



**wireless** | **IQ**<sup>™</sup>

**Wireless Drive-Thru Audio System**

**Operating Instructions**

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# Table of Contents

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<b>WIRELESS IQ EQUIPMENT .....</b>	<b>1</b>
Wireless IQ Base Station .....	2
External Features .....	2
COM6000BP COMMUNICATOR® .....	4
Features and Controls .....	4
How to Wear the COMMUNICATOR® .....	4
How to Use the COMMUNICATOR® Controls.....	5
COMMUNICATOR® Registration.....	5
Battery Removal and Replacement.....	7
Battery Charger .....	7
<b>WIRELESS IQ OPERATION.....</b>	<b>8</b>
Changing Languages.....	8
Obtaining Communicator Status .....	8
Single-Lane Operation (one base station for one speaker post).....	9
Dual-Lane Operation (two base stations for two speaker posts).....	10
Tandem Operation (two base stations for two speaker posts).....	11
Internal Communication .....	12
Speed-Team Operation .....	13
Wired Backup System.....	13
Message Repeater Operation.....	14
<b>EQUIPMENT CARE AND CLEANING .....</b>	<b>15</b>
Handling the Equipment Properly.....	15
Cleaning the Equipment.....	15
<b>IN CASE OF PROBLEMS .....</b>	<b>16</b>
Base Station Internal Controls and Indicators.....	19
<b>EQUIPMENT SPECIFICATIONS.....</b>	<b>20</b>
<b>FCC NOTICE.....</b>	<b>21</b>

## Figures and Diagrams

---

Figure 1. Wireless IQ standard equipment .....	1
Figure 2. Base station with front door open .....	2
Figure 3. COMMUNICATOR® controls.....	4
Figure 4. Correct wearing of the headset.....	4
Figure 5. Registration buttons and indicators.....	6
Figure 6. Communicator battery-release latch .....	7
Figure 7. Batteries in charger .....	7
Figure 8. Typical Tandem drive-thru .....	11
Figure 9. S2 switch on Switcher Board .....	13
Figure 10. Base station internal features .....	19

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

The COM6000BP COMMUNICATOR® provides basic operating cues in Spanish and French, as follows. Refer also to the Changing Languages instructions on page 8.

## Español

El comunicador COM6000BP proporciona información que indica el estado del funcionamiento del mismo en español como es: **Unidad #, Batería cargada, Batería semi-cargada, Batería baja, Línea uno, Línea dos, Fuera de alcance, Reemplazar batería y Unidad desactivado.**

Para cambiar el idioma de la información que se escucha en la diadema, de inglés a español, siga los siguientes pasos: Oprima y mantenga presionado el botón “A1”, así como el botón para reducir el volumen “▼” y el botón para encender el comunicador “PWR” al mismo tiempo, hasta que el comunicador se encienda.

## Français

COM6000BP fournit les sélections de fonctionnement fondamentales suivantes en français: **Ceinture-sac #, Fonction inactive, Batterie charge, Batterie demi-charge, Batterie basse-charge, Voie un, Voie deux, 'hors d'entente, Remplace batterie et Ceinture-sac inactive.**

Pour changer les indications de l'anglais au français, appuyer et tenir le “A1” et le volume en bas “▼” en même temps, tout en appuyant sur le bouton d'allumage “PWR”.

# WIRELESS IQ EQUIPMENT

The Wireless IQ is an audio system primarily for use at quick-service restaurants. The equipment shown below is standard with the Wireless IQ system. Optional equipment can be ordered from your local dealer.

**NOTE:**

*Equipment quantities vary, depending on individual store needs at time of purchase. Additional equipment can be ordered from the list below.*



Wireless 6000 Base Station

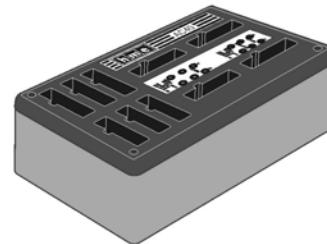


Odyssey IQ



COM6000BP

COMMUNICATOR®



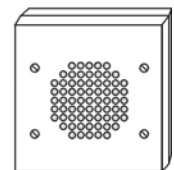
Battery Charger



Battery



Microphone



Speaker

**OPTIONAL EQUIPMENT**

Equipment	Model Number
Belt-Pac Communicator	COM6000BP
Odyssey IQ Headset Communicator	HS6000
Battery for Communicator	BAT41
Headset Earmuff	No model number
Ceiling Speaker	MM100
Ultrasonic Vehicle Detector	DU3
Vehicle Detector Board	VDB101
Vehicle Detector Loop (underground)	VDL100
Message Repeater	MR300
Low-Profile Speaker	SP2500LP
Microphone	DM3
Mode Switch (dual lane)	MS1000
Switcher Circuit Board	No model number
Remote Antenna Kit (with 6 ft / 1.83 meter cable)	ANT20-6
Remote Antenna Kit (with 30 ft / 9.14 meter cable)	ANT20-30
Remote Record Switch	No model number
Remote Speed Team Switch	SW2

Figure 1. Wireless IQ standard equipment

# Wireless IQ Base Station

All functions of the drive-thru audio system are channeled through the base station. It is the electronic heart of the Wireless IQ.

External base station features are shown in Figure 2, and described on page 3. Internal controls and connectors are shown in Figure 10 on page 19.

