SECTION 6

USER'S MANUAL

Axlon **A**xlon **E**lectronics **Corp**
21st century digital home at your fingertip

PalmPal-lite

User's Manual

Table of Contents

IMPORTANT PRODUCT INFORMATION

WARNING: SAFETY INSTRUCTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK AND INJURY TO PERSONS AND DAMAGE TO PROPERTY

Safety Instructions

- Read and understand all instructions.
- Follow all warnings and instructions.
- Keeping the product at dry place. Do not use mobile unit or install Digital Wireless I/O module and Wireless Door Phone near water, or when you are wet. For example, do not use it in a shower, or next to a swimming pool, bathtub, kitchen sink, or laundry tub. Do not use liquids or aerosol sprays for cleaning. If the product comes in contact with any liquids, unplug power cord or battery immediately. Do not plug the product back in until it has dried thoroughly.
- Protecting the product from overheating. It should never be placed near or over a radiator or heat register.
- To reduce the risk of electric shock or burns, do not disassemble this product, but take it to qualified service personnel when some service or repair work is required.
- Avoid using telephone during an electrical storm. There may be a risk of electrical shock from lightning.
- Do not use the mobile unit to report a gas leak in the vicinity of the leak. Please use mobile unit away from the area where gas is leaking, and make sure the base system is also away from the area.
- Do not place metal objects on the antenna.
- The base system or wireless mobile unit charger is not allowed near microwave ovens, radio equipment, or non-cable connected televisions. These appliances may cause electrical interference to the desk station or wireless mobile unit.
- DO NOT open or mutilate the batteries. Released electrolyte is corrosive and may cause damage to the eyes or skin. The electrolyte may be toxic if swallowed.
- During charging, batteries heat up. This is normal and is not dangerous.
- If this product does not operate normally, read 'Trouble Shooting' in user's

manual. If you cannot solve the problem, or if the product is damaged, refer to the Limited Warranty, please call your system installer or ask help from the PalmPal-lite's authorized reseller. You can find the nearest PalmPal-lite's reseller from Axlon's web site at http://www.axlon.com Do not try to fix or open this product by yourself.

FCC Registration and Repair Information

This product has been registered with the Federal Communications Commission (FCC) in accordance with Part 68 of its rules. The FCC requires us to tell you the following information.

1. **Connection and use with the nationwide telephone network**

An FCC compliant telephone cord and modular plug is provided with this product. This product is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant.

2. **Notification to the telephone company**

Upon request of your local telephone company, you are required to provide them with the following information:

A The 'line' to which you will connect the telephone equipment (that is, your phone number), and

B. The telephone equipment's FCC registration number and ringer equivalence number (REN). These numbers are on the back or bottom of the base system.

3. **Repair instructions**

If it is determined that your telephone equipment is malfunctioning, the FCC requires that it not be used and that it be unplugged from the modular jack until the problem has been corrected. Repairs to this telephone equipment can only be made by the manufacturer or its authorized agents or by others who may be authorized by the FCC. For repair procedure, follow the instruction outlines under the Limited Warranty.

4. **Rights of the Telephone Company**

If this telephone product is causing harm to the telephone network, the Telephone Company may temporarily discontinue your telephone service. If possible, the Telephone Company will notify you before interrupting service. If advance notice is not practical, you will be notified as soon as possible.

Your will be given opportunity to correct the problem and you will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operation, or procedure that could affect the proper functioning of this product.

If such changes are planned, you will be notified.

5 Programming/testing of emergency numbers

This product is equipped with optional function for emergency dial out. If you choose to have the emergency auto-dial out function, please keep these things in mind:

a. We recommend that you also write the telephone number on the directory card, so that you can still dial the emergency number manually if the auto-dial feature doesn't work.

b. This feature is provided only as a convenience, and the manufacturer assumes no responsibility for customer reliance upon the emergency auto-dial out feature.

c. Testing the emergency telephone numbers you have stored is not recommended. However, if you do make a call to an emergency number:

- You must remain on the line and briefly explain the reason for the call before hanging up.

- Programming/testing of emergency numbers should be performed during off-peak hours, such as in the early morning or late evening, when the emergency services tend to be less busy.

Interference Information:
Part 15 of FCC Rules:

Some telephone equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used properly, may cause interference to radio and television reception.

This product has been tested and found to meet the standards for a Class B digital device, as specified in Part 15 of the FCC Rules. These specifications are designed to provide against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this product causes interference to radio, VCR or television reception when it's in use, you might correct the interference with any one or all of these measures:

- Where it can be done safely, re-orient the receiving television, VCR, or radio antenna.

