SCS100

Single Channel System

User Manual

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Figures

Illustrations in this publication are approximate representations of the actual equipment, and may not be exactly as the equipment appears.

SCS100 SINGLE CHANNEL SYSTEM

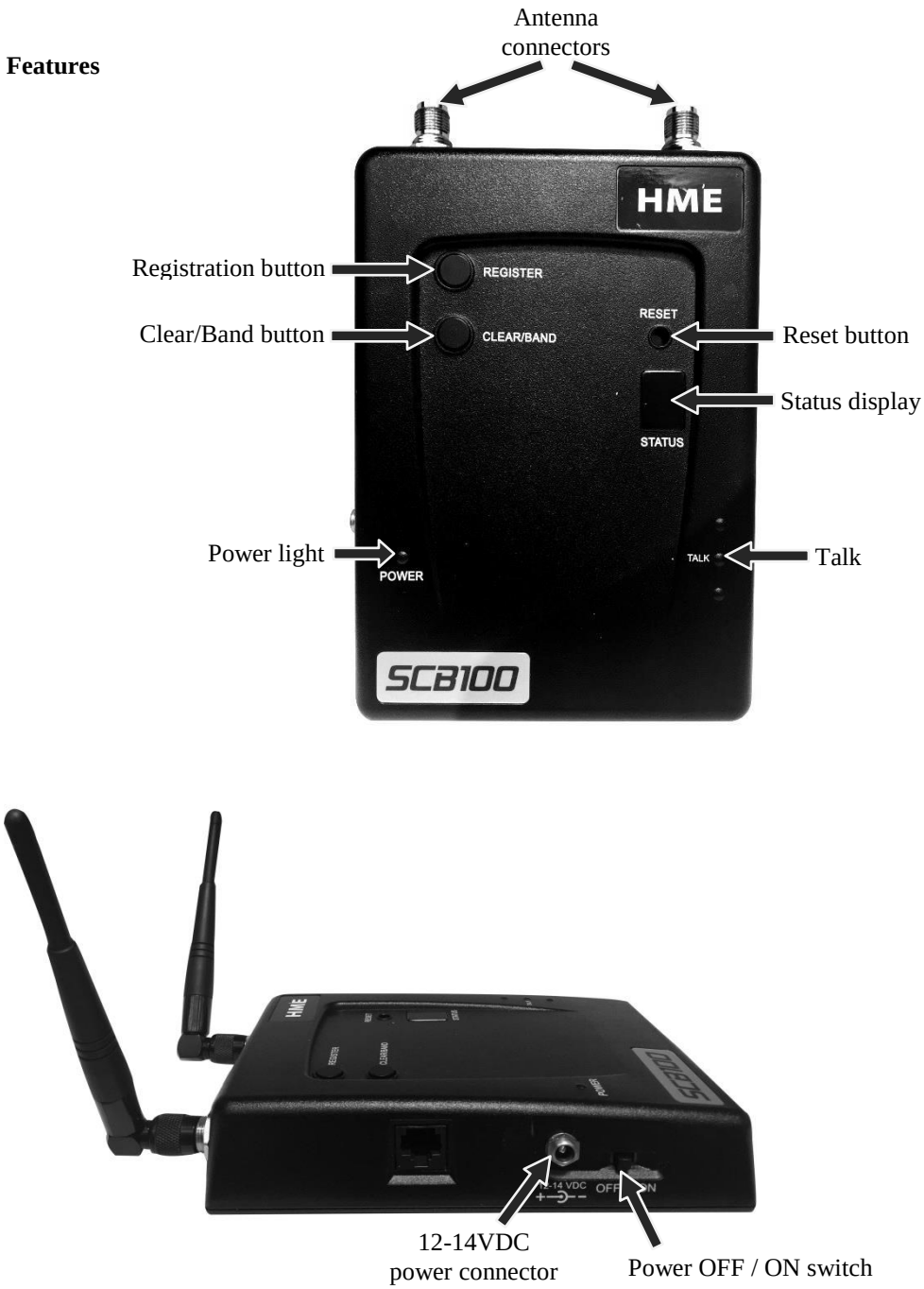
Standard Equipment

Check to ensure you have all equipment needed to operate the SCS100 Single Channel System. **BP100 Beltpac** equipment can be viewed on page 9.

