

# User Manual

## SP-935

### Digital Long Range Cordless Phone



EnGenius Customer Service  
<http://www.engiustech.com/>

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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 expressly 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

**SP-935**

**FCC ID: A8J-SP935**

**IC: 10103A-SP935**

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.

#### Base Station

##### 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:****FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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.

**IMPORTANT NOTE:****Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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

**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.

**IMPORTANT NOTE:****Radiation Exposure Statement:**

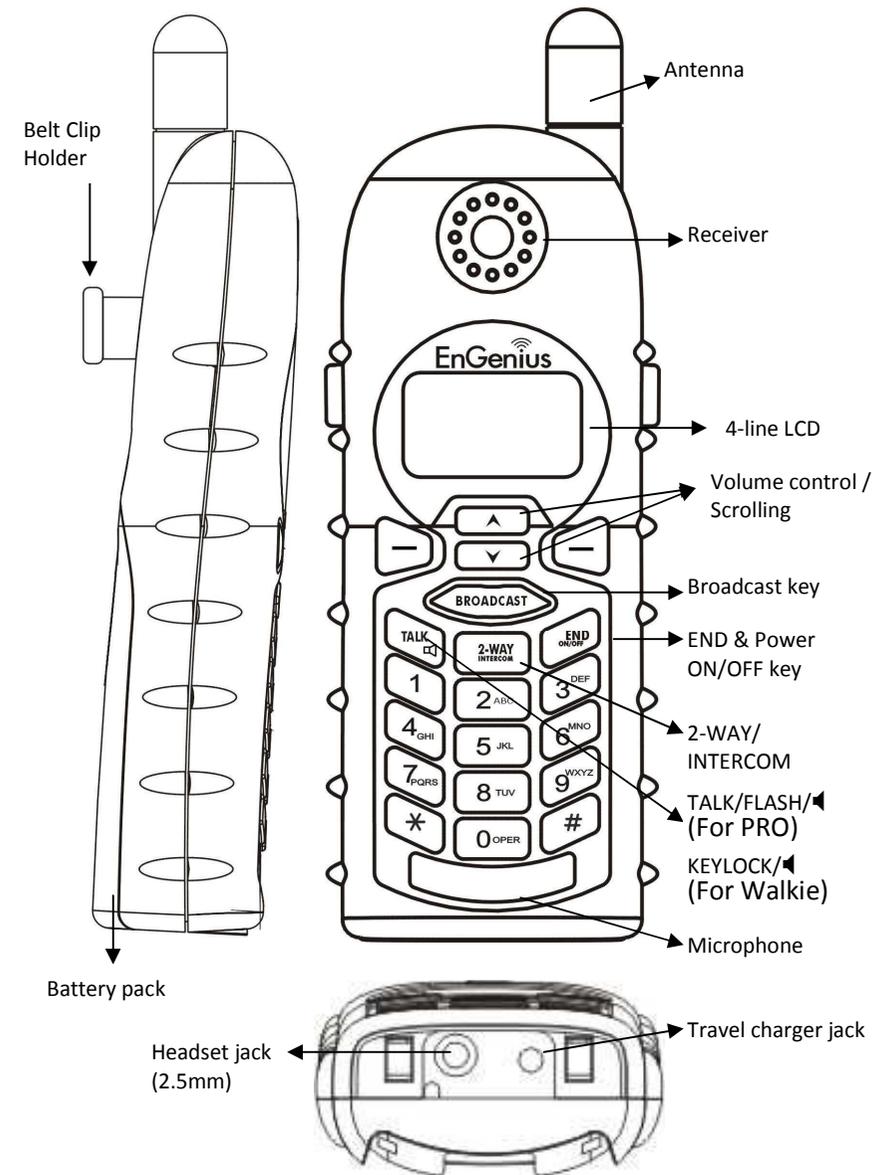
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with IC RF exposure compliance requirements, please follow operation instruction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

This device has been designed to operate with an antenna having a maximum gain of 2.5dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

## Equipment Checklist

1. In a Base + Handset package, please find the following components:
  - a. Base Station x 1 (antenna installed)
  - b. Base AC/DC Adaptor x 1
  - c. Handset x 1 (antenna installed)
  - d. Handset Antenna x 1 (Long x1)
  - e. Desktop Charger x 1
  - f. Charger AC/DC Adaptor x 2
  - g. 1700mA Li-ion Battery Pack x 1
  - h. Telephone Cord x 1
  - i. CD (User's Manual), Quick Guide
  
2. In a Handset package, please find the following components:
  - a. Handset x 1 (antenna installed)
  - b. Handset Antenna x 1 (Long x1)
  - c. 1700mA Li-ion Battery Pack x 1
  - d. Desktop Charger x 1
  - e. Charger AC/DC Adaptor x 1
  - f. Quick Guide
  
3. Optional Accessory
  - a. Outdoor Antenna Kit (including antenna and cable)
  - b. High-gain handset antenna
  - c. Headset

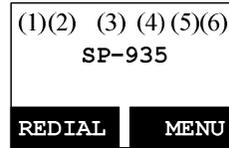
## Handset Illustration



## Handset Features

### Basic Handset Features

1. 4-line LCD (Liquid Crystal Display)
  - a. The LCD display has LED (Light Emitting Diode) for backlighting.
  - b. The 1<sup>st</sup> line of LCD consists of icons.
  - c. Icons explanation from left to right
    - (1) **RSSI level** (Receive Signal Strength Indicator)  
 During a call, the number of bars is proportional to the radio signal strength received.
    - (2) **Link mode**  
 **(2.1) Call in-progress** (ON/OFF-Hook)  
Indicates if the phone line is in the OFF-Hook status.
    -  **(2.2) Intercom in-progress**  
Indicates if Intercom mode is active  
Indicate the Handset ID which is making intercom with.
    - (3) **Line, Sound and Indication**
      -  **(3.1) Line Indicator**  
Indicate when using line 1 or the incoming call from FXO line
      -  **(3.2) SIP Indicator**  
Indicate when using SIP or the incoming call from SIP
      -  **(3.3) Enable ringer**
      -  **(3.4) Disable ringer**
      -  **(3.5) Ringer and vibrate mode**
      -  **(3.6) Vibrate mode**
      -  **(3.7) Message waiting indicator**
    - (4) **Disable PA and indicate speaker phone**
      -  (4.1) Indicate if the incoming broadcast is disabled.
      -  **(4.2) Speaker indicator**  
Indicate if the speaker phone is active
    - (5) **Two-Digit Handset ID**  
11 Displays the 2-digit Handset ID of own.
    - (6) **Battery Strength**  
Number of bars is proportional to the amount of battery time remaining.
  - d. The 2<sup>nd</sup> and 3<sup>rd</sup> lines of the LCD, maximum 16 characters each, display status, message, menu selections, or user-editable alphanumeric characters.



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

2. Ringer
  - a. Rings to an incoming call and intercom call.
  - b. Distinctive alert sounds indicating various events:
    - (1) Single beep: successful key entry.
    - (2) Double beep: indicates power on/off.
    - (3) Triple beep: failed operation.
    - (4) Periodic 1-Long-2-Short beep (every 1 minute): low battery warning 、 out of range 、 call on hold
  - Re: No any beep for invalid key entry
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.
4. SPEAKERPHONE (  )
 

Press and hold the key for over 2 seconds to enable/disable the speakerphone during incoming, outgoing or intercom call.
5. 2-WAY INTERCOM (  )
  - a. Places an intercom call to another handset, a group handset (group paging) or all registered handsets.
  - b. Intercom calls are digital, full duplex, and are conducted without the assistance from the base station.
6. BROADCAST (  )
  - a. Half duplex broadcasting to handsets for immediate announcement
  - b. Half duplex broadcasting to base stations

Re : Press the  key on the left top corner of handset to activate the broadcast function.
7. Left/Right Soft Keys (  )
  - a. Make menu selection.

8. Up() /Down() Scrolling Keys
  - a. Scroll through records and menu selections.
  - b. Adjust receiver voice volume when in the Talk mode.
  - c. Press  to enter received call log when in the Standby mode.
  - d. Press  to enter phonebook when in the Standby 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

### Additional Handset Features

1. Multiple handsets registration
  - a. Up to 10 handsets can be registered to a base station
  - b. ID 10-19: individual Handset IDs.
  - c. ID 1~7: 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. Ringer Vibrator
  - a. Two options for Line (incoming call) ringing & Intercom ringing.
  - b. Six-level ringer volume selections (Off/Low/Medium/High/Vibrate/ Vibrate & High) for each option.
  - c. Eight ringer type selections for each option.
3. Caller ID  
Displays incoming call phone number and name on the LCD (needs Caller ID service from local telephone company)
4. 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)
5. 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).

6. DND (Do Not Disturb, i.e., Silent Ring)
7. Call Logs
  - a. Redial: Stores 10 phone numbers (up to 26 digits each) dialed most recently. Can perform last-number redial on all 10 numbers.
  - b. Received & New Call Log: Total 50 entries (16-digit phone number, 16-character names, and Date/Time stamp), needs Caller ID service from local telephone company.
  - c. Phone numbers and names can be saved into phonebook while in display.
8. Call Manager: Include blocking incoming call, outgoing call and assign line dedication, line selection.
  - a. Incoming call:
    - a-1. PA On/Off: Enable or disable the broadcast from other handsets or base station. When PA is Off, the handset can't receive broadcast from base station or other registered handsets, but it can broadcast to base station or other registered handsets.
    - a-2.. Line On/Off: Enable or disable the capability to receive incoming call from telephone line/SIP call. When Line is Off, the handset can't receive incoming call from telephone line/SIP call, but it can still make outgoing call.
    - a-3. Int. On/Off: Enable or disable the intercom from other handsets or base station. When Int. is Off, the handset can't receive intercom from base station or other registered handsets, but it can intercom to base station or other registered handsets.
  - b. Outgoing call  
Select the mode of line selection (Auto/Manual/Predefine line/Off) when you make a line call.
    - b-1. Auto: A handset will be selected one of available line from subscribed bases before making an outgoing call. (Default)
    - b-2. Manual: A handset will be set prompted a select from a list of

available lines before making an outgoing call.(1 for telephone line, 5 for SIP call)

b-3 Off: Disable the capability to make an outgoing call.

