4.7.2 Power Connections to MA860 Unit

- Only Main PS is connected to the unit connect directly to 20-48V side of the PWR connector.
- Main and Redundant PSs connected to the unit connect the provided splitter cable to the unit and the Main and Redundant PSs to the appropriate connectors as shown below.



5 Power-up and Provisioning the Unit

Upon power-up, MA-860 automatically performs WCE, WiFi Coverage Expander auto-discovery.

It is recommended to locally connect to the unit using a computer running the telnet session to configure the local configuration options defined below. Following the initial setup and configuration MobileAccess recommends that the administrator verifies that all connected antennas are detected via the Web GUI or Engineering GUI, to perform the adjustment procedures and to verify that the unit is operating properly.

MA860 is by default configured with a *static IP address*. (It may also be configured for DHCP). Once the MA860 IP address is defined and it is connected to the network, it can be remotely managed via a Web access connection.

This section provides the following information:

- Unit power-up and procedures performed by the unit upon power-up
- Opening a session from the MA-860 Engineering Tool application
- Verifying all antennas are connected
- Performing adjustment procedures

5.1 Power-up and WCE Auto-discovery

To power-up the unit

Connect the power to the PWR connector located on the MA-860 as defined in Section 4.7.

Unit initialization and WCE auto-discovery

Upon power-up, the unit performs discovery of the WCE units during which time the RUN LED (located on the front panel) is constant GREEN. *This will take between one to two minutes.*

If you have connected the 860 WLAN Module via the Web GUI or Engineering UI before the auto-discovery process was completed, the dialog will show Auto-discovery in process.

After the initial discovery procedure has been completed, the RUN LED continuously flickers green indicating *normal* operation.

Note: Configuration changes corresponding to the addition or removal of WCE units can be remotely performed at any time via the Web GUI to access the unit.

5.2 System Setup Configuration

Before deploying the device in the field, it is recommended that all system level configurations are configured on the 860 WLAN module as defined in section 5.2

5.2.1.1 Assigning Network Parameters

The unit is factory set with the following static IP address:

 IP address:
 192.168.1.1

 Subnet mask:
 255.255.0.0

 Default GW:
 192.168.254.254

• Change the static address using Telnet as described in section 5.2.1.2

Note: For networks with DHCP – refer to section 6.2.2

• To set the SNMP parameters – refer to section 5.2.1.3.

5.2.1.2 Changing the Static IP Address

The static IP address is changed from the Telnet window.

To change the static IP address

- 1. Set your laptop IP to the same subnet as the static IP address assigned to the Repeater (e.g 192.168.1.2)
- 2. Connect the unit to your laptop with a cross cable.
- 3. Click the Windows Start option, choose Run and type Telnet and press Enter.
- 4. At the prompt Microsoft Telnet> o 192.168.1.1 9999. Press Enter.
- Click OK and immediately press Enter to go into Setup Mode. The current settings will be displayed, followed by the Change Setup menu.

Char	nge Setup:	
0	Server configuration	
1	Channel 1 configuration	
3	SNMP configuration	
8	exit without save	
9	save and exit	Your choice 0

- 6. Enter **0** (Server Configuration).
- You will be prompted to change the IP address one byte at a time –Enter the new value for each byte as you are prompted and press Enter. For example, the value entered below is 192.168.10.55

```
IP Address : (000) 192.(000) 168.(000) 10.(000) 55
```

8. You will be are prompted to set the *Gateway, Netmask, telnet Config password and to Change the DHCP device name.*

```
IP Address : (000) .(000) .(000)
Set Gateway IP Address (Y) ?
Gateway IP Address : (192) .(168) .(010) .(245)
Netmask: Number of Bits for Host Part (0=default) (16)
Change telnet config password (N) ?
Change DHCP device name (not set) ? (N) ?
```

 Press Enter to run through the rest of the parameters. When the Setup Menu is displayed again, select 9 – Save and Exit.