Figure 1. SCB100 Equipment

SCB100 Equipment Features

Figure 2. SCB100 Features



Equipment Connections

1. Connect Antennas to SCB100

- Screw both antennas onto the antenna connectors
- Tighten the antennas, and angle them as shown in **Figure 3**.

2. Connect Power Supply to SCB100

- Connect the power cord to power adapter
- Plug the power cord into AC power outlet
- Plug in and tighten the power adapter jack to SCB100

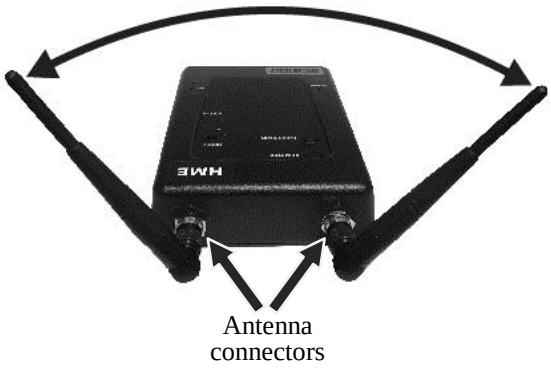


Figure 3. SCB100 Antenna Setup

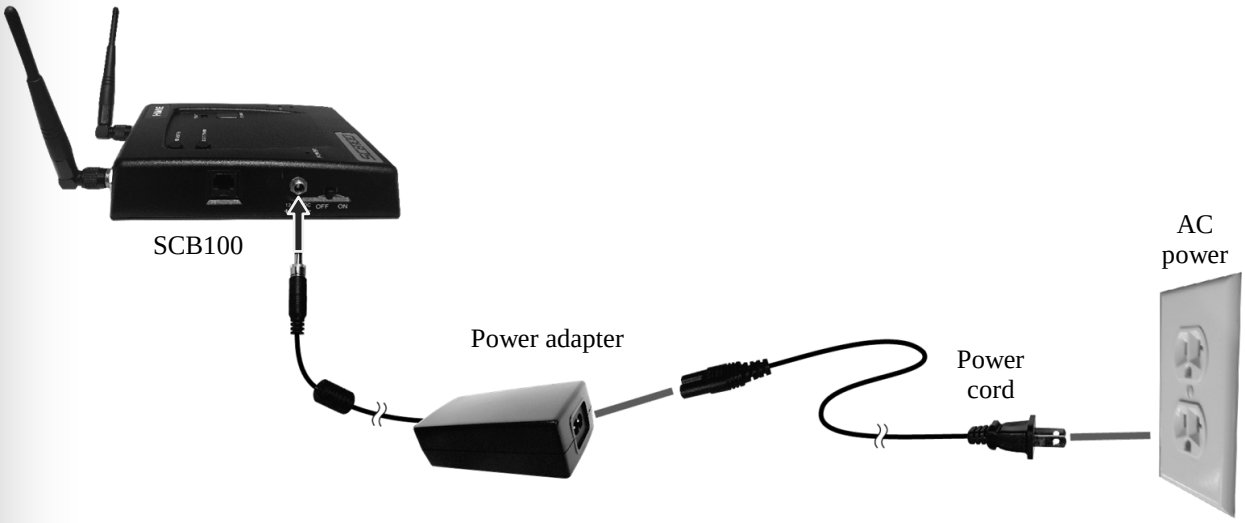


Figure 4. SCB100 Connection to Power

BP100 EQUIPMENT

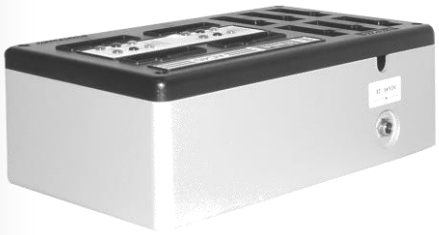
The equipment needed for BP100 Beltpac operation is displayed below. The Battery is located on the back of the beltpac.

For battery removal and charging information, see **AC40A Battery Charger Setup, page 10 - 11**.