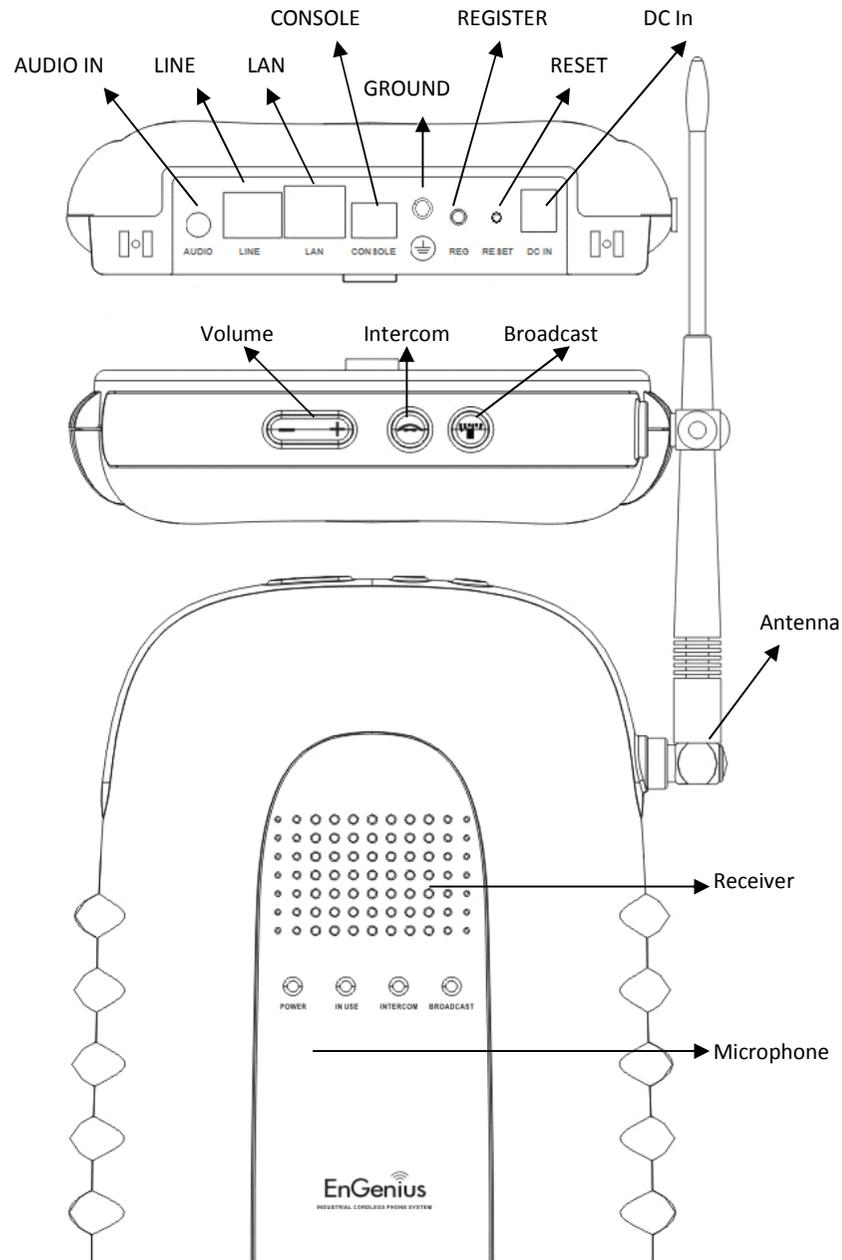
- c. Call Barring
    - c-1. Block the users from dialing long distance calls or international calls
    - c-2. Up to 5 digits of each call barring setting; up to 5 entries allowed
  - d. This changing requires to entering the “Call Settings” (MENU-4-3-4).  
[Note] You need to key in the accurate user ID and password to perform this feature. The default password is “0000”.
9. Any Key Answer (except  and **SILENT** soft Key)
- a. If you enable Any Key Answer, while you have two incoming line calls simultaneously, you can press **1** to answer the line 1 call or press **2** to answer the line 2 call.
10. Key-guard
- a. When the keyguard is selected, all keys will be locked.  
Press **UNLOCK** (Left) soft key followed by **\*** to release it.
  - b. The keyguard will be automatically enabled once returning back to idle mode for 15 seconds.
11. Dialing Prefix
- a. 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
13. Mute
- a. Press **MUTE** (Left) soft key during talk, the handset microphone will be muted.  
Press **UNMUTE** (Left) soft key to release it.
14. Phonebook
- a. 50 entries, each stores a phone number or handset ID (up to 26 digits) and name (up to 16 characters)
  - b. Alphabetically sorted display and search by letter.

- c. Dial from display.
  - d. During the stand-by mode, you can enter the phone book by pressing  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. Four-level key tone volume selections (Off/Low/Medium/High).
  - b. Four key tone type selections.
16. Call Timers
- a. Display call time duration for current call during and immediately after the call.
17. Programmable Feature Call
- a. Allow user to pre-program the most frequently used Feature code into SP-935 which is adjunct to the PBX system.
  - b. Up to 10 entries can be saved.
  - c. Once the feature code is being programmed, you can quickly perform those functions during the call by pressing **OPTION** soft key.
18. Menu Display
- a. To avoid mis-setup in the “Call Settings” (MENU-4), “Phone Settings” (MENU-5), “Base Settings” (MENU-6) and, these settings can be hidden.
  - b. Handset password is required before enter Menu Display (MENU-8), the default handset password is “0000”.
  - c. When disabling the settings, these setting will not displayed any longer, unless enabled by entering Menu Display again.
19. PA On/Off
- a. Enable or disable the broadcast function.
  - b. When PA is Off, the handset can't receive broadcast from base station or other registered handsets; But it can broadcast to base station or other registered handsets.
20. Group Setting
- a. Allow handset to subscribe to one or several groups.  
Re: Up to 7 groups (1~7) can be subscribed.
21. Custom Name

- a. Allow changing the “SP-935” screen to the desired wording or info, such as the user’s name.  
Re: Up to 32 characters can be entered.
22. Change Pwd
- a. Allow changing the handset password which requires entering in Call Barring (MENU-4-3) and Menu Display (MENU-8) .  
Re:Default is “0000”.
23. DTMF Duration
- a. From MENU-6-1 to select variable duration of DTMF tone.
  - b. Default is 100ms.
  - c. When entering the Base Settings, PIN is required. Default is “0000”.
- Re: Better to check with your phone company first before changing it.
24. Programmable Flash key timing
- a. From MENU-6-2 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 cause Flash key not working. Change only when you are certain of the new value would work.
  - d. When entering the Base Settings, PIN is required. Default is “0000”.
25. Assign next handset ID for new handset
- a. Using registered handset from MENU-6-3 to assign a next handset ID to a new handset.
  - b. If not assign next handset ID, the system will automatically assign a handset ID to a new handset..
  - c. When entering the Base Settings, PIN is required. Default is “0000”.
26. Clear Handset
- a. Using registered handset from MENU-6-4 to remove the other registered handset, in case the other registered handset is defected.
  - b. Once clear the other registered handset, the user is able to register a new handset for instead.
  - c. When entering the Base Settings, PIN is required. Default is “0000”.
27. Change PIN
- Allow changing the base PIN which requires entering the “Base Settings” (MENU-6-5).
- a. Using registered handset to change PIN from MENU-6-5.

- b. Default PIN is “0000”.
  - c. When entering the Base Settings, PIN is required. Default is “0000”.
28. Auto Hang Up feature
- a. Using registered handset from MENU-6-6 to turn on/off the Auto hand up feature.
  - b. If turning on the feature, the handset will automatically hang up the call when the far-end hangs up the call.
  - c. When entering the Base Settings, PIN is required. Default is “0000”.
29. Set Time
- The set time function allows user to set date/time to support the DTMF caller ID (DTMF caller ID doesn’t attach date/time when receiving from PSTN, using this setting, user is able to review the date/time when the caller ID received).
- a. Enter MENU-6 to set Base Settings.
  - b. Press  or  scrolling key to select desired base station
  - c. Enter Base PIN (Default is “0000”).
  - d. Enter 7 to enter Set Time.
  - e. Enter 6 digits for YY/MM/DD(Year/Month/Day), then enter 4 digits for hr:mm (Hour : Minute)
  - f. Press SAVE (Left) soft key to finish the setting.
30. Mic Gain
- Allow changing the handset microphone gain based on the handset in different environment – Quiet, Normal and Noisy environment.  
This requires entering the “Phone Settings” (MENU-5-1).
31. Headset Ring
- Allow changing the ringer emitted either from handset speaker or receiver of headset.  
This requires entering the “Phone Settings” (MENU-5-8).