## External Features

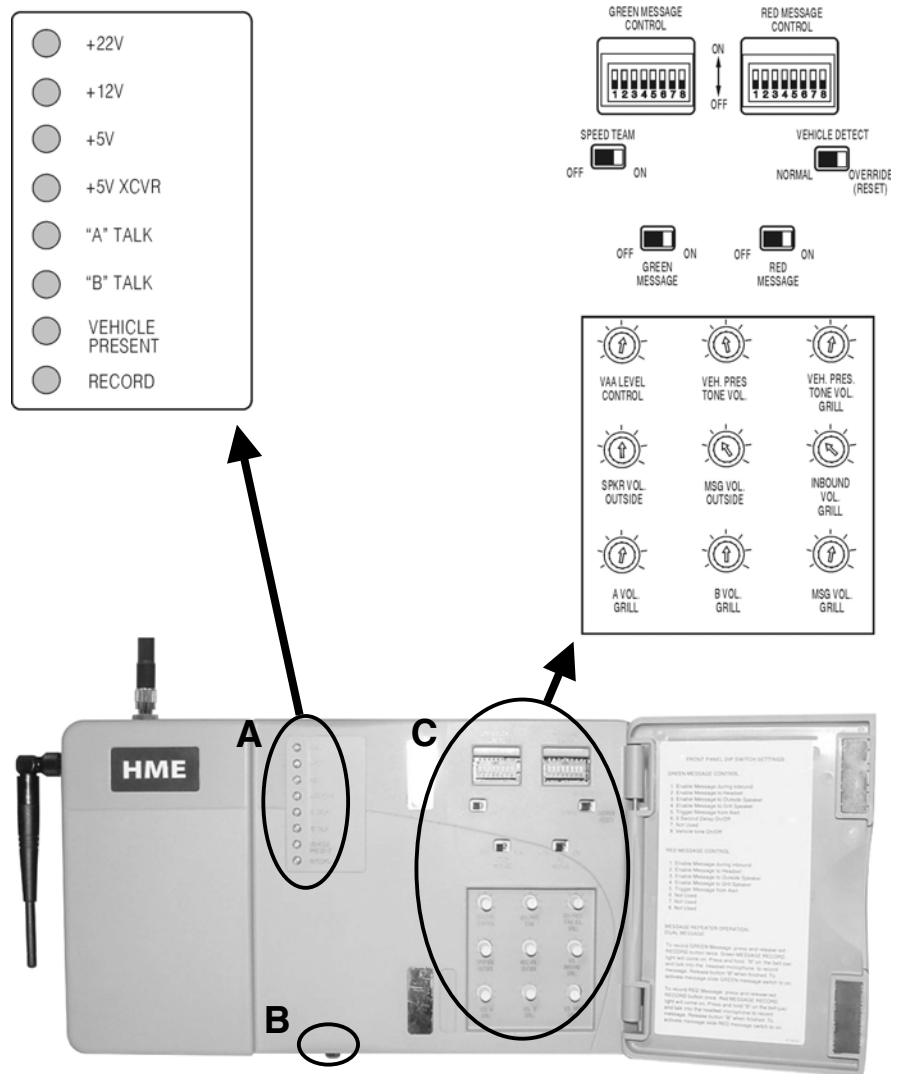


Figure 2. Base station with front door open

**Front** – (See A on Figure 2, page 2.)

- Four **power supply lights** are on when the base station has AC power.
- **“A” TALK light** is on during channel-A transmission.
- **“B” TALK light** is on during channel-B transmission.
- **VEHICLE PRESENT light** is on when a vehicle is present in the drive-thru lane or when the system is in vehicle-detect override.
- **RECORD light** is ON RED when the base station is ready to record red message for the message repeater, and BLINKING RED while a red message is being recorded. It is ON GREEN when the base station is ready to record green message for the message repeater, and BLINKING GREEN while a green message is being recorded.

**Bottom** – (See B on Figure 2, page 2.)

- **PUSH FOR RECORD MODE button** must be pushed IN AND RELEASED ONCE to prepare the base station to record red message for the message repeater, or pushed IN AND RELEASED TWICE to record green message.

**Behind Front Door** – (See C on Figure 2, page 2.)

- **GREEN MESSAGE and RED MESSAGE switches** must be switched ON to use the message repeater, OFF when the message repeater is not being used. Instructions are given inside the front door.
- **SPEED TEAM switch** must be switched ON for speed-team operation, OFF for normal drive-thru operation.
- **VEHICLE DETECTOR switch** must be switched to OVERRIDE to disable the vehicle detector. To reset the vehicle detector, switch to OVERRIDE for 5 seconds, then switch back to NORMAL and leave for normal vehicle detection operation. If the switch is left in the OVERRIDE position, the outside microphone will remain on continuously.
- **DIP switches** at the top are used to control message routing to the outside speaker, grill speaker or COMMUNICATOR®s. DIP switch settings are shown inside the front door.
- **Nine level controls** are used to set the following levels:
  - VAA LEVEL CONTROL** adjusts the volume level at which you hear your own voice in the headset while you are speaking into the microphone. Turn clockwise to lower your voice level in the headset earpiece. Turn counterclockwise to raise your voice level.
  - VEH. PRES TONE VOL.** adjusts the vehicle-present tone volume in the headset.

**VEH. PRES. TONE VOL. GRILL** adjusts the volume of the vehicle present tone played through the grill speaker.

**SPKR VOL. OUTSIDE** adjusts the outside speaker volume.

**MSG VOL. OUTSIDE** adjusts the volume of the outgoing message-repeater message to the customer at the speaker post or menu board.

**INBOUND VOL GRILL** adjusts the volume of the inbound audio from the outside microphone played through the grill speaker.

**A VOL. GRILL** adjusts the volume of channel A communication, from Communicator operators, played through the grill speaker.

**B VOL. GRILL** adjusts the volume of channel B communication, from Communicator operators, played through the grill speaker.

**MSG VOL. GRILL** adjusts the volume of the message-repeater message played through the grill speaker.

**NOTE:** *In tandem systems, on the secondary base station there is a TANDEM switch in place of the SPEED TEAM switch. In normal tandem operation, the SPEED TEAM switch on the primary base station must be in the OFF position, and the TANDEM switch on the secondary base station must be in the ON position. When the TANDEM switch is ON, the RED MESSAGE switch does not need to be in the ON position to enable the “Red Message” to be played.*