- To the extent possible, relocate the television, VCR, radio, or other receiver with respect to the telephone equipment.

- If this telephone product runs on AC power, plug your product into an AC outlet that's not on the same circuit as one used by your radio, VCR, or television.

Modifications to this product, not expressly approved by the manufacturer, could void the user's authority to operate the equipment.

Limited Warranty:

1. This limited, non-transferable warranty is provided to the original purchaser. The product is warranted to be free from defects in materials and workmanship under normal installation, use, and service for period of one year from the date of purchase as shown on the purchaser's receipt.

2. Our obligation under this warranty is limited to repair or replacement of the product or any part which are defective provided that the product is returned to the original place of purchase or an authorized service location during the warranty period. A copy the purchases receipt must accompany products returned.

3. If the product is repaired reconditioned component parts or materials may be used. If the product is replaced, we may choose to replace it with a new or reconditioned product of the same or similar design. The repaired or replacement product will be warranted for either 90 days or the remainders of the original one-year warranty period, whichever is longer.

4. This warranty does not cover:
   a. Product that has been subjected to misuse, accident, shipping or other physical damage, improper installation, abnormal operation or handling, neglect, inundation, fire, water, or other liquid intrusion; or
   b. Product that has been damaged due to repair, alteration, or modification by anyone other than an authorized service representative of PalmPal-lite; or
   c. Product to the extent that the problem experienced is caused by signal conditions, network reliability or cable or antenna systems; or
   d. Product to the extent that the problem is caused by use with non-PalmPal-lite electrical accessories; or
   e. Product whose warranty/quality stickers, product serial number plates or electronic serial numbers have been removed, altered or rendered illegible; or
   f. Product returned without valid proof or purchase
   g. This warranty is also void if this product is removed from the country in which the original purchaser purchased it. Due to variations in telephone systems and communications laws, this product may be illegal for use in some countries. We assume no responsibility for damages or penalties incurred resulting from the use

of this product in a manner or location other than that for which it is intended.

h. This product's Event-Macro features can be customized according to users' preference. **These features are provided as a convenience, and a help to reduce the possible property lost and enhance home living safety.** However, customer cannot reply only on PalmPal-lite. Manufacturer assumes no responsibility for customer reliance upon PalmPal-lite.

5. How Do You Get Warranty Service?

Please contact your installer who installed PalmPal-lite system for you. If you cannot find the original Installer, please email to info@axlon.com or check web site at http://www.axlon.com to find the nearest PalmPal-lite's authorized reseller to assist you.

Except as provided by applicable law, you assume the risk of loss or damage during transit and transportation and are responsible for delivery or handling charges incurred in the transport of Product(s) to the installer or authorized PalmPal-lite service location. The installer or authorized PalmPal-lite reseller will return repaired or replaced Product under this limited warranty to you, transportation, delivery or handling charges prepaid. If the Product failure is not covered by this limited warranty, or proof of purchase does not meet the terms of this limited warranty, PalmPal-lite's authorized reseller will notify you and will request that you authorized the cost of repair prior to any further repair activity. You must pay for the cost of repair and return shipping costs for the repair of Products that are not covered by this limited warranty.

Section 1.0 Introduction

This section will familiarize you with your new PalmPal-lite system. It covers introduction of each PalmPal-lite device, system capabilities and its limitation, the terminology used in this manual, and some key applications and features of the systems.

1.1 About PalmPal-lite

PalmPal-lite is the brand name of Axlon's mobile control panel with phone functions based on 900 MHz Direct Sequence Spread Spectrum (DSSS) RF technology. PalmPal-lite, as a gateway to home automation, opens all of its resources and provides a powerful and convenient control interface between user and a wide range of automated systems, such as security, lighting, HVAC, other legacy home systems, or a personal computer.

PalmPal-lite consists of Base system, Mobile Unit, Charger, Digital Wireless I/O module, Wireless Door Phone, Dallas Touch Key, and accessories such as battery.

Each base system support up to six Mobile Units, One Digital Wireless I/O module, one Wireless Door Phone, and up to eight Dallas Touch Key.

The basic package includes one base system, one mobile unit, two batteries, and one charger. Digital Wireless I/O module, Wireless Door Phone, and Dallas Touch Key are optional purchasing.

PalmPal-lite is the first product of its kind in the market that combines home automation control and telephone functions (data or voice) in a wireless format that provides onsite and offsite wireless connectivity. PalmPal-lite extends interaction with home automation systems to any location that has phoned or pager service!