5.2.1.3 Setting SNMP Parameters

- 1. Click the Windows Start option, choose Run and type Telnet and press Enter.
- At the prompt Microsoft Telnet> o xxxx.xxxx.xxxx 99999 (where xxxx. is the IP address
 of the unit). Press Enter.
- Click OK and immediately press Enter to go into Setup Mode. The current settings will be displayed, followed by the Change Setup menu.

```
Change Setup:

0 Server configuration

1 Channel 1 configuration

3 SNMP configuration

8 exit without save

9 save and exit Your choice 3
```

- 4. Enter **3** (SNMP Configuration).
- Set the SNMP Read and Write community names and the SNMP traps destination addresses (up to three addresses can be defined).

```
SNMP community name for read (): public
SNMP community name for write (): private
Enter IP addresses for SNMP traps:
    1: (000) 192.(000) 168.(000) 10.(000) 22
    2: (000) .(000) .(000)
    3: (000) .(000) .(000)
```

 Press Enter to run through the rest of the parameters. When the Setup Menu is displayed again, select 9 – Save and Exit.

5.3 Default Login and User Account Levels

You may login to the MA 860 unit through any Web browser or 860 WLAN Engineering GUI. The available login credentials and default passwords are defined below:

- Operator (oper) monitoring options only
- Field Engineer (eng) monitoring and configuration options
- **TechSuport** for MA technical personnel only

NOTE: The password is **case** sensitive – use **lower case** letters.

5.4 Remote Web Management

Once the system level attributes are defined as in section 5.2, the 860 WLAN module can then be accessed remotely on the network LAN from any Web Browser by connecting to the IP Address of the specific MA 860 unit or through any Network Operating Center (NOC) using SNMP.

Use the Remote Web management options to make configuration changes, adjustments, and to monitor the unit status.

To login to the MA 860 configuration application

- 1. Run a Web Browser application (i.e. Internet Explorer).
- Enter the IP Address of the MA 860 unit. (i.e. http://192.168.10.127). The Login dialog appears. The application version is displayed at the top of the window.

mobileaccess			
	Μ	A860	
	User Name Password	Operator Operator Field Eng Tech Support	
		Login	

Figure 5-1. Login Window

- 3. Select the User (**Oper** or **Field Eng**) where **Field Eng** has configuration privileges. Enter the password (see 5.3.)
- 4. Click Login. ()

The Main configuration window appears. The Main window is described in the following section.

5.4.1 MA 860 View

Upon login, the MA-860 View shows the General tab that provides general information on the MA860 unit and on the WCE connections on each channle.

NOTE: The display is refreshed automatically; however, if necessary, click the same tab again (do **not** use the Web Browser Refresh option).

Note that there are six tab – three tabs on the upper window area and three in the lower window area. Table 5-1.

Unit Identification	M	Iulti-service ntenna units			
mobileaccess	X		To post	Tab options	Security Control
860	Antenna 1	Ser No.	SW Ver.	Inactive SW.	Product Ver.
Ser No . 0246802		073138F	4.5	N/A	B77
SW Ver . 4.5	Antenna 2	Ser No.	SW Ver.	Inactive SW.	Product Ver.
Inactive Sw. N/A	Anomaz				
Product Ver. B77		Ser No.	SW Ver.	Inactive SW.	Product Ver.
IP Addr. 192.168.10.55	Antenna 3	0731392	5.5	4.1	B77
MAC Addr. 00-20-4A-8F-43-6E	Antenna 4	Ser No.	SW Ver.	Inactive SW.	Product Ver.
General Adjustments	Alarms				Apply

Figure 5-2. Main Window

Menu Option	Description
Installation	User definable unit identification parameters and read-only IP address and MAC address.
Security	Password change options.
Control	Shows the General, Adjustment and Alarms tab in the bottom window area.
General	Unit identification and version information, and WCE information for each channel.
Adjustments	Unit adjustment pane. Used to calibrate cables.
Alarms	Alarm monitoring

Table 5-1.	MA 860	View Menu	Options
------------	--------	-----------	---------

5.5 Unit Location and IP

The Installation tab shows user defined information on the unit location, name, etc. and the unit IP and MAC address.

		Installation	Security	Control
IP	192.168.10.55			
	1			
Mac Address	00-20-4A-8F-43-6E			
	,			
Name	MA860			
Location	Default Location			
				Apply

5.6 Changing Password

To change the password of the User Name:

1. Click the **Security** tab in the Main window.

	Installation	Security	Control
		(
Login Password	•••		
User Name	Field Eng 🔹		
New Password	•••		
Verify Password	•••		
			Apply

- 2. To change the password:
 - In the **Login Password** field, enter the password to login to the current session.
 - In the **User Name** field, select the User Name whose password is to be changed.
 - In the **New Password** field, enter the new password.
 - In the **Verify Password** field, type the new password again.
 - Click Apply.