## Base Illustration

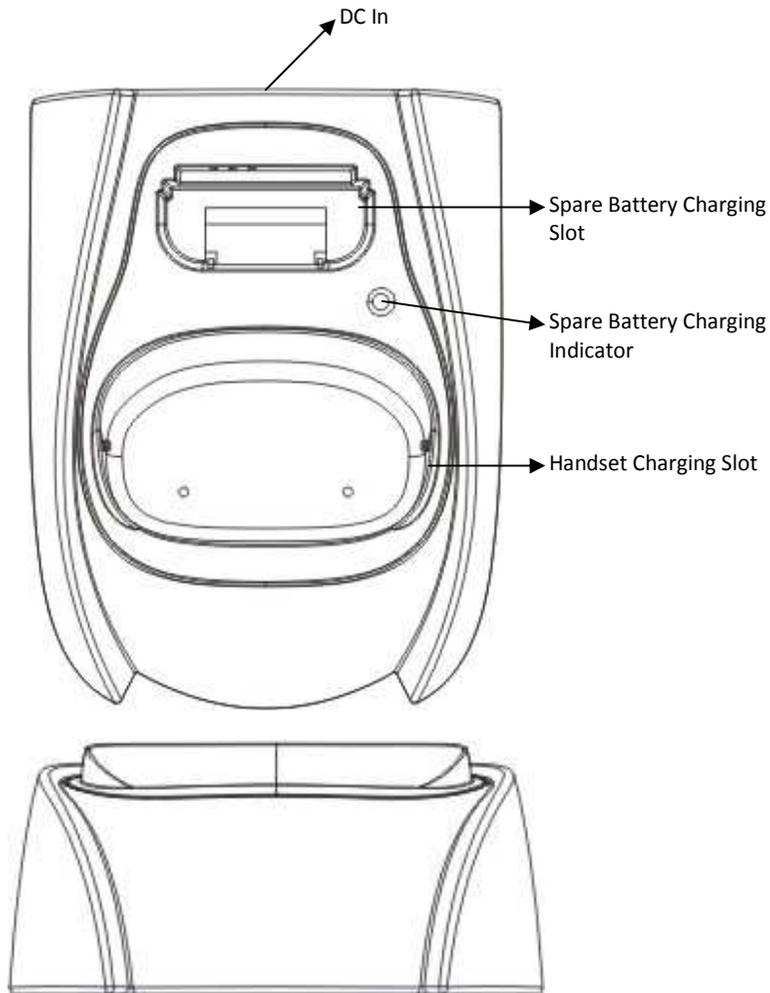


## Base Features

### Basic Base Station Features

1. Audio in Jack (3.5mm)  
Connect to an external device for music on hold
2. FXO Jack (L1)  
Standard RJ-11 connector to plug in the telephone line
3. Ethernet Jack  
Standard RJ-45 connector to plug in the Ethernet (LAN) line
4. Console jack  
Jack for console and firmware upgrade (Type-B USB connector)
5. GND  
Connecting the ground cable
6. REG button for Registration and Page
  - a. Press and hold this REG button till the "INTERCOM" LED into flashing status to enter registration mode.
  - b. To search a misplaced handset; press "REG" button, all registered handsets beep for 30 seconds. Press "REG" again or any key on handset to stop.
7. RESET Button
  - a. Restores base station to factory settings
  - b. Reset button is intended to prevent accidental system reset.
  - c. All handsets (including administrator) and additional base(s) need to be re-registered after a base station reset. The web configuration is also to reset to factory setting.
8. DC In: to plug in the 12V DC power adaptor

## 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 "Charge Complete"
    - (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.
4. The adaptor for charging station can be used as travel charger as well. However, you can't turn off the power while you charge the handset via travel charger. A warning message "Unplug Travel Charger then OFF" will be shown on the LCD.

### Notes:

1. Fully charge battery packs before first use.
2. Handset will be "power on" automatically when placing on the charging slot.
3. However, if you run drain the battery, it will take around one minute for handset to auto power on.

## Getting Started

### Base Station Installation

1. Plug the transformer end of the base station AC/DC adaptor into a standard AC electrical power outlet, plug the other end into the “DC In” jack on the back of the base station.
2. Plug phone cord into the “RJ11” FXO jack
3. Plug Ethernet cord into the “RJ45” LAN jack

PS: SIP configuration please see P50.

### 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 charger 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

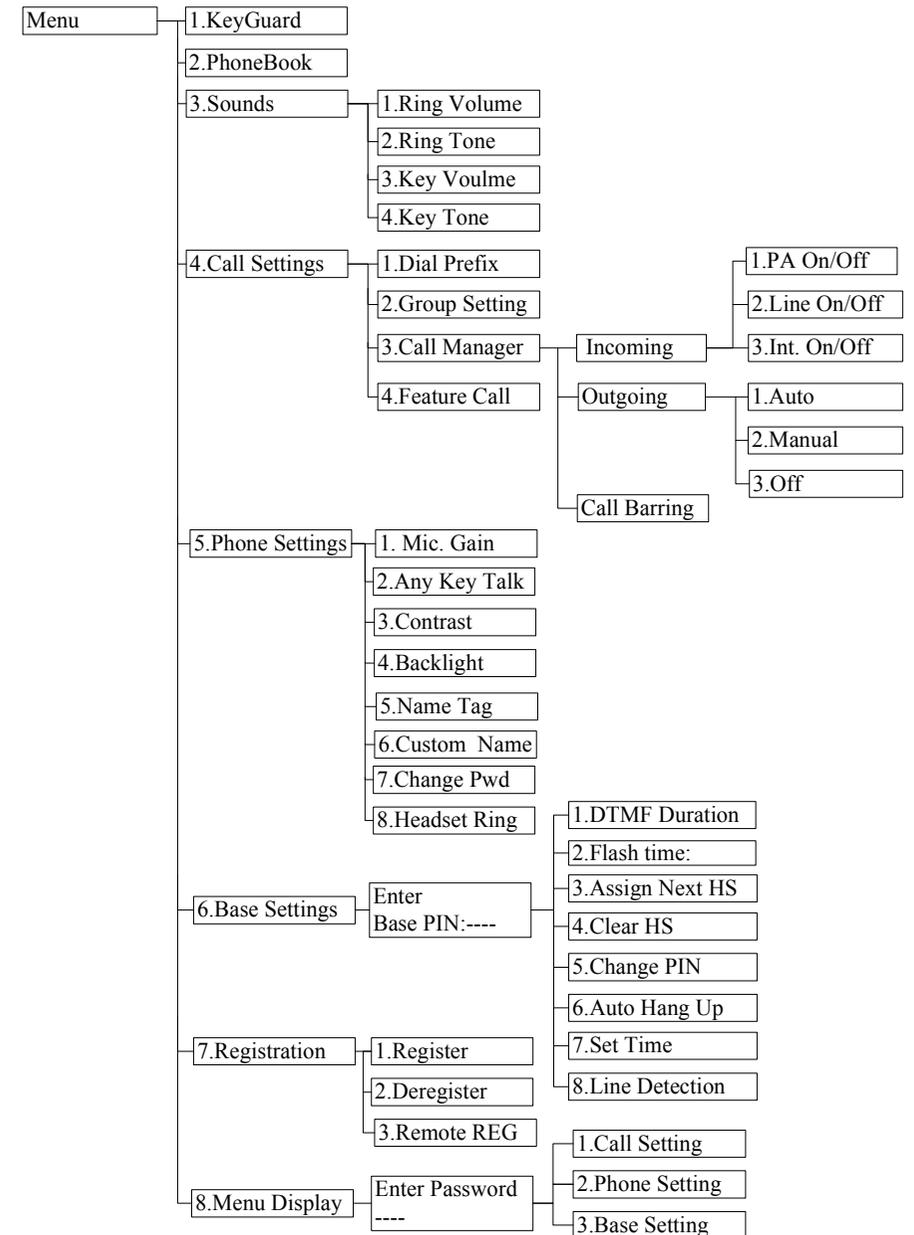
1. **STANDBY mode**- this is the default mode. The page key is active in standby mode only. The base “Power” (blue color) LED will light up during this mode.
2. **TALK mode**- the base station operates in this mode during phone call. The “In Use” (white color) LED will light up during this mode.
3. **REGISTRATION mode**- the base station enters this mode by pressing and holding the REG button for 5 seconds. The 4 LEDs will be blinking in “Registration” mode, also a prompt sound will be emitted.

#### B. Handset Operation Modes

1. **STANDBY mode**- this is the default mode.
  - a. If there is no on-going activity, the handset automatically goes into SLEEP/STANDBY mode to save battery power.
  - b. The handset can be turned off completely by holding down the  key for 3 seconds.
  - c. The standby 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 43.
  - d. The Menu structure display as below:



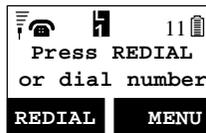
### 3. Menu Tree



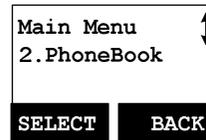
## Making a Telephone Call

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 dial-and send dialing.



3. **Speed dial** by access the entries in the phone book (Menu→2)
  - a. Press  or  scrolling key to enter the phone book
  - b. Press  to dial out the number



4. To abort dialing, press  key.



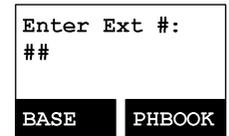
### Notes:

1. If a link cannot be established, the LCD will show "Base not found" after a 6-second time out.
2. A call duration timer will start displaying the length of the call after link is established.