The large, easy-to-read LCD on the mobile unit provides clear instructional or system status messages, allowing the user to control their home environment. Six programmable macro buttons on the mobile unit simplify system control tasks. By pressing a single button, any number of pre-programmed system functions can be executed.

PalmPal-lite includes manually or automatically event-triggered automation

programs. For example, whenever someone cuts phone line before breaking in, the event will trigger system to send alarm to all mobile units, and turn on the lights with alarm to scare off the intruder. All of the event-triggered automation applications are programmable to provide the maximum safety and convenience to users.

PalmPal-lite provides the user with an unprecedented level of mobile accessibility, communications, system control, privacy, convenience, and other features. System control and communication are not restricted to physical locations of hard-wired control panels or by limited-distance infrared controls. The mobile unit can cover entire estate and, with dial-out phone and pager capabilities, the user can communicate or interact via voice or data to and from any location that has telephone or pager service.

1.2 Terminology used in the Manual

Device: Mobile unit, Digital wireless I/O module, Wireless Door Phone, Dallas Touch Key.

Registration: To get each Device connected wirelessly on line with base system and process a Device Registration with base system. After the registration, the base system will acknowledge the registered device and ready for system configuration.

Device Number: Each registered device will get an authorized 'Device Number' from base system. 'Device Number' will be needed for the system configuration and Device 'UN-Install' in future.

EVENT: When one of PalmPal-lite system device such as one 'single-pressed' button or its connected devices is triggered manually or automatically. The triggered device or button is defined as 'EVENT'. More detail about the type of Event will be covered in 'The relationship between Event and Macro'.

MACRO: When one of the Events is triggered, one or a series of Actions will be activated. The Action is defined as 'Macro'. For more detail about what Macro could be, please refer to 'The relationship between Event and Macro'.

'Single-Press' Macro Button: There are three programmable 'single-pressed' Macro buttons on each side of mobile units, as total six buttons. The button is named in sequence from up to down for the left side as L1, L2, L3, and for right one as R1, R2, and R3. Each button represents a series of Actions triggered when the button is pressed. For example, when the

button R1 programmed as 'Welcome Home' is pressed, the living room light will be on, the ceiling fan is on, and the selective music is played through working with external systems. After your installers discuss with you and program the Macro you need, you can check the Mobile Unit's 'FUNC' and refer the Macro Button to check if you need to know the Macro meaning of each button.

1.3 What is EVENT and MACRO?

The relationship between **Events** and **Macros** is when the **Events (IF)** are triggered manually or automatically, the **Macros (THEN)** will be activated to execute a series of actions in response to the events. The **Events** we defined here are all happened within PalmPal-lite's system. The **Macros** are defined mostly within PalmPal-lite's operation network and plus an option of sending ASCII code through RS-232 to other system, and let other system to decide how to activate their own functionality or send back some control commands to employ PalmPal-lite's resources.

The number of Events is according to the system options installed. The maximum number of **Macros Setting** is up to 30, which means the maximum up to 30 types of series actions. For more detail, please refer to the following **Events** and **Macros** chart.

The chart lists the Event types that the system can receive from the inputs of PalmPal-lite, as well as Macro, which activate a series of actions according to the each pre-defined EVENT (IF).

Event(IF) triggered	Macro(THEN) Action
MANUALLY INPUT	**AUTOMATION TYPES**

☐ *From PalmPal-lite system*
  ☐ Six One-Touch buttons
  ☐ Door Bell pressed
  ☐ Touch Key
  ☐ Call in home phone number for remote access control
	1. Show message on LCD DISPLAY of mobile unit
	
	2. Generate Audio Sound by ringing chosen from 8 different ringer tones or NO SOUND on selective or all mobile unit

AUTOMATICALLY INPUT ☐ *From PalmPal-lite system*	3. Control the five digital outputs on Digital Wireless I/O module

□ Phone Line Call In □ Phone Ringing On/Stop □ ON Hook/ OFF Hook □ Line fault □ Status change from the five digital inputs on Digital wireless I/O module	4. Dial Out to specified number 5. Open the Door controlled by Door Phone module 6. Trigger other system's functionality, such as - LCD Display - Buttons on keypads which are simulated by buttons on mobile unit - Sensors and actuators through RS-232, LonWorks, or an OEM interface

All the Events and Macro settings should be configured through the PC software tool provided by Axlon. In Configuration section 2.4, there will be more details on how to configure the system.

Commands from other systems to trigger PalmPal-lite's device is not defined within PalmPal-lite's EVENT-Macro setting.