Beltpac

Headset

Battery



AC40A Battery Charger

AC power supply

Power cord

AC40A BATTERY CHARGER SETUP

The AC40A is the charger used for the beltpac batteries.

IMPORTANT! Before installing the system, connect the AC power supply to the AC40A Battery Charger and plug it into an electrical outlet. Charge all the batteries for the beltpacs while the other equipment is being installed. Charging time is about 2.5 hours.

Changing Batteries

When a battery weakens, a voice in the headset will say "*Change battery*". When this occurs, take the beltpac out of its pouch and remove the battery. Slide the arrow-shaped battery-release latch in the direction of the arrow. Pull up on the end of the battery near the battery-release latch and lift the battery out of the beltpac. You can also turn the beltpac over and catch the battery in your hand.

When replacing a battery in the beltpac, place the battery in the battery holder on the beltpac in the same position as the battery you removed. Press the top of the battery carefully into the battery holder until it snaps in place under the battery-release latch.

Recharge batteries according to the instructions on page 11.

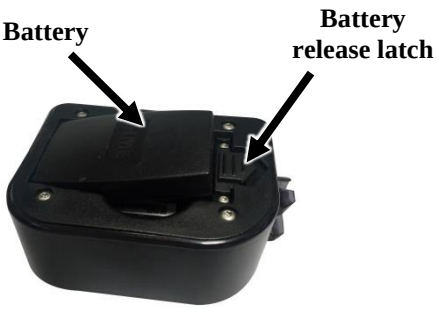


Figure 5. Battery Release

Connect AC Power Supply

1. Attach the AC power supply cable connector to the screw connector on the battery charger.
2. Plug the power cord connector into the AC power supply.
3. Plug the power cord into an electrical outlet.
4. The red lights on the charger will blink, and then the yellow lights will turn on and remain on.

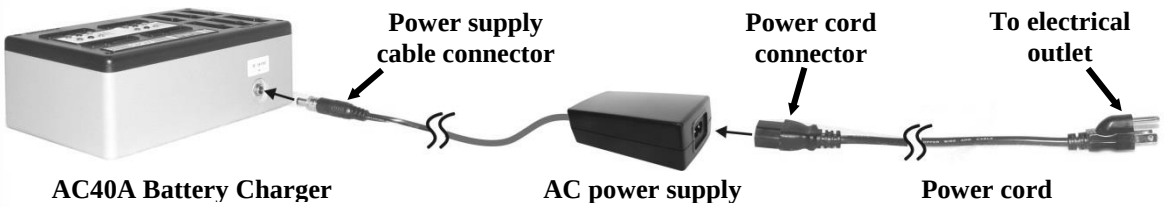


Figure 6. AC Power Supply Setup

Charging Batteries

Up to four batteries can be charged at one time. The battery status lights next to each charging port are explained below. Up to six fully charged batteries can be stored in the battery storage ports.

Insert a battery in each of four charging ports until it clicks into place.

A yellow light next to each charging port remains on while a port is empty. When a battery is placed in a charging port, a flashing yellow light displays **CHARGE PENDING**, indicating that the battery is too hot.

To remedy this situation, adjust the room temperature or move the charger to a cooler area. When a battery is in a charging port, a steady yellow light means **CHARGE FAILED**. If this happens, follow the instructions on the side of battery charger.

With a battery is in a charging port, a red **CHARGING** light indicates that the battery is charging.

A green **READY** light next to a battery port indicates that the battery is fully charged. Store fully charged batteries in storage ports.

Fully charged batteries should not be left in charge ports. If a battery is left in a charge port for more than three weeks, the yellow indicator may light up, but it does not indicate a faulty battery.