## Making an 2-Way/ Intercom Call

The SP-935 Cordless Phone System offers private, Intercom/ 2-way radio calls independence of base station. Intercom/ 2-way communication can be placed between handsets.

1. Press  key followed by a two-digit handset ID or Group ID.
2. Press  key to end the call.



### 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 "Paging timeout" after a 35-second time out.

## Making a Broadcast

### Handset to Handset Calls

1. Broadcasting all handsets
  - a. Press and hold  key from one handset.



- b. Start to speak the message to be broadcasted once you hear the key tone; the speakerphone of destination handsets will be opened up, if it received the voice.

Re: the initiating handset press and hold the  key is needed during the speaking or broadcasting.

- c. Release  key to end the broadcasting.

2. Broadcasting a group of handsets

- a. Enter the Group ID and then press and hold  key.



- b. Start to speak the message to be broadcasted once you hear the key tone; the speakerphone of destination handsets will be opened up, if it received

the voice.

Re: the initiating handset press and hold the  key is needed during the speaking or broadcasting.

c. Release  key to end the broadcasting.

3. Broadcasting an individual handset

a. Enter the Handset ID and then press and hold  key.



b. Start to speak the message to be broadcasted once you hear the key tone; the speakerphone of destination handsets will be opened up, if it received the voice.

Re: the initiating handset press and hold the  key is needed during the speaking or broadcasting

c. Release  key to end the broadcasting.

### Redial

1. Press **REDIAL** (Left) soft key.

2. The LCD shows the last phone number dialed. To dial this number, press  key.



3. Use  or  key to scroll through the last 10 phone numbers dialed. Select and press  key to dial the selected number.

[Note] Intercom numbers (Handset ID) are not stored in the last 10 numbers dialed log.



### Receiving a Telephone Call

1. When an incoming call arrives, the LCD will show the caller ID message, and the ringer will ring or vibrate unless the



ringer has been turned off.

2. 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  key to start conversation.

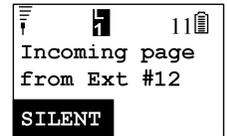
Re: You can turn on the "Any Key Talk" from **MENU-5-2**

#### Notes:

1. 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.
2. 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

1. When an intercom call arrives (called from other handsets, ex. Handset 12), the ringer will ring or vibrate unless the ringer has been turned off. Press  to answer the intercom call.



2. 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  key to start conversation.

3. If the handset is not on the cradle and **MENU-6-2** "Any Key Talk" setting is "On", press any key (except  and the **SILENT** soft key) to answer.

#### Notes:

1. The LCD displays the caller's Handset ID.
2. You can press the **SILENT** (Left) soft key if you choose to ignore the call.

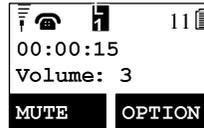
Unlike turning off the ringer the **SILENT** key operation is valid only for the current call.

## Ending a Call

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

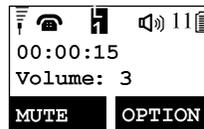
## Adjusting Handset Receiver (Earpiece) Voice Volume

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



## Adjusting Handset Speakerphone Voice Volume

- Voice volume can only be adjusted during a call (in speakerphone mode).
- There are 6 levels of volume selections. Use  or  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 **OPTION** (Right) soft key and the **\*** key

You have a call on hold

- To return to the conversation, press **UNHOLD** (Left) soft key

### Notes:

- 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.

## Mute

- After a link is established, you can press **MUTE** (Left) soft key 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.



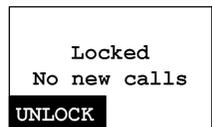
## Do Not Disturb (Silent Ring)

- Enter the key sequence **MENU-3-1**, then select "Off". Press **SELECT** (Left) soft key to confirm your choice. This will turn off the ringer until it is turn 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.



- To unlock the keypad, press **UNLOCK** (Left) soft key, then,

Press \* to

within 2 seconds, press the digit **\*** to unlock.

3. Once returning back to standby mode for 15 seconds, the keyguard will be automatically enabled.
4. Key Guard is in effect until unlocked.

### Battery Recharge and Replacement

1. Charge the battery when one or several of the following happen:
  - a. Phone beeps twice (every 60 seconds in talk mode, every 10 minutes in standby mode).
  - b. Battery icon is empty.
  - c. Phone does not respond when a power on/off key  is pressed.
  - d. LCD and backlighting become dim.
  - e. Talk range shortfall is experienced.
2. You can replace the handset battery after placing the call-in-progress on hold and press  key. To retrieve the call on held, press talk key again after replaced battery and power the handset on..
3. 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

### Handset Registration

1. If your handset(s) is purchased as part of a system, it has been pre-registered with the base station at the factory.
2. If Handset ID as "00," that means it is a new handset or the ID has been erased. You need to register the handset with the base station.

#### 3. Registration:

- a. Press **MENU-7** to enter the registration mode
- b. Press and hold the base's PAGE button for 3 seconds until the In Use LED (white color) lighting up and flashing, also the base station will emit prompt sound to remind you the base station is in the registration mode..
- c. Press handset key **1**, this completes the registration process. The base station will assign a handset ID between 11 and 19 automatically. The assigned ID will be displayed on the handset LCD, indicating successful registration.
- d. Repeat above steps for all additional handsets.



#### 4. De-registration:

- a. You can de-register the handset you're using from the base station. De-registration will reset the Handset ID to 00, erase the system security code, and free up the handset ID for future registration.
- b. After deregistration, the handset will not be able to use the base station to make or receive phone calls, nor can it intercom other handsets.
- c. Press **MENU-7** to enter the registration mode
- d. Press and hold the base's PAGE button for 3 seconds until the In Use LED (white color) lighting up and flashing, also the base station will emit prompt sound to remind you the base station is in the de-registration mode.
- e. Press the handset number key **2**, this completes the



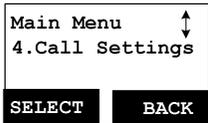
de-registration process. Upon successful de-registration, the handset display will show "Please register".

- Notes:**
1. The base station has a 30 second registration timeout starting from pressing the PAGE button. The handset has a 6 second registration timeout starting from the registration or de-registration option has been selected. The base station and handset will automatically exit registration mode after timeout.
  2. Repeat registration or de-registration process if unsuccessful.

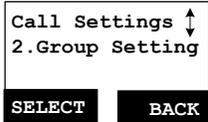
- Notes:**
1. The handset can change group affiliations at any time.
  2. The base station is not responsible for group assignments. Consequently, it cannot de-subscribe a handset from a group.
  3. When an intercom caller enters a group ID, all handsets subscribed to this group will ring. The first handset to answer will establish a link with the caller. Afterward, it is a one-to-one call, not a one-to-many call.

### Handset Group Subscription

1. Up to nine handset groups (1-7) can be defined and handsets can decide which group(s) they want to be in.
2. 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 11 will need to "subscribe" to Group 2 and Group 3.



3. Group Selections:
  - a. Press handset MENU-4 to enter the Call Settings menu
  - b. Press number 2, handset enters group setting menu.



- c. Press OPTION soft key and followed by 1 key to subscribe the group (" #", #:1~7). Enter 1~7.
- d. Repeat for all desired groups.



- e. Delete group selections by pressing OPTION soft key and followed by 2 to Unsubscribe the group.

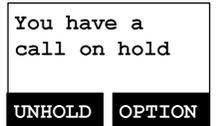
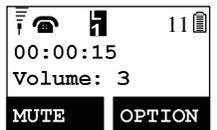


### Call Transfer

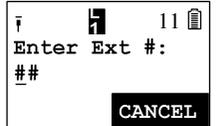
While a telephone call is in progress, you can transfer it between different handsets.

#### Direct transfer

1. Press OPTION (Right) soft key, followed by the \* key to put the call on hold.
2. Press OPTION (Right) soft key, followed by the 1 key or SELECT soft key of XFER, pressed destination handset ID, then the held call will be transferred directly.



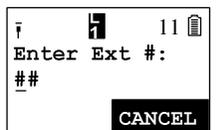
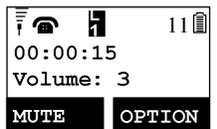
After the call transferred to destination handset, the original handset will go back to standby mode automatically.



#### Indirect transfer

If you want to talk to the destination handset before the call transferred, you can follow with below method:

1. During the call, press 2-WAY INTERCOM key, followed by entering the destination handset ID.
2. Press the TALK key of the destination handset to answer the intercom call, you can now talk to the destination handset.



After the talking, press END ONOFF to end the intercom call, then the destination handset is able to pick up the incoming call

automatically.

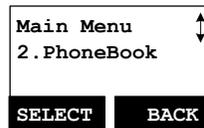
After the call transferred to destination handset, the original handset will go back to standby mode automatically.

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

## Phonebook Operations

1. You can store up to 50 entries in the phonebook. Each entry can contain a phone number or handset ID (up to 26 digits) and a name (up to 16 characters).

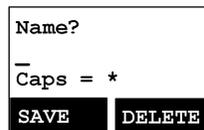
2. To access the phonebook, press **MENU** (Right) soft key, followed by **2**; or press **Y** scrolling key while the handset is in standby mode.



3. To add a new entry:

a. Press **ADD** (Left) soft key.

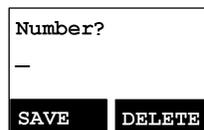
b. Enter the name when LCD prompts "Name?" Use **DELETE** (Right) soft key to delete the last digit entered. When completed, press **SAVE** (Left) soft key to save. Re: Up to 16 characters can be entered as the name.



c. You will then be prompted to enter a number for the name just entered.