Through the RS-232, the other systems can also interoperable work with PalmPal-lite system in two-way. However, the commands sent directly from other system to activate PalmPal-lite's functionality such as Digital Wireless I/O, Door Phone, Dial Out, or others are through programming such system's RS-232 input and output ASCII strings according to PalmPal-lite's RS-232 interface protocol. It is the same as sending commands out from PalmPal-lite's RS-232 port to trigger the other systems, such as through the 'CTRL' button on PalmPal-lite's mobile unit which set the PalmPal-lite's mobile units to become the other system's control panel and activate other systems' device. For more detail about how to connect PalmPal-lite with other systems and two-way interoperable operation, please check the Section 2.7 "Integrate with other system through RS-232". The following chart lists what resources PalmPal-lite opens for other systems to use.

Commands from other systems	Actions
-Through other system's control panel -Through PalmPal-lite's 'CTRL' button to enter other system's control mode -Audio ports connected to other system which can send and receive audio signal to cooperate with the other system's application -Other system's devices, such as sensors, actuators, etc.	**Other systems** This is up to the other system's application and system design. **PalmPal-lite** The following list all the PalmPal-lite's resources opened for use as Actions according to the commands sent from other systems. Show message on LCD DISPLAY of mobile unit Generate Audio Sound on mobile unit Control the five digital outputs of Digital Wireless I/O module Make a Phone Dial Out Open/Close the Door connected to Door Phone module

1.4 What Users must need to Know!

1.4.1 One Important Password

There is only one Password, which is used your own 'Remote Access Control' and also for the installer to do 'System Configuration on PC'. As long as you have the old password, the default password is set as '0000'; you can always change your password at any time. Please remember to change the password after installer finishing system configuration on PC. So your installer won't be able to access your home control remotely. However, please remember or record your password. If you forgot your password, then you will need to use the configured disc for your PalmPal-lite system to check your password.

If you forgot the password, the procedure is as follows,

1. Connect the PC to the RS-232 on the back of PalmPal-lite's base system

2. Insert the Configuration Disc

3. A small window will pop out asking you to enter the password, and it has uploaded the password data stored on base system to PC.

4. Please keep entering any four-digit password about 10 times.

5. Click the Axlon's icon on the left top windows, ' ' it will then show the password.

1.4.2 Two Important Worksheets

Two worksheets, '**EVENT-Macro Setting**' and '**Device Check List**' are recorded with all the detail about your PalmPal-lite system setting and each device's device number. It is very important for you to keep a copy of these worksheets for system repair, upgrade or device change in future.

1.4.3 Some trade off features

Intercom

Intercom is an option allowing one Mobile Unit to call and talk to another one. Users need to carefully decide whether they want to have **Intercom** function or not.

Regarding how to disable or enable INTERCOM function, please refer 'INTERCOM' under the Section 3.2.2 'Mobile Unit's Control Operation 'FUNC' button'. The Intercom function is pre-set as 'enabled' the first time.

If **Intercom** is enabled, when the Mobile Unit is using **Intercom** with another one, the triggered EVENT with ringing and message such as 'Emergency' or Door Phone ringing won't be able to interrupt and notify both mobile units using the Intercom function. However, the 'Emergency' message or Doorbell ringing can still be sent to other Mobile Unit not using Intercom function. Then the users can still receive message or hear ringing from other mobile units.

If **Intercom option** is disabled, then all mobile units can receive the triggered EVENT message and Door Bell ringing at any time, but are not be able to call and talk to another Mobile Unit.

Door Mode

If Door Mode is set to as a MACRO to 'automatically transfer door phone to a pre-programmed number' when the doorbell is pressed, then we

6

should select 'AWAY' under the Door Mode on the mobile unit's 'FUNC' operation. Of course, the installer will set up the pre-programmed phone number to be transferred when doorbell is pressed under 'AWAY' mode. Then when users come home, they can switch DOOR MODE back to 'HOME', a default setting that will ring all mobile units when the doorbell is pressed.

However, if the user isn't satisfied with the default setting with all mobile units ringing when the door bell is pressed under the 'HOME' mode, then the installer can create a different MACRO setting according to user's preference. However, the automatically door phone transfer function under 'AWAY' won't be able to use since we will need to use the 'AWAY' mode to define your new MACRO setting when the door bell is pressed while you are at home. For more detail, please check with your installer.

