

# User Manual (English)

## SP922FH Digital Long Range Cordless System



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## Safety Instructions

**Caution:** Your wireless telephone gives you freedom and flexibility to stay in touch while you move around. However, when using your phone equipment, safety instructions should be followed to avoid the risks of fire, electric shock, injury to person, and damage to property.

### General Safety Instructions

1. When using your wireless phone, ensure your safety and the safety of others:
  - a. Always watch where you are walking and standing.
  - b. Don't let a phone call distract you from working safely.
  - c. If power goes out, it won't work. Recommend backup power.
2. In an emergency:
  - a. If an emergency occurs, dial the emergency phone number. Remember: if you are in an area where your phone does not have a clear signal from the base, it is highly probable that the call may not go through. Locate the nearest landline telephone or other communications device to call for help.
  - b. Emergency calls may not automatically provide emergency personnel with your name, phone number or location.
3. Notice to Hearing Aid Users: This phone system is compatible with inductively coupled hearing aids.
4. Notice to Cardiac Pacemaker Users: Preliminary studies done by the US FDA and others have shown that, although interference to the implanted cardiac pacemaker may occur when operating very closely, wireless telephones "do not seem to pose a significant problem for pacemaker wearers." However, until more is known, FDA suggests that people with pacemakers may want to take precautions when using or carrying a wireless telephone to ensure that there is ample distance between the telephone and the pacemaker. Do not carry the handset in a breast pocket. If you have any reason to suspect that interference is taking place, turn off your handset immediately.

### Product Safety Instructions

1. Read and understand all instructions.
2. Follow all warnings and instructions including those marked on the product.

3. Changes or modifications to this product not expressively approved by the manufacturer will void the warranty and the FCC authorization to operate the equipment. Use only manufacturer provided accessories.
4. Do not use the telephone near water. Never spill liquid of any kind on this product.
5. Unplug the product from the wall telephone jack and power outlet before cleaning. Do not use liquid or aerosol cleaners. Use damp cloth for cleaning.
6. Do not place this product on an unstable cart, stand, or table. The product may fall and cause personal injury or damage to the product or other property.
7. Power Outage: In the event of a power outage, your handset charger will not recharge the handset battery, and the base station will not allow you to make an outgoing call or take an incoming call. Both the charger and the base station require electricity for operation. You should have a telephone that does not require electricity available for use during power outage, or have a temporary backup power supply.
8. Slots or openings in the product's housing are provided for ventilation. These openings must not be blocked or covered. Placing the product on a bed, carpeting, or other similar surface may block these openings and should be avoided. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
9. Never push objects of any kind into this product through housing slots/openings as they may damage the product, touch dangerous voltage points or short out parts that could result in fire, electric shock, or injury.
10. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
11. Do not overload wall power outlets and extension cords as this may result in fire or electric shock.
12. To avoid electric shock or burn, do not disassemble this product. Send this product to an authorized service center when service or repair work is required. Call Customer Service for locations near you. Opening or removing covers may expose you to dangerous voltages, electrical currents or other risks. Incorrect reassembling of the product may cause electric shock when the product is subsequently used.
13. Avoid using the product during a storm. There may be a risk of electric shock from lightning.
14. Do not place the product where persons can step, trip, or fall on it.
15. Do not place conductive objects over or near the antenna.

16. Do not use the product to report a gas leak while in the vicinity of the leak.
17. Do not install the base station or the handset charger near microwave ovens, radios, TV sets, speakers, or other electrical equipment. These appliances may cause interference to the product or experience interference from the product.
18. Unplug the base station or the charger adaptor from the power outlet and refer to an authorized service center under the following conditions:
  - a. If liquid has been spilled into the product.
  - b. When the power supply cord or plug is damaged or frayed.
  - c. If the product has been exposed to rain or water.
  - d. If the product does not operate normally by following the operating instructions.
  - e. If the product has been dropped or housing has been damaged.
  - f. If the product shows a distinct change in performance.

### **Battery Safety Instructions**

1. Use only manufacturer approved Li-ion rechargeable batteries and charger. Do not use other types of rechargeable batteries or non-rechargeable batteries. The batteries could short-circuit, and the battery enclosure may be damaged causing a hazardous condition.
2. Follow the charging instruction in this manual and instruction labels and markings in the handset and charger compartments.
3. Battery must be recycled or disposed of properly. Do not dispose the battery in a fire. The cells may explode.
4. Do not dispose of the battery in municipal waste. Check with local codes for disposal instructions.
5. Exercise care in handling the batteries in order not to short-circuit the battery with conductive materials such as rings, bracelets, keys, pocketknife, and coins. The battery or conductive material may overheat and cause burn or fire.
6. Do not expose batteries to rain or water.
7. Do not open or mutilate the battery. Released electrolyte is corrosive and may cause injury to eyes or skin. The electrolyte may be toxic if swallowed.
8. During charging, the battery heats up. This is normal and is not dangerous.

### **Regulatory Information**

**SP922FH**

**FCC ID: U2M-SP922FH**

**IC: 3616C-SP922FH**

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.

Privacy of communications may not be ensured when using this phone.

### **Portable Handset**

#### **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

**IMPORTANT NOTE:**

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**Industry Canada statement:**

This device complies with RSS-210 of the Industry Canada 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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

**IMPORTANT NOTE:**

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with IC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

This device has been designed to operate with an antenna having a maximum gain of 2dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

**NOTE IMPORTANTE:**

Déclaration d'exposition aux radiations:

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

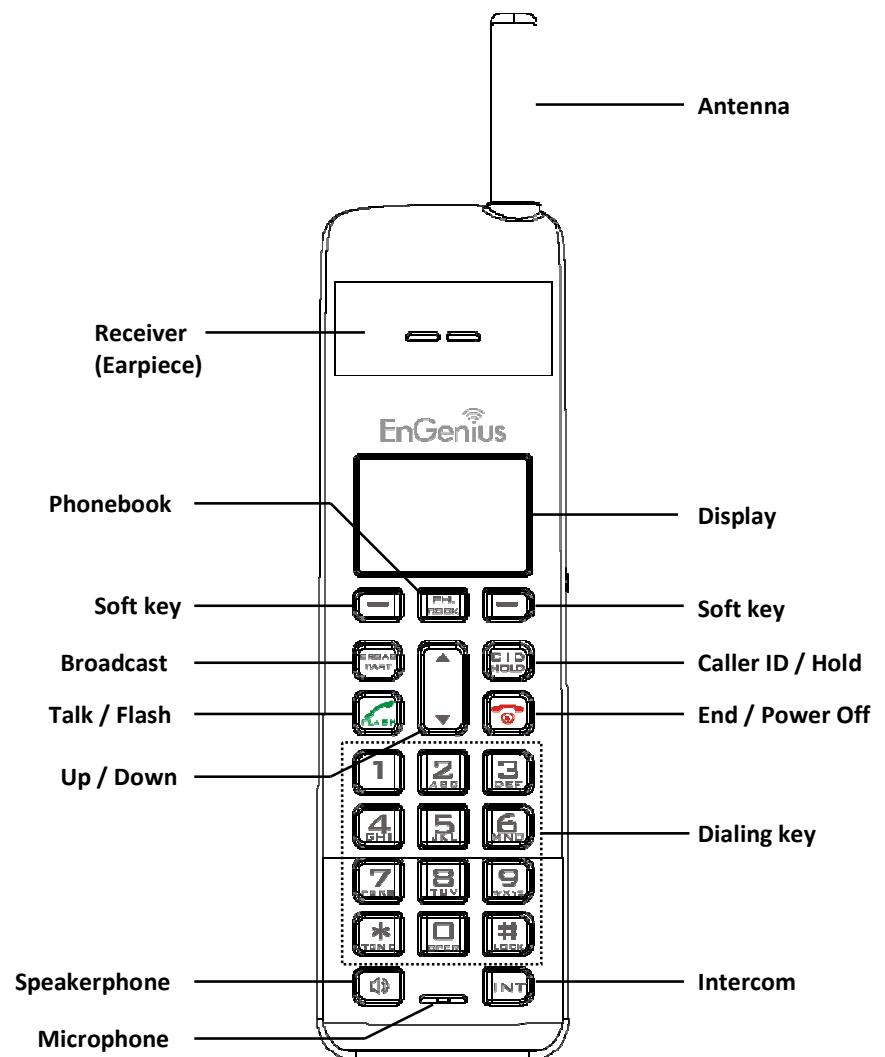
Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

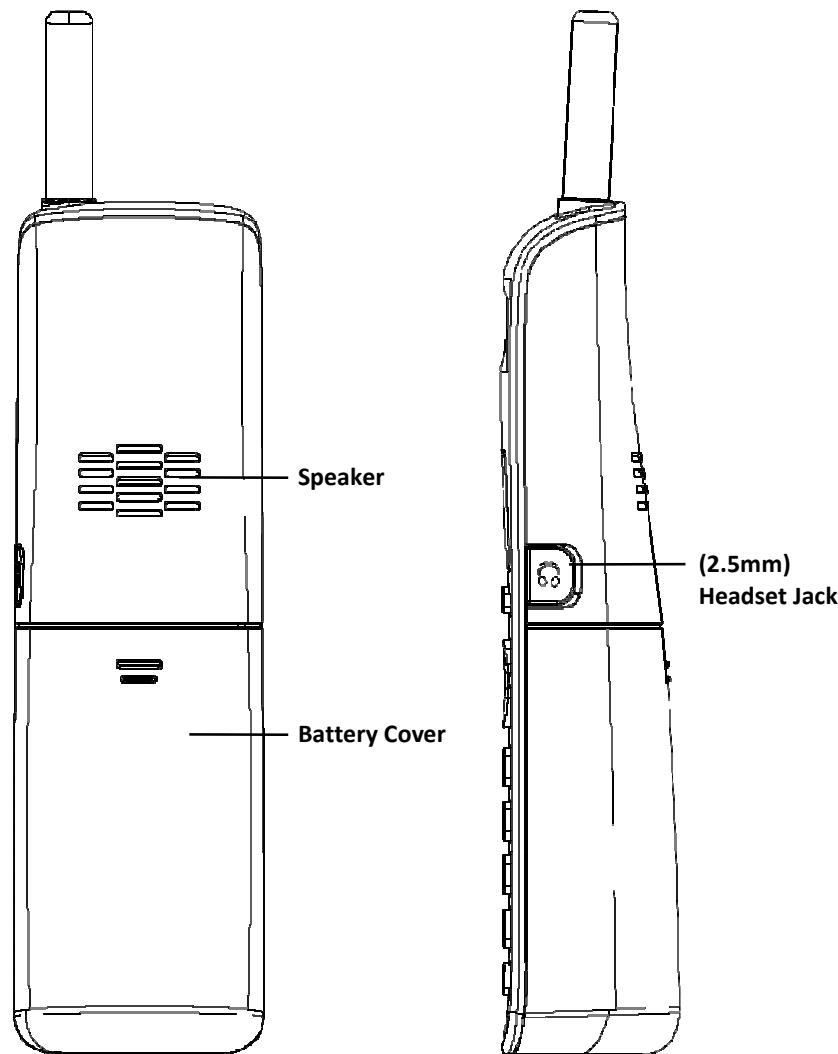
Ce dispositif a été conçu pour fonctionner avec une antenne ayant un gain maximal de dB 2. Une antenne à gain plus élevé est strictement interdite par les règlements d'Industrie Canada. L'impédance d'antenne requise est de 50 ohms.

## Equipment Checklist

1. In a Handset package, please find the following components:
  - a. Handset x 1
  - b. Handset Antenna x 1(short)
  - c. Handset Antenna x 1(long)
  - d. 1100mA Li-ion Battery x 1
  - e. Charger x 1
  - f. Charger AC/DC Adaptor x 1
  - g. Belt Clip x 1
  - h. CD user manual, Quick Guide and Warranty Card
2. Optional Accessory
  - a. Belt Clip
  - b. Spare Battery
  - c. Handset Long antenna
  - d. Headset

## Handset Illustration

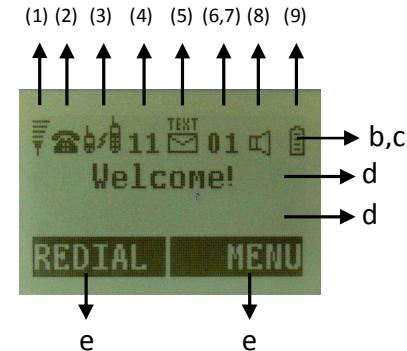




## Handset Features

### Basic Handset Features

1. 4-line LCD (Liquid Crystal Display)



- The LCD display has LED (Light Emitting Diode) for backlighting.
- The 1<sup>st</sup> line of LCD consists of icons.
- Icons explanation from left to right
  - RSSI** (Receive Signal Strength Indicator)  
During a call, the number of bars is proportional to the radio signal strength received.
  - Call in-progress** (ON/OFF-Hook)  
Indicates if phone line mode is active.
  - Intercom in-progress**  
Indicates if Intercom mode is active.
  - Handset ID**  
Displays a handset icon and a 2-digit Handset ID.
  - Text Envelope** (Register to 1X base only)  
Indicates if there is new text message.
  - Two-Digit Address Index**  
Shows address index when viewing contents of the call logs.
  - Line Indicator**  
Indicates the number of the line being accessed by the handset.
  - Speaker phone**  
Indicates if speaker phone is active.
  - Battery Strength**
    - Number of bars is proportional to the amount of battery time remaining.

- Indicates charging when in charger cradle.

d. The 2<sup>nd</sup> and 3<sup>rd</sup> lines of the LCD, maximum 14 characters each, display status, message, menu selections, or user-editable alphanumerical characters.

e. The last line displays the left and right soft keys.