Re: Up to 26 digits can be entered as the number.

d. After entering the number, press the **SAVE** (Left) soft key to save this entry into phonebook.



e. Enter a phonebook entry without a name, the all

records without name will be placed on top of the phonebook list.

f. 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.

### Notes:

1. When enter a phone number, the cursor automatically advances to the next digit field. Use **^** or **Y** 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 **Y** scrolling key to move the cursor backward or forward manually. Also use **^** or **Y** 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 1 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 2 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
*	Caps – when in character editing. * – when in number editing.
#	Space & # – when in character editing # & P (Pause) – 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.
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 16 digits, press **OPTION** (Right) soft key and select Option 3 "View Number" to view the complete number.
6. To search for a record:
  - a. Use **Y** 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** twice.
  - d. Use **^** or **Y** scrolling key to locate the exact record you are looking for.

7. To erase phonebook:
  - a. Use **^** or **Y** scrolling key or the alphabetical search method to locate the record to be erased or edited.

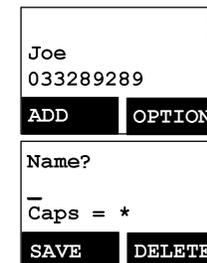


- b. Press **OPTION** (Right) soft key to enter option menu.

- c. Press **1** to erase the designated phone entry.
- d. LCD shown "Delete entry?" Press **YES** (Left) soft key to confirm your change.



8. To edit phonebook:
  - a. Use **^** or **Y** scrolling key or the alphabetical search method to locate the record to be erased or edited.
  - b. Press **OPTION** (Right) soft key to enter option menu.
  - c. Press **2** to edit the designated phone entry.



9. Dial from display:
  - a. Press **TALK** or **2-WAY 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** (Right) soft key follow by **5** or **^** **Y** scrolling key to transfer when handset in phonebook mode.
  - b. For phone sending party, press **1** to enter sending mode.
    - i. Either press **TX ALL** (Left) soft key to transfer all phonebook entries to another handset(s).
    - ii. Or press **TX ONE** (Right) soft key 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".

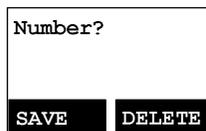
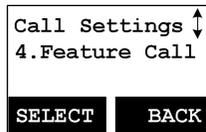
- ii. Start to receive phonebook, LCD shows “Get phonebook from Ext. # : xx”.
- iii. A beep emitted when receiving each phonebook.
- iv. When the phonebook receiving, 2-digit countdown on the LCD to indicate the phonebook numbers which are waiting for receiving.

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

### Programmable Feature Call

1. If SP-935 base station is installed behind a PBX system, it is feasible to pre-program some feature call along with the PBX’s feature code into the system.
2. Up to 10 most frequently used feature call codes can be pre-programmed.
3. Name and enter feature call codes:

- a. Press **MENU** (Right) soft key while the handset is in the standby mode.
- b. Press **4**, followed by **4** to enter the “Feature Call” menu.
- c. Press **ADD** (Left) soft key to add a new entry of feature call.
- d. Key in the name of feature call, like editing a phonebook entry, i.e. “PBX Transfer”. Press **SAVE** (Left) soft key to confirm.
- e. Key in the feature call code of the correspondence PBX feature i.e. F\*70. Press **SAVE** (Left) soft key to confirm. Re: “F” represent the Flash signal.
- f. The 1<sup>st</sup> feature call and correspondence feature call code you entered will appear on the LCD screen.

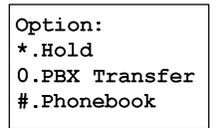
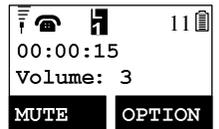


- g. Press **OPTION** (Right) soft key to delete or edit the feature call you programmed into the system.
- h. Repeat the same operations to program 2<sup>nd</sup> and even more feature call that you will use frequently.



### 4. Using pre-programmed feature call during the call.

- a. Press **OPTION** (Right) soft key while the handset is in the talk mode.
- b. Press the correspondence number of the feature call which you want to perform i.e. press “0” to perform the “PBX Transfer”.



#### Notes:

1. This feature call would be useful if the SP-935 base station is adjunct to a PBX system,
2. if you have not pre-programmed any feature call into the system, only “#.Phonebook” in the **OPTION** menu.
3. The SP-935’s programmable feature call may not function with all PBX or Key phone systems due to the diversity of various proprietary systems.

### Caller ID

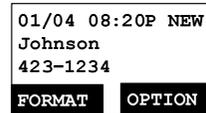
1. Contact with your local phone company to subscribe to this feature. The phone system receives and displays Caller ID information transmitted by your local phone company. This information may include the calling phone number, name, date and time. This unit can store up to 50 calls of caller ID information.
2. The display will show the date and time of call on the first line, followed by the name on the second line, and the phone number on the third line. An unread

record will have a "NEW" at the end of the first line of display.

- When viewing a call record, the number can be dialed, stored to the phonebook or deleted.

### View Call Log

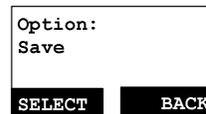
- To view the call log, press **▲** to enter the Call Log.  
Press **▲** or **▼** key to scroll through the numbers and names when available.



- Press **OPTION** right soft key, you can **▲** or **▼** key to choose save, delete, clear all.

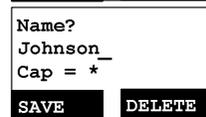
#### a. Save call log:

- Press **SELECT** right soft key, you can use **▲** or **▼** key to scroll the name, and press **DELETE** to edit the name.



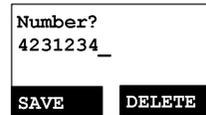
Then press **SAVE** left soft key to save the name.

- Use **▲** or **▼** key to scroll the number, and press **DELETE** to edit the number.



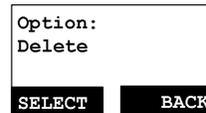
Then press **SAVE** left soft key to save the number.

- After above process, the call log saved into phonebook.



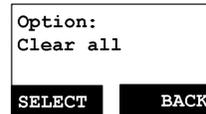
#### b. Delete call log:

- Press **SELECT** right soft key followed by **YES** left soft key to confirm deleting.



#### c. Clear All:

- Press **SELECT** right soft key followed by **YES** left soft key to confirm clearing all caller ID records.



### Call a Caller ID

- Press **▲** key on idle screen to enter the call log, use **▲** or **▼** key to scroll the call log.

- When display a caller ID, Press **TALK** to dial this number.

### Call Manager

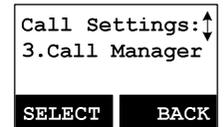
"Call Manager" feature allows four options :

- The first option is "Incoming". The handset can be selected to enable receiving the incoming PA, intercom call, line call or line dedicated.
- The second option is "Outgoing". The handset can be set to access available bases automatically or manually or pre-defined telephone line.
- The third option is "Call Barring". The handset can be selected to block the calls which are not allowed.

Note: When enter this menu (Call Manager), you must enter handset's password first (4 digits). The default password of handset is "0000".

### Incoming

- Press **MENU** (Right) soft key followed by **4** to enter the Call Settings mode.  
Press **3** to select Call Manager followed by entering handset's password (4 digits).



Press **1** or **2** if multi-base is on to select Incoming.

- Press **1** to enable receiving PA On/Off.  
Re : Default setting is "ON".



- Press **2** to enable receiving Line On/Off wich include SIP and FXO line both.  
Re : Default setting is "ON".

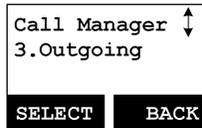
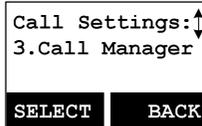
- Press **3** to enable receiving Intercom On/Off.  
Re : Default setting is "ON".

(1) By default all incoming calls will ring all handsets.

When enter this menu, you must enter handset password first (4 digits).  
 Re: The default password of handset is "0000".

## Outgoing

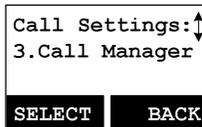
1. Press **MENU** (Right) soft key followed by **4** to enter the Call Settings mode.  
 Press **3** to select Call Manager followed by entering handset's password (4 digits).  
 Press **2** or **3** if muti-base is on to select "Outgoing".  
 The handset is able to make outgoing calls via the desired line of base station  
 Re : Default setting is "Auto".



- a. Press **1** to "Auto".The handset is able to make outgoing call via an available line and SIP ed bases automatically.
- b. Press **2** to "Manual". When pressing  key in standby mode, the handset LCD will show the available line. Press  or  to scroll the options: 1. SIP, 2 Line. Press digit 1, you can select the SIP line 1 to make a call..
- c. Press **3** to "Off".The handset is disable to make any outgoing call.

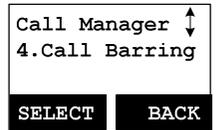
## Call Barring

1. Press **MENU** (Right) soft key followed by **4** to enter the Call Settings mode.  
 Press **3** to select Call Manager followed by entering handset's password (4 digits).



Press **3** or **4** if muti-base is on to select "Call Barring" to block users from dialing the long distance calls or international calls. And also block the incoming call from outside line or other registered handset.

Re : Default of Call Barring "OFF".