5.7 Web Access Adjustment

The default gain for each channel is set to 0dB.

To adjust the gain

1. Click the **Adjustment** button in the Main window.

The window is divided areas corresponding to each channel. Four control buttons are available:

- Full Discovery performs complete discovery of the antennas
- Partial Discovery performs discovery on new or undiscovered elements
- Reset sets adjustment values to the factory default levels
- Apply downloads configuration and adjustment values to the MA860 unit

mobileacces	s 🎾			Gain Setting options	
				Installation Secu	ity Control
Port 1	802.11a	AP1 Pwr	Ant1 Pwr	802.11b/g AP1 Pwr	Ant1 Pwr
DC ON 💌	Adjust a	N/A dBm	-30 dBm	Adjust b/g N/A dBm	Low dBm
Port 2	802.11a	AP2 Pwr	Ant2 Pwr	802.11b/g AP2 Pwr	Ant2 Pwr
DC OFF -	Adjust a	1 dBm	N/A dBm	Adjust b/g N/A dBm	N/A dBm
Port 3	802.11a	AP3 Pwr	Ant3 Pwr	802.11b/g AP3 Pwr	Ant3 Pwr
DC ON 💌	Adjust a	N/A dBm	Low dBm	Adjust b/g N/A dBm	Low dBm
Port 4	802.11a	AP4 Pwr	Ant4 Pwr	802.11b/g AP4 Pwr	Ant4 Pwr
DC OFF 💌	Adjust a	N/A dBm	N/A dBm	Adjust b/g N/A dBm	N/A dBm
	Full Discover	y	Partial Discovery	/ Reset	
General Adjust	ments Alar	ms			Apply

Figure 5-3. Gain Setting Options

NOTE: The **Full Discovery** button checks for each and every antenna. During Full Discovery, the unit DOES NOT transmit or receive data. To discover changes from the last Discovery, click the **Partial Discovery** button. Partial Discovery does not affect the unit output.

2. In the **DC** field of each channel to which an antenna is connected, verify that the **DC** parameter is **ON**. (This field is enabled by default).

Note: If **OFF** is displayed, it indicates the antenna is disconnected by the system (due to a fault such as a short.). In addition, alarms are generated.

- 3. Perform **802.11a** cable adjustments as follows:
 - Set up a Constant Wave signal generator to 5.745GHz at 17dBm (for optimum results).

Note: If the signal generator cannot be set to 17dBm, any level between 5 to 19 dBm range will achieve good results.

- Click the corresponding Adj a button. Verify that the AP PWR and Ant PWR values of the corresponding channel are EQUAL.
- Repeat for each link (i.e. four times).
- For each channel, verify that **AP1..4 Pwr** is equal to **Ant1..4 Pwr**.
- 4. Perform cable adjustments for **802.11bg** as follows:
 - Set up a Constant Wave signal generator to **2.447GHZ** at **17dBm** (for optimum results).

Note: If the signal generator cannot be set to 17dBm, any level between 5 to 19 dBm range will achieve good results.

- Click the corresponding **Adj bg.** Click the corresponding **Adj a** button. Verify that the **AP PWR** and **Ant PWR** values of the corresponding channel are **EQUAL**.
- Repeat for each link (i.e. four times).
- For each channel, verify that **AP1..4 Pwr** is equal to **Ant1..4 Pwr**.
- 5. Click **Apply** to save adjustment and to save any changes in the DC settings of the ports.

5.8 What next?

After performing the adjustment procedure:

Click the **Alarms** tab. Referring to the following section (5.9) do the following:

- Disable (filter out) irrelevant alarms (where antennas or APs are not connected).
- Verify that the connected Access Point and antenna indicators are Green.
- Verify that the calibration indicators are Green.

5.9 Monitoring Alarms

To monitor MA860 status

Click the **Alarms** button in the Main window. The Alarms pane appears. The pane is divided into four areas corresponding to each channel and a fifth area (MA 860) for the unit as a whole.

mobile	COLORS Networks	5						Calle.		
							Ins	tallation	Security	Control
	Trap Select	Temp	AP a	AP b/g	MA860 WCE	WCE Antenna	DC	Adjust a	Adjust b/g	WCE HW
Port 1										
Port 2	2									
Port 3	•									
Port 4										
MA-860										
General	Adjustme	ents	Alarms							Apply

Figure 5-4. Alarms Window

To disable trap monitoring of irrelevant channels

For irrelevant channel, disable the **Trap Select** field.