2. Ringer
 

- a. Rings to an incoming call.
- b. Distinctive alert sounds indicating various events:
  - (1) Single Beep: successful key entry.
  - (2) Double beep: failed operation or invalid key entry, also indicates power on/off.
  - (3) Periodic 1-Long-2-Short Beep (every 1 minute): low battery warning.
  - (4) Periodic Long Series of Beeps (repeat every 30 seconds): indicates a call is on-hold.

3. TALK/FLASH (
 )
 

- a. Places or answers a telephone or intercom call.
- b. Sends a Flash signal to phone line to retrieve a dial tone after the call ends, or to perform the call waiting feature provided by local phone companies during a call.
- c. Press and hold the key for one second to enable/disable speakerphone.

4. SPEAKERPHONE (
 )
   
Press the key to enable/disable the speakerphone during incoming, outgoing or intercom call.

5. 2-WAY/INTERCOM (
 )
 

- a. Places an intercom call to another handset ID or a group ID (group paging).
- b. Intercom calls are digital, full duplex, and are conducted without the assistance from the base.

6. BROADCAST (
 )
 

- a. Half duplex broadcasting to handsets for immediate announcement.
- b. Half duplex broadcasting to base stations.

[please refer to page 30 for detail operation]

7. Left/Right Soft Keys ( / 
 )
   
Make menu selection.

8. Up (
 ) / Down (
 ) Scrolling Keys
 

- a. Scroll through records and menu selections.
- b. Adjust receiver voice volume when in Talk mode.

9. END; On/Off Key (
 )
 

- a. Ends a call.
- b. Leaves current menu operation, up one level.
- c. Press for 3 seconds to off the power.

10. CALLER ID Key (
 )
 

- a. Review caller ID list.
- b. Including received and missed caller ID.

11. PHONEBOOK Key (
 )
 

- a. Review phonebook.
- b. Add, delete, edit, view and transfer the phonebook entry.

### Additional Handset Features

- 1. Multiple handsets registration (Register to 1X base only)
  - a. Up to 9 handsets can be registered to a base station; up to 36 handsets can be accommodated to the system.
  - b. ID 11-19; 21-29; 31-39; 41-49: individual Handset IDs. ID 11 and 12 are the first two ID's assigned by the base and are designated "administrators" who can change base settings such as greeting message and other base administrative functions.
  - c. ID 01-09: Group IDs. Handsets can "subscribe" from the handset menu to group(s) and be paged when a landline caller or an intercom caller enters a Group ID.
- 2. Multiple handsets registration (Register to PRO base only)
  - a. Up to 90 handsets.
  - b. ID 10 and 11 are the first two ID's assigned by the base and are designated "administrators" who can change base settings such as greeting message and other base administrative functions.

Note: Unless necessary, it is better not to assign ID 10 and 11 to DuraWalkie handsets.
- c. ID 01-07: Group IDs. Handsets can "subscribe" from the handset menu to group(s) and be paged when a landline caller or an intercom caller enters a Group ID.

3. Ringer / Vibrator
  - a. Six-level ringer volume selections (high/ Medium/ low/ vibrate/ vibrate-then-ring/ off).
  - b. Four ringer type selections.
4. Caller ID
 

Displays incoming call phone number and name on the LCD (needs Caller ID service from local telephone company).
5. Call waiting with caller ID
 

Displays 2<sup>nd</sup> incoming call information on the same phone line when 1<sup>st</sup> call is in progress (needs Call Waiting with Caller ID service from local telephone company).
6. Name tagging with caller ID
 

Match the caller ID with the phone book entries; once matched, the LCD screen will display the name or nickname instead of pure caller ID info (needs Call Waiting with Caller ID service from local telephone company)
7. DND (Do Not Disturb, i.e., Silent Ring)
8. Three Call Logs
  - a. Called Log: Stores 10 phone numbers (up to 28 digits each) dialed most recently. Can perform last-number redial on all 10 numbers.
  - b. Received Call Log: 10 entries (14-digit phone number, 14-character names, and time stamp), needs Caller ID service from local telephone company.
  - c. Missed Call Log: 10 entries (14-digit phone number, 14-character names, and time stamp), needs Caller ID service from local telephone company.
  - d. Phone numbers and names can be saved into phonebook while in display.
9. Call barring (Register to 1X base only)
  - a. Block the users from dialing the long distance calls or international calls.
  - b. Up to 5 digits of each call barring setting; up to 4 entries allowed.
  - c. If you need to dial a specific number to retrieve the dial tone, you need to key in that number while setting the call barring.

[Note] you need to key in the accurate user ID and password to perform this feature. The default password is "0000".
10. Key-guard

11. Dialing Prefix
 

Up to 14 digits, including pause(s), one access code can be pre-programmed to be added automatically in front of the dialed number when dialing from call logs, phonebook, and dial-and-send dialing.
12. Call Hold
  - a. Places call on hold.
  - b. Battery Hot Swap: Change battery while call is on hold.
13. Mute
14. Phonebook
  - a. 30 entries(Register to 1X base only) and 90 entries(Register to PRO base only), each stores a phone number or handset ID (up to 28-digit) and name (up to 14-character).
  - b. Alphabetically sorted display and search.
  - c. Dial from display.
  - d. During the stand-by mode, you can enter the phone book by pressing  or  scrolling key.
  - e. Phone book transfer via air
    - i. Transfer specific phonebook to one handset or all registered handsets.
    - ii. Transfer all phonebooks to one handset or all registered handsets.
15. Key tone
  - a. Three-level key-tone volume selections (high/low/off).
  - b. Four key-tone type selections.
16. Call timers
 

Display call time duration for current call during and immediately after the call.
17. Text Messaging (Register to 1X base only)
  - a. Editing Message: from a handset, users can edit the short text message for up to 25 characters. Up to 5 messages can be edited and stored.
  - b. Sending Message: In view mode, handset can send a message to another handset or a group of handsets.
  - c. Incoming Message: A distinctive tone alerts an incoming message. The message will stay on LCD display for 8 seconds and then is saved in memory. A total of 5 incoming messages can be saved.
18. Call Transfer (Register to PRO base only)
  - a. Direct Transfer: transfer a telephone call to another handset without announcement.

- b. Announced Transfer: speak to the destination handset before transferring a telephone call.

19. Call Conferencing (Register to PRO base only)

- a. 2-handset and 1-line conferencing.
- b. 1-handset and 2-line conferencing.

20. Line Selection (Register to PRO base only)

When enabled from the handset menu, a handset user will be prompted to select from a list of available lines before making an outgoing call.

21. Programmable PBX Options:

- a. Allow user to pre-program the most frequently used PBX feature along with its feature code into DuraFon which is adjunct to the PBX system.
- b. Up to 9 entries can be saved.
- c. Once the feature and feature codes being programmed, you can quick perform those functions during the call by pressing **OPTION** soft key.

22. Base Selection

When enable from the handset menu, a handset user can manually select the base which is the nearest one with user before making an outgoing call.

23. Repeater Operation (Register to PRO base only)

In order to get better range performance for handset to handset calls (intercom and broadcast), install a repeater and make the calls via repeater is able to extend the range of handset to handset calls.

### **Administrator Features (Register to 1X base only)**

Handsets 11 and 12 are designated administrators. Both have the same authority to perform base station administrative functions from their handset menu selections. No password is required and to remember.

1. Supports both DTMF and Pulse dialing
  - a. From an administrator handset (Handset 11 or 12), press **MENU-9-1-** enter base ID(10,20,30,40)-**1** to select Tone or Pulse dialing mode.
  - b. Default is Tone dialing.

2. Administrator programmable Flash key timing
  - a. From an administrator handset (Handset 11 or 12), press **MENU-9-2-** enter base ID(10,20,30,40)-**1** to select flash key timing.
  - b. 9-level (100 ms - 900 ms) timing selections, default= 600 ms.
  - c. The default value (600 ms) works in most areas. Changing this setting may cause Flash key not working. Change only when you are certain of the new value would work.
3. Call transfer to PBX extension
  - a. When install the DuraFon 1X behind the PBX system, you can pre-program the feature code of call transfer function.
  - b. Need to adjust the Flash time to match your PBX setting.

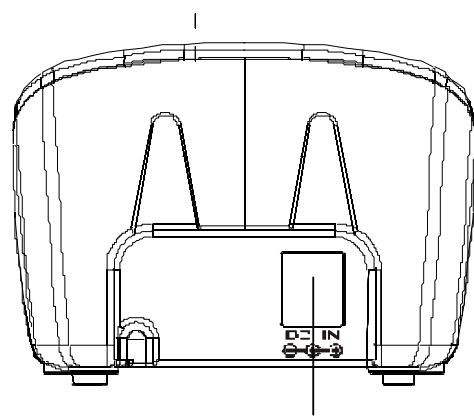
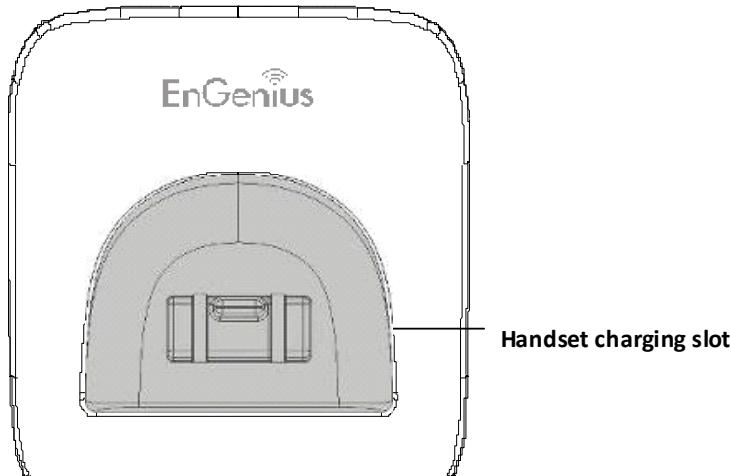
### **Administrator Features (Register to PRO base only)**

Handsets 10 and 11 are designated administrators. Both have the same authority to perform base station administrative functions from their handset menu selections. No password is required.

1. Supports both DTMF and Pulse dialing
  - a. From an administrator handset (Handset 10 or 11 ), press **MENU-9-1-** enter base ID(00-07)-**1** to select Tone or Pulse dialing mode.
  - b. Default is Tone dialing.
2. Administrator programmable Flash key timing
  - a. From an administrator handset (Handset 10 or 11), press **MENU-9-1-** enter base ID(00-07)-**2** to select flash key timing.
  - b. 9-level (100 ms - 900 ms) timing selections, default= 600 ms.
  - c. The default value (600 ms) works in most areas. Changing this setting may result in Flash function not working. Change only when you are certain the new value will work.
3. Call Transfer to PBX Extension
  - a. When the DuraFon PRO is installed behind a PBX system, you can pre-program the feature code of call transfer function.
  - b. Need to adjust the Flash time to match your PBX setting.

Re: If loosing administrator handsets (handset 10 and 11), all settings must be reset (reset the base and re-register all handsets).

## Charger Illustration



## Charger Features

1. DC In  
Connects to Charger AC Adaptor.
2. Handset Charging Slot
  - a. Charge handset battery when handset is placed in cradle.
  - b. Refer to the handset LCD for charging status.
    - (1) Charging: battery status bar is running and the LCD screen showed: Charging.
    - (2) Fully Charged: battery status bar stands still and the LCD screen would display "Fully Charged".
    - (3) Charge Fail: Should there be any error occurred during charging mode, the LCD screen would display "Charge Fail".
  3. It is impossible to overcharge the battery using this charger.

### Notes:

1. Fully charge battery packs before first use.
2. Both handset and spare batteries can be charged at the same time.
3. Handset will be "power on" automatically when placing on the charging slot.
4. However, if you run drain the battery, it would take around one minute for handset to auto power on.

4. You can't turn off the power while you charge the handset. A warning message: "Unplug Charger then OFF again" will be shown on the LCD display.

## Getting Started

### Handset and Charger Installation

1. Plug the transformer end of the Charger AC/DC adaptor into a standard AC electric power outlet, plug the other end into the "DC In" jack on the back of the Charger.
2. Install battery pack onto the handset.
3. Install handset antenna.
4. Place handset onto the charging slot.
5. Fully charge the battery for three hours before use.
6. The phone system is now ready to perform basic functions such as making and receiving phone calls and intercom calls. No base station or handset programming is needed for basic operations.

#### Note:

1. Handset(s) packaged along with a Base Station are pre-registered at the factory. If you have a new handset, you will need to register the handset with the base station in order to be recognized as a member handset by the base(s) and by other handsets. See Handset Registration.
2. Fully charge battery packs before the first usage.

## Basic Operations

### Operation Modes

Both the base station and handset have levels of operation at which time only certain procedures of functions can be performed.