2. To add the Call Barring code
  - a. Once turn on the Call Barring feature, you can key in the "Call Barring" code  
 To add one block code, press **ADD** (Left) soft key then start entering the Call Barring code. After the number entering the Call Barring code., press **SAVE** (Left) soft key to save.
    - (1) Up to 5 digits can be edited to be Call Barring code.  
 For example, if you want to block all call dialing to Manhanntan, NY area, you can enter 1212 as the Call Barring code.
    - (2) If you base station is adjunct to a PBX system, please also include that specific number to retrieve the PSTN tone.
  - b. Press **OPTION** (Right) soft key to delete or edit the Call Barring codes.
    - Up to 5 sets of Call Barring codes can be programmed.
  - c. If wants to block all outgoing calls, enter "**\* \* \* \* \***" **\* \* \* \* \*** 5 "**\* \* \* \* \***" keys followed by, press **SAVE** (Left) soft key to save it, all outgoing calls will be restricted.



## Visual Message Waiting Indicator (VMWI)

VMWI feature supported the FSK message which received from telephone line; It will activate a message icon of handset and flash the VOICE MESSAGE LED of base.

### Notes:

1. A subscription to telephone company voice mail service is required.

2. If the handset still indicates the icon even after you have listened all messages, turn it off by pressing and holding “Caller ID” key on the handset.

## Adjust Handset Microphone Gain

In case you will use the handset in different workplace or environment, to perform better voice quality for the other end, you can adjust the handset microphone gain to suit for variable place.

- a. Press **MENU** right soft key while the handset is in the standby mode.
- b. Press **5** (Phone Settings), followed by **1** to enter the “Mic. Gain” menu.
- c. Use **▲** or **▼** key to scroll the “Standard”, “Medium” and “Low” options.
- d. If you are using the handset in quiet environment, like office or meeting room, the level of “Standard” is recommended.

If you are using the handset in a noisy environment, like factory or outdoor place, the level of “Medium” or “Low” is recommended.

## Adjust Headset Ring

When using headset, to avoid missing the call due to the ringer emitted from receiver of headset, you can change the ringer emitting from either handset speaker or receiver of headset.

- a. Press **MENU** right soft key while the handset is in the standby mode.
- b. Press **5** (Phone Settings), followed by “9” to enter the “Headset Ring” menu.
- c. Select **On**, the ringer will be emitted from the receiver of headset; If select **Off**, the ringer will be emitted from handset speaker.

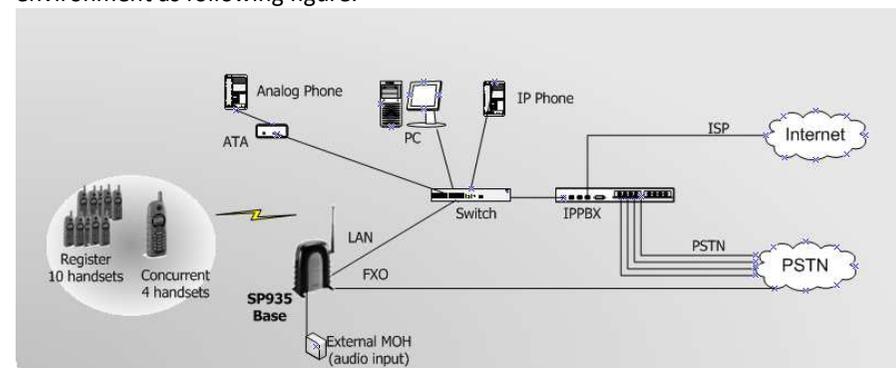
## SIP Configuration

### Introduction

The SP-935 is a long range cordless telephone system which built-in a SIP client along with a traditional FXO port. It provides user the capability to make VoIP call or PSTN call via different ports. Below describes how to setup the SIP configuration of SP-935 base from web.

### Application

Typically, the SP-935 is able to connect with a legacy PBX (or PSTN line) via a telephone jack, and in addition with an IPPBX via a networking jack. These two interfaces are perfectly suitable for adjunct telephone system for enterprise environment as following figure.



### VoIP Features

- Support 3 VoIP and 1 PSTN line calls simultaneously.
- Each handset has only one SIP account.
- Up to register 10 SIP accounts and 10 handsets accordingly.
- Flexible call manager feature to dedicate the SIP or PSTN call.
- Use G.711U-law for VoIP codec
- SIP and LAN setting from web configuration
- Internet interface: 10/100base-T LAN port x1

### Registration handsets

- Before setting the SIP configuration, the available handset(s) of SP-935 must register to the base of SP-935.
- Register handset:
  - (1) Press and hold the register key on base till the “Intercom” key into flashing status. During this flashing LED period, the base can perform the registration.

- (2) In handset, enter "MENU, 7,1" to enter the registration.
- (3) The assigned ID ( from 10 to 19) will be displayed on handset LCD, indicating successful registration
- (4) Repeat the above steps for all additional handsets.

### Default settings

Connect the internet port to SP-935 LAN port.

IP Address	<b>192.168.1.156</b>
Username / Password	<b>admin / admin</b>

### Web configuration

Open a web browser (Internet Explorer/Firefox/Safari/Chrome) and enter the IP Address <http://192.168.1.156>



The default username and password are **admin**. Once you have entered the correct username and password, click the Login button to open the web-base configuration page.

If successful, you will be logging in and see the configuration of SP-935.

### LAN configuration

Note: When you change the LAN IP to DHCP, once you click the "Apply" to take effect the change. Then you should know the new IP of SP-935 in advance to access the web configuration next time.

## Base Settings

System		
Status		
LAN		
Log		
Base Settings		
VoIP		
Tools		

Base Mode	Slave Base
Base ID	1
Authentication Password	0000

Advanced Settings

Auto Hang Up	Off
Base Intercom Auto Answer	On
Message Waiting Indication	Off
DTMF CID Format	Check Start/End Byte
Line Detection	Off

RF Settings

RF Power Mode	High
Channel Range	US(902MHz to 929MHz)

Apply Cancel

Note: When you change one of the Base Setting, you should click the "Apply" to take effect the change. The items with gray color are not changeable and reserved for other version..

## SIP Configuration

### SIP server

System		
VoIP		
Basic		
Account Setting		
Audio Setting		
Tools		

VoIP Server IP	192.168.1.1
VoIP Server Port	5060 ( 5060-5070 )
VoIP Dial Mode	RFC 2833
STUN	Off
DNS SRV	Off
SIP Outbound Proxy	

Apply Cancel

### SIP account

Enter VoIP-> Account Setting

System						
VoIP						
Basic						
Account Setting						
Audio Setting						
Tools						

HS ID	SIP Number	Display Name	Status	Account Active	Action
10	10	10	Offline	Enable	Edit Release
11	11	11	Offline	Enable	Edit Release

System		
VoIP		
Basic		
Account Setting		
Audio Setting		
Tools		

### User Information Settings

User Name	210
Display Name	201
Password	●●●●●●●●
Re-type Auth Password	●●●●●●●●
Account Active	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Apply Cancel

### Individual account

- Note: You should register every handset on SP-935 base, before you start setting the SIP configuration,

The default SIP number is according to handset ID which means SIP number 10 for handset ID 10 accordingly. You need to enter the Edit button for each account.

System		
Wireless		
VoIP		
Basic		
Account Setting		
Audio Setting		
Tools		

### User Information Settings

User Name	10
Display Name	10
Password	●●
Re-type Auth Password	●●
Account Active	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Apply Cancel

System

VoIP

Basic

Account Setting

Audio Setting

Tools

### User Information Settings

User Name:

Display Name:

Password:

Re-type Auth Password:

Account Active:  Enable  Disable

Click the **Apply** button to save the setting as the screen showing:

Module is reloading, please wait for 1 seconds

After you finish these accounts setting, you need to click the **Apply** button as following in red to activate the setting.

VoIP

Basic

Account Setting

Audio Setting

Tools

### User List

HS ID	SIP Number	Display Name	Status	Account Active	Action
10	10	10	Online	Enable	<input type="button" value="Edit"/> <input type="button" value="Release"/>
11	11	11	Online	Enable	<input type="button" value="Edit"/> <input type="button" value="Release"/>
12	12	12	Online	Enable	<input type="button" value="Edit"/> <input type="button" value="Release"/>
13	13	13	Online	Enable	<input type="button" value="Edit"/> <input type="button" value="Release"/>
14	14	14	Offline	Disable	<input type="button" value="Edit"/> <input type="button" value="Release"/>
15	15	15	Offline	Disable	<input type="button" value="Edit"/> <input type="button" value="Release"/>
16	16	16	Offline	Disable	<input type="button" value="Edit"/> <input type="button" value="Release"/>
17	17	17	Offline	Disable	<input type="button" value="Edit"/> <input type="button" value="Release"/>
18	18	18	Offline	Disable	<input type="button" value="Edit"/> <input type="button" value="Release"/>
19	19	19	Offline	Disable	<input type="button" value="Edit"/> <input type="button" value="Release"/>

### Audio Setting

In this Audio Setting, after you change the setting and click "Apply", you need to power cycle the base in order for any changes take effect.

VoIP

Basic

Account Setting

Audio Setting

Tools

Transmit Gain:  Receive Gain:

PSTN Line

Country:  AC Impedance:

Flash Time:

DSP/Software

Line In Gain:  Line Out Gain:

Codec/Hardware

Speaker Gain:  Microphone Gain:

Music on Hold Gain:

DTMF Settings

DTMF Gain:  DTMF Duration:

### Tools

#### Admin

This page allows you to change the username and password. By default, the username is **admin** and the password is: **admin**. The password can contain 0 to 12 alphanumeric this characters and is case sensitive.