# COMMUNICATOR®

## Features and Controls

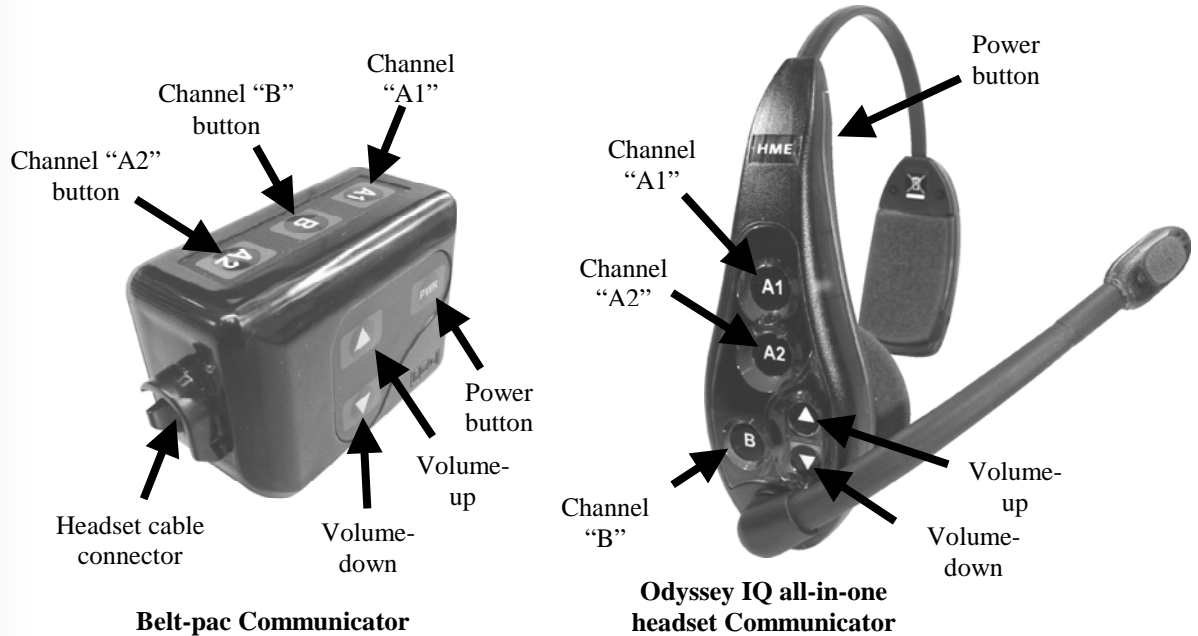


Figure 3. COMMUNICATOR® controls

## How to Wear the COMMUNICATOR®

- Wear the headset with the microphone on your right or left side next to your mouth.
- Adjust the headband and microphone boom as needed.
- If you are using a belt-pac with headset, clip the belt-pac to your belt or waistband on either your right or left side. Clip the clothing clips on the headset cable to the back of your shirt and collar.
- If you are using an Odyssey IQ headset, put the headset on your head with the headset band behind your neck.

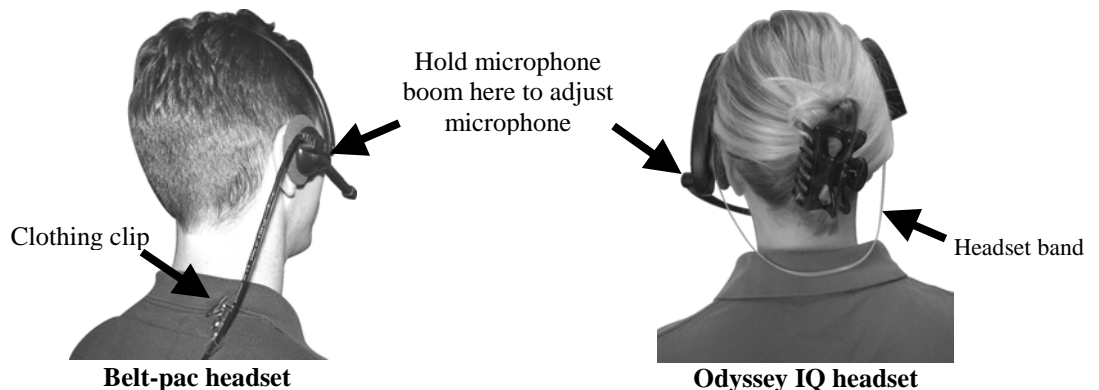


Figure 4. Correct wearing of the headset

## How to Use the COMMUNICATOR® Controls

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The Communicator control buttons have a snap action. They will activate when pressed firmly. Use your fingertips, not your fingernails, to press the buttons. Refer to Figure 3 on page 4.

### Power On/Off

- **Power On** — Press and release the PWR (power) button. A voice message in the earpiece will say “belt-pac #, battery full/half/low” and the red power lights next to the A1 and A2 buttons on the belt-pac will go on. After a short time, one light will go off and the other will change to green. The voice message will then say “Lane 1 (or 2).” The green light indicates the Communicator is ready to use. In dual-lane operations, a green light next to A1 indicates ready on Lane 1 and a green light next to A2 indicates ready on Lane 2.
- **Power Off** — Press and hold the PWR button for about two seconds. A voice message in the earpiece will say “belt-pac off,” and the power lights will go off.

### Volume Up/Down

- **Volume Up Adjustment** — Press and release the volume-up ▲ button. Each time you press the button you will hear a higher pitch beep in the earpiece as the volume increases. When you reach maximum volume, you will hear a high-pitched double beep. If you press and hold the volume-up ▲ button, you will hear repeating beeps, increasing in pitch until the volume reaches maximum. Then you will hear high-pitched double beeps repeating until you release the volume-up ▲ button.
- **Volume Down Adjustment** — Press and release the volume-down ▼ button. Each time you press the button you will hear a lower pitch beep in the earpiece as the volume decreases. When you reach minimum volume, you will hear a low-pitched double beep. If you press and hold the volume-down ▼ button, you will hear repeating beeps, decreasing in pitch until the volume reaches minimum. Then you will hear low-pitched double beeps repeating until you release the volume-down ▼ button.

## COMMUNICATOR® Registration

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During installation of the Wireless IQ, each Communicator was registered for use with a specific base station. The base station thereby recognizes all Communicators registered to it when their power is on, and will be able to tell the difference between them and other electronic equipment operating on similar frequencies.

A maximum of 15 Communicators can be registered. If one is replaced, you must register the new one before you use it. When a Communicator is replaced, the old one remains in memory. If the maximum number of 15 (in memory) is exceeded, the Communicator ID display in the base station will show “F” for full. See Figure 5. If this happens, you must clear all current registrations and re-register all active Communicators. To clear all current registrations, press the “Clear All Registration” button and the “Reset” button at the same time. Refer to Figure 5 on page 6. Continue holding the “Clear All Registration” button after releasing the “Reset” button, until the clear code “c” (lower case) appears on the Communicator ID display. Register all active Communicators the same way, one at a time.