Status color codes

Each status is color codes as follows:

- Green OK
- RED Fail
- GREY Not relevant.

Trap descriptions

Trap	Description
Temp	RED - temperature is above 60C; otherwise GREEN.
AP a	RED – 802.11a port or AP is not detected; otherwise GREEN
AP bg	RED – 802.11b/g port or AP is not detected; otherwise GREEN
MA860 ANT	RED - WCE not detected; otherwise GREEN.
WCE Antenna	RED – antenna connected to WCE is not detected; otherwise GREEN.
DC	RED - Antenna disconnected due to detected overcurrent or overcurrent detected a the antenna
Adjust a	RED – 802.11a cable adjustment procedure of channel failed.
Adjust b/g	RED – 802.11b cable adjustment procedure of channel failed.
WCE HW	RED – WCE hardware failure.
MA-860	RED – MA860 temperature over 60°C; GREEN – MA860 normal temperature

5.10 Provisioning via the MA-860 Engineering Tool

This procedure is performed via a local connection to a computer running the **MA-860 Engineering Tool** application.

5.10.1 Opening a Session to the Unit

To provision the MA-860 control unit using the Configuration Tool

- 1. Install the MA-860 MA Engineering Tool application on your computer.
- 2. Connect to the MA-860 front panel **Local** connector using the RS232 9-pin cable provided with the MA-860 unit.



3. Launch the MA-860 Engineering Tool application on the computer. The Login dialog is invoked.

👱 MA860	
UserName	Field Eng 🔹
Password	###
Com Port	COM 1 -
Connect	Cancel

- 4. Select Field Eng, and enter the corresponding Password (eng).
- 5. Select the **COM Port** corresponding to the physical COM port on the computer to which the unit is connected.

6. Click **Connect**. The application main window appears with the General tab displayed by default.

The General tab provides SW and HW information for the MA 860 unit and for each WCE.

If the antenna discovery process has not been completed, you will see a message indicating antenna discovery is in process – as illustrated below.

MA 860 HW info	SW and	SW and HW info for each WCE
MAB60 - Eng IUI	55	
860 Ser No. SW ver.	Antenna 1 Ser No. Antenna 2 Ser No. W	Antenna discovery in process message X Antenna discovery in Prod Rev. Prod Rev. Prod Rev.
GUI Ver.	Antenna 3 Ser No. Antenna 4 Ser No.	SW ver.
General Adjustments	Alarms	

5.10.2 Provisioning Procedure

Note: Refer to 6.1 and Table 6-1 for the locations and descriptions of the parameters described in this section.

To provision the unit

1. Select the Adjustment tab. The following window appears.

	👻 MA860 - Eng GUJ
Step 5. Calibrate bg. Step 4. Click a _	
Step 3. ON –	DC 802/1a API Pwr. Antl Pwr I ON O Adj a N/A
	Port 2 DC Adj a AP2 Pwr. Ant2 Pwr Adj b/g AP2 Pwr Ant2 Pwr
	Port 3 802.11a AP3 Pwr. Ant3 Pwr 802.11b/g AP3 Pwr Ant3 Pwr ON O Adj a 1 dBm 1 dBm 30 dBm -30 dBm
	Port 4 DC 802.11a AP4 Pwr. Ant4 Pwr 802.11b/g AP4 Pwr. Ant4 Pwr OFF 0 Adj a N/A N/A Adj b/g N/A N/A
Step 2. Click to discover connected antennas	Full Discovery Partial Discovery Reset
Step 1 Invoke Adjustment tab	General Adjustments Alarms
Step 6. Review	

NOTE: The **Full Discovery** button checks for each and every antenna. During Full Discovery, the unit DOES NOT transmit or receive data. To discover changes from the last Discovery, click the **Partial Discovery** button. Partial Discovery does not affect the unit output.

2. In the **DC** field of each channel to which an antenna is connected, verify that the **DC** parameter is **ON**.

NOTE: If OFF is displayed, it indicates the antenna is disconnected. If an alarm was generated – the system disconnected the antenna due to a detected fault such as a short.

