, you must connect the setup port device to the setup port before applying power to the AP. In the DEChub 900, use the DEChub setup port.

3. Seat the AP in the DEChub 900 or DEChub 90 as shown in Figure 4. The Access Point/DEChub hot–swap feature allows you to install the AP without turning off power.

Figure 4:   Installing in a DEChub 900 or DEChub 90
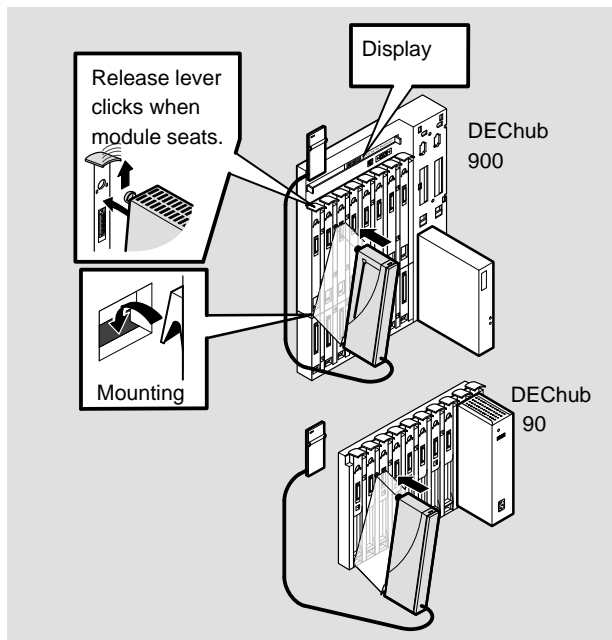
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Task 2 – Configuring the AP

To configure the wireless parameters of the AP, use the local setup port. If you intend to use SNMP management, you should set the SNMP parameters at the same time you set the wireless parameters. Refer to the *RoamAbout Access Point Owner's Manual* for details.

Configuring with a Direct Sequence (DS) Adapter

The AP with a DS-type PC card network adapter is shipped with a default Network ID based on the hardware MAC address and Domain ID and Beacon Key values of 1. Digital recommends, for security reasons, that you change both the Domain ID and the Beacon Key values.

In a roaming configuration, all APs must have different Network IDs and all APs and clients must share the same Domain ID and Beacon Key. In a nonroaming configuration, ensure that all the wireless clients that communicate through the AP use the same Network ID and use a Domain ID of 0. Refer to the documentation for your wireless PC Card network adapter for information about the Network ID format and parameters.

Configuring with a Frequency Hopping (FH) Adapter

The AP with a FH-type PC card network adapter is shipped with an autochannel based on the hardware MAC address, a Subchannel default of 1, and a Domain default of 0. Digital recommends, for security reasons, that you change the Domain.

In a roaming configuration, all APs and clients must share the same Domain. There is no nonroaming configuration. Refer to the documentation for your wireless PC Card network adapter for information about the wireless parameters.

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Task 3 – Verifying the Operation of AP

The Access Point runs a series of self-tests on power-up and reports status using its LEDs. When power–up begins, the following occurs:

1. The firmware begins running diagnostics, initializes minimal hardware, then sequentially turns on and off LEDs 2 through 6.

2. After LED 6 turns on and then turns off, the firmware completes its diagnostics and hardware initialization. During this portion of the diagnostics and hardware initialization, LEDs 2 through 7 flash on and then off.

3. The diagnostics then check to see if a PC Card digital interface card is properly inserted in the AP. If a card is present, LED 7 lights.

Note

> Do not try to insert a PC Card digital interface card in the AP if the power supply is connected to an AC outlet or the unit is installed in a DEChub. Always unplug the power supply (or remove the AP from the DEChub) before inserting a PC Card digital interface card.

The diagnostics take approximately 10 seconds to complete after power-up. Upon successful completion of the diagnostics, the normal LED pattern is displayed, as shown in Figure 5. LED 4 (Bridge State) lights after 30 seconds, indicating the AP is forwarding packets.

If the unit fails to display the above described LED pattern, verify that you correctly installed the module.

Figure 5: Normal LED Pattern
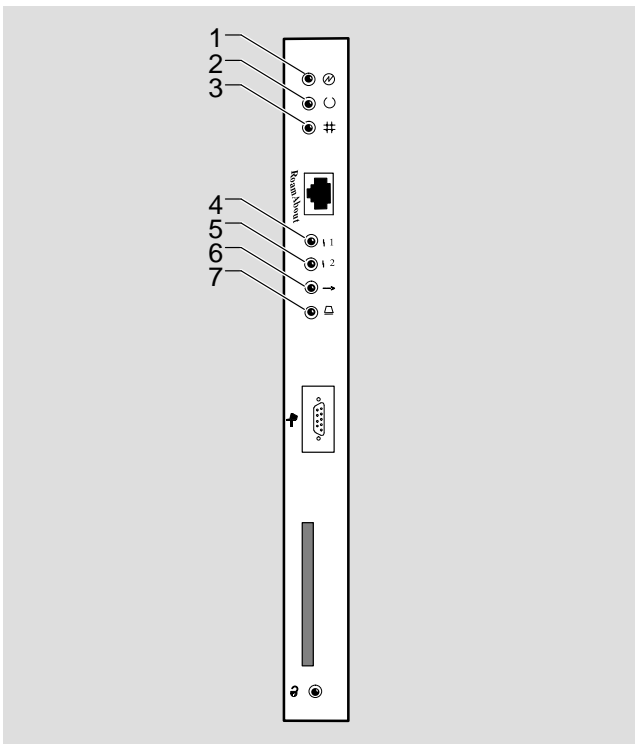
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Item	LED Name	Operational State
1	Power OK ⊘	On = power is okay
2	Module OK ↺	On = self-test passed
3	Wired LAN OK ⌗	Blinking = network connection
4	Bridge State	On after 30 sec = the AP is forwarding packets
5	AP Saturated	Off
6	Wireless LAN Activity	Blinking
7	PC Card Present	On = PC card is installed

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Task 4 – Verifying Communication Between Adapters and your AP

The Digital RoamAbout PC Card Network Adapter includes diagnostic utilities that allow you to verify the communications path between RoamAbout Network Adapters in the wireless LAN. You can run the diagnostic utilities on any mobile end station that is within range of the AP.

Refer to the Owner's Manual for your PC Card network adapter for details about the available diagnostic utilities.