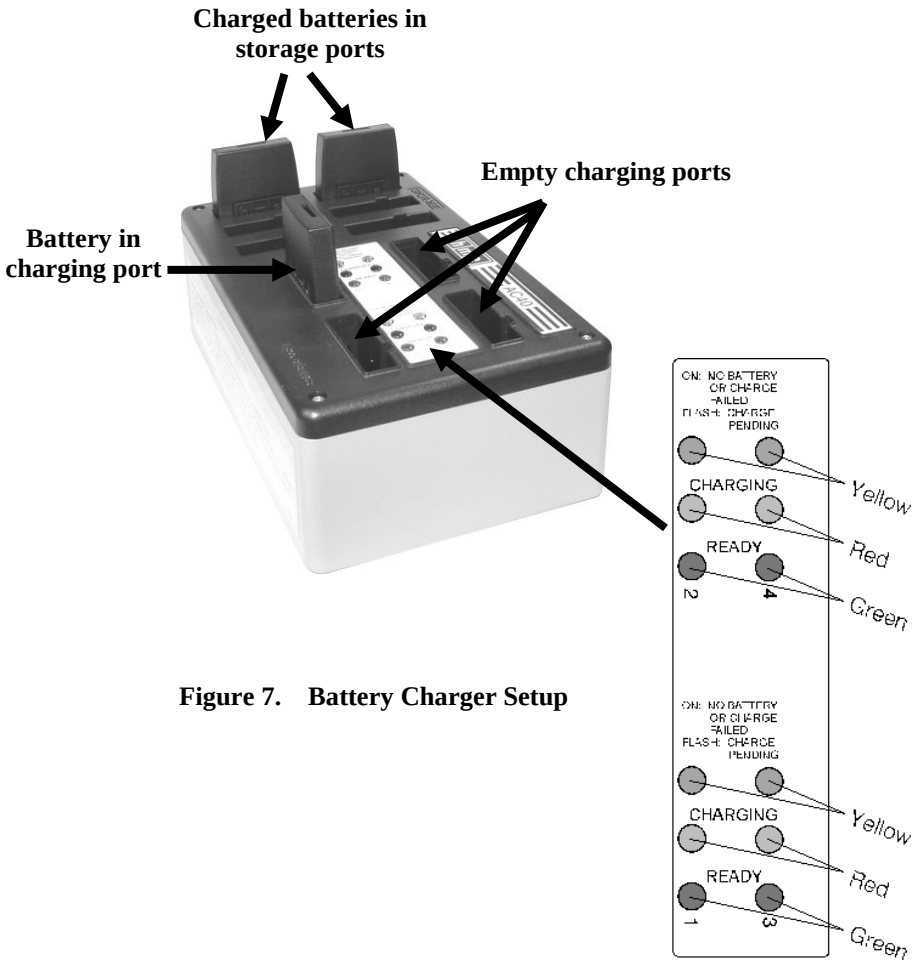


Figure 7. Battery Charger Setup

BELTPAC USER INSTRUCTIONS

Beltpac Registration

Prior to operation of the SCS100 system, each beltpac must be registered for use with the base station. The base station will then recognize all registered beltpacs when their power is on, differentiating between each beltpac and any interfering transmissions from other electronic equipment operating on similar frequencies.

When a beltpac is added or replaced, the new one must be registered. When a beltpac is replaced, the old one remains in memory. A maximum of three beltpacs can be registered to a single base station.

If the maximum number of three beltpacs (in memory) is exceeded, an **F** will appear in the **STATUS** display on the base station when you enable registration mode. If this happens, refer to **When the maximum number of beltpacs (3) is exceeded…** on the next page.

To Register a Beltpac:

1. Be certain that all beltpacs to be registered are powered off and the base station power is on.
2. Plug the headset into the beltpac, and put the headset on your head.
3. Press the **REGISTER** button on **SCB100** Base until a small "**o**" (for "open") appears in the **STATUS** display.
4. Simultaneously press and release the **PTT** button and **PWR** (power) button. A voice message in the headset will say "Power on, Beltpac #, Version #, Begin registration". The beltpac will enter registration mode (see next page).

NOTE:
Beltpacs must be within 6 feet (1.83 meters) of the base station while being registered.