### **NOTE:**

*In tandem or dual-lane operations there are two base stations, a primary and a secondary. Communicators must be registered to the primary base station.*



**NOTE:**

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

**Register each COMMUNICATOR® as follows:**

- Be certain all Communicators to be registered are turned off and the base station power is on. Other Communicators can be on or off.
- Open the base station as follows:
  - Unscrew and remove the remote antenna cable from the top of the base station.
  - Press down on the two release tabs on top of the cabinet and carefully pull its front panel forward and down.
- **CAUTION: Do not let the front panel of the base station drop.**
- Locate the items shown in Figure 5.
  - Press and release the registration button.
  - If no Communicators are on, the status light will be blinking red. If any Communicators are on, the status light will be on steady green.
  - After you press the registration button, the Communicator ID display will show a small “o” for open, and the status light will blink green.
- Press and hold the B button while pressing and releasing the PWR (power) button to turn the Communicator on, and release the B button. This will cause the Communicator to enter the registration mode.
  - The status light in the base station will be blinking green and the Communicator ID display will continue to show a small “o” for open.
  - The power lights next to the A1 and A2 buttons on the Communicator will be blinking red then will change to green.

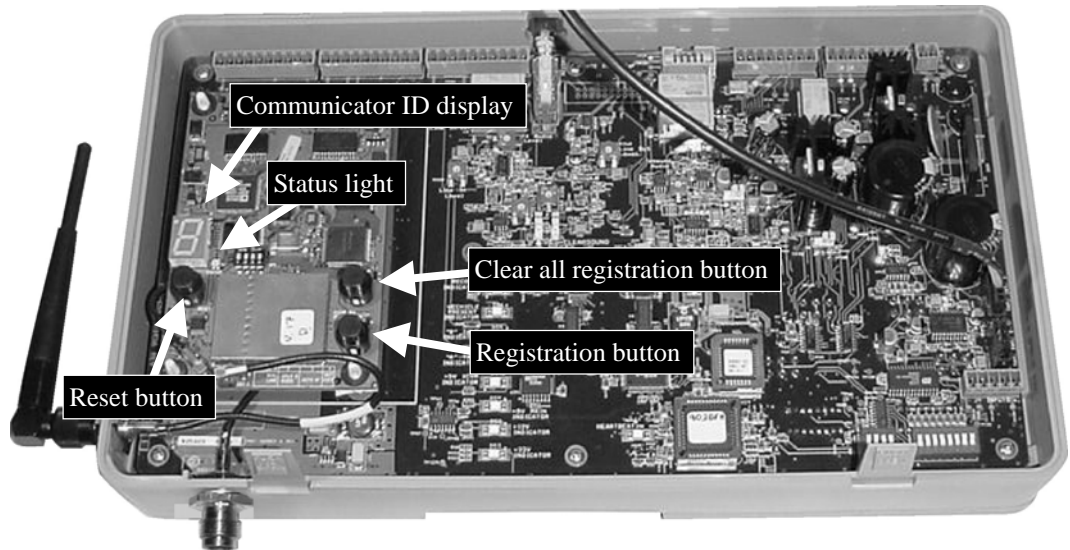


Figure 5. Registration buttons and indicators

**When the registration is successfully completed:**

- — The green status light in the base station will be on steady and the Communicator ID display will show the ID number assigned to this Communicator. ID numbers are assigned sequentially as 0 thru 9, A, b, C, d and E.
- One of the power lights on the Communicator will remain on steady green.
- Close the base station and reconnect the remote antenna cable.

## Battery Removal and Replacement

**To change batteries:** If a battery is weak when the COMMUNICATOR® power is turned on, a voice in the earpiece will say “Battery low.”

If a battery becomes weak during operation, a voice in the earpiece will say “Change battery.” When this happens, take the Communicator out of its pouch and slide the battery-release latch in the direction of the arrow. Pull up on the end of the battery near the latch and lift it out of the Communicator, or turn the Communicator over and catch the battery in your hand.

Battery-release latch



Figure 6. Communicator battery-release latch

**To replace batteries:** When replacing a battery in the Communicator, place the end of the battery with the metal contacts into the battery holder on the Communicator, in the same position as the battery you removed. Press the top of the battery carefully into the battery holder until it snaps into the latch.

## Battery Charger

Up to four batteries can be charged in the charger at the same time. Charging time is approximately 2.5 hours. 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.

### CAUTION:

*Do not remove batteries from the charger until the green READY light is lit, or the charger will reset and the charge cycle will begin again.*

- A yellow light stays on steady next to each charging port while the port is empty.
- Insert a battery in one of the four charging ports until it clicks in place.
- If a yellow light is on steady next to a battery in a charging port, it means CHARGE FAILED. Follow the diagnostic instructions on the side of the battery charger.
- If a yellow light is flashing next to a battery in a charging port, it indicates CHARGE PENDING, which means the battery is too hot. Lower the room temperature or move the charger to a cooler area.
- A red CHARGING light will stay on next to a battery in a charging port while the battery is charging.
- A green READY light will go on next to a battery in a charging port when the battery is fully charged.
- Store fully charged batteries in the storage ports.

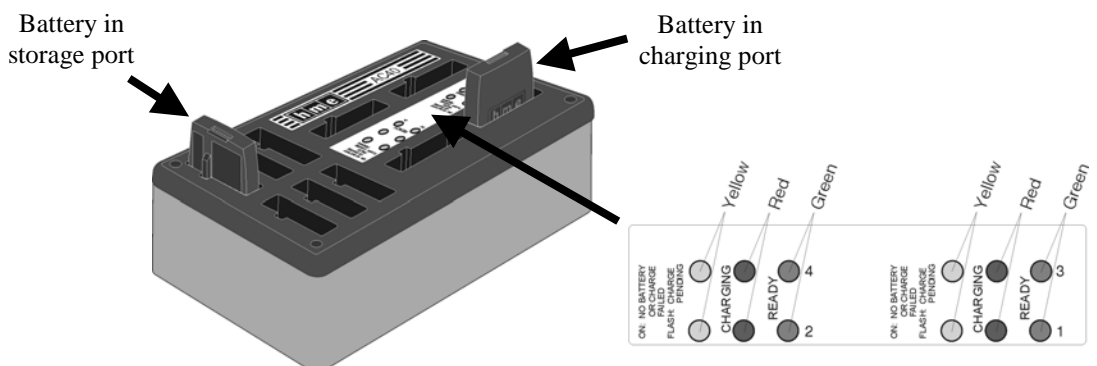


Figure 7. Batteries in charger

# WIRELESS IQ OPERATION

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The COM6000BP can be operated in Hands-Free (HF), Auto-Hands-Free (AHF) or Push-To-Talk (PTT) modes. If your store does not have HF capability, the Wireless IQ should be operated in the PTT mode, according to the instructions on the following pages for single-lane or dual-lane stores.