Section 2.0 Devices Illustration

2.1 PalmPal-lite System Structure

PalmPal-lite consists of different devices such as Base system, Mobile Unit, Digital Wireless I/O module, Wireless Door Phone, and Dallas Touch Key. Each device will be given a 'Device Number'. Users will only need to know the Device number of Mobile Unit and Wireless Door Phone when they need to call these device. The device number is set in sequence as follows,

Mobile Unit Device Number: 11, 12, 13, 14, 15, and 16
Digital Wireless I/O Module: 50
Wireless Door Phone: 20
Dallas Touch Key: 70, 71, 72, 73, 74, 75, 76

In the following, we will illustrate each device purpose and its labeled function description.
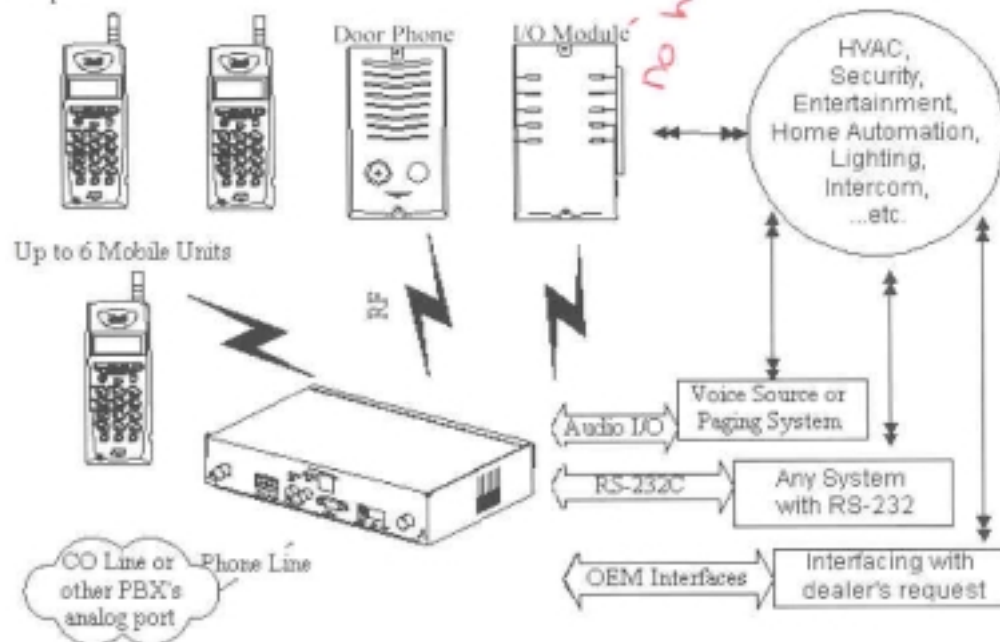

Figure 2.1 PalmPal-lite System Structure

2.2 Base System

The following chart is PalmPal-lite's base system's back panel illustration.
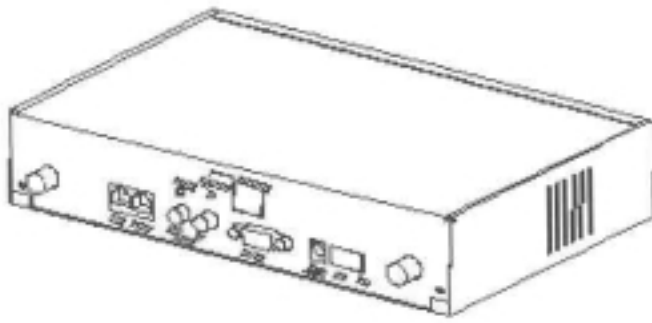
Figure 2.2 Base system

Function Purpose

The base system is the central of PalmPal-lite system to deliver or exchange information, control, and voice communication among all the devices. The base system needs to be power on all the time and keep phone line connected to be working.

For Installer Only

Except PalmPal-lite's authorized reseller or installer who needs to employ base system for installation, under the normal system operation, users nearly need to touch the base system. If there is any problems happened while using PalmPal-lite system, please not try to touch or change any setting or connection on the back of base system. You can try to check the system following the section 4.0 In case of difficulty first. If the condition doesn't get improved, please call your installer, or check out the nearest PalmPal-lite reseller through Axlon's web site at www.axlon.com. Without proper handling, the system may be down or disconnected.

.3 Mobile Unit

Function Purpose

The mobile unit is PalmPal-lite's wireless user interface as a cordless telephone, a control keypad, and an information terminal. For example, it can call out and receive phone call, control single or multiple devices, which we call MACRO, and being notified by message on LCD display and alert sound about the external environment status.

Figure 2.3 Mobile Unit

The First Level's three Keys

ON/OFF - A button pressed to operate the various phone functions such as Dial Out, Receive, and Hang Up a phone, Intercom (Option), and Talk to Door Phone.

