

No Wires Needed

Pelican 1100 WLAN Hub

User Manual

Version 2.1.1 – October 1999



User manual

Pelican 1100 WLAN Hub

No Wires Needed
Jan Steenlaan 3-5
3723 BS Bilthoven
The Netherlands

www.nwn.com

Version 2.1.1 – October 1999

Trade marks

Copyright © No Wires Needed

The publisher reserves the right to revise this publication and to make changes to any or all parts of this manual at any time, without obligation to notify any person or entity of such revisions or changes.

Swallow, Parrot, Pelican, AirLock, APCenter, ASBF and Connect are trademarks of No Wires Needed. Other product and company names are registered trademarks or trademarks of their respective holders.

Copyright statement

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, whether electronic, mechanical, photocopying, recording, or otherwise without the prior writing of the publisher.

Printed in Amsterdam, October 1999

Free Repair Period

NWN undertakes a Free Repair Period of 12 months from the date of Invoice. Within the Free Repair Period NWN repairs a faulty device free of charge or replaces it in case of irreparable damage.

Excluded from the Free Repair Period are malfunctions caused by operation outside the intended usage; by misuse or abuse; by service modifications or repairs performed by unauthorised persons or by other conditions not arising from defects in Product materials or workmanship.

The costs associated with physically replacing the defective part and re-installing are to be borne by the Buyer.

Statement of Year 2000 Compliance

Detailed information about our statement is published on our website.

<http://www.nwn.com>

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 the minimum distance between your body, excluding hands, wrists, feet and ankles, and the antenna as shown in the table below:

WLAN Hubs which use the attached low gain indoor antennas (1.9dBi)	20cm (7 inches)
--	-----------------

Declaration of Conformity

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.

**No Wires Needed Parrot, Pelican,
WBS, WBC 1100**



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

1 Contents

1	Contents	9
2	Introduction	10
3	Configuring the Pelican.....	11
3.1	Installation of configuration software.....	11
3.2	Give the Pelican an IP-address	12
3.2.1	Selecting a network.....	14
4	Connection the devices	15
4.1	Connect one device to the Pelican.....	15
4.2	Connect 2-4 devices to the Pelican.....	16
4.3	Continue installation.....	17
4.3.1	Resetting the Pelican.....	18
5	Technical specifications Pelican 1100	19
5.1	Standards supported.....	19
5.2	Environmental	19
5.3	Power specifications	19
5.4	Radio specifications	19
5.5	Specific features	20
5.6	Physical Dimensions.....	20

2 Introduction

Thank you for purchasing your No Wires Needed Pelican 1100 WLAN Hub. This manual will assist you with the installation procedure.

The package you have received should contain the following items:

- User manual
- Pelican 1100 WLAN Hub
- Power adapter
- Diskettes containing PConfig™ Software

Note: if anything is missing, please contact your vendor

3 Configuring the Pelican

The Pelican should be configured before it is actually installed.

The settings contain the following parameters:

- IP address
- Network name
- Community string (password)
- Lock (remote management on/off)

First install Pconfig from the diskette that is shipped with the Pelican.

3.1 *Installation of configuration software*

To install the PConfig program, insert disk 1 into your local disk drive and run the PConfig setup.exe. The set-up wizard will guide you through the installation process.

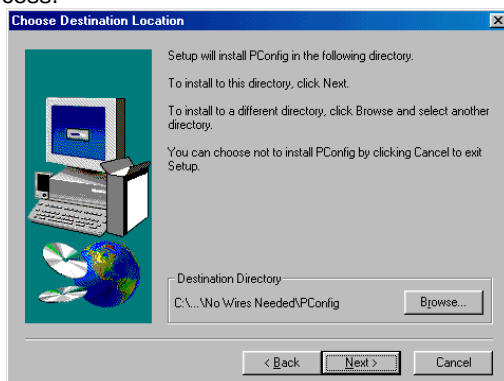


Figure 3.1 Select the directory you want to install PConfig in.

Start the PConfig program after completion of the installation.

3.2 Give the Pelican an IP-address

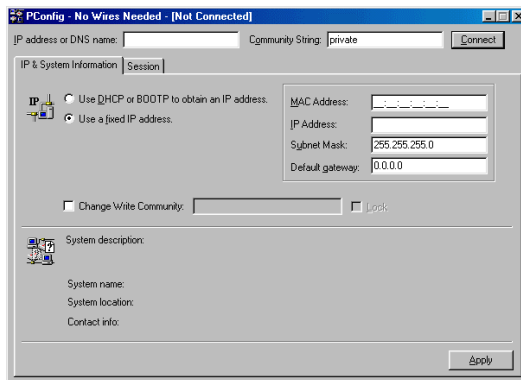
The following settings should be done:

- IP address
- Network name
- Community string (password)
- Lock (remote management on/off)

Therefore you should connect the Pelican directly to a computer were Pconfig is running on. Either use a cross cable, or a standard hub to accomplish this.