#### A. Base Operation Modes

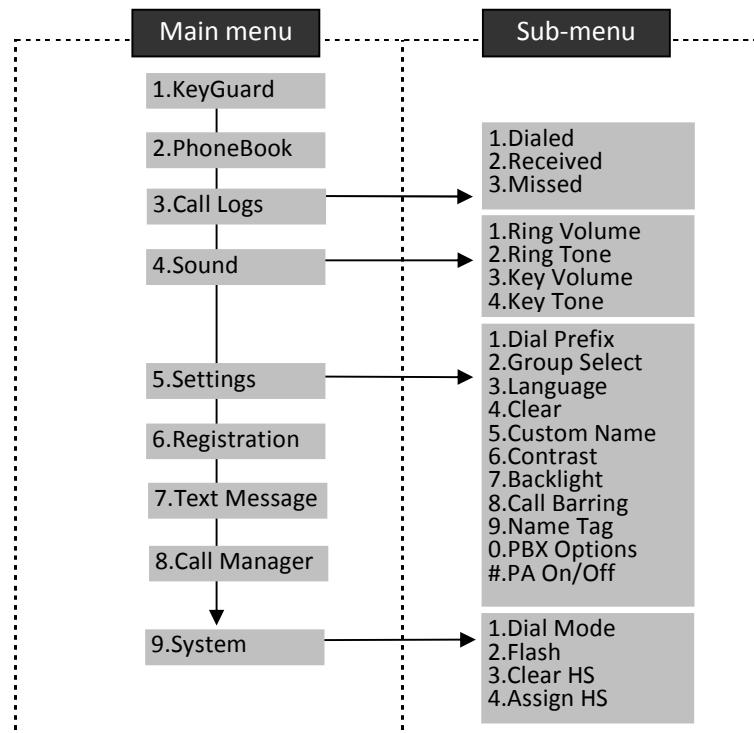
1. **IDLE mode (Register to 1X base only)** - this is the default mode. The intercom, broadcast, and volume keys are active in IDLE mode.
2. **TALK mode (Register to 1X base only)** - the base operates in this mode during phone call, intercom, and broadcast operation. The "In Use", "Intercom", and "Broadcast" LED will light up respectively.
3. **REGISTRATION mode** - the base enters this mode by pressing the REG button for three seconds. There are no active base unit keys once this mode has been entered. Four LEDs will be lighted up in Registration mode.

#### B. Handset Operation Modes

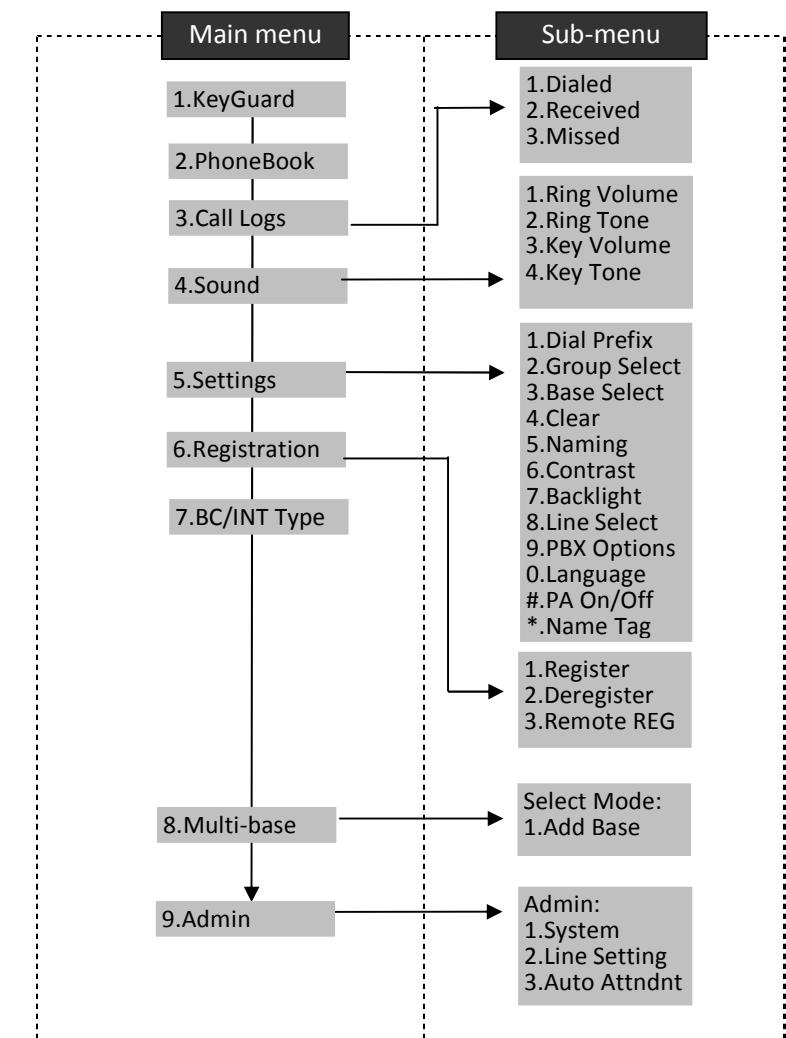
1. **IDLE mode** - this is the default mode.
  - a. If there is no on-going activity, the handset automatically goes into SLEEP/IDLE mode to save battery power.
  - b. The handset can be turned off completely by holding down the  key for 3 seconds.
  - c. The idle screen display (custom name) can be edited.
  - d. The 2-digit number represents the handset ID
2. **Menu mode**
  - a. Press the Right soft function key to activate MENU mode.
  - b. In MENU mode, the handset settings and information contained in memory can be changed.
  - c. The functions available through the MENU selection are covered in greater detail from page 67.
  - d. The MENU structure display as below:



Menu Tree (Register to 1X base only)

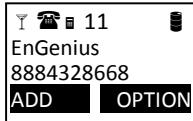


Menu Tree (Register to PRO base only)



## Making a Telephone Call

1. Press , wait for dial tone, and then enter phone number.
2. Alternatively, you can enter phone number first then press  key. When using this method, you can use the **CLEAR** (Left) and **DELETE** (Right) soft keys to edit the number entered. "Delete" erases the last digit entered. "Clear" erases the entire line but remains in the dialing mode.
3. **Speed dial** by access the entries in the phone book
  - a. Press  or  scrolling key to enter the phone book
  - b. Press  to dial out the number
4. To abort dialing, press  key.
5. During the call, press the  key to activate the speakerphone.



### Notes:

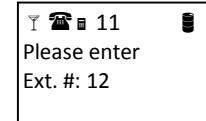
1. After a link established, the Base ID will appear on the upper-right corner. If no Base ID shown up, it applied that you are approaching the boundary of the coverage.
2. If the line is occupied, the LCD shows "No Line Available" and handset returns to standby mode.
3. If a link cannot be established, the LCD will show "No Base" after a 12-second time out.
4. A call duration timer will start displaying the length of the call after link is established.

## Making an 2-Way/ Intercom Call

The EnGenius Industrial Cordless Phone System offers private, Intercom/ 2-way radio calls independence of base station. Intercom/ 2-way communication can be placed from or to base stations and handsets.

### A. Handset to Handset Calls

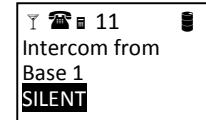
1. Press  key followed by a two-digit handset ID or Group ID.
2. Press  key to end the call.
3. During the call, press the  key, the speakerphone is active.



### Notes:

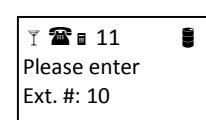
1. Intercom calls can be made regardless if the Base Station is present.
2. If a Group ID is entered, the first handset (belonging to that group) that answers will establish a link with the caller. See Handset Group Subscription.
3. If a link cannot be established, the LCD shows "No Connection" after a 12-second time out.

### B. Intercom/2-Way from Base to Handset (Register to 1X base only)

1. Press  key on the base station to intercom all registered handsets. The first handset to answer will establish a voice link with the base.  

2. The INTERCOM LED will flash until a handset responds.
3. The base unit will page for 15 seconds, then terminate the page if no handset responds.
4. Before a handset answers, the INTERCOM can be cancelled from the base by pressing  again. However, once a handset answers, only the answering handset can end the call.

### C. Intercom/2-Way from Handset to Base (Register to 1X base only)

1. Press  key followed by a two-digit base ID [Note: Base 1 ID as 10, Base 2 ID as 20, Base 3 ID as 30, and Base 4 ID as 40]
2. The base will ring once, then automatically connect the



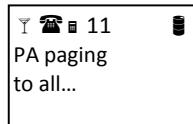
intercom call from a handset.

## Making a Broadcast

### A. Handset to Handset Calls

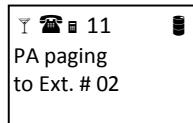
#### 1. Broadcasting all handsets

- Press and hold  key from one handset.
- Hear bi-bi-beep while the initiating handset broadcast all handsets within communication coverage.
- Start to speak the message to be broadcasted once you hear the “beep” sound; the speakerphone of destination handsets will be opened up.
- Release the  key and return to IDLE mode.



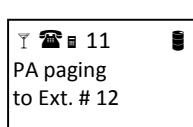
#### 2. Broadcasting a group of handsets

- Enter the Group ID then press and hold  key.
- Hear bi-bi-beep while the initiating handset broadcast all handsets within communication coverage.
- Start to speak the message to be broadcasted once you hear the “beep” sound; the speakerphone of destination handsets will be opened up.
- Release the  key and return to IDLE mode.



#### 3. Broadcasting an individual handset

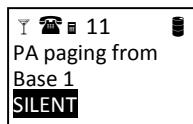
- Enter the Handset ID then press and hold  key.
- Hear bi-bi-beep while the initiating handset broadcast all handsets within communication coverage.
- Start to speak the message to be broadcasted once you hear the “beep” sound; the speakerphone of destination handsets will be opened up.
- Release the  key and return to IDLE mode.



### B. Broadcasting from Base to Handset (Register to 1X base only)

#### 1. Broadcast to all handsets

- Press  key on the base station to intercom all registered handsets.

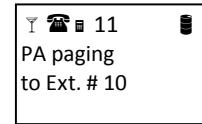


- Hear bi-bi-beep while the initiating handset broadcast all handsets within communication coverage.
- The Broadcast LED will light up.
- Press the  key again and return to IDLE mode.

### C. Broadcasting from Handset to Base (Register to 1X base only)

#### 1. Broadcast to the base station

- Enter the Base ID then press and hold  key.
- Hear bi-bi-beep while the initiating handset broadcast the base stations.
- Start to speak the message to be broadcasted once you hear the “beep” sound; the speakerphone of the base will be opened up.
- Release the  key and return to IDLE mode.



## Redial

- Press **REDIAL** (Left) soft key.
- The LCD shows the last phone number dialed. To dial this number, press **DIAL** (Left) soft key.
- Use  or  Arrow Key to scroll through the last 10 phone numbers dialed. Select and press **DIAL** soft key.  
[Note] Intercom numbers (Handset ID) are not stored in the last 10 numbers dialed log.

## Receiving a Telephone Call

- When an incoming call arrives, the ringer will ring or vibrate unless the ringer has been turned off.
- If the handset is on the charger cradle (ringer will be temporarily switched to “Ring” if it has been set to “Vibrate”), lift the handset and press the  to start conversation.
- If the handset is not on the cradle, press any key (except ), and the Silent

soft key) to answer.

- During the call, press the  key, the speakerphone is active.

**Notes:**

- You can press **SILENT** (Left) soft key if you choose to ignore the call. Unlike turning off the ringer (from the handset menu), the **SILENT** key operation is valid only for the current call.
- If Caller ID service is available, the LCD will display the incoming call information. If the LCD shows "Private" or "Unknown", the caller's information may have been blocked by the caller or the originating phone company.

## Receiving an Intercom Call

- When an intercom call arrives, the ringer will ring or vibrate unless the ringer has been turned off. Press  to answer the intercom call.
- If the handset is on the charger cradle (ringer will be temporarily switched to "Ring" if it has been set to "Vibrate"), lift the handset and press the  key to start conversation.
- If the handset is not on the cradle, press any key (except , and the **SILENT** soft key) to answer.
- During the call, press the  key, the speakerphone is active.

**Notes:**

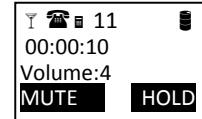
- The LCD displays the caller's Handset ID.
- You can press the **SILENT** (Left) soft key if you choose to ignore the call. Unlike turning off the ringer the **SILENT** key operation is valid only for the current call.

## Ending a Call

To end a telephone or intercom call, press  key or place handset into charger cradle.

## Adjusting Receiver (Earpiece) Voice Volume

- Voice volume can only be adjusted during a call.
- There are 6 levels of volume selections. Default = 1. Use  or  arrow key to adjust
- The new setting remains effective for all future calls until changed.



## Placing a Call On Hold

- When a call is in progress, it can be put on hold by pressing the **HOLD** (Right) soft key or the  key.
- To return to the conversation, press **UNHOLD**



**Notes:**

- The call being placed on hold can only be "un-hold" by the handset that puts it on hold.
- Handset LCD displays a call is being on hold. An alert tone (double beep) every 30 seconds will remind the handset that a call is being on hold.
- If the operation (e.g., call transfer) after putting a call on-hold fails, the held call may be dropped.
- You can power off the handset (e.g., change battery) while call is on hold. After power on again, you can continue the call by pressing **UNHOLD** (Left) soft key or select "4" from the Option (only for 1X) menu to terminate the hold state.

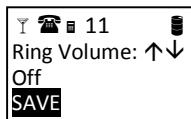
## Mute

- After a link is established, you can press **OPTION** (Left) soft key and press "0" to mute the handset microphone.
- When mute is active, the other end will not hear your voice, but still can speak to you.

- To leave the mute state, press **UNMUTE** (Left) soft key. Mute is effective only for the current call.

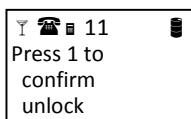
### Do Not Disturb (Silent Ring)

- Enter the key sequence **MENU** - 4 - 1, then select "Off". Press **SAVE** to confirm your choice. This will turn off the ringer until it is turned on again from the menu.
- For temporary silencing the ringer when an incoming call arrives, press **SILENT** (Left) soft key.