EXIT - After 'FUNC' is pressed and entering the 'Main Menu', EXIT is to return to the last Menu or exit 'Main Menu'

VOLUME - 1. Adjust the volume received

2. Move the cursor back and forward to correct the entered number.

3. Move cursor up and down to select the item under the menu.

CTRL - A bottom pressed to enter the other system's 'Control Mode' or to enter another applications. When the 'CTRL' is pressed, the original Macro or Event setting under PalmPal-lite system will be disabled. About detail function, please check with your installer.

ENTER - (1) After 'FUNC' is pressed and entering the 'Main Menu',

'ENTER' is to confirm and get into the selected item's menu. (2) When On/OFF is pressed to make a call, after entering the number to dial out, press 'ENTER' to confirm the dialed out number and make the call.

The Second Level's three Keys

FUNC - Press 'FUNC' to enter the 'Main Menu' listed with nine user's settings and three installation settings. When the system is installed and configured with certain 'Macro' function, you will need to press 'FUNC' to enter 'Main Menu' and select the certain user setting to enable or disable the function. For detail content in 'Main Menu', please check the mobile unit operation section.

AUDIO - Press 'Audio' to (1) broadcast to speakers connected to the 'OUT' of Audio on the back of base system or to other systems or, (2). To receive audio sound from the external system connected to the 'IN' of Audio on the back of base system.

MUTE - Mute allows you to hear your caller, but prevents the caller from hearing you. Press 'MUTE' while on a call to prevent the caller hearing when you talking, and press 'MUTE' again to return to your conversation.

Three Keys on the Bottom of the Mobile Unit

REDIAL- The last number dialed on this phone is stored in redial memory until you dial another number, press 'REDIAL' to dial out the last dialed phone number

HOLD- Place an active call on hold and to transfer the call to another mobile unit by pressing the mobile unit's device number.

FLASH- FLASH is to access subscriber services. If you have Call Waiting service, press 'FLASH' to switch between an active call and an incoming call
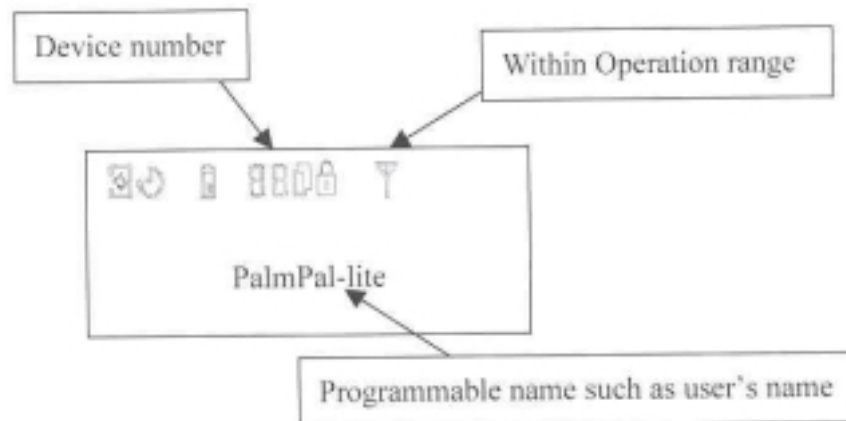
Three single-pressed Macro buttons on each side of the Mobile Unit

There are three buttons on each side of the mobile units. Each button can be programmed as a 'MACRO' to activate one single or a series of actions.

The installers will program the setting and train users on how to use these Macro buttons.   Users can also refer to the 'Event-Macro' worksheet which list all the Macro functions for each button your installer customize for you.

LCD Display

The LCD display on Mobile Unit presents information about the status of the system and user option in their displays. The content changes according to the state of the phone and the way you customize your PalmPal-lite system.   If the Mobile Unit is idle, the display will look like this.

Device number

Within Operation range

PalmPal-lite

Programmable name such as user's name

The icon on the top line is fixed icon and will be shown only according to the status of the system.   The description of each icon is as follows,

Base system is under the Installation Mode.

Door Mode is set under 'AWAY'

Low Battery Warning with ringing. It means you need to replace a fully charged battery or put the Mobile Unit on charger.   However, the Icon and ringing won't be stopped until the battery is fully charged.

Mobile Unit No

Hold (Flash)/LINE Busy

Remote Access function Disabled

☿ Within the operation range

2.4 Charger

Function Purpose:

1. Battery charge

The charger is used as battery charging for PalmPal-lite's mobile units. The charger's power cord should be connected to 110-V power always. It can charge one back up battery in the battery charging only slot on the rear of charger and at the same time charge one mobile unit with battery in the front of charger. Due to the limited talking hours and stand by hours for mobile units, it is recommended to keep the mobile unit on charger when it is not in use.