System

VoIP

Tools

Admin

Time

Diagnosis

Firmware

Back-up

Reset

Login Name:

Old Password:

New Password:

Repeat New Password:

Admin	
Login Name	Enter a new username for logging in to the New Name entry box.
Old Password	Enter the old password for logging in to the Old Password entry box.
New Password	Enter the new password for logging in to the New Password entry box.

Repeat New Password	Re-enter the new password in the Confirm Password entry box for confirmation.
Apply / Cancel	Click <b>Apply</b> to apply the changes or <b>Cancel</b> to return previous settings.

### Time

This page allows you to set the internal clock.

Time	
Time Setup	Select to sync with a NTP server or with the PC internal clock.
Time Zone	Select a time zone from the drop-down list and check whether you want to enter the IP address of an NTP server or use the default NTP server to get have the internal clock set automatically.
Apply / Cancel	Click <b>Apply</b> to apply the changes or <b>Cancel</b> to return previous settings.

### Diagnosis

This page allows you to analyze the connection quality of SP-935 and trace the routing table to a target in the network.

Diagnosis	
Address to Ping	Enter the IP address you would like to search.
Ping Result	Check the specific IP address alive

Start	Click <b>Start Ping</b> to begin pinging target device (via IP).
-------	--

### Firmware

This page allows you to upgrade the firmware of SP-935.

To perform the Firmware Upgrade:

Click the **Browse** button and navigate the OS File System to the location of the upgrade file.

Select the upgrade file. The name of the file will appear in the *Upgrade File* field.

Click the **Apply** button to commence the firmware upgrade.

**Note:** The device is unavailable during the upgrade process and must restart when the upgrade is completed. Any connections to or through the device will be lost.

### Back-up

This page allows you to save the current device configurations. When you save the configurations, you also can reload the saved configurations into the device through the **“Restore Settings” from A File** section. If extreme problems occur, or if you have set the SP-935 wrongly, you can use the **“Reset”** button in the **Restore to factory default** section to restore all the configurations of the SP-935 to the original default settings.

Back-up	
Restore to factory default	Click <b>Reset</b> button to restore the SP-935 to its factory default settings.
Backup Setting	Click <b>Save</b> to save the current configured settings.
Restore Setting	To restore settings that have been previously backed up, click <b>Browse</b> , select the file, and click <b>Upload</b> .

### Reset/ReBoot/Registration

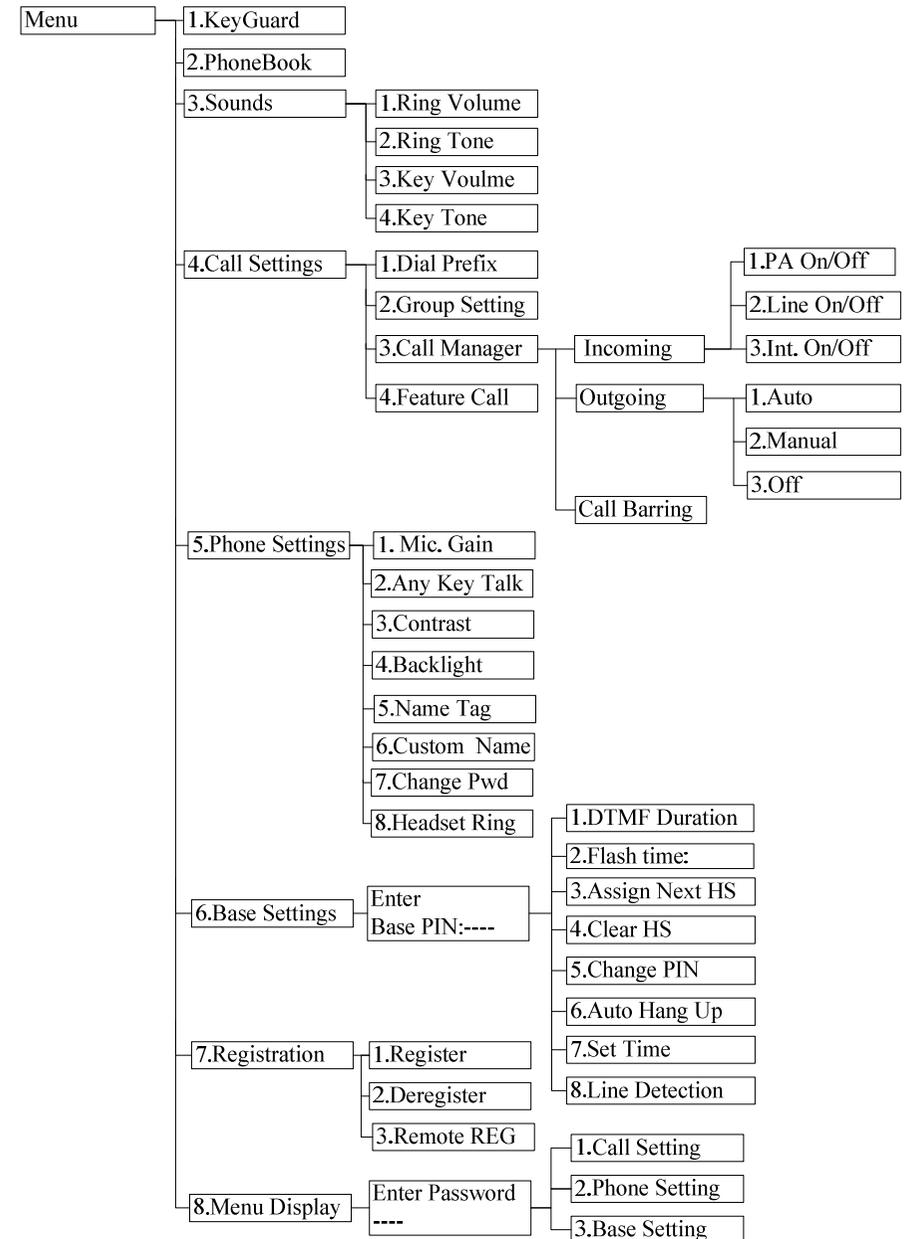
You can press and hold the below buttons to execute specific features, or using the web setting instead.



These features (Reset, Reboot, and Registration) can be performed from this web setting

System	
VoIP	
<b>Tools</b>	
Admin	Reset to Default
Time	
Diagnosis	In the event the system stops responding correctly or stops functioning, you can perform a reset. Your settings will not be changed. To perform the reset, click on the REBOOT button.
Firmware	Reboot the Device
Back-up	
Reset/Reboot/Reg	Register your handset after pressing the REGISTER button.
	Register
System	
VoIP	
<b>Tools</b>	
Admin	
Time	
Diagnosis	
Firmware	
Back-up	
Reset	In the event the system stops responding correctly or stops functioning, you can perform a reset. Your settings will not be changed. To perform the reset, click on the APPLY button.
	Apply

## Menu Operations



1. Press **MENU** right soft key to enter menu mode while the phone is in standby mode.  
 Re: You can either press  or , followed by **SELECT** left soft key to confirm the selected menu. Or Press the digit directly to confirm the selected menu. For example, press **MENU** right soft key followed by **4** and **1** to select the Ring Volume.
2. Press **1** to select Keyguard (see Key Guard operation on page [34](#)).
3. Press **2** to add, delete, edit, view and edit the phonebook (see Phonebook instruction on page [40](#)).
4. Press **3** to set Sounds settings:
  - a. Press **1** to select Ring Volume:  
 Two options for ring volume: Line (for incoming call) and Intercom (for intercom call). Set each option respectively.  
  
 When setting each option, use  or  to scroll through 6 options: "Off", "Low", "Medium", "High", "Vibrate" and "Vibrate & High". Press **SELECT** left soft key to save selection. Default = Medium.
  - b. Press **2** to select Ring Tone:  
 Two options for ring tone: Line (ring tone for incoming call) and Intercom (ringer for intercom call). Set each option respectively.  
  
 Use the  or  to scroll through 8 ringers, press **SELECT** left soft key to save selection. Default = 1.
  - c. Press **3** to select Key Volume when a key is pressed:  
 Use  or  to scroll through 4 options: Off, Low, Medium, and High. Press **SELECT** left soft key to save selection. Default = Medium.
  - d. Press **4** to select Key Tone:  
 Use the  or  to scroll through 4 options: 1, 2, 3 and 4. Press **SELECT** left soft key to save selection. Default = 1.
5. Press **4** to set Call Settings:
  - a. Press **1** to set Dial Prefix:
    - (1) Press  or  to turn on or off the dial prefix feature. Default

- (2) = Off.
- (2) If "On" is selected, the handset is prompted to enter the prefix number, up to 14 digits can be entered.
- (3) Use **Delete** right soft key to edit prefix number.
- (4) Press **SAVE** left soft key to confirm the selection.
- (5) When this feature is turned on, the LCD will prompt the user "Dial Prefix? Yes or No" on each outgoing phone call from call logs, phonebook, and dial-and-send dialing, the current prefix is also displayed.  
 Re: the prefix number will be added automatically in front of the dialed number if press **YES** left soft key.
- (6) 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 [37](#).
  - c. Press **3** to set Call Manager: see Call Manager operation on Page [48](#).
  - d. Press **4** to set Feature Call: see Feature Call operation on Page [44](#).
6. Press **5** to set Phone Settings:
  - a. Press **1** to set Mic Gain: See Mic Gain operation on Page [52](#).
  - b. Press **2** to set Any Key TALK:  
 Use **CHANGE** left soft key to select and confirm "On" or "Off". Default is "Off".  
 Re: When set "on", press any key (except  and **SILENT** key) to answer the incoming call.
  - c. Press **3** to set LCD Contrast:
    - (1) Use  or  to scroll through option 1~8. Default is 4.
    - (2) Press **SAVE** left soft key to confirm selection.
  - d. Press **4** to set LCD Backlight:
    - (1) Use  or  to scroll through option 1~3 (1.8 seconds 2.On 3.Off). Default is "8 seconds".
    - (2) Press **SAVE** left soft key to confirm selection.
  - e. Press **5** to set Name Tag:
    - (1) Use **CHANGE** left soft key to select and confirm "On" or "Off". Default is "Off".