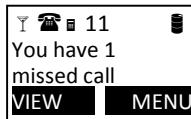
### Key Guard

- To prevent accidental dialing, you can press **MENU** (Right) soft key, then press "1" to select KeyGuard option. The handset keypad is locked. No key entry is accepted except the "UNLOCK" key.
- To unlock the keypad, press **UNLOCK** (Left) soft key, then, within 2 seconds, press the digit "1" to unlock.
- Key Guard is in effect until unlocked or powered off.



### To View Missed Call(s)

- Whenever you have missed incoming call(s), you can Press **CID HOLD** or **VIEW** soft key to enter the call logs information.
- You need to subscribe the caller ID service from local telecom company to retrieve this data.



### To Call back from Call Log

- When you review missed incoming call(s), you can directly call back

by pressing **FLASH** key.

- The displayed CID number in most cases will be a 10-digit number with the 3-digit area code followed by the 7-digit telephone number. If the area code is unnecessary for calling back, you can follow below rule to adjust the calling back number:
  - Press **FORMAT** key once, the 3-digit area code will be removed.
  - Press **FORMAT** key twice, "1" will be added in front of the displayed number.
  - Press **FORMAT** key three times, it will loop back original displayed number.
 Re:The CID default is 10 digits, when press **FORMAT** key, it will be 7-digit → 11-digit → 10-digit in circle.
- After the displayed number chosen, press the **FLASH** key to call back.

### Battery Recharge and Replacement

- Charge the battery when one or several of the following happen:
  - Phone beeps twice every two seconds.
  - Battery icon is empty.
  - Phone does not respond when a key is pressed.
  - LCD and backlighting become dim.
  - Talk range shortfall is experienced.
- You can replace the handset battery after placing the call-in-progress on hold.
- Battery talk time and standby time vary depending on the talk/standby pattern and the operating distance. Putting the handset back to charger cradle as often as possible is recommended for best performance. **Use only manufacturer provided battery and charger!**

## Advanced Operations

### Preliminary Setting

1. Since the SP922FH is able to register to DuraFon 1x or PRO, when you take it out and power on, you will see the initial screen as figure, you have to choose the desired base station before making handset registration.
2. Choose base:
  - a. Press key 1 means you desire to register the handset on a PRO base.
  - b. Press key 2 means you desire to register the handset on a 1X base.
3. When choosing the base, the handset is ready to register to the desired base station.
4. The handset can't serve for 1X and PRO base at the same time, once the desired base chosen (ie. 1X base), the handset can't be registered to PRO any longer, unless making factory reset.

Re: In case you want to change the desired base station, please check with EnGenius' authorized dealer about the factory reset.



and 12, which gives them administrator privileges.

### 4. De-registration:

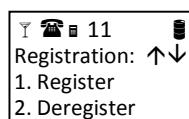
- a. You can de-register a handset from a base. De-registration will reset the Handset ID to 00, erase the system security code, and free up the old ID for future registration.
- b. After deregistration, the handset will not be able to use the base to make or receive phone calls, nor can it intercom other handsets.
- c. Press handset **MENU** (Right) soft key.
- d. Press the handset number key "6", this will enter the handset registration menu.
- e. Press and hold the base's REG button for 2 seconds until 4 LEDs come on.
- f. Press the handset number key "2", this completes the de-registration process. Upon successful de-registration, the handset will show ID "00".

#### Notes:

1. The base has a 30 second registration timeout starting from pressing the REG button. The handset has a 12 second registration timeout starting from the registration or deregistration option has been selected. The base and handset will automatically exit registration mode after timeout.
2. When you conduct the registration procedure with BASE 20, the handset ID will be ranging from 21 to 29.
3. Up to 4 bases can be installed to form a sub-multiple line system.
4. Repeat registration or de-registration process if unsuccessful.

### Handset Registration (Register to 1X base only)

1. When 1<sup>st</sup> time using the handset, you need to register the handset to the base station (The handset ID is 00 before registering to the base station) .
2. Registration:
  - a. Press **MENU-6** to enter the registration mode
  - b. Press and hold the base's Registration (REG) button for 2 seconds until 4 LEDs light up.
  - c. Press handset key "1", this completes the registration process. When you register the handset to BASE 10, the base will assign a handset ID between 12 and 19. The assigned ID will be displayed on the handset LCD, indicating successful registration.
  - d. Repeat above steps for all additional handsets.
  - e. The first two handsets registered will be given ID 11

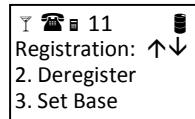


### Registration of Additional Base (Register to 1X base only)

1. DuraFon 1X can be installed as the multiple base configurations: up to 4 base units can be registered. The BASE 10 serve as the master base.
2. Use admin handset, HS 11 or HS12, to conduct the registration for 2nd, 3<sup>rd</sup>, 4<sup>th</sup> base unit.
3. Registration:
  - a. Press **MENU-6** from HS 11 to enter the registration mode.
  - b. Press and hold the Registration (REG) button on that additional base unit, which you want to add into the system) for 2 seconds until 4 LEDs light up



- c. Press handset key “3”, then enter the base ID i.e. 20 for 2nd base, 30 for 3rd base, or 40 for 4th base. this completes the registration process.



### Handset Registration (Register to PRO base only)

1. When 1<sup>st</sup> time using the handset, you need to register the handset to the base station (The handset ID is 00 before registering to the base station).
2. In certain situations, you may want to change a handset's ID. For example, you want to change a particular handset from a user to an administrator (ID 10 or 11), or vice versa. Or in some rare occasions, you find another handset having the same Handset ID.
3. Registration:
  - a. Press **MENU** **6** to enter the registration mode
  - b. Press and hold the base's Registration (**REG**) button for 2 seconds until the L1, L2, L3, and L4 LED come on.
  - c. Press handset key “1”, this completes the registration process. The base station will assign a handset ID between 10 and 99. The assigned ID will be displayed on the handset LCD, indicating successful registration.
  - d. Repeat above steps for all additional handsets.
  - e. The first two handsets registered will be given ID 10 and 11, which gives them administrator privileges.

Re : Base 00 is a primary base. All handsets must register to Base 00.

4. De-registration:
  - a. You can de-register a handset from a base. De-registration will reset the Handset ID to 00, erase the system security code, and free up the old ID for future registration.
  - b. After deregistration, the handset will not be able to use the base to make or receive phone calls, nor can it use the intercom to reach other handsets.
  - c. Press handset **MENU** (Right) soft key.
  - d. Press the handset number key **6**, this will enter the handset registration menu.
  - e. Press and hold the base's **REG** button for 2 seconds until L1, L2, L3, and L4 LED come on
  - f. Press the handset number key **2**, this completes the de-registration process. Upon successful de-registration, the handset will show ID “00”.

#### Notes:

1. The base has a 30 second registration timeout starting from pressing the **REG** button. The handset has a 12 second registration timeout starting from the time registration or de-registration option has been selected. The base and handset will automatically exit registration mode after timeout.
2. Repeat registration or de-registration process if unsuccessful.

### Advanced Registration (Register to PRO base only)

1. Advanced registration functions can be performed by administrator handsets (ID 10 and 11) only.
2. Administrator handsets can perform advanced registration function as long as it is within range with the base station. The base station does not need to be in registration mode.
3. De-register a Handset ID by administrator:
  - a. Make sure that the administrator handset is within the coverage range of the base station.
  - b. Press administrator handset **MENU** (Right) soft key
  - c. Press the number **9**, this will enter the handset administration menu.
  - d. Press number **1**, handset enters system setting menu.
  - e. Press number **4**, and enter the two-digit Handset ID to be cleared.
  - f. Upon successful operation, the handset LCD will display “Done”, otherwise it will show “Message not received, try again”.
4. Obtain a Specific Handset ID:
  - a. If a particular Handset ID is preferred over sequentially assigned ID, the administrator can “tell” the base in advance what the next ID assignment should be.
  - b. Press administrator handset **MENU** (Right) soft key.
  - c. Press the number **9**, this will enter the handset administration menu.
  - d. Press number **1**, handset enters system setting menu.
  - e. Press number **5**, and enter the two-digit Handset ID to be assigned next by the base.
  - f. Upon successful operation, the handset LCD will display “Done,” otherwise it will show “Message not received, try again.”
  - g. If the handset ID is already in use by another handset, the administrator will be alerted. In that case, the administrator can choose another ID or asks the handset having the desired ID to vacate by de-registering with the

base.

- Perform registration immediately afterward for the handset desiring a specific ID to ensure that the ID is not taken by another handset.

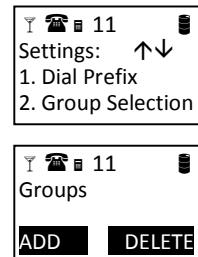
- Remotely register Handset :
  - If base install in ceil or higher location, administrator handsets can perform remote registration.
  - Press administrator handset **MENU** (Right) soft key
  - Press the number **6**, this will enter registration mode.
  - Press number **3**, this will replace the procedures to press & hold the base **REG** button until the L1, L2, L3 and L4 LED come on.
  - Proceeding the handset registration process for new handsets.

**Notes:**

- De-registration by the administrator will disable a handset's ability to use the base station to make or receive phone calls. This also frees up the ID for future registration.
- Handsets de-registered by the administrator can still perform intercom to other handsets.

### Handset Group Subscription

- When register to 1X base, there are up to nine handset groups (01-09) can be defined and handsets can decide which group(s) they want to be in.
- When register to PRO base, there are up to seven handset groups (01-07) can be defined and handsets can decide which group(s) they want to be in.
- For example, Group 1 represents the Customer Service Group, Group 2 represents the Sales Group, and Group 3 is the Marketing Group. Suppose that Handset 11 wants to receive incoming rings for all Sales and Marketing related calls. Then handset 10 will need to "subscribe" to Group 2 and Group 3.
- Group Selections:
  - Press handset **MENU-5** to enter the handset setting menu
  - Press number “**2**”, handset enters group select menu.
  - Press **ADD** soft key and enter two-digit group number (01-09) to add membership in a group.
  - Repeat for all desired groups.
  - Delete group selections by pressing **DELETE** key and



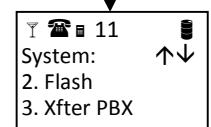
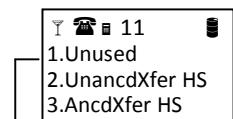
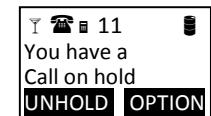
enter group number.

**Notes:**

- The handset can change group affiliations at any time.
- The base (administrator) is not responsible for group assignments. Consequently, it cannot de-subscribe a handset from a group.

### Call Transfer (Register to 1X base only)

- While a telephone call is in progress, you can place call on hold and transfer the call.
- Press **HOLD** (Right) soft key to put call on hold.
- Press **OPTION** (Right) soft key to enter selection menu.
- Two types of transfer method:
  - Un-announced Call Transfer:  
Press  before the destination handset answers, the call is automatically transferred to the destination handset.
  - Announced Call Transfer:
    - Speak to the destination handset.
    - Press **XFER** (Right) soft key or the  to end announcement. The call is transferred to the destination handset.



**Notes:** If the destination handset does not answer after handset paging timeout, the call is routed back to the originating handset.

### Call Transfer (Register to PRO base only)

- While a telephone call is in progress, you can place the call on hold and transfer the call.

2. Press **HOLD** soft key to put call on hold.
3. Press **OPTION** soft key to enter feature list for selection.
4. Press number **2** and enter a two-digit Handset ID to call another handset extension.
  - a. Un-announced Call Transfer:  
Press **END** before the destination handset answers, the call is automatically transferred to the destination handset.
  - b. Announced Call Transfer:  
(1) Speak to the destination handset.  
(2) Press **XFER** soft key or the **END** to end announcement. The call is transferred to the destination handset.

**Notes:**

1. If the destination handset does not answer after handset paging timeout, the call is routed back to the originating handset.
2. Above described "Call Transfer" is for DuraFon PRO handset-to handset call transfers.

### Call Manager (Register to 1X base only)

"Call Manager" feature allows the handset to be set to receive all incoming, transferred, and 2-Way/Intercom calls OR just transferred and 2-Way/Intercom calls. The option is selectable by base 1 to base 4. Besides, this feature allows you to select a specific base station to make an outgoing call.

1. Decide whether to receive the incoming, transferred, and 2-Way/Intercom calls from a specific base station:
  - a. Press **MENU - 8** to enter the Call Manager function. The screen will display:
  - b. Press 1 to enter "incoming" setting.
  - c. Use **▲** or **▼** Scrolling keys to select a base from base 1 to base 4.
  - d. Then press the **→YES NO** key to switch between Yes and No, then press **SAVE** key to confirm the setting.
  - e. Repeat the process until all base stations from

**Y □ 11**  
Main Menu: **↑↓**  
8. Call Manager  
9. System

**Y □ 11**  
Call Manager: **↑↓**  
1. Incoming  
2. Outgoing

**Y □ 11**  
Receive Calls  
From base 1: **↑↓**  
**SAVE** **→YES NO**

which calls are to be accepted have been selected for the handset

2. Decide whether to select a specific base station to make outgoing call:
  - a. Press **MENU - 8** to enter the Call Manager function.
  - b. Press 2 to enter "Outgoing" setting.
  - c. Use **▲** or **▼** to select either On or Off.
  - d. Scroll to On and press **SAVE** if you want to select a specific base station before you make an outgoing call. The default setting is Off.

**Y □ 11**  
Select Base  
On  
**SAVE**

### Change System Settings by Administrator (Register to 1X base only)

There are four types of system setting that can be adjusted by Administrator.