2. Auto-Answer and Speaker Phone

In addition to the battery charging, the charger can also provide 'Auto-Answer' and 'Speaker Phone' functions when the mobile unit is on the charger. On the back of charger, there is an ON/OFF switch for 'Auto-Ans'. When the switch is ON, the front 'Auto' Answer light would be on. When the call is coming, the mobile unit on charger will automatically pick up the phone to let users talk to the call hands-free through the speaker built-in on charger.
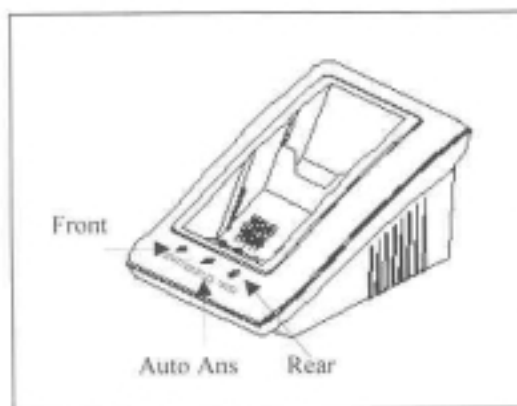
Figure 2.3.A Front View

There are three LED lights in front, which are '**Front**', '**Auto Ans**', and '**Rear**'.

'**Front**' is the charging indicator for mobile unit battery. When indicator is in 'RED', it means the mobile unit battery is in charging. When the indicator is

in 'GREEN', it means the mobile unit battery is fully charged.

    '**Auto-Ans**' is the indicator of Auto-Ans function is ON.

    '**Rear**' is charging indicator for the back up battery. When indicator is in 'RED', it means the back up battery is in charging. When the indicator is in 'GREEN', it means the back up battery is fully charged.
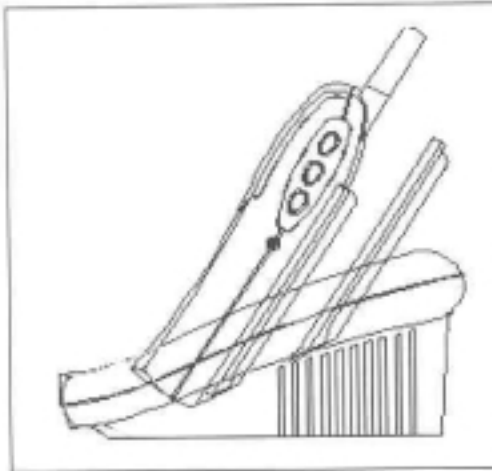

Figure 2.3.B Side View

    There are two cradles on charger. The front cradle is for mobile unit battery, and the rear one is for the back up battery. To put the mobile unit battery or back up battery in charger, you need to make sure the battery's side slot slid in along the protruding line in the cradle.
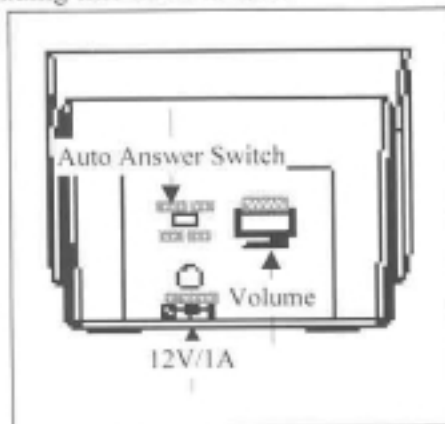

Figure 2.3.C Rear View

On the rear of charger, there are **Auto-Ans, Volume,, and DC 12V/IA.**

Auto-Ans: To activate the auto phone pick up function, please switch the Auto-Ans to ON. The front middle LED 'AUTO ANS' will be on as RED. To disable the auto phone pick up function, please switch the Auto-Ans to OFF. The front middle LED 'AUTO ANS' will be off.

Volume: Adjust volume received when talking to caller through speakerphone.

DC 12V/IA: To connect charger's 12V DC adapter to the 110 V AC power.

2.5 Digital Wireless I/O Module

Function Purpose:

The Digital Wireless I/O Module is for two-way interoperable control operation, which can send commands out to activate one single or a series of jobs and also receive signal detected from the connected external devices such as windows break sensor etc.