3. Perform **802.11a** cable adjustments as follows:

Set up a Constant Wave signal generator to 5.745GHz at 17dBm (for optimum results).

Note: If the signal generator cannot be set to 17dBm, any level between 5 to 19 dBm range will achieve good results.

 Click the corresponding Adj a button. The adjustment status will be indicated by the color of the button:

BLACK – not adjusted or waiting for connection. Try again.

YELLOW – adjustment in process.

GREEN – successful adjustment.

- RED adjustment failure. Try again.
- Repeat for each link (i.e. four times).
- For each channel, verify that **AP1..4 Pwr** is equal to **Ant1..4 Pwr**.
- 4. Perform cable adjustments for **802.11bg** as follows:
 - Set up a Constant Wave signal generator to 2.447GHZ at 17dBm (for optimum results).

Note: If the signal generator cannot be set to 17dBm, any level between 5 to 19 dBm range will achieve good results.

• Click the corresponding **Adj bg.** The adjustment status will be indicated by the color of the button:

BLACK	 not adjusted 	or waiting f	for connection.	Try again.
-------	----------------------------------	--------------	-----------------	------------

- YELLOW adjustment in process.
- GREEN successful adjustment.
- RED adjustment failure. Try again.
- Repeat for each link (i.e. four times).
- For each channel, verify that **AP1..4 Pwr** is equal to **Ant1..4 Pwr**.
- 5. Click the **Alarms** tab. Referring to the following section (5.9):
 - Under Traps Select, uncheck (filter out) irrelevant alarms (where antennas or APs are not connected).
 - Verify that the connected Access Point and antenna indicators are Green.
 - Verify that the calibration indicators are Green.

MAB60 - Eng GUI		N.V.				200000 00000	- 9	10		
	Trap Select	Temp	AP a	AP bg	MA860 WCE	WCE Antenna	DC	Adj a	Adj b/g	WCE HW
Port 1									Ø	
Port 2	V	O				Ø	Ø	Ø	Ō	Ø
Port 3	v				Ø	O			Ø	
Port 4	v	O				Ø	Ø	Ø	Ø	Ø
MA-860	v	O								
General Adjustme	nts Alarms									

To disable trap monitoring of irrelevant channels

For irrelevant channel, disable the Trap Select field.

Status color codes

Each status is color codes as follows:

- Green OK
- RED Fail
- GREY Not relevant.

Trap descriptions

Тгар	Description
Temp	RED - temperature is above 60C; otherwise GREEN.
AP a	RED – 802.11a port or AP is not detected; otherwise GREEN
AP bg	RED – 802.11b/g port or AP is not detected; otherwise GREEN
MA860 ANT	RED - WCE not detected; otherwise GREEN.
WCE Antenna	RED – antenna connected to WCE is not detected; otherwise GREEN.
DC	RED - Antenna disconnected due to detected overcurrent at the corresponding antenna.
Adjust a	RED – 802.11a cable adjustment procedure of channel failed; otherwise GREEN.
Adjust b/g	RED – 802.11b cable adjustment procedure of channel failed; otherwise GREEN.
WCE HW	RED – WCE hardware failure; otherwise GREEN.
MA-860	Last row in the window.
	RED – MA860 over temperature; otherwise GREEN.

6 Appendix

6.1 Adjustment Tab Parameters

This tab is used to:

- Configure the antennas manually and perform auto-discovery of antennas
- Perform cable adjustment for each channel
- View the power level at each antenna port and at each AP port
- Reset the MA-860 unit

🙎 MA860 - Eng GUI
mobileaccess Networks
Port 1 DC 802.11a AP1 Pwr. Ant1 Pwr 802.11b/g AP1 Pwr Ant1 Pwr ON 0 Adj a N/A -30 dBm Adj b/g N/A LOW
Port 2 DC OFF 0 802.11a Adj a Adj a N/A Ant2 Pwr N/A 802.11b/g Adj b/g N/A N/A Adj b/g
Port 3 DC 802.11a AP3 Pwr. Ant3 Pwr 802.11b/g AP3 Pwr Ant3 Pwr ON 0 Adj a 1 dBm 1 dBm Adj b/g N/A -30 dBm
Port 4 DC 802.11a AP4 Pwr. Ant4 Pwr 802.11b/g AP4 Pwr. Ant4 Pwr OFF 0 Adj a N/A N/A Adj b/g N/A N/A
Full Discovery Partial Discovery Reset General Adjustments Alarms

Table 6-1. MA-860 Engineering Tool Window Parameter Descriptions

Window Item	Description
DC	Used to show and configure status of voltage at each antenna port.
	Voltage is automatically disabled (Off) to a port where an antenna was not detected during auto-discovery (upon power-up and upon command from the user).
	The button adjacent to each DC field is used to manually disable or enable voltage to the corresponding antenna (relevant for service personnel under conditions where an antenna is disconnected or replaced).