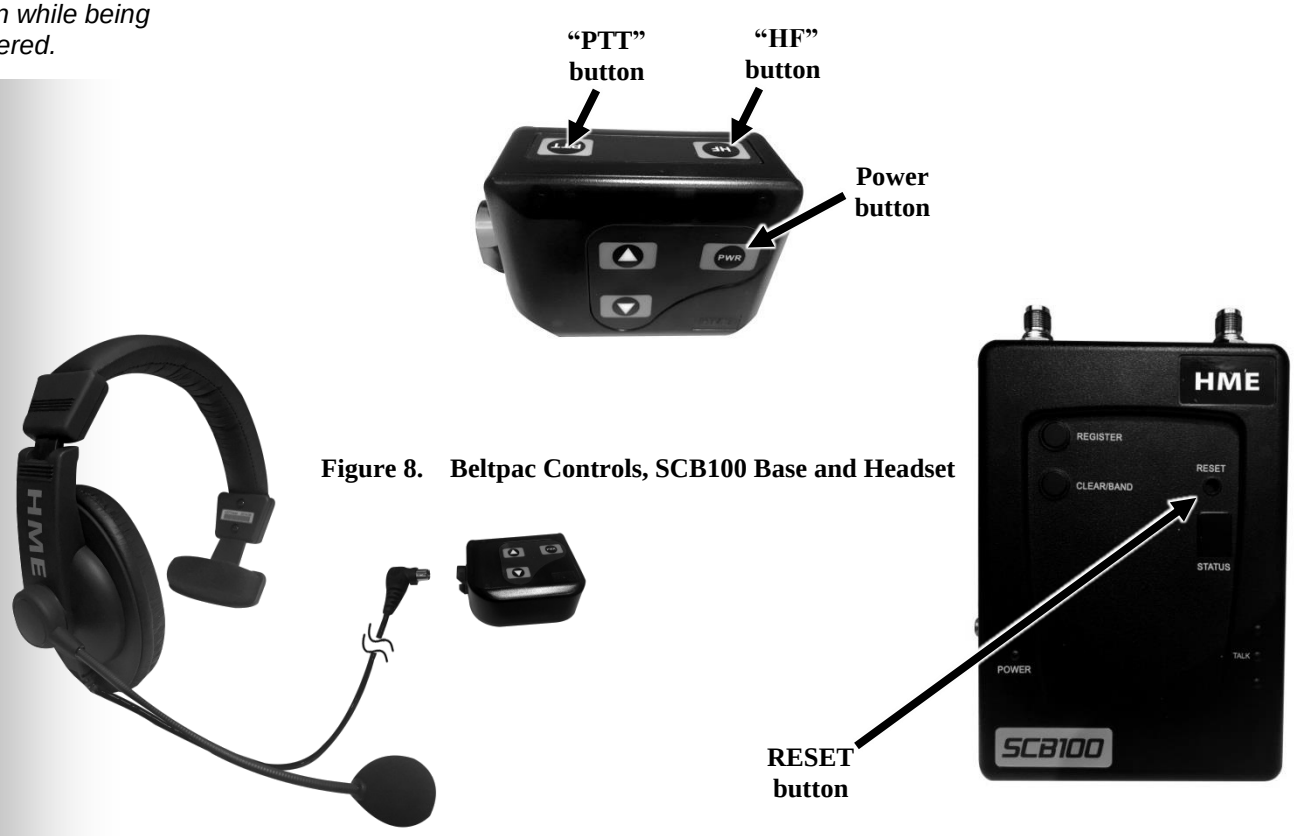


Figure 8. Beltpac Controls, SCB100 Base and Headset

The two power lights next to the **HF** and **PTT** buttons will begin blinking red.

Wait! There may be a delay. One of the following will happen:

Registration is Completed	Registration Failed
• After a short delay of up to three seconds (in some cases), you will hear "**Registration complete**". • The **STATUS** display will momentarily show the ID number assigned to this beltpac. **NOTE:** ID numbers are assigned sequentially as 0 thru 2. • The power light on the beltpac, adjacent to the **HF** button, will remain on (steady green).	• Both power lights on the beltpac will be blinking red, and there may be a delay of up to 90 seconds before you hear "**Registration failed**." **NOTE:** If registration failed, follow the instructions below to remedy the situation. • Press the **RESET** button on the base. (See Figure 5.) • When the **STATUS** display goes blank, press the **REGISTER** button and repeat the registration procedure. If registration fails again, call HME Customer Support at **1-800-848-4468**. Outside the USA, call your local HME representative for assistance.