Installer Only:

Once the Digital Wireless I/O Module is installed and programmed by PalmPal-lite's authorized installer, users nearly need to touch or use the I/O module.   It is strongly recommended not to try to touch or change any setting or connection on the Digital Wireless I/O Module because it may disable the original function setting.   If users are interested to know more about this device, you can check with your installer or the PalmPal-lite installation manual for more detail description.
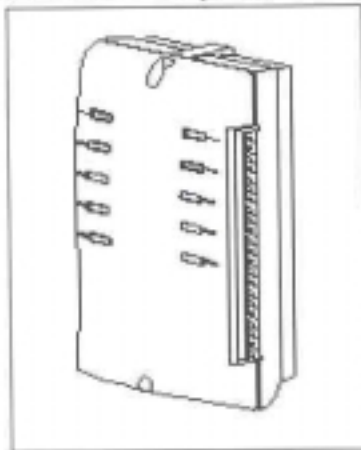
Figure 2.5 Digital Wireless I/O Module

2.6 Wireless Door Phone

Function Purpose:

The Wireless Door Phone is to provide a wireless voice communication between the Wireless Door Phone and the Mobile Unit, a remote door opening from Mobile Unit, and a different Macro function activation when different Dallas Touch Key is pressed.

IMPORTANT: It is strongly recommended that your electric door is equipped with manual key opening option.   When the electricity is off, if

your electric door is closed, then you won't be able to open it through mobile unit unless you have the manual door opening option by key.

The button on the right front of Wireless Door Phone is doorbell for visitors to call the mobile units. Once the doorbell is pressed, it will ring all the mobile units. Users can pick up any mobile unit to talk to the visitor or transfer the call the pre-programmed phone number. For the transfer function, please check with your installer for more detail.

The slot on the left front of Wireless Door Phone is for the Dallas Touch Key to touch and open the door. Different Touch Key can be programmed for different Macro actions. Please check with your installer for more detail.
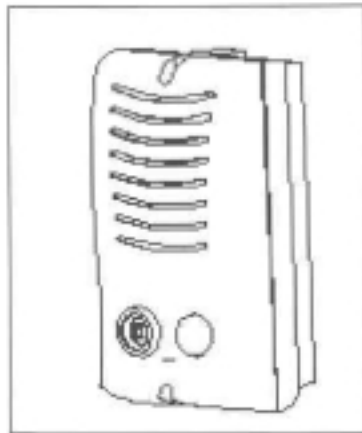

Figure 2.6 Wireless Door Phone

2.7 Dallas Touch Key

Function Purpose:

The Dallas Touch Key is used to open the door and activate one single or multiple pre-programmed actions when the Dallas Touch Key is touched to the slot on the Wireless Door Phone. Each key has its own identification number, and can't be duplicated. However, if the key is lost, please call your installer immediately to disable the key's door opening and other Macro functions.

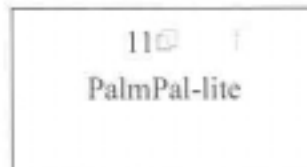

Figure 2.7   Dallas Touch Key

Section 3.0 System Operation
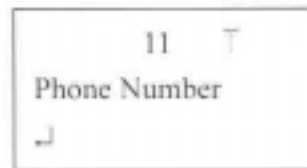
3.1 Mobile Unit 'Phone' Operation

PalmPal-lite's Mobile Unit is the wireless user interface for system's control information display with phone functions. In the section 3.1, we will cover its phone functions.

3.1.1 Making a Call

A. Before attempting to make phone call, check to see whether the icon, " ▯ " appears as follows. If it does, it means the line is busy now. Please try later.
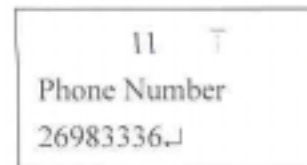
```
┌─────────────────────────┐
│    11▯       ↑          │
│                         │
│    PalmPal-lite         │
│                         │
└─────────────────────────┘
```

B. If not shown, it means the line is available now. Press ON/OFF key on the mobile unit. The LCD shown as,

```
┌─────────────────────────┐
│      11      ↑          │
│  Phone Number           │
│                         │
│  ↵                      │
└─────────────────────────┘
```

C. Key in the phone number you like to dial and use the '▲' and '▼' key to correct the phone number. .

D. Press ENTER when done pressing the correct phone number

```
┌─────────────────────────┐
│      11      ↑          │
│  Phone Number           │
│  26983336↵              │
└─────────────────────────┘
```

E. When phone is dialing out, the LCD display will show 'Connected'

```
┌─────────────────────────┐
│      11  ▯    ↑         │
│  Connected              │
│                         │
└─────────────────────────┘
```