1. Dial Mode

- a. Press **MENU-9** and enter the two-digit base ID to enter the System mode.
- b. Press 1 to enter Dial Mode selection
- c. You can adjust the dial mode between Tone and Pulse.
- d. The default setting is Tone.

**Y □ 11**  
Main Menu: **↑↓**  
8. Call Manager  
9. System

2. Flash

- a. Press **MENU-9** and enter the two-digit base ID to enter the System mode.
- b. Press 2 to enter Flash selection
- c. You can adjust the flash time from 100ms to 900 ms (9 levels to choose from.) For example, press "2" if the desired flash time is 200ms. You will see "Done" once you finish the setting.
- d. The default setting is 600ms.

**Y □ 11**  
System: **↑↓**  
1. Dial Mode  
2. Flash

**Y □ 11**  
Flash:  
1-9 \* 100msec  
(600msec)

**Y □ 11**  
Done

**Notes:** If the base station is adjunct to a PBX system, it is recommended to adjust the flash time of DuraFon 1X to match the PBX spec.

3. Clear HS

- a. This function is useful if you want to replace a new

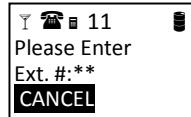
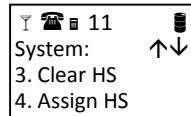
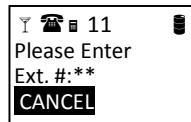
**Y □ 11**  
System: **↑↓**  
2. Flash Time  
3. Clear HS

handset to a damaged handset. You need to clear this registered handset ID on the base station before you register this new handset. Press Menu-9 and enter the two-digit base ID to enter the System mode.

- b. Press 3 and then enter two digits ID number to be assigned. You will see "Saving Configuration" and a Done confirmation.

4. Assign HS: Set next Handset ID to be assigned

- a. This function is useful if you want to assign a designated handset ID to a specific handset. Press Menu-9 and enter the two-digit base ID to enter the administration mode.
- b. Press 4 and then enter two digits ID number to be assigned. You will see "Saving Configuration" and a Done confirmation.



### 3-Way Conferencing (Register to PRO base only)

1. While a telephone call is in progress, you can place call on hold and bring in another phone line or another handset for a 3-way conference.
2. Press **HOLD** (Right) soft key to put the current call on hold.
3. Press **OPTION** (Right) soft key to enter selection menu.
4. 3-Way Conferencing with a Second Handset:
  - a. Press number **2** and enter a two-digit Handset ID to call another handset extension.
  - b. After the second handset answers, press the **CONF** (Left) soft key.
  - c. Two handsets and one phone line can now talk simultaneously. Any one party can drop out of the 3-way conferencing, leaving the remaining two parties still connected.
5. 3-Way Conferencing with a Second Phone Line:
  - a. Press number **1** and enter a phone number to call another

phone line.

- b. After the second line answers, press the **CONF** (Left) soft key.
- c. One handset and two phone lines can now talk simultaneously.
  - I. If one phone line hangs up, the handset continues talking to the remaining phone line.
  - II. If the handset presses key, the 2nd phone line will be dropped. The handset and the first phone line continue conversation.

#### Notes:

1. 3-way conferencing between 3 handsets is not supported.
2. Unlike 3-way conferencing provided by the phone company, 3-way conferencing involving 2 phone lines will take up two physical lines, leaving only two lines left available for other handsets. The handset must have access to a second line.

### Base Select (Register to PRO base only)

1. A handset can manually select the desired base station before access outbound line.
2. Press handset **MENU** (Right) soft key.
3. Press the number **5**, this will enter the handset setting menu.
4. Press number **3**, handset enters Base Select setting mode.
5. Use or arrow to scroll up and down the selection on/Off.
6. Make a selection (default =off), and press **SAVE** (Left softkey). Re: When turns on the Base Select, you must enter 2-digit Base ID after press key.

#### Notes:

1. Because this setting allows handset manually select the base station, the handset must be in range with the direct base station.

### Call Waiting (Register to PRO base only)

1. A handset, while talking on one phone line, can be informed of the arrival of a new incoming phone call.
2. For example, suppose that Handset 15 is talking on Line 1. When a new call comes in on, Line 4, and the caller enters extension number "15" when prompted by the AA, or if the call is set to be routed to Handset 15 when AA is disabled.
3. The base station recognizes that Handset 15 is busy. Instead of announcing to Line 4 that Handset 15 is busy, the base sends an alert to Handset 15.
4. Upon receiving the alert, the handset sounds an audible double beep alert and LCD displays "New call on Line 4".
5. Handset 15 can:
  - a. Ignore the new call; continue talking to Line 1.
  - b. Press **Switch** key to switch to Line 4.
  - c. Subsequent pressing of **FLASH** key will toggle between Line 1 and Line 4.
  - d. Press  key while talking to a line will terminate that particular call and automatically switch back to talking to the remaining line.

#### Notes:

1. This built-in call waiting is separate from the Call Waiting feature available from the local phone company. The phone company provided Call Waiting functions on the same phone line, while the DuraFon Call Waiting functions on two separate phone lines.
2. This feature only works for 2 lines, if a 3<sup>rd</sup> phone call comes for the same handset, the call will not be routed to the handset.
3. It is recommended to order from the local phone company Hunt Group feature for all your lines and not subscribe to the Call Waiting feature.

### Auto Attendant (AA) (Register to PRO base only)

1. When enabled by the administrator, an automated attendant would greet a telephone line incoming call.

2. The caller will be prompted by the greeting message to enter a two-digit extension number (Handset ID) or press for operator
3. The greeting message is user programmable. The Handset ID that is designated as the operator is also user programmable.
  - a. Default greeting message (Main OGM): "Please enter the extension number or press 0 for the operator"
  - b. Default operator: Handset 10.
4. AA will ask for another handset ID if the first entry is invalid (no registered handset with that ID) with the announcement (OGM2): "The extension you entered is invalid, please try another extension or press for the operator".
5. If there is no entry time out, AA will announce (OGM3): "Please hold, your call is being transferred to the operator". And automatically ring the operator handset.
6. If the destination handset does not answer (busy, power off, or out of range) after handset paging time out, the AA prompts the caller for another extension number by announcing (OGM5): "The extension you've entered is busy or not available. Please enter another extension number or press 0 for the operator"
7. If the 2nd try is still not successful, AA will announce (OGM4): "Sorry, nobody can answer your call right now. Please try again later, "goodbye". Then drops the call.
8. When the DURAFON PRO base station is connected to wired PBX extension lines, calls addressed/routed to the AA operator can be sent back to the operator of the wired PBX system. From an administrator handset, up to 10 keys/digits are allowed to program a specific code in order to transfer the calls back to the wired PBX. This feature can only be enabled and pre-programmed by an administrator handset (Handset ID 10 or 11). Consult with the wired PBX manual for operation instructions and correct key sequence for transfer calls to the operator from an extension

#### Notes:

1. Intercom calls are not routed by Auto-Attendant.
2. Routing messages OGM2,3,4 and 5 are not user programmable.

3. The timeout is 5 seconds for entering extension number.
4. The calls can be routed to either a Handset ID or an extension number of the wired PBX system. There can be only one operator for the AA, which is either an DURAFON PRO handset or the wired PBX operator.
5. Call routing is at most 2 hops. That is, if both the 1st and the 2<sup>nd</sup> handsets do not answer, the call will be terminated if the operator does not answer.

### AA Configuration by Administrator (Register to PRO base only)

1. Administrator can change the following AA settings:
  - a. Record/playback new main greeting message.
  - b. Set number of rings before AA picks up a call.
  - c. Turn on/off the AA line-by-line.
  - d. Set Designated Handset ID for AA disabled line(s). Either the Designated Handset ID or the Group ID can use that particular line for incoming and outgoing calls. Which means this specific line(s) will be dedicated to a particular handset (Handset ID 10-99) or a calling group (Group ID 01-07)
  - e. Designate an operator, the handset which would answer unrouteable calls or when the caller chooses "Operator" when prompted

### Change AA Parameters (Register to PRO base only)

- a. From an administrator handset (Handset 10 or 11), press **MENU** (Right softkey).
- b. Press number **9**, this will enter administration menu
- c. Press **3**, handset enters AA setting menu.
  - i. Press **1** and follow instruction to record new greeting message.
  - ii. Press **2** to playback the current greeting message.
  - iii. Press **3** to set number of rings before the AA picks up a call. Use Up/Down arrow to choose between 2 and 9 rings.
  - iv. Press **4** to turn AA On/Off. This can be done separately for each phone line by using **▲** or **▼** to scroll through Line 1 to Line 4, and press **On** or **Off** softkey to turn AA On/Off. If turning off the AA may be useful when:
    - The line is not used by a group of people.
    - External answering machine is to be attached to the line.
  - v. Press **5** and select from the following two options to set Operator for AA:
    - "Handset" : assign a specific handset as operator by entering a

two-digit handset ID (default=Handset 10) as operator for all calls addressed to the operator when AA is on, or "PBX" : transfer calls to be answered by the operator back to the designated wired PBX operator. System administrators must know the proper programming and "call transfer" feature code (available from the user manual of the wired PBX system) in order to perform this function correctly.

- The following example is the instruction to route a call back to the brand N's PBX system by pressing "Flash-7-0-1-8-3-0", where a Flash key is pressed followed by the call transfer code "70", then enter the extension number "1830" immediately. Confirm the set up by press using the **SAVE** (Left softkey).

#### Notes:

1. Only administrator can change AA settings.
2. Because AA setting is stored on the base station, the handset must be in range with the base to make changes.
3. The maximum recording time for the greeting message is 128 seconds.
4. Allowing each line's AA to be turned on or off separately is useful if different lines are used for different purposes.
5. When AA is disabled, the line can be dedicated to either an individual Handset ID or a Group ID.
6. The operator can be any individual handset or a group; it doesn't need to be an administrator handset (Handsets 10 and 11).
7. The minimum number of rings before the AA picks up cannot be lower than two for the purpose of receiving the Caller ID message.

### Line Dedication (Register to PRO base only)

1. Line dedication function can be performed by administrator handsets (ID 10 and 11) only.
2. By default all incoming calls will ring all handsets.
3. With the administrative handset, press **MENU-9-2-2** for Line Dedication setting.
4. It will first show Line 1 and line status. If you wish to dedicate line 1 to a specific handset or group, you need to press **OK**. To dedicate lines 2-4 use **▲** or **▼** scrolling key on the keypad.
5. After choosing a line, it will show **YES** and **NO**, when choosing **YES**, you need to enter the handset ID or group ID for extension number. If you choose **NO**, it will go back to Line Setting menu.

**Notes:**

1. When entering Line Dedication setting, it will show line and status. If line is already dedicated to a specific handset or group, it will show the handset or group ID behind the line. If line isn't dedicated to a specific handset yet, it will show "ALL HS" behind the line.
2. When setting Line Dedication, make sure the handset or group ID is correct to avoid losing calls sent to an DuraWalkie handset or invalid ID.
3. Handsets dedicated to a port will also receive calls from non-dedicated line as well as the handset's dedicated line. Use Line Dedication for a group on other lines to further manage calls

**Line Selection (Register to PRO base only)**

1. Press **MENU** - **5** - **8** while the phone is in standby to enter Line Select menu.
2. Use **▲** or **▼** to switch between **On** and **Off**, default = Off.
3. If set to On, when pressing  or entering a phone number followed by pressing  key, the handset LCD display will show "Select Line" followed by available lines (1~4). Select from one of the available lines i.e. press **1** to select line 1 and press **2** to select line 2.
4. This feature is also supported when selecting a second line during call conferencing.

**Change System and Line Settings by Administrator (Register to PRO base only)**

1. There are two system parameters that can be changed by the administrator: clear (de-register) handset ID and set the next handset ID to be assigned by the base.
2. From an administrator handset (Handset 10 or 11), press **MENU**(Right) soft key.
3. Press number **9**, this will enter the administration menu.
4. Press number **1**, handset enters System setting menu.
  - a. Dial tone:  
Press **1** to set up the dial tone to be either "Tone" or "Pulse." Press **1** to choose "Tone" or press **2** to choose "Pulse."

**b. Flash time:**

Press **2** to set up the flash time from 100ms, 200ms, to 900 ms (9 levels to choose from.) For example, press **2** if the desired flash time is 200ms.

**c. Line Detect:**

Press **3** to set up the line detect to be either "On" or "Off." Press **1** to choose "On" or press **2** to choose "Off."

**d. Clear Handset ID:**

Press **4** and enter a two-digit Handset ID when prompted to clear this ID for later assignment.

**e. Set next Handset ID to be assigned:**

Press **5** and enter a two-digit Handset ID when prompted. This is the ID that will be given out by the base to the next handset registering with the base.

**5. Press number **2**, handset enters Line Setting menu.****a. Enter Base ID(00~07) to access base.****b. Press **1** to enter Broadcast setting**

- i. Press handset **OFF**(Right softkey) to disable broadcasting function;
- ii. Or press handset **ON**(Left softkey) to enable broadcasting function

**c. Press **2** to enter Line dedication setting**

- i. Select base's line and press handset **CHANGE**(Right softkey)

**ii. Line Dedicate confirm:**

Press **NO**(Right softkey) to go back Line Setting Menu.

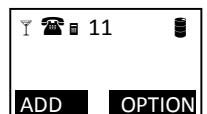
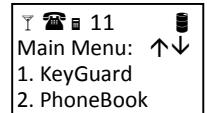
Press **YES**(Left softkey) then enter extension number.