When the maximum number of Beltpacs (3) is exceeded:

If a beltpac is replaced, the new one must be registered. The old beltpac remains in memory. If the maximum number of three (in memory) is met, all current registrations must be cleared and all active beltpacs must be re-registered.

To clear all current registrations, press the **CLEAR / BAND** button and the **RESET** button simultaneously.

Continue holding the **CLEAR / BAND** button after releasing the **RESET** button, until the clear code "**c**" (lower case) appears momentarily on the **STATUS** display. All active beltpacs can then be registered, one at a time. (Previously registered beltpacs must be re-registered.)

NOTE:
*If registration fails due to an excess of three beltpacs registered, an "F" will appear on the **STATUS** display.*

NOTE:
*To press the **RESET** button, insert the tip of a paper clip (or similar object) into the **RESET** hole at the upper-right corner of the base station front panel. Refer to Figure 8, previous page.*

Beltpac Operation

The beltpac control buttons have a snap action. They will activate when firmly pressed. It's best to use your fingertips, not your fingernails, when pressing the buttons.

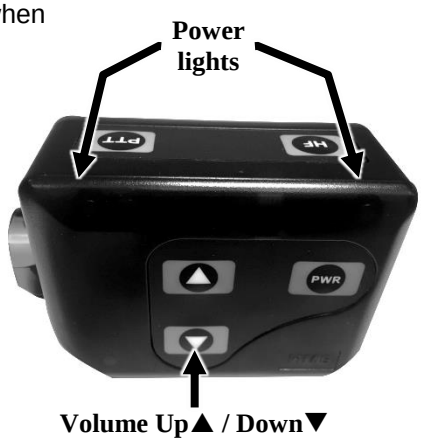


Figure 9. Power Lights and Volume

Power On/Off

Power On: Press and release the **PWR** (power) button. A voice message in the headset will say "*Power on, Beltpac #, Version #*," and the red power lights at the corners of the **HF** and **PTT** buttons will illuminate.

After a short time, the light adjacent to the **PTT** button will turn off and the light adjacent to the **HF** button will turn green, indicating that the beltpac is ready for use.

The **STATUS** indicator on the base station will momentarily indicate the beltpac ID.

Power Off: Press and hold the **PWR** button for approximately two seconds. A voice message in the headset will say "*Power off*", and the green power light will turn off. The power light will remain a steady green whenever the beltpac is ready (but not transmitting). While the beltpac is transmitting, the green power light will flash.

Push-To-Talk Operation: Press and hold the **PTT** button to speak. Release the button to listen. In PTT operation, a voice will only be transmitted while a user is pressing the **PTT** button.

Hands-free Operation: Quickly press and release the **HF** button to "latch" the beltpac and begin communication. Talk and listen as in a normal telephone conversation. Press and release the **HF** button again to "unlatch" and end the conversation.

Volume Up/Down

Volume Up Adjustment: Each time you press and release the volume-up button (▲), you will hear a higher pitch beep in the headset as the volume increases one step. If you press and hold the volume-up button, you will hear beeps of ascending pitch as the volume increases to maximum.

When maximum volume is reached, you will hear "maximum" repeating until you release the button.

Volume Down Adjustment: Each time you press and release the volume-down button (▼), you will hear a lower pitch beep in the headset as the volume decreases. If you press and hold the button, you will hear beeps of descending pitch as the volume decreases to minimum.

When minimum volume is reached, you will hear rapidly repeating beeps until you release the button.

Sidetone Adjustment

Sidetone is the volume level of your own voice heard in the headset as you speak into the microphone. To adjust sidetone, press and hold the **HF** button while pressing the volume-up (▲) or volume-down button (▼).

If you reach the maximum volume level you will hear "**Maximum**" in the headset. If you reach the minimum volume level, a voice prompt will say "**Zero**".

Your sidetone setting will be saved in memory. Adjustment is not required each time the beltpac is powered on or off.

This adjustment only affects the level of your voice in your own headset.

Microphone Gain Adjustment

Some users speak louder or softer than others. To adjust for this situation, use the Microphone Gain option. When adjusted, the microphone gain increase or decrease can be monitored through sidetone or by someone else on a Beltpac/Headset.