Window Item	Description
Adj a/bg	Used to perform cable adjustment for 802.11a and 802.11/bg services.
	Note: this is a required configuration procedure.
	The color of the buttons indicate the status of the corresponding adjustment
	procedure:
	Black – adjustment not initiated or communication error during the adjustment.
	Yellow – adjustment in process
	Green – successful adjustment
	Red – failed adjustment
Antenna Power	Power supplied to the antenna
AP Power	AP14 .11a – shows the 802.11a service power provided by the corresponding (1 to 4) AP. <i>Note: During normal operation, this value should be equal to the power transmitted by the relevant antenna (parameter Pwr 11.a of the corresponding <i>antenna*)</i>.</i>
	AP14 .11b/g – shows the 802.11b/g service power provided by the corresponding (1 to 4) AP. <i>Note: During normal operation, this value should be equal to the power transmitted by the relevant antenna (parameter Pwr 11.b/g of the corresponding <i>antenna*)</i>.</i>
Antenna 14	Four window areas corresponding to each antenna. <i>Only the areas of antennas detected during auto-discovery (automatically performed when power is connected) are accessible.</i> Each area contains the following parameters:
	 Pwr .11a – 802.11a service power measured at antenna output. Should be the same as the 802.11a service power output by the corresponding AP (AP .11a under AP Pwr).
	 Pwr .11bg – 802.11b/g service power measured at antenna output. Should be the same as the 802.11b/g service power output by the corresponding AP (AP .11b/g under AP Pwr) *.
	• AP a DCA – Digital Control Attenuator for 802.11a Tx/Rx antenna Gains. Used to manually attenuate (reduce) the signal under special conditions of Cable Adjustment failure. <i>The greater the DCA value, the smaller the signal.</i>
	• AP bg DCA – Digital Control Attenuator for 802.11b/g Tx/Rx antenna Gains. Used to manually attenuate (reduce) the signal under special conditions of Cable Adjustment failure. <i>The greater the DCA value, the smaller the signal.</i>
	 N/Tx 11a – power level of 802.11a signal transmitted by the antenna. Should be preset to "Normal" mode (Tx mode is used only for factory testing).
	$_{\odot}~$ 5V .11a – input voltage for the TDD Amplifier of 802.11b/g
	 5V .11bg – input voltage for the TDD Amplifier of 802.11b/g (normal values are 4- 5V)
	○ 3V – input voltage level for 802.11a Rx
	○ 6V – Antenna Input DC Power
	 3.3V – Digital Control voltage level
	*This is relevant only AFTER the adjustment procedure is performed.

6.2 Using the Lantronix Device Installer

NOTE: Be sure the installed version is 3.6 or higher.

6.2.1 Installing and Navigating the Application

NOTE: Be sure the installed version is 4.1.0.3 or higher.

1. Install the **Lantronix DeviceInstaller** application on your computer and launch the application. The DeviceInstaller Main window appears.



Figure 6-1. DeviceInstaller Main Window

- 2. In the toolbar, click **Search** to perform auto-discovery. The currently connected MA 860 units in the network will be identified and listed in the window according to:
 - Type communication hardware version XPort-03
 - IP Address currently defined IP address
 - Hardware Address MAC address
 - Additional identification parameters may be available.

6.2.2 Assigning Dynamic IP with DHCP

Note: Refer to the previous section for instructions on installing and navigating the required application.

1. Select the MA860 unit and click the icon **Assign IP** in the toolbar.



Figure 6-2. Assigning Static IP Address

3. The IP Address Assignment Method window appears.



Figure 6-3. IP Assignment Method Window

 Select Obtain an IP Address automatically – do NOT select Assign a specific IP address. Then, click Next. The IP Discovery Settings window appears.