A full-duplex system supports HF, AHF and PTT operation. Communication can be transmitted and received at the same time, as in a normal telephone conversation. In the AHF mode, transmission and reception are activated automatically when a customer drives into the drive-thru lane. In the HF mode, transmission and reception are activated by touching and releasing one of the A buttons on the COMMUNICATOR®. In the PTT mode, one of the A buttons on the Communicator must be held while the operator is talking to the customer. A half-duplex system only supports the PTT mode. One of the A buttons on the Communicator must be held while the operator speaks to the customer. The customer's voice will not be heard while the operator is transmitting.

## **NOTE:**

*In dual-lane operations, if you have a Mode Switch and it is in the "2 OPERATORS" position, you will only hear a single beep in your headset when a customer arrives in the lane you are operating.*

In single lane operations, when a customer arrives in the drive-thru lane, you will hear a single beep in the headset.

In dual-lane operations, when a customer arrives in the drive-thru lane you are connected to you will hear a single beep in the headset; when a customer arrives in the other lane, you will hear a double beep.

In dual-lane operation, if you are communicating with a customer in one lane when another customer arrives in the other lane, you will hear a higher pitch double beep in your headset. When the customer leaves the speaker post in the lane you are connected to, the same high pitch double beep will repeat in your headset every four seconds until you touch the A1 or A2 button to communicate with the customer in the other lane.

## **Changing Languages**

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To change the language of the cues heard in the Communicator from English to Spanish/French and back to English, with the Communicator power off, press and hold the volume-down ▼ button and the A1 button while you press the power PWR button. The language of the cues heard in the headset earpiece will change when the power goes on.

## **Obtaining Communicator Status**

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To obtain Communicator status, with the Communicator power off, press and hold the volume-down ▼ button and the A2 button while you press the power PWR button. You will hear the status message in the headset earpiece when the power goes on.

# Single-Lane Operation

## (one base station for one speaker post)

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### Hands-Free (HF) Mode

- With the power off, press and hold the volume-up ▲ and B buttons while you press and release the PWR button to turn the power on in the HF mode. The COMMUNICATOR® will remember this setting.
- As a customer enters the drive-thru lane, you will hear an alert tone (single beep) in your headset, and you will be able to hear the customer at the speaker post or menu board.
- Use the volume-up ▲ and down ▼ buttons to adjust the customer's voice level in your headset if necessary.
- Touch and release the A1 or A2 button to speak and listen to the customer.
- Touch and release the A1, A2 or B button to end communication with the customer.
- Touch and release the A1 or A2 button if you want to speak to the customer again.
- If a customer drives away from the speaker post or menu board, the Communicator will stop transmitting.

### Auto Hands-Free (AHF) Mode

- With the power off, press and hold the volume-up ▲ and A1 buttons while you press and release the PWR button to turn the power on in the AHF mode.
- As a customer enters the drive-thru lane, you will hear an alert tone (single beep) in your headset, and you will be able to hear the customer at the speaker post or menu board.
- Use the volume-up ▲ and down ▼ buttons to adjust the customer's voice level in your headset if necessary.
- Speak and listen to the customer without pressing any buttons.
- Touch and release the A1, A2 or B button to end communication with the customer.
- Touch and release the A1 or A2 button if you want to speak to the customer again.
- If a customer drives away from the speaker post or menu board, the Communicator will stop transmitting.

### Push-To-Talk (PTT) Mode

- With the power off, press and hold the volume-down ▼ and B buttons while you press and release the PWR button to turn the power on in the PTT mode. The Communicator will remember this setting.
- As a customer enters the drive-thru lane, you will hear an alert tone (single beep) in your headset, and you will be able to hear the customer at the speaker post or menu board.
- Use the volume-up ▲ and down ▼ buttons to adjust the customer's voice level in your headset if necessary.
- Touch and hold the A1 or A2 button to speak to the customer. Release when finished.

#### **NOTE:**

*Only one Communicator operator at a time can use the auto hands-free feature. If a Communicator is turned off while in the AHF mode, it will automatically be reset for its previous operating mode.*

# Dual-Lane Operation

## (two base stations for two speaker posts)

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### Hands-Free (HF) Mode

- With the COMMUNICATOR® power off, press and hold the volume-up ▲ and B buttons while you press and release the PWR button to turn the power on in the HF mode. The Communicator will remember this setting.
- As a customer enters a drive-thru lane, you will hear an alert tone in your headset (single beep for connected lane, double beep for the other lane), and you will be able to hear the customer at the speaker post or menu board if that lane is selected.
- Use the volume-up ▲ and down ▼ buttons to adjust the customer's voice level in your headset if necessary.
- Touch and release the A1 button for Lane 1 or A2 for Lane 2, to speak and listen to the customer.
- Touch and release the A1, A2 (depending on lane) or B button to end communication with the customer.
- Touch and release the A1 button for Lane 1 or A2 for Lane 2, to speak to the customer again.
- To change lanes, touch and release the opposite A button.
- If a customer drives away from the speaker post or menu board, the Communicator will stop transmitting.