(2) Press **SAVE** left soft key to confirm selection.

Re: When Set "On", the handset 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)

f. Press **6** to set Custom Name:

(1) Enter characters using the Character Table and method discussed in the Phonebook section.

(2) 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).

(3) Press **SAVE** (Left) soft key to confirm setting.

Re: Once entering the custom name, the greeting of LCD in standby mode will be changed as the entering.

Default greeting is "SP-935".

g. Press **7** to Change Password:

(1) Enter original (4 digits) of handset then press **OK** left soft key when enter this menu.

(2) Enter new password (4 digits) then press **SAVE** left soft key to confirm new password.

h. Press **8** to set Headset Ring: See Headset Ring operation on Page 52.

7. Press **6** to set Base Settings:

When enter this menu, you must enter Base PIN code first (4 digits).

Re: The PIN code is for Base Settings. Default is "0000".

a. Press **1** to set DTMF Duration.

(1) Enter the DTMF duration (90~200ms), press **OK** left soft key to confirm the setting. Default is 100ms.

Re: Please check with your dealer before you change it. If the duration not matches with PSTN or PBX setting, it may operate faultily.

b. Press **2** select flash key timing. Default is 600ms.

(1) Use **▲** or **▼** to scroll through option 1~9 (100~900ms). Or press digit key (1~9) directly.

(2) Press **SELECT** left soft key to confirm selection.

Re: 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.

c. Press **3** to set Assign Next HS

(1) Enter 2-digit handset ID followed by pressing **OK** left soft key.

(2) When register a new handset, the base will assign the specific handset ID which assigned in advance to the new handset.

d. Press **4** to set Clear HS

(1) Enter 2-digit handset ID followed by pressing **OK** left soft key.

(2) The base will erase the handset ID from system.

e. Press **5** to Change PIN:

(1) Enter the new Base PIN followed by **OK** left soft key.

Re: Default Base PIN is "0000".

f. Press **6** to set Auto Hang Up:

(1) Use **CHANGE** left soft key to select and confirm on or off.

Re: When setting "on", the SP-935 will automatically hang up if the far end caller hung up already. However, this function depends on if there is "dial tone or busy tone" signal sent out by PBX or PSTN, after the call hung up.

g. Press **7** to Set Time to support DTMF Caller ID:

(1) Use **SAVE** left soft key to select and confirm the Date and Time you have set (see Set Time operation on page 20).

f. Press **8** to set Line Detection:

(1) Use **CHANGE** left soft key to select and confirm on or off.

Re: When setting "on", the SP-935 will automatically see if the telephone line is plugged in or not. Once the telephone line is not available, user can't select the line to make an outgoing call manually.

8. Press **7** to register, de-register handset : see Handset Registration operation on Page 36,

9. Press **8** to set Menu Display:

To avoid mis-setup of Call Settings (MENU-4), Phone Settings (MENU-5) and Base Settings (MENU-6), you can hide these menus, so that other handset users won't have chance to mis-setup these settings.

Re: When entering the Menu Display, you have to enter password first.

- a. Press **1** to set hiding/un-hiding of the Call Settings menu.
  - (1) Use **CHANGE** left soft key to select and confirm on or off.
- b. Press **2** to set hiding/un-hiding of the Phone Settings menu.
  - (1) Use **CHANGE** left soft key to select and confirm on or off.
- c. Press **3** to set hiding/un-hiding of the Base Settings menu.
  - (1) Use **CHANGE** left soft key to select and confirm on or off.

Re: Select "On" means the menu will be displayed on screen. Select "Off" means the menu will be hidden.

## Technical Specifications

Electrical Specifications	Base Station	Portable Handset
Frequency	902-928 MHz	902-928 MHz
RF Power	Peak: 708 mW Average: 354 mW	Peak: 708 mW Average: 88.5 mW
Channel Spacing	200 kHz	200 kHz
Number of Channels	128	128
Modulation	MSK	MSK
Multiple Access	Frequency Hopping TDMA	Frequency Hopping TDMA
Frequency Hopping Rate	100 per second	100 per second
TDMA Frame Length	10 ms	10 ms
Number of Slots/Frame	2	2
Number of Users/Carrier	1	1
Receiver Sensitivity	< -108 dBm (@ BER 10 <sup>-2</sup> )	< -108 dBm (@ BER 10 <sup>-2</sup> )
Antenna Connector	Reverse TNC	Non-standard
Antenna Gain	2 dBi 5 dBi External (optional)	2 dBi (Long) 0.5 dBi (Short)
TX Power Control Range	NA	100-708 mW
Telephone Interface	RJ11 x 1	NA
VoIP interface	RJ45 x 1	NA
SIP protocol	RFC 3261	NA
Speech Coding	64Kbps G.711alaw, G.711 ulaw	8 kbps G.729A
Channel Coding	8 kbps Convolutional + CRC	8 kbps Convolutional + CRC
Transmission Data Rate	170.667 kbps	170.667 kbps
User Data Rate	128 kbps duplex	128 kbps duplex
Duplex	Time Division Duplex (TDD)	Time Division Duplex (TDD)
Voice Quality	TIA/EIA-470B	TIA/EIA-470B
No. of System ID	65,536	65,536
Ring Signal	20-50 Hz, 15-90 Vrms	NA
Auto-Attendant Coding	64Kbps G.711alaw, G.711 ulaw	8 kbps G.729
Flash Time	100-900 ms programmable	NA
Power Source	100~240V/12V AC/DC Adapter	3.7V, 1700 mAh Li-ion Battery
Charger Current	NA	500 mA

Charge Time	NA	4 hours (from empty)
Regulation Compliance	FCC Part 15, Part 68	FCC Part 15, Part 68
Operating Temperature	0 – 50 °C	-10 – 60 °C
Storage Temperature	-10 – 70 °C	-10 – 70 °C
Humidity	20 – 75 %	20 – 75 %
Dimension without antenna	161W x 42D x 188H (mm) 6.3" x 16.5" x 7.4"	161 x 58 x 31 mm
Weight	14.1 ounces	6.17 ounces

## Base Station

### 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:

#### FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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

15.214 (d) Cordless telephones shall incorporate circuitry which makes use of a digital security code to provide protection against unintentional access to the public switched telephone network by the base unit and unintentional ringing by the handset. These functions shall operate such that each access of the telephone network or ringing of the handset is preceded by the transmission of a code word.

Access to the telephone network shall occur only if the code transmitted by the handset matches the code set in the base unit. Similarly, ringing of the handset shall occur only if the code transmitted by the base unit matches the code set in the handset. The security code required by this Section may also be employed to perform other communications functions, such as providing telephone billing information. This security code system is to operate in accordance with the following provisions.

- (1) There must be provision for at least 256 possible discrete digital codes. Factory-set codes must be continuously varied over at least 256 possible codes as each telephone is manufactured. The codes may be varied either randomly, sequentially, or using another systematic procedure.
- (2) Manufacturers must use one of the following approaches for facilitating variation in the geographic distribution of individual security codes:
  - (i) Provide a means for the user to readily select from among at least 256 possible discrete digital codes. The cordless telephone shall be either in a non-operable mode after manufacture until the user selects a security code or the manufacturer must continuously vary the initial security code as each telephone is produced.
  - (ii) Provide a fixed code that is continuously varied among at least 256 discrete digital codes as each telephone is manufactured.
  - (iii) Provide a means for the cordless telephone to automatically select a different code from among at least 256 possible discrete digital codes each time it is activated.
  - (iv) It is permissible to provide combinations of fixed, automatic, and user-selectable coding provided the above criteria are met.
- (3) A statement of the means and procedures used to achieve the required protection shall be provided in any application for equipment authorization of a cordless telephone.

**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. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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.

**Déclaration d'exposition aux radiations:**

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.

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.

**Telecom**

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the EUT of this equipment is a label that contains, among other information, a product identifier in the format US: SNIW401BSP935. If requested, this number must be provided to the telephone company.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US: SNIW401BSP935. The digits represented by 01 are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

If your equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC. Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, please contact the following address and phone number for information on obtaining service or repairs.

The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

*Company: EnGenius Technologies*

*Address: 1580 Scenic Avenue, Costa Mesa, CA92626*

*Tel no.: 888.735.7888 ext. 827*

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

"NOTICE: This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment."

"NOTICE: The Ringer Equivalence Number (REN) for this terminal equipment is 0.1. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five."

« AVIS : Le présent matériel est conforme aux spécifications techniques d'Industrie Canada applicables au matériel terminal. Cette conformité est confirmée par le numéro d'enregistrement. Le sigle IC, placé devant le numéro d'enregistrement, signifie que l'enregistrement s'est effectué conformément à une déclaration de conformité et indique que les spécifications techniques d'Industrie Canada ont été respectées. Il n'implique pas qu'Industrie Canada a approuvé le matériel. »

« AVIS : L'indice d'équivalence de la sonnerie (IES) du présent matériel est de 0.1. L'IES assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule

condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5. »

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