**Note:**

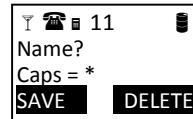
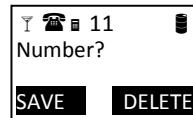
De-registration by the administrator will disable a handset's ability to use the base station to make or receive phone calls. This also frees up the ID for future registration.

**Phonebook Operations (Register to 1X base only)**

1. You can store up to 30 entries in the phonebook. Each entry can contain a phone number or handset ID (up to 28 digits) and a name (up to 14 characters).
2. To access the phonebook, press menu follow by "2" or **▲** or **▼** scrolling key while the handset is in standby mode.
3. To add a new entry:



- a. Press **ADD** (Left) soft key.
- b. Enter a phone number when LCD prompts “Number?” Use **DELETE** (Right) soft key to delete the last digit entered. When completed, press **SAVE** (Left) soft key to save.
- c. You will then be prompted to enter a name for the phone number just entered.
  - (1) Press the **SAVE** key to enter a phone number without a name. All records without naming will be placed on top of the list, in the order they are entered.
  - (2) To enter the name, press the corresponding keypad number one or more times according to the order of the character on the key. See table below for a list of available characters and their orders. For example, press “2” once for the character “A”, twice for “B”, etc.
  - (3) Use **DELETE** (Right) soft key to delete the last character entered. When completed, press **SAVE** (Left) soft key to save.



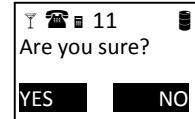
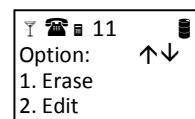
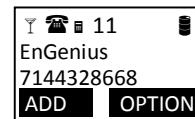
#### Notes:

1. When enter a phone number, the cursor automatically advances to the next digit field. Use **▲** or **▼** scrolling key to move the cursor backward or forward to insert or delete (the digit above the cursor, or left of the cursor if cursor is on the right of the last digit).
2. When entering a name, the cursor automatically advances to the next character field if you press a different key for the next character. If you need to enter consecutive characters from the same key, you can wait for the cursor to advance or use **▲** or **▼** scrolling key to move the cursor backward or forward manually. Also use **▲** or **▼** to move the cursor to insert (to the left of the cursor) or delete (the character above the cursor, or left of the cursor if cursor is on the right of the last character).
3. By default, all letters are entered in the upper case. Use the \* key to toggle between upper and lower cases.
4. A “Pause” entry represents a 2.8 second delay in dialing the following digits, which is useful when calling a sequence of segmented numbers (e.g., access code, credit card number, auto-attendant entries, etc.) Pause is entered by pressing the \* key twice (LCD displays P). Entering pause twice (PP) will result in 5.6 seconds pause in the dialing.

#### 5. Character Table:

Key	Characters and Orders
1	' + , . * ( ) & 1
2	A B C 2
3	D E F 3
4	G H I 4
5	J K L 5
6	M N O 6
7	P Q R S 7
8	T U V 8
9	W X Y Z 9
0	0
*	Toggle case when in character editing * P (Pause) when in number editing
#	Space – when in character editing # when in number editing

4. The entries are alphabetically sorted and stored as a list in an ascending order (A to Z) from the top of the list.
  - a. If the phonebook is entered from the menu, the first entry displayed is the top of the list.
  - b. If the phonebook is entered using the  arrow, the first entry displayed is the top of the list.
  - c. If the phonebook is entered using the  arrow, the first entry displayed is the bottom of the list.
5. The first line of LCD display shows name and the 2<sup>nd</sup> line shows the phone number. If the phone number is longer than 14 digits, press **OPTION** (Right) soft key and select Option 3 to view the complete number.
6. To search for a record:
  - a. Use  or  scrolling key to enter the Phone Book mode.
  - b. Press a key that corresponds to the first character of the name you are looking for.
  - c. For example, you are looking for "EnGenius", and then press the number "3" once.
  - d. Use  or  scrolling key to locate the exact record you are looking for.
7. To erase phonebook:
  - a. Use  or  scrolling key or the alphabetical search method to locate the record to be erased or edited.
  - b. Press **OPTION** (Right) soft key to enter editing menu.
  - c. Press "1" to erase the designated phone entry.
  - d. LCD shown "Are you sure?" Press **YES** to double confirm your change.
8. To edit phonebook:
  - a. Use  or  scrolling key or the alphabetical search method to locate the record to be erased or edited.
  - b. Press **OPTION** (Right) soft key to enter editing menu.
  - c. Press "2" to edit the designated phone entry.



9. Dial from display:
  - a. Press  or  to dial the phone number or Handset ID displayed.

### Phonebook Operations (Register to PRO base only)

1. You can store up to 90 entries in the phonebook. Each entry can contain a phone number or handset ID (up to 28 digits) and a name (up to 14 characters).  
Re: For DuraWalkie, each entry can store 2 digits handset ID or Group ID.
2. To access phonebook, press **MENU** followed by **2** or  or  scrolling key when handset in standby mode.
3. To add a new entry:
  - a. Press **ADD** soft key.
  - b. Enter a phone number when LCD prompts "Number?" Use **DELETE** soft key to delete the last digit entered. Press **SAVE** when completed.
  - c. You will then be prompted to enter a name for the phone number just entered.
    - (1) Press **SAVE** key to enter a phone number without a name. All records without a name will be placed on top of the list, in the order they are entered.
    - (2) To enter the name, press the corresponding keypad number one or more times according to the order of the character on the key.
    - (3) Use **DELETE** soft key to delete the last character entered. When completed, press **SAVE** soft key to confirm your selection.

#### Notes:

1. When entering a phone number, the cursor automatically advances to the next digit field. Use  or  scrolling key to move the cursor backward or forward to insert or delete.
2. When entering a name, the cursor automatically advances to the next character field if you press a different key for the next character. If you need to enter consecutive characters from the same key, you can wait for the cursor to advance or use  or  scrolling key to move the

cursor backward or forward manually. Also use  or  to move the cursor to insert or delete.

3. By default, all letters are entered in the upper case. Use the **\*** key to toggle between upper and lower cases.
4. A "Pause" entry represents a 2.8 second delay in dialing the following digits, which is useful when calling a sequence of segmented numbers (e.g., access code, credit card number, auto-attendant entries, etc.)  
Pause is entered by pressing the **\*** key twice (LCD displays P). Entering pause twice (PP) will result in 5.6 seconds pause in the dialing.
4. The entries are alphabetically sorted and stored as a list in an ascending order (A to Z) from the top of the list.
  - a. If the phonebook is entered from the menu, the first entry displayed is from the top of the list.
  - b. If the phonebook is entered using the , the first entry displayed is from the top of the list.
  - c. If the phonebook is entered using the , the first entry displayed is from the bottom of the list.
5. The first line of LCD display shows name and the 2<sup>nd</sup> line shows the phone number. If the phone number is longer than 14 digits, press **OPTION** soft key and select Option 3 to view the complete number.
6. To search for a record:
  - a. Use  or  scrolling key to enter the Phone Book mode.
  - b. Press a key that corresponds to the first character of the name you are looking for.
  - c. For example, you are looking for "EnGenius", and then press the number **3** once.
  - d. Use  or  scrolling key to locate the exact record you are looking for.
7. To erase phonebook entry:
  - a. Use  or  scrolling key or the alphabetical search method to locate the record to be erased.
  - b. Press **OPTION** soft key to enter editing menu.
  - c. Press **1** to erase the designated phone entry.
  - d. LCD shown "Are you sure?" Press **YES** to double confirm

your change.

8. To edit phonebook entry:
  - a. Use  or  scrolling key or the alphabetical search method to locate the record to be edited.
  - b. Press **OPTION** soft key to enter editing menu.
  - c. Press **2** to edit the designated phone entry.
9. Dial from display:
  - a. Press **TALK** or Intercom to dial the phone number or Handset ID displayed.
10. To transfer phonebook:  
To transfer phonebook, both parties have to enter the phonebook transfer mode firstly by following below:
  - a. Press **OPTION** follow by **4** or  or  scrolling key when handset in phonebook mode.
  - b. For phone sending party, press **1** to enter sending mode.
    - i. Either press **TX ALL** (left softkey) to transfer all phonebook entries to another handset(s).
    - ii. Or press **TX ONE** (right softkey) to transfer one entry to another handset(s).
    - iii. Press 2-digit handset ID or group ID, then select all phonebook entries or one entry to be transferred.  
Re : "00" means all handsets
    - iv. During phonebook transferring, LCD shows "Sending" and 2-digit countdown on the LCD to indicate the phonebook numbers which are waiting for sending.
  - c. For phonebook receiving party, press **2** to enter receiving mode.
    - i. When entering the receiving mode, LCD shows "Ready".
    - ii. Start to receive phonebook, LCD shows "Get phonebook from Ext. # : xx".
    - iii. A beep emitted when receiving each phonebook.
    - iv. When the phonebook receiving, 2-digit countdown on the LCD to indicate the phonebook numbers which are waiting for receiving.

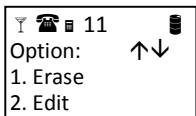
Re: The phonebook transfer through the wireless interface, it may partially miss transmission by interference.

**Notes:****Character Table:**

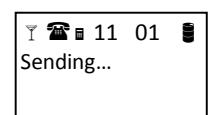
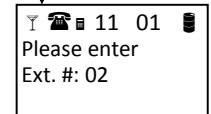
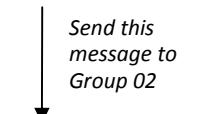
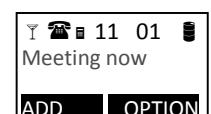
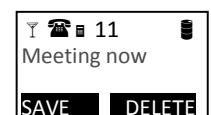
Key	Characters and Orders
1	' + , . * ( ) & 1
2	A B C 2
3	D E F 3
4	G H I 4
5	J K L 5
7	P Q R S 7
8	T U V 8
9	W X Y Z 9
0	0
*	Toggle case when in character editing * P (Pause) when in number editing
#	Space – when in character editing # when in number editing

**Call barring (Register to 1X base only)**

1. Block the users from dialing the long distance calls or international calls. You need the password to enter the setting. The default PW is "0000".
2. Use  or  scrolling key to switch between On and Off of this setting. The default is "Off". Press **SAVE** to confirm your selection.
3. To edit the Call barring code
  - a. Once turn on the call barring feature, you can key in the "call barring" code.
    - (1) Up to 5 digit can be edit to be call barring code. For example, if you want to block all call dialing to Manhattan, NY area, you can enter 1212 as the call barring code.
    - (2) If you base station is adjust to a PBX system, please also include that specific number to retrieve the PSTN tone.
  - b. Press **OPTION** to erase or edit the call barring codes.
  - b. Up to 5 set of call barring codes can be programmed.

**Text Messaging (Register to 1X base only)**

1. Short text messages, up to **25** characters each, can be sent from a handset to another handset or a group of handsets.
2. Up to 5 outgoing messages can be edited, stored and sent. They are stored in the "Outbox" in the order they are entered, with Message 01 being the most recent entry. The message counter on the upper right corner of the LCD display shows the message ID.
3. Up to 5 received messages can be stored for later reference. They are stored in the "Inbox" in the order they are received, with Message 01 being the most recently received. The message counter on the upper right corner of the LCD display shows the message ID.
4. Viewing and editing outgoing text messages:
  - a. Press **MENU** (Right) soft key while the handset is in standby.
  - b. Press "7" following by "2" to enter Outbox menu.
  - c. Press **ADD** (Left) soft key to enter a new text message.
    - (1) Enter characters using the Character Table and method discussed in the Phonebook section.
    - (2) Use  or  scrolling key to move the cursor backward or forward to insert character or delete the character. For example, you are editing the message 1 as "Meeting now."
    - (3) When finished, press **SAVE** (Left) soft key to save change. You will see the Text Message ID as 01 on the upper right corner of the LCD screen.
5. Sending a text message:
  - a. While viewing the message, press **INT** key followed by a Handset ID or a Group ID (01-09).
  - b. The current message is sent.
  - c. There will be no acknowledgement returned.
6. To erase or edit the current messages:
  - a. Press **MENU**-7-2 to enter outbox text message.
  - b. Press **OPTION** (Right) soft key to erase or edit the current message:
    - (1) Press "1" and confirm to erase message. Subsequent messages will be moved up in the



### Outbox.

(2) Press "2" to edit message. Follow the instructions above for entering a new message.

### 7. Receiving a text message:

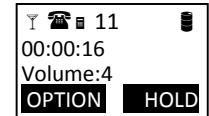
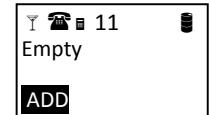
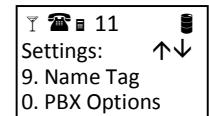
- When a message arrives, a double beep alerts the arrival of a text message.
- The text message remains on the LCD display for 8 seconds and then is automatically stored in the Inbox.

### 8. Viewing received text messages:

- Press **MENU**-7-1 to enter Inbox menu
- The LCD displays Message 01, the most recent received message. Use  or  to view previous messages. The LCD displays Empty if there is no inbound text message.
- Press **SAVE** (Left) soft key to return the message to Inbox.
- Press **DELETE** (Right) soft key and confirm to delete the current message. Subsequent messages will be moved up in the Inbox.