### Auto Hands-Free (AHF) Mode

- For Lane 1 operation, with the power off, press and hold the volume-up ▲ and A1 buttons while you press and release the PWR button to turn the power on in the AHF mode.
- For Lane 2 operation, with the power off, press and hold the volume-up ▲ and A2 buttons while you press and release the PWR button to turn the power on in the AHF mode.
- As a customer enters a drive-thru lane, you will hear an alert tone in your headset (single beep for connected lane, double beep for the other lane), and you will be able to hear the customer at the speaker post or menu board if that lane is selected.
- Use the volume-up ▲ and down ▼ buttons to adjust the customer's voice level in your headset if necessary.
- Speak and listen to the customer without pressing any buttons.
- Touch and release the A1, A2 (depending on lane) or B button to end communication with the customer.
- Touch and release the A1 button for Lane 1 or A2 for Lane 2, to speak to the customer again.
- If a customer drives away from the speaker post or menu board, the Communicator will stop transmitting.

### Push-To-Talk (PTT) Mode

- With the Communicator power off, press and hold the volume-down ▼ and B buttons while you press and release the PWR button to turn the power on in the PTT mode. The Communicator will remember this setting.
- As a customer enters a drive-thru lane, you will hear an alert tone in your headset (single beep for connected lane, double beep for the other lane), and you will be able to hear the customer at the speaker post or menu board if that lane is selected.
- Use the volume-up ▲ and down ▼ buttons to adjust the customer's voice level in your headset if necessary.
- Touch and hold the A1 button to speak to a customer in Lane 1, or A2 to speak to a customer in Lane 2.

#### **NOTE:**

*Only one Communicator operator at a time, in each lane, can use the auto hands-free feature. If an operator attempts to configure a second Communicator, "System busy" will be heard in his headset. When operating in the AHF mode, changing lanes is not possible. If a Communicator is turned off while in the AHF mode, it will automatically be reset for its previous operating mode.*

## **Tandem Operation (two base stations for two speaker posts)**

### **CAUTION:**

*In tandem operation, if Order Taker #2's Communicator is set in the Auto Hands-Free mode, the "Please pull forward" message will not be played at Order Point #2. If necessary, Order Taker #2 will have to ask the customer at Order Point #2 to pull forward.*

In Tandem operation, customers at Order Point #1 are served by Order Taker #1, and customers at Order Point #2 are served by Order Taker #2. If a customer arrives at Order Point #2 when there is no customer at Order Point #1, a message will be played automatically from Speaker Post or Menu Board #2 saying "Please pull forward." The message can be set to play one time or to repeat every 4 seconds until the customer pulls forward to Order Point #1 (See page 14, Red Message Control, Switch 6). When a customer arrives at Order Point #1, Order Taker #1 will be alerted. If a customer arrives at Order Point #2 when there is already a customer at Order Point #1, Order Taker #2 will be alerted.

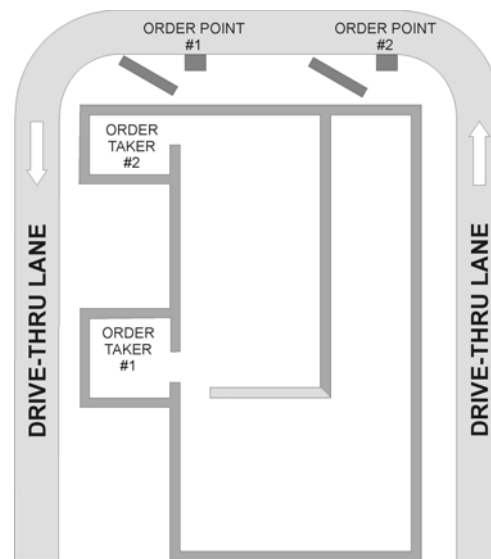


Figure 8. Typical Tandem drive-thru

### **Hands-Free (HF) Mode (Either Order Taker)**

- With the COMMUNICATOR® power off, press and hold the volume-up ▲ and B buttons while you press and release the PWR button to turn the power on in the HF mode. The Communicator will remember this setting.
- As a customer approaches Order Point #1, Order Taker #1 will hear an alert tone in the headset, and will be able to hear the customer at speaker post or menu board #1.
- If a customer approaches Order Point #2 when there is already another customer at Order Point #1, Order Taker #2 will hear an alert tone in the headset, and will be able to hear the customer at speaker post or menu board #2.
- Use the volume-up ▲ and down ▼ buttons to adjust the customer's voice level in your headset if necessary.
- Order Taker #1, touch and release the A1 button to speak and listen to the customer at Order Point #1.
- Order Taker #2, touch and release the A2 button to speak and listen to the customer at Order Point #2.
- Touch and release the A1/A2 (depending on which Order Taker) or B button to end communication with the customer.
- Touch and release the A1/A2 (depending on which Order Taker) to speak to the customer again.
- If a customer drives away from the speaker post or menu board, the Communicator will stop transmitting.

**NOTE:**

*In Tandem operation, only Order Taker #1 can use the Auto Hands-Free Mode.*

*If a Communicator is turned off while in the AHF mode, it will automatically be reset for its previous operating mode.*

**Auto Hands-Free (AHF) Mode (Only Order Taker #1)**

- Order Taker #1 only, with the power off, press and hold the volume-up ▲ and A1 button while you press and release the PWR button to turn the power on in the AHF mode.
- As a customer approaches Order Point #1, you will hear an alert tone in your headset, and you will be able to hear the customer at speaker post or menu board #1.
- Use the volume-up ▲ and down ▼ buttons to adjust the customer's voice level in your headset if necessary.
- Speak and listen to the customer without pressing any buttons.
- Touch and release the A1 or B button to end communication with the customer.
- Touch and release the A1 button to speak to the customer again.
- If a customer drives away from the speaker post or menu board, the Communicator will stop transmitting.

**Push-To-Talk (PTT) Mode (Either Order Taker)**

- With the Communicator power off, press and hold the volume-down ▼ and B buttons while you press and release the PWR button to turn the power on in the PTT mode. The Communicator will remember this setting.
- As a customer approaches Order Point #1, Order Taker #1 will hear an alert tone in the headset, and will be able to hear the customer at speaker post or menu board #1.
- If a customer approaches Order Point #2 when there is already another customer at Order Point #1, Order Taker #2 will hear an alert tone in the headset, and will be able to hear the customer at speaker post or menu board #2.
- Use the volume-up ▲ and down ▼ buttons to adjust the customer's voice level in your headset if necessary.
- Touch and hold the A1 button to speak to a customer at Order Point #1, or A2 to speak to a customer at Order Point #2.
- If a customer drives away from the speaker post or menu board, the Communicator will stop transmitting.