To increase microphone gain: Press the volume-up button (▲) while holding down the **PTT** button in the normal operating mode.

To decrease microphone gain: Press the volume-down button (▼) while holding down the **PTT** button in the normal operating mode.

You will hear "**Maximum**" if you attempt an increase higher than maximum microphone gain.

A voice prompt will say "**Zero**" if you attempt to decrease lower than minimum microphone gain.

Microphone gain will be saved in non-volatile memory. Adjustment is not required each time the beltpac is powered on or off.

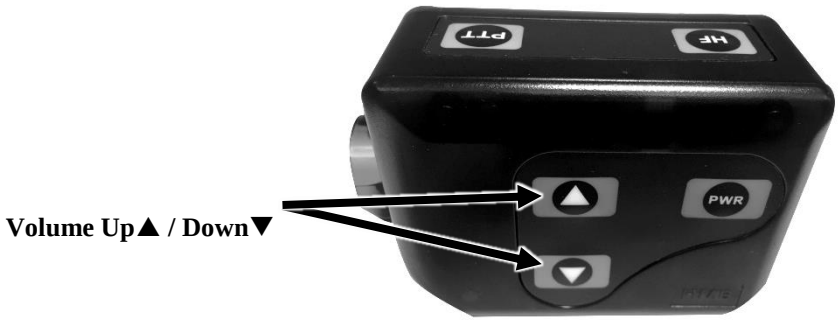


Figure 10. Sidetone and Microphone Volume Adjustment

INTERFERENCE AVOIDANCE

Multiple base stations can operate on high or low parts of the frequency band to prevent interference, which may be heard in a headset as popping sounds. For example, if you have 2 base stations, set 1 on low band and 1 on high band, according to the steps below.

1. Turn the base station power on. The status window will show "8" for a few seconds. After the "8" disappears, the STATUS window will be blank.
2. Press and hold the CLEAR/BAND button and, while you press and hold the REGISTER button for about 4 seconds until the STATUS window shows L, H or A.

L = Low band **H = High band** **A = All**

3. Quickly, press the CLEAR/BAND button repeatedly to cycle through parts of the frequency band, and stop at the desired L, H or A setting.

NOTE: *Base stations are shipped in the "A" (default) position. A "c" will only appear on the STATUS display the first time you are setting the frequency band.*

In general, whenever you cycle through the L, H or A settings and then stop at an L, H or A setting (different from the previous setting), an "8" will quickly appear, followed by "c". This confirms that the setting has been changed.

If you change a base station's frequency band setting, you will have to re-register all beltpacs that were registered to that base station.

FCC NOTICE

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.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by HM Electronics, Inc. could void the users authority to operate this equipment.

The antenna(s) used for the base transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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.
The term “IC:” before the certification/registration number only signifies that the Industry Canada technical specifications were met.

Hereby, HM Electronics, Inc. declares that the SCB100 is in compliance with the essential requirements and other relevant provisions of R&TTE Directive 1999/5/EC.

CE

This product operates in the 2400 to 2483.5 MHz frequency range. The use of this frequency range is not yet harmonized between all countries. Some countries may restrict the use of a portion of this band or impose other restriction relating to power level or use. You should contact your Spectrum authority to determine possible restrictions.

Waste Electrical and Electronic Equipment (WEEE)

The European Union (EU) WEEE Directive (2002/96/EC) places an obligation on producers (manufacturers, distributors and/or retailers) to take-back electronic products at the end of their useful life. The WEEE Directive covers most HME products being sold into the EU as of August 13, 2005. Manufacturers, distributors and retailers are obliged to finance the costs of recovery from municipal collection points, reuse, and recycling of specified percentages per the WEEE requirements.

Instructions for Disposal of WEEE by Users in the European Union

The symbol shown below is on the product or on its packaging which indicates that this product was put on the market after August 13, 2005 and must not be disposed of with other waste. Instead, it is the user’s responsibility to dispose of the user’s waste equipment by handing it over to a designated collection point for the recycling of WEEE. The separate collection and recycling of waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local authority, your household waste disposal service or the seller from whom you purchased the product.