### Programmable PBX Options (Register to 1X base only)

- When DuraFon 1X base unit installed behind the PBX system, it is feasible to pre-program some PBX features along with their feature codes into the system.
- Up to 9 most frequently used PBX feature codes can be pre-programmed.
- Name and enter PBX feature codes:
  - Press **MENU** (Right) soft key while the handset is in standby.
  - Press "5" following by "0" to enter "PBX Options" menu.
  - Press **ADD** soft key to edit a PBX feature to be memorized.
  - Key in the name of the PBX features just like editing a phonebook entry i.e. PBX Transfer. Press **SAVE** to confirm your entries.
  - Key in the feature code of the correspondence PBX feature i.e. Flash\*70. Press **SAVE** to confirm your entries.
  - The first PBX feature and the correspondence feature code you enter will appear on the LCD screen.  
*[note] "F" represents the Flash signal*
  - Press **OPTION** soft key to Erase or Edit the PBX feature you program into the system.
  - Repeat the same operation to edit the second and even the third PBX feature that you will use frequently.
- Using pre-programmed PBX feature during the call.
  - Press **OPTION** soft key while the handset is in talk mode.
  - Press the correspondence number of the function you want to perform i.e. press **1** to perform "PBX Transfer" function.
  - Press  when you finish the desired function and back to standby mode.

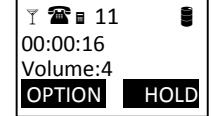
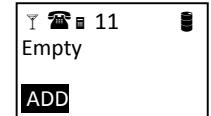
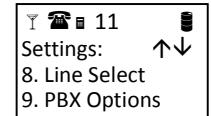


Notes:

1. This feature would be useful if the DuraFon 1X base unit is adjunct to a PBX system.
2. Only "Mute" function will be displayed if you have not preprogrammed any PBX features into the system.
3. The DuraFon 1X's Programmable PBX Options may not function with all PBX / Key systems due to the diversity of various proprietary systems.

### Programmable PBX Options (Register to PRO base only)

1. When DuraFon PRO base unit installed behind the PBX system, it is feasible to pre-program some PBX features along with their feature codes into the system.
2. Up to 9 most frequently used PBX feature codes can be pre-programmed.
3. Name and enter PBX feature codes:
  - a. Press **MENU** (Right) soft key while the handset is in standby.
  - b. Press "5" following by "9" to enter "PBX Options" menu.
  - c. Press **ADD** soft key to edit a PBX feature to be memorized.
  - d. Key in the name of the PBX features just like editing a phonebook entry i.e. PBX Transfer. Press **SAVE** to confirm your entries.
  - e. Key in the feature code of the correspondence PBX feature i.e. Flash\*70. Press **SAVE** to confirm your entries.
  - f. The first PBX feature and the correspondence feature code you enter will appear on the LCD screen.  
*[note] "F" represents the Flash signal*
  - g. Press **OPTION** soft key to Erase or Edit the PBX feature you program into the system.
  - h. Repeat the same operation to edit the second and even the third PBX feature that you will use frequently.
4. Using pre-programmed PBX feature during the call.
  - a. Press **OPTION** soft key while the handset is in talk mode.
  - b. Press the correspondence number of the function you want to perform i.e. press 1 to perform "PBX Transfer" function.
  - c. Press  when you finish the desired function and back to standby mode.



**Notes:**

1. This feature would be useful if the DuraFon PRO base unit is adjunct to a PBX system.
2. Only "Mute" function will be displayed if you have not preprogrammed any PBX features into the system.
3. The DuraFon PRO's Programmable PBX Options may not function with all PBX / Key systems due to the diversity of various proprietary systems.

**Broadcast through PBX (Register to PRO base only)**

1. DuraFon PRO and DuraWalkie both have the broadcast function, each can broadcast another handset without going through the base station, as long as the handsets are connecting. However, when setting up the multi-base, the broadcast feature may not be available due to the coverage range. In that case, you can use the function of "Broadcast through PBX" to broadcast.
2. From an administrator handset (Handset 10 or 11), press **MENU**(Right) soft key.
3. Press number **9**, this will enter administration menu.
4. Press number **2**, handset enters Line setting menu.
  - a. Enter Base ID(00~07) to access base.
  - b. Press **1** to enter Broadcast setting
    - i. Press **▲** or **▼** to select L3 or L4 (the status of setting will be displayed on LCD)
    - ii. Press **CHANGE** to enter the setting mode, and the base ID will be displayed on LCD.
    - iii. Press **On** (Left softkey) to enable the broadcast function. Press **Off** (Right softkey) to disable the broadcast function.
    - iv. After setting broadcast, press **On** (Left softkey) to enable the AA. Press **Off** (Right softkey) to disable the AA.  
Re: L3 and L4 can be setting as two broadcast lines, repeated above items for setting 2nd broadcast line.
  5. When calling through the line 3 or 4, the caller will be prompted by the greeting message to enter a two-digit extension number

( "01" ~ "07" for Group ID: "10" ~ "99" for Handset ID: "00" for all).

- a. The greeting message : "Please enter the extension number"
- b. If there is no entry after 5 seconds, the broadcast will be enabled to all handsets.

**Note :**

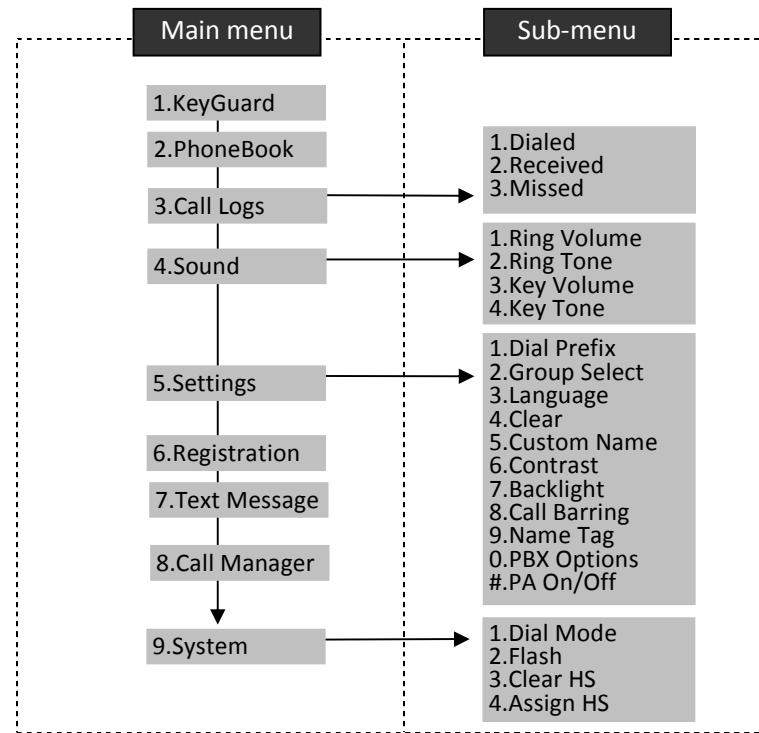
1. Line 3 and or 4 can be reserved for broadcast function.
2. For a single broadcast port; reserve Line 3 for broadcast and line dedicate (see pg. 46) Line 4 to a non-existent handset (ie: 99).
3. A base unit configured with a single broadcast port Lines 1 and 2 may be used as standard telephone ports or lines.
4. For dual broadcast ports; reserve Line 3 and 4 for broadcast and line dedicate Lines 1 and 2 to a non-existent handset (ie: 99)
5. Broadcast is limited to 30 seconds.

**Repeater Operation (Register to PRO base only)**

1. Due to the range performance of handset to handset calls (intercom or broadcast) isn't as good as line calls, in order to get better range performance for handset to handset calls, install a repeater and make the calls via repeater is the solution.
2. The procedure of repeater's registration is same as the multi-base which can be performed by administrator handset (Handset 10 and 11).
3. From an administrator handset (Handset 10 or 11), press **MENU** – **7** to enter the "BC/INT Type" menu setting.
4. Press **▲** or **▼** key to select "Repeater Mode", then press **SAVE** (Left softkey) to confirm the selection.  
Re : When setting to "Repeater" mode, the handset to handset calls will always via repeater.
5. Enter the base number (00~07) which assigned the base to be a repeater.
6. The default of "BC/INT Type" is "P2P Mode".

**Notes:**

- a. The repeater must work with PRO system.
- b. A repeater can only support 2 simultaneous intercom calls (2 pairs handsets).  
Or can only support 1 broadcast call.
- c. In order to operate with a PRO system, the repeater must be assigned a base ID from the PRO system, please refer to the multi-base setup to add the repeater as a multi-base.
- d. The handsets which intend to work with the repeater require enabling a "Repeater Mode".
- e. When enabling the "Repeater Mode", both intercom and broadcast calls will go via the repeater, instead of the original direct handset to handset (P2P mode).
- f. A repeater will no longer support any PSTN call.
- g. No support putting the repeaters in cascade.

**Menu Operations (Register to 1X base only)**

1. Press **MENU** (Right) soft key while the phone is in standby.
2. Press "1" to lock keypad (see Key Guard operation on page [34](#)).
3. Press "2" to view, search, delete, and edit the phonebook (see Phonebook instruction on page [51](#)).
4. Press "3" to view the last 10 numbers called, received, or missed. Records can be erased or edit/save into the phonebook.
  - a. Press "1" to view the last 10 phone numbers dialed, starting from the most recent one. Use **▲** or **▼** to scroll through the list. Press **OPTION** for options.
    - (1) Erase: press "1" and confirm to erase the current record.
    - (2) Save: press "2" to edit and save or save without editing into the phonebook.
    - (3) View Number: press "3" to view the complete number if the phone

- number is longer than 14 digits.
- b. Press “2” to view the last 10 phone numbers received, starting from the most recent one. Use  or  to scroll through the list. Press **OPTION** for options.
  - (1) Erase: press “1” and confirm to erase the current record.
  - (2) Save: press “2” to edit and save or save without editing into the phonebook.
  - (3) View Number: press “3” to view the complete number if the phone number is longer than 14 digits.
  - (4) No entries: the LCD displays “No entries” if there is no “Received call logs”. Please note that you need to subscribe the Caller ID service from your local teleco to facilitate this function.
- c. Press “3” to view the last 10 phone numbers received but didn’t answer, starting from the most recent one. Use  or  to scroll through the list. Press **OPTION** for options.
  - (1) Erase: press “1” and confirm to erase the current record.
  - (2) Save: press “2” to edit and save or save without editing into the phonebook.
  - (3) View Number: press “3” to view the complete number if the phone number is longer than 14 digits.
  - (4) No entries: the LCD displays “No entries” if there is no “Missed call logs”. Please note that you need to subscribe the Caller ID service from your local teleco to facilitate this function.
- d. While viewing any of the three call logs, press **DIAL** to dial the phone number.

**Notes:**

- 1. Only phone numbers are stored in the three call logs. Intercom calls are not recorded.
- 2. Caller ID service is required from your local phone company in order to receive phone numbers, names and time stamps on incoming calls. The Received and Missed Call Logs will register no incoming calls if Caller ID service is not available.

- 5. Press “4” to set sound-related settings:
  - a. Press “1” to select ringer volume: use  or  to scroll through 6 options: Medium, Low, Vibrate, Off, High-then-Vibrate, and High. Press **SAVE** to save selection. Default = Medium.
  - b. Press “2” to select ringer tone: use the  or  to scroll through 4 options: 0, 1, 2, and 3. Press **SAVE** to save selection. Default = 0.

- c. Press “3” to select key volume when a key is pressed: use  or  to scroll through 3 options: High, Low, and Off. Press **SAVE** to save selection. Default = Low.
- d. Press “4” to select key tone: use the  or  to scroll through 4 options: 0, 1, 2, and 3. Press **SAVE** to save selection. Default = 0.
- 5. Press “5” to change handset settings:
  - a. Press “1” to set dialing prefix:
    - (1) Use  or  to scroll and select to turn on or off the dialing prefix feature. Default = Off.
    - (2) If “On” is selected, the handset is prompted to enter a prefix, up to 14 digits.
    - (3) Use **Delete** and  or  scrolling key to edit prefix.
    - (4) When this feature is turned on, the LCD will prompt the user on each outgoing phone call except during redial or dialing by pressing the  key first whether to use the dialing prefix. The current prefix is also displayed. Press **Yes** or **No** soft key to add the prefix to the beginning of the number.
    - (5) This feature is useful for access code, calling card, and credit card calls, etc.
  - b. Press “2” to Group Select: see Handset Group Subscription on page [40](#).
  - c. Press “3” to select language
    - (1) Use  or  to select English, Spanish, French. The default setting is English.
    - (2) Press **SAVE** to confirm your selection.
  - d. Press “4” to clear call logs and phonebook:
    - (1) Press ‘1’ and confirm to delete the entire phonebook.
    - (2) Press “2” and confirm to clear the three call logs (Called, Received, and Missed).
  - e. Press “5” to change the power-up LCD display to show, e.g., customer name or other greeting message:
    - (1) Use  or  to move the cursor backward or forward to insert (to the left of the cursor) or delete (the character above the cursor, or left of the cursor if cursor is on the right of the last character).
    - (2) Enter characters using the Character Table and method discussed in the Phonebook section.
    - (3) When finished; press **SAVE** to save change.
  - f. Press “6” to change LCD display contrast:
    - (1) Use  or  to scroll through values 1 to 8. Pick one that is most suitable to you. Default = 6.

(2) When finished; press **SAVE** to save change.

g. Press "7" to change the LCD backlight:

- (1) Use  or  to scroll through options: On, Off, and 20 Seconds. Default = 20 seconds, meaning that the backlight will turn off the backlight after 20 seconds of inactivity.