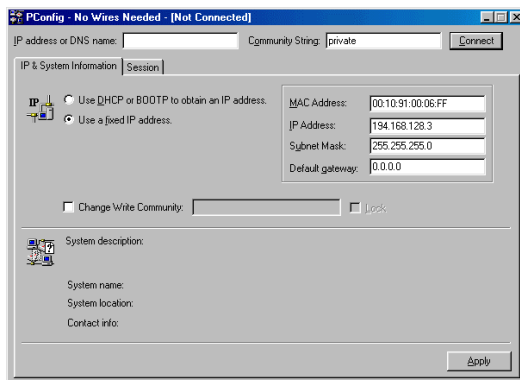
Note: You should not attach the Pelican to the same wired backbone were the Access Points are connected to. This will result in a not-ending loop, and can cause network problems.

After starting Pconfig the following screen will appear.

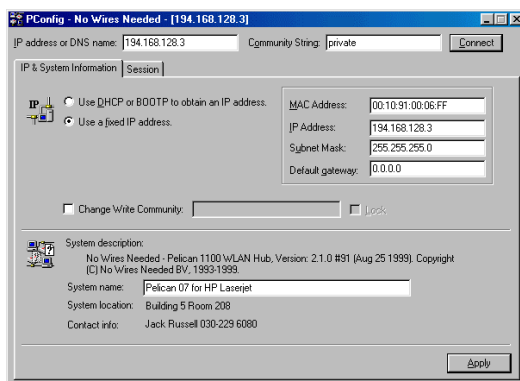


Select 'Set a fixed IP address'. Then enter the MAC address and the IP address manually. The MAC Address can be found at the backside of the Pelican.

Press Apply.

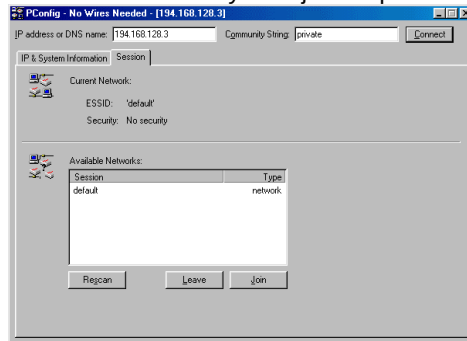


You are now enabled to fill in the System name, System Location and Contact Info. These fields are not mandatory; the information is useful when using several Pelicans in a more complex environment. Place your cursor behind the field you wish to change.



3.2.1 Selecting a network

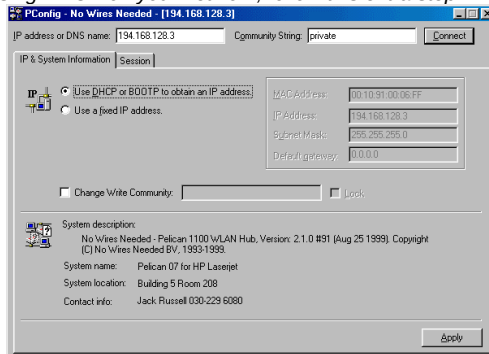
Selecting the Session tab will enable you to join a specific wireless network.



Press “Leave” and then “Rescan” to get an overview of all the available networks, thereafter select the appropriate network and press “Join”.

You are now ready to connect your Pelican to the Ethernet device or to the standard hub where the four devices are connected to.

Note: If you are using DHCP on your network, follow this extra step



Check the box “Use DHCP or BOOTP to obtain an IP-address” and press “Apply”.

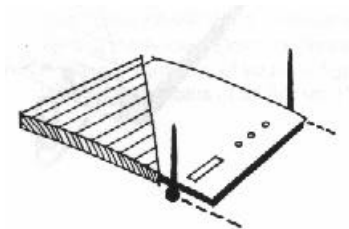
Note: The IP address previously entered will remain in the “IP address or DNS name” box, even when DHCP or BOOTP is selected.