## **Internal Communication**

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To communicate internally with other COMMUNICATOR<sup>®</sup> operators, press and hold the B button while talking. Release when finished. In single-lane operations, up to four Communicator operators can have conference-call type communication by all pressing the B button. Everyone pressing the B button will hear each other without interference.

In dual-lane operation, if your system was set up for "Split-B," internal communication will be heard only by Communicator operators in your lane. If your system was not set up for Split-B operation, internal communication will be heard by all Communicator operators in both lanes. In dual-lane operation, up to three Communicator operators can have conference-call type communication by all pressing the B button. Everyone pressing the B button will hear each other without interference. If a car arrives in a lane while internal communication is taking place, priority will be given to the respective A channel for customer communication, which will reduce the number of internal communication channels available.

## Speed-Team Operation

Speed team operation is used during high-volume times. An order taker wearing a Communicator relays orders from outside into the store, using button A1, A2 or B.

Speed teams are not used in tandem drive-thrus.

## Wired Backup System

In order to use a wired backup system, you must have a Switcher Board (optional) in your base station.

To find out if you have a Switcher Board:

- Open the base station as follows.
  - Unscrew and remove the remote antenna cable from the top of the base station.
  - Press down on the two release tabs on top of the cabinet and carefully pull its front panel forward and down.
- **CAUTION: Do not let the front panel of the base station drop.**
- Look for the Switcher Board shown in Figure 8. If there is no Switcher Board, it will not be possible to use a wired backup system.
- If there is a Switcher Board, place the S2 switch in the IN position to use the wired backup system. *When using the Wireless IQ system, the S2 switch must be in the OUT position.*

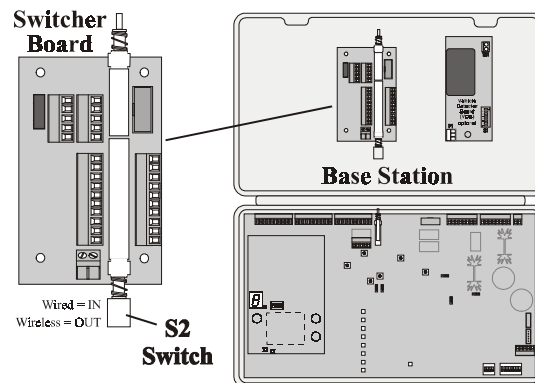


Figure 9. S2 switch on Switcher Board

- Close the base station and reconnect the remote antenna cable.



# Message Repeater Operation

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## **NOTE:**

Refer to Figure 2 on page 2.

### **To record RED MESSAGE**

- Be certain the RED MESSAGE switch is in the ON position.
- Press and release the RECORD MODE button on the base station **once**. — The **red** MESSAGE RECORD light on the base station will come on.
- Press and hold button B on the COMMUNICATOR® and talk into the headset microphone to record a message (up to 8 seconds). — The MESSAGE RECORD light on the base station will begin blinking.
- Release button B. — The record function will stop and the MESSAGE RECORD light will go off.

### **To record GREEN MESSAGE**

- Be certain the GREEN MESSAGE switch is in the ON position.
- Press and release the RECORD MODE button on the base station **twice**. — The **green** MESSAGE RECORD light on the base station will come on.
- Press and hold button B on the Communicator and talk into the headset microphone to record a message (up to 8 seconds). — The MESSAGE RECORD light on the base station will begin blinking.
- Release button **B**. — The record function will stop and the MESSAGE RECORD light will go off.

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Locate the RED MESSAGE and GREEN MESSAGE switches, and the RED MESSAGE CONTROL and GREEN MESSAGE CONTROL DIP switches inside the front door of the base station for the following settings.

### **Red Message Switch**

In the **ON** position, the RED MESSAGE switch enables the “Red Message” to be played. A playing message can be cancelled by pressing Communicator button A.

### **Red Message Control**

- Switch 1** enables inbound audio from speaker post to be heard while message is playing.
- Switch 2** enables message to be played to all Communicators.
- Switch 3** enables message to be played on the outside speaker.
- Switch 4** enables message to be played on the ceiling speaker.
- Switch 5** causes message to be triggered by an external alert signal.
- Switch 6** (only used in tandem systems, on secondary base station)
  - in **OFF** position, “Please pull forward” message plays once.
  - in **ON** position, “Please pull forward” repeats every 4 seconds.
- Switches 7 and 8** not used

### **Green Message Switch**

In the **ON** position the GREEN MESSAGE switch enables the “Green Message” to be played. A playing message can be cancelled by pressing Communicator button A.

### **Green Message Control**

- Switch 1** enables inbound audio from speaker post to be heard while message is playing.
- Switch 2** enables message to be played to all Communicators.
- Switch 3** enables message to be played on the outside speaker.
- Switch 4** enables message to be played on the ceiling speaker.
- Switch 5** causes message to be triggered by an external alert signal.
- Switch 6** causes a 3 second delay before message is played.
- Switch 7** not used
- Switch 8** allows selection of single or dual-beep vehicle present tone.

## **NOTE:**

The RED MESSAGE switch does not need to be in the ON position to enable the “Red Message” to be played when the TANDEM switch is on.

## **NOTE:**

If both RED MESSAGE and GREEN MESSAGE switches are in the ON position, and are selected for the same output, Red and Green Messages will be played alternately. After a new message has been recorded or after the base station has lost and regained power, any message to the outside speaker will always be heard in the Communicator headset the first three times it plays, whether Switch 1 is in the ON or OFF position.

# EQUIPMENT CARE AND CLEANING

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## Handling the Equipment Properly

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- When adjusting the microphone position, hold the boom at its base, not at the microphone end.
- Carry the headset by the headband, not by the earpiece, and never by the microphone boom.
- Use both hands to put the headset on or take it off.

## Cleaning the Equipment

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### COM6000BP COMMUNICATOR®

- Remove the battery from the Communicator.
- Clean the battery and Communicator with a damp sponge sprayed with household cleaner. Squeeze excess liquid out of the sponge before using it.
- Clean the metal battery contacts on the battery and Communicator as follows. Wet the tip of a swab with alcohol and squeeze the excess alcohol from it. Wipe each contact with the swab and be certain all the contacts are dry before reinstalling the batteries.
- Foam muffs on headset earpieces can easily be replaced for sanitary purposes. To order extra foam muffs, call your local HME sales representative.