Figure 6-4. Automatic IP Discovery Settings Window

- 5. Enable the following checkboxes: DHCP, BOOTP, Auto-IP and Clear Gateway.
- 6.. Click **Next**. The Assignment window appears.
- 7. Click **Assign** to assign the MA860 unit the defined parameters. Once the parameters have been assigned, the message 'Completed Successfully' appears and the **Finish** button is enabled.



Figure 6-5. Finish Static IP Address Definition

8. Click **Finish.** The **Device Installer** Main window reappears and the installed unit will be listed in the window.

6.3 SNMP Management Using a Standard SNMP Manager

The MA 860 packages provide MIBSs that enable standard SNMP (Version 2.0) managers such as HP OpenView to view event traps sent by the MA 860 unit and to configure the unit.

NOTE: These traps provide a general indication of the type of failure. The MA MA 860 enables identifying the source of the problem and system monitoring parameters. (Trap destinations and community names were defined in section 5.2.1.3.

6.3.1 Traps List

NOTE: Traps are only sent to defined trap destinations 5.2.1.3.

The following traps are provided:

Name	Туре	Severity	OID	Description
ma860powerUp	NOTIFICATION- TYPE	notification	81.4.2.0.1	System On.
ma860SerialNotify	NOTIFICATION- TYPE	notification	81.4.2.0.2	serial communication status failed success
ma860WceOverTemperature	NOTIFICATION-TYPE	major	81.4.2.0.3	WCE Temperature over 60°C
ma860WceNormalTemperature	NOTIFICATION-TYPE	info	81.4.2.0.4	WCE Temperature Normal
ma860APaDisconnect	NOTIFICATION-TYPE	major	81.4.2.0.5	AP type 802.11 a DisConnected
ma860APaDetected	NOTIFICATION-TYPE	info	81.4.2.0.6	AP type 802.11 a Connected
ma860APbgDisconnect	NOTIFICATION-TYPE	major	81.4.2.0.7	AP type 802.11 bg DisConnected
ma860APbgDetected	NOTIFICATION-TYPE	info	81.4.2.0.8	AP type 802.11 bg Connected
ma860WceDisconnected	NOTIFICATION-TYPE	major	81.4.2.0.9	WCE Disconnected
ma860WceDetected	NOTIFICATION-TYPE	info	81.4.2.0.10	WCE detected by MA860

Table 6-2. List of MA 860 Traps

Name	Туре	Severity	OID	Description
ma860WceDCFault	NOTIFICATION-TYPE	major	81.4.2.0.11	DC OFF - disconnected by system due to falure
ma860WceDCOn	NOTIFICATION-TYPE	info	81.4.2.0.12	DC ON
Ma860adjust11aFailed	NOTIFICATION-TYPE	minor	81.4.2.0.13	Adjustment on type 802.11 a Failed
Ma860adjust11aSuccess	NOTIFICATION-TYPE	info	81.4.2.0.14	Adjustment on type 802.11 a Succeeded
Ma860adjust11bgFailed	NOTIFICATION-TYPE	minor	81.4.2.0.15	Adjustment on type 802.11 bg Failed
Ma860adjust11bgSuccess	NOTIFICATION-TYPE	info	81.4.2.0.16	Adjustment on type 802.11 bg Succeeded
ma860OverTemperature	NOTIFICATION-TYPE	major	81.4.2.0.17	MA860 Temperature over 60°C
ma860NormalTemperature	NOTIFICATION-TYPE	info	81.4.2.0.18	MA860 Temperature Normal
ma860WceAntDisconnected	NOTIFICATION-TYPE	major	81.4.2.0.19	WCE antenna DisConnected
ma860WceAntDetected	NOTIFICATION-TYPE	info	81.4.2.0.20	WCE antenna Connected
ma860WceFailure	NOTIFICATION-TYPE	major	81.4.2.0.21	WCE HW failure
ma860WceOK	NOTIFICATION-TYPE	info	81.4.2.0.22	WCE HW OK

6.3.2 Viewing and Configuring Using a Standard MIB Browser

To view and configure using any standard SNMP manager

NOTE: It is assumed that the IP Address of at least one destination is already defined.

From a computer *configured as a trap destination* (configured to receive the traps), load the MIB file to the SNMP manager. The following figure shows the MIB tree that includes the loaded MobileAccess MA 860 file.



Figure 6-6. MIB Tree with Loaded MobileAccess MA 860