(2) When finished; press **SAVE** to save change.

h. Press "8" to edit Call Barring

- (1) Need to Enter Password to edit the call barring code to be executed. The default PW is "0000."
- (2) Please refer to page 58 for detail operation.

i. Press "9" to enable Name tag

- (1) Use  or  to switch between On and Off. The default setting is Off.
- (2) When finished; press **SAVE** to save change.

j. Press "0" to program PBX features that you use frequently

- (1) Program and save the most frequently used PBX function into DuraFon system.
- (2) Please refer to page 63 for detail operation.

k. Press "#" to turn Broadcast On/Off.

- (1) Press **ON** (Left) soft key to turn on the broadcast function (including the broadcast of handset to handset or base to handset).
- (2) Press **OFF** (Left) soft key to turn off the broadcast function. Re: when broadcast setting "OFF", there is an icon indicated in the display, side of the battery icon.

6. Press "6" to register or de-register handset: See the detail instructions on page 36.

7. Press "7" to view inbox text message(s) or edit outbox text message(s). See the detail instructions on page 59.

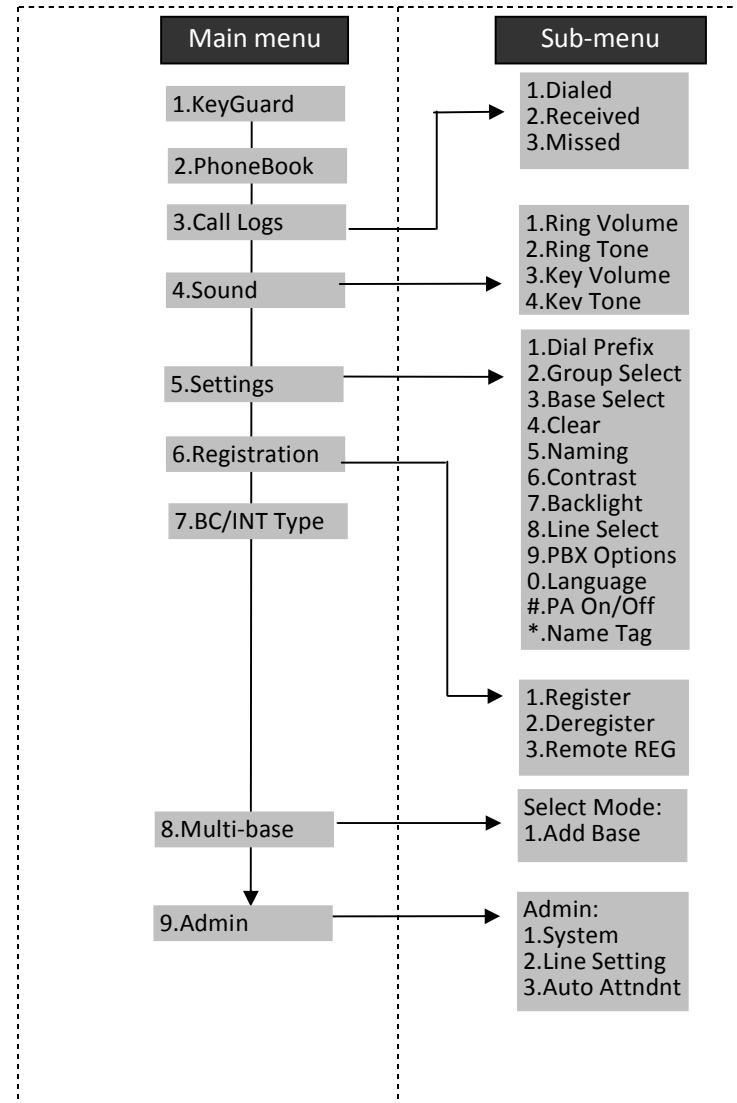
8. Press "8" to enter Call Manager setting.

- a. Press "1" to edit "incoming call" setting. See the detail instructions on page 42.
- b. Press "2" to edit "outgoing call" setting.

- (1) Once activate Select BS function, you need to enter the base ID which you want to choose for an outgoing call.
- (2) The default setting is OFF.

9. Press "9" following by entering a base ID to enter System setting. See the detail instructions on page 50.

## Menu Operations (Register to PRO base only)



1. Press **MENU** (Right) soft key while the phone is in standby.
2. Press **1** to lock keypad (see Key Guard operation on page 34).

3. Press **2** to view, search, erase, edit and transfer the phonebook (see Phonebook operation on page [55](#)).
4. Press **3** to view the last 10 numbers called, received, or missed. Records can be erased or edit/save into the phonebook.
  - a. Press **1** to view the last 10 phone numbers dialed, starting from the most recent one. Use **▲** or **▼** to scroll through the list.
    - i. Press **OPTION** (Right) soft key for options.
      - Press **1** and confirm to erase the current record.
      - Press **2** to edit and save or save without editing into the phonebook.
      - Press **3** to view the complete number if the phone number is longer than 14 digits.
  - b. Press **2** to view the last 10 phone numbers received, starting from the most recent one. Use **▲** or **▼** to scroll through the list.
    - i. Press **OPTION** (Right) soft key for options.
      - Press **1** and confirm to erase current record.
      - Press **2** to view the arrival date and time of the call.
      - Press **3** to edit and save or save without editing into the phonebook.
  - c. Press **3** to view the last 10 phone numbers received but not answered, starting from the most recent one. Use **▲** or **▼** to scroll through the list.
    - i. Press **OPTION** (Right) soft key for options.
      - Press **1** and confirm to erase current record.
      - Press **2** to view the arrival date and time of the call.
      - Press **3** to edit and save or save without editing into the phonebook.
  - d. The two-digit index on the upper right corner of the LCD display shows the location in ascending order, with 01 being the most recent call.
  - e. While viewing any of the three call logs, press **DIAL** (Left) soft key to dial the phone number.

**Notes:**

1. Only phone numbers are stored in the three call logs. Intercom calls are not recorded.
2. Caller ID service is required from your local phone company in order to receive phone numbers, names and time stamps on incoming calls. The Received and Missed Call Logs will register no incoming calls if Caller

ID service is not available.

3. The Caller ID feature may not be supported by all PBX or Key systems' analog ports, check with your equipment provider

5. Press **4** to set sound-related settings:
  - a. Press **1** to select ringer volume: Use **▲** or **▼** to scroll through 6 options: Low, Medium, High, Vibrate, Vib and Ring, Off. Press **SAVE** (Left) soft key to save selection. Default = Medium.
  - b. Press **2** to select ringer tone: Use **▲** or **▼** to scroll through 4 options: 0, 1, 2, and 3. Press **SAVE** (Left) soft key to save selection. Default = 0.
  - c. Press **3** to select key volume when a key is pressed: Use **▲** or **▼** to scroll through 3 options: High, Low, and Off. Press **SAVE** (Left) soft key to save selection. Default = Low.
  - d. Press **4** to select key tone: Use **▲** or **▼** to scroll through 4 options: 0, 1, 2, and 3. Press **SAVE** (Left) soft key to save selection. Default = 0.
6. Press **5** to change handset settings:
  - a. Press **1** to set dialing prefix:
    - i. Use **▲** or **▼** to scroll and select to turn on or off the dialing prefix feature. Default = Off.
    - ii. If "On" is selected, the handset is prompted to enter a prefix, up to 14 digits.
    - iii. Use **DELETE** (Right) soft key and **▲** or **▼** to edit prefix.
    - iv. When this feature is turned on, the LCD will prompt the user on each outgoing phone call except during redial or dialing by pressing the  key first whether to use the dialing prefix. The current prefix is also displayed. Press "YES" (Left) or "NO" (Right) soft key to add the prefix to the beginning of the number.
    - v. This feature is useful for access code, calling card, and credit card calls, etc.
  - b. Press **2** to Group Select: see Handset Group Subscription on page [40](#).
  - c. Press **3** to set or turn Base Select on or off. Default = Off. See Base Select.
  - d. Press **4** to clear call logs and phonebook:
    - i. Press **1** and confirm to delete the entire phonebook.
    - ii. Press **2** and confirm to clear the three call logs (Called, Received, and Missed).
  - e. Press **5** to edit the name of Custom or Line:

- e-1. Press **1** to change the power-up LCD display to show, e.g., customer name or other greeting message;
- e-2. Press **2** to change the name of line, when calls coming, it will indicate the calls came from which line.
  - i. Use or to move the cursor backward or forward to insert (to the left of the cursor) or delete (the character above the cursor, or left of the cursor if cursor is on the right of the last character).
  - ii. Enter characters using the Character Table and method discussed in the Phonebook section.
  - iii. When finished, press **SAVE** (Left) soft key to save change.
- f. Press **6** to change LCD display contrast:
  - i. Use or to scroll through values **1 to 8**. Pick one that is most suitable to you. Default = **6**.
  - ii. Press **SAVE** (Left) soft key to save setting.
- g. Press **7** to change the LCD backlight:
  - i. Use or to scroll through options: On, Off, and 20 Seconds. Default = 20 seconds, meaning that the backlight on, will turn off after 20 seconds of inactivity.
  - ii. Press **SAVE** (Left) soft key to save setting.
- h. Press **8** to change the Line selection:
  - i. Use or to scroll through options: On or Off. Default = Off, meaning that you can not select the other available lines to dial.
  - ii. Press **SAVE** (Left) soft key to save setting.
- i. Press **9** to change the PBX options:
  - i. Press **ADD** soft key to edit a PBX feature to be memorized and key in the name of the PBX features just like editing a phonebook entry.
  - ii. Press **SAVE** (Left) soft key to save setting.
  - iii. Press **OPTION** and **1** following by entering PBX options mode, you can erase the PBX option.
  - iv. Press **OPTION** and **2** following by entering PBX options mode, you can edit the PBX option.
  - v. Press **OPTION** and **3** following by entering PBX options mode, you can transfer the PBX options to other handset(s).

Re: To transfer PBX Options, both parties have to enter the PBX Option mode firstly by following below:

For sending party, press **1** to enter sending mode.

  - Either press **TX ALL**(left softkey) to transfer all PBX options to another handset(s).
  - Or press **TX ONE**(right softkey) to transfer a specific entry to another handset(s).
  - Press 2-digit handset ID or group ID, then select all PBX options

or a specific entry to be transferred (“00” means all handsets)

- During PBX options transferring, LCD shows “Sending”, and 2-digit countdown on the LCD to indicate the numbers of PBX options which are waiting for sending.

For receiving party, press **2** to enter receiving mode.

- When entering the receiving mode, LCD shows “Ready”.
- Start to receive PBX options, LCD shows “Get PBX options from Ext. # : x x”.
- When the PBX options is receiving, 2-digit countdown on the LCD indicates the number of PBX options which are waiting to be received.

**Note:**

1. Different PBX makers use different analog codes to control PBX function, like call transfer, call park, etc.; Please refer to your PBX maker’s manual for this information.
2. Errors may occur in PBX options and phonebook entries transferred wirelessly due to interference. Please re-enter entry manually if problems occur with a entry.

- j. Press **0** to change Language:
  - i. Use or to scroll through options: English and Portuguese. Default = Portuguese, meaning the LCD display shows in English.
  - ii. Press **SAVE** (Left) soft key to save setting.
- K. Press **#** to turn Broadcast On/Off.
  - i. Press **On** (Left softkey) to turn on the broadcast function (including the broadcast of handset to handset and base to handset).
  - ii. Press **Off**(Left softkey) to turn off the broadcast function

Re: When broadcast setting “Off”, there is an icon indicated in the display, side of the battery icon.
- L. Press **\*** to turn Name Tag On/Off.
  - i. Press **On** (Left softkey) to turn on the name tag function, when receiving the incoming calls, the LCD will show the name which stored in phonebook.
  - ii. Press **Off**(Left softkey) to turn off the name tag function.
- 7. Press **6** to register or de-register handset: See Handset Registration.
- 8. Press **7** to set up the intercom or broadcast via repeater(see Repeater Setup).

9. Item 8 is to add new bases.

From an administrator handset (Handset 10 or 11) to set new Base 01~07. Maximum additional bases is up to 8. Before adding a new base, the Handset must be registered in master base(Base ID =00).

- a. Press REG button on new Base.
- b. Use Handset 10 or 11 to Add base: Press MENU → 8 → 1
- c. Enter 01~07 (base ID)

10. Press 9 to change system and Line setting: See System and Line Setting.

## Technical Specifications

Electrical Specifications	Portable Handset
Frequency	902-928 MHz
RF Output Power	Peak: 26 dBm Average: 20 dBm
Channel Spacing	200 kHz
Number of Channels	128
Modulation	Differentially Encoded MSK
Multiple Access	Frequency Hopping TDD
Frequency Hopping Rate	100 per second
TDD Frame Length	10 ms
Number of Slots/Frame	4
Receiver Sensitivity	<-108dBm (@ BER 10 <sup>-2</sup> )
Antenna Gain	Long: 2.dBi; Short: 1.5 dBi
Antenna Connector	Proprietary
Telephone Interface	NA
Channel Coding	8 kbps Convolutional + CRC
Transmission Data Rate	176.678 kbps
Speech Coding	8 kbps G.729
User Data Rate	128kbps duplex
Duplex	Time Division Duplex (TDD)
Number of System ID	65,536
Ring Signal	NA
Flash Time	NA
Power Source	3.7V/1100mAh Li-Ion Battery
Charge Time	3hours
Regulation Compliance	FCC Part 15, Part 68 Hearing Aid Compatible Canada RSS-210, CS03
Operating Temperature	-10 – 60 °C
Storage Temperature	-40 – 70 °C
Humidity	20 – 75 %

Notes:

1. NA = Not Applicable.
2. The manufacturer reserves the right to change designs and specifications without notice.

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