4 Connection the devices

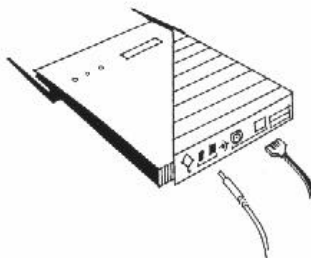
Note: The Pelican 1100 WLAN Hub is equipped with one RJ45 connector. Use a cross-cable if you only connect one device to the Pelican 1100 WLAN Hub. If you want to connect four devices, be advised to use a normal standard hub connected to the Pelican and the four devices.

4.1 *Connect one device to the Pelican*

1. Place your Pelican 1100 WLAN Hub next to your device that should be connected to it.
2. Make sure the antennas are in a vertical position (if not, rotate over 90 degrees).



3. Insert the power connector.
4. Attach the UTP Ethernet CROSS-cable directly to the device.
5. Switch on the Pelican WLAN Hub.

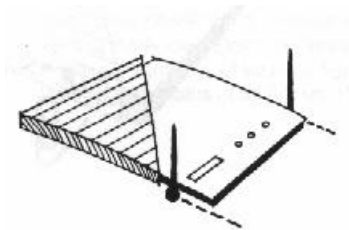


Continue to Chapter 4.3

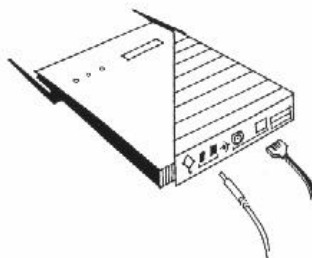
4.2 *Connect 2-4 devices to the Pelican*

Place your Pelican 1100 WLAN Hub next to the standard Hub.

1. Make sure the antennas are in a vertical position (if not, rotate over 90 degrees).



2. Insert the power connector.
3. Attach the UTP Ethernet cable to the standard Hub.
4. Connect the devices to the standard Hub.
5. Switch on the Pelican WLAN Hub.



Continue to chapter 4.3

4.3 *Continue installation*

At the front of the Pelican WLAN Hub you will see three LEDs.

If all goes well, the rightmost LED (power) is green and the leftmost (WLAN) and middle (wired network) LEDs flash whenever there is traffic on the respective networks which is at least ten times per second for the wireless LAN because of so-called 'beacons'.

The WLAN Hub automatically selects the medium attached. When no devices are detected, the network LED will turn red.

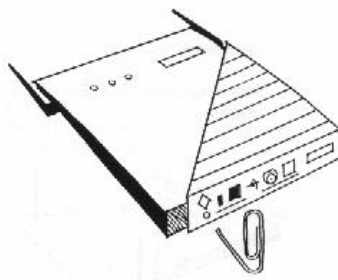
When the supplied power is too low or unstable the power LED will turn red. The power LED will also turn red when the firmware of the Pelican WLAN Hub has a fault condition.

Installation completed.

4.3.1 Resetting the Pelican

You can reset the Pelican WLAN Hub's settings to factory defaults by pushing a paperclip in the little hole next to the power switch while switching the Pelican WLAN Hub on.

When you push a paperclip in the reset hole while the Pelican WLAN Hub is switched on, only the lock set by PConfig™ is deactivated.



5 Technical specifications Pelican 1100

5.1 Standards supported

- Compliant with ETS 300 328 and ETS 300 826 (CE marked)
- IEEE 802.11 standard for Wireless LAN
- All major networking standards (including IP, IPX)

5.2 Environmental

Operating temperature (ambient):

- 0°C to 40°C (32°F to 104°F)

Humidity:

- 10% to 90%

5.3 Power specifications

DC power supply

- In 230 VAC 50 Hz 150 mA
- Out 9 VDC 1.3 A

Parrot Access Point

- In 9 VDC 1 A

5.4 Radio specifications

Range:

- per cell indoors approx. 50 meters (150 ft) or more
- per cell outdoors up to 300 meters (1000 ft)

Transmit power:

- +18 dBm

Frequency range:

- 2.4-2.4835 GHz, direct sequence spread spectrum

Number of Channels:

- Europe: 13 (3 non-overlapping)
- US: 11 (3 non-overlapping)
- France: 4 (1 non-overlapping)

Antenna system:

- Dual antenna diversity system; 2dB gain

5.5 Specific features

Supported bit rates:

- 11 Mbps
- 5.5 Mbps
- 1 Mbps (IEEE 802.11 DSSS compliant devices, using ASBF™)
- 2 Mbps (IEEE 802.11 DSSS compliant devices, using ASBF™)

Data encryption:

- AirLock™ security, 128-bit key length

Utility Software:

- PConfig™ configuration tool

Key Management:

- Automatic Dynamic Key Allocation (ADKA) through public key

5.6 Physical Dimensions

180 x 220 x 40 mm