### Battery Charger

Avoid splashing water or grease on the battery charger. Clean the battery charger monthly as follows.

- Remove all batteries from the battery charger.
- Clean the battery charger case with a damp sponge. Wet the sponge and wring it out so it is damp, not dripping wet. Spray household cleaner on the sponge (NOT DIRECTLY ON THE EQUIPMENT). Clean the battery charger with the sponge and dry it thoroughly.

Wet the tip of a cotton swab with rubbing alcohol and squeeze the excess alcohol from the swab. Wipe the metal contacts inside each battery port with the damp swab. Allow the contacts to dry before placing batteries in the ports.

**CAUTION:**  
*Always unplug the battery charger before cleaning it.*

# IN CASE OF PROBLEMS

PROBLEM	PROBABLE CAUSE	SOLUTION
<b>“Battery failed” is heard in headset when COMMUNICATOR® PWR button is pressed.</b>	Battery may be defective.	Replace battery. Call HME.*
<b>“Headset failed” is heard in headset when Communicator PWR button is pressed.</b>	Headset may be defective.	Use another headset. Call HME.*
<b>No sound is heard in Communicator headset when you press button A and speak into microphone.</b>	Power may be off at base station.	Check circuit breaker for building.
	Power supply in base station may not be working.	Check power supply indicator lights on base station. If no light is lit, be sure AC power adapter is plugged into AC electrical outlet, and is connected to J29 on base station audio circuit board.
	Communicator power may not be on.	Press PWR button on Communicator. Be certain power light goes on and switches from red to green.
	Volume may not be set correctly.	Adjust volume with Volume-up and down buttons.
	Battery may be low or defective.	Check Communicator Power light. If not lit, replace battery.
	Headset may be defective.	Use another headset. Call HME.*
	Communicator may not be registered.	Register Communicator.
<b>Channel A or B is not working.</b>	Communicator power may not be on.	Press PWR button on Communicator. Be certain power light goes on and switches from red to green.
	Battery may be low or defective.	Check Communicator Power light. If not lit, replace battery.
	“A” Talk or “B” Talk light on base station does not light when Communicator button A or B is pressed.	Use another Communicator. Call HME.*
	Communicator may not be registered.	Register Communicator.
<b>Outbound sound is too low.</b>	Outbound volume may be set too low for environment.	Turn outside speaker volume control, on front panel of base station, clockwise until volume is satisfactory.
<b>No outbound sound; Customer cannot hear anything.</b>	System may be set for speed-team operation.	Be certain SPEED TEAM button on base station is in OFF position.
	There may be loose wires on outside speaker or base station circuit board.	Check outside speaker wire connections in base station and at outside speaker.
	Speaker or base station may be defective.	Call HME.*

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>SOLUTION</b>
<b>Customer cannot be heard in push-to-talk (PTT) operation.</b>	System may be set for speed-team operation.	Be certain SPEED TEAM button on base station is in OFF position.
	Base station may be set for wrong drive-thru mode (half-duplex).	Check S6 DIP switch #1 at bottom of base station audio circuit board. It should be ON for full-duplex, OFF for half-duplex operation.
<b>Only intermittent voice can be heard in headsets.</b>	Transmitter antenna connectors on base station transceiver circuit board may be loose or damaged.	Be certain antennas are screwed securely onto base station. Check transmitter antenna cable connection at ANT1 and ANT2 near lower-left corner of transceiver circuit board. Pull and remove each connector plug, and check to be certain pin inside it is not bent. If not, call HME.*
	VAA level is too sensitive.	Reduce VAA level (See Figure 2, page 2) so inbound audio is reduced only when order taker speaks into microphone.
	Circuit board may be defective.	Call HME.*
<b>Personnel hear customers in ceiling speaker or headsets, but cannot hear each other.</b>	Circuit board may be defective.	Check to see if status lights on base station are lit. Call HME.*
	COMMUNICATOR <sup>®</sup> may be defective.	Use another Communicator. Call HME.*
<b>No tone or sound is heard in ceiling speaker or headsets when vehicle enters drive-thru lane.</b>	Power interruption may have caused vehicle detection circuit to be out of balance.	When no vehicle is in the drive-thru lane, move the vehicle detector override switch on the base station to the RESET position, then back to the NORMAL position.
	System may be set for speed-team operation.	Be certain SPEED TEAM switch on base station is in OFF position.
	Connector may be loose, or S6 DIP switch #8 is not set to ON.	Check all connectors in base station, and be certain S6 #8 is set to ON. Call HME.*
<b>Personnel cannot hear customers in ceiling speaker or headsets.</b>	There may be loose wires on base station circuit board.	Check all connections on base station circuit boards.
	System may be set for speed-team operation.	Be certain SPEED TEAM switch on base station is in OFF position.
	VAA level is too sensitive.	Reduce VAA level (See Figure 2, page 2) so inbound audio is reduced only when order taker speaks into microphone.
	Outside microphone, audio circuit board or vehicle detector board may have failed.	Call HME.*
<b>Headset has intermittent sound.</b>	Battery may be low.	Replace battery.
	Headset may be defective.	Use another headset. Call HME.*

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>SOLUTION</b>
<b>There is still sound in headset after all customers have been served.</b>	VEHICLE DETECT switch on base station may be in the OVERRIDE position.	Be certain switch is in the NORMAL position.
	Vehicle detector may be locked up.	Slide VEHICLE DETECT switch back and forth slowly twice.
<b>Battery charger is not working.</b>	Charger may not be plugged in.	Be certain charger is plugged in. If it still is not working, call HME.*
<b>Red or Green message will not play.</b>	Switch not on.	Be certain respective Red or Green message repeater switch on base station is in the ON position, and routing switches are set.
<b>Registration of COMMUNICATOR® failed. "Registration failed" message heard in headset. Lights stay red.</b>	Base station power not on. Communicator <b>B</b> button not pushed when powering up. Registration button not pushed.	Repeat registration procedure on page 6. Call HME.*

\* For assistance, call HME at 1-800-848-4468, or Fax 858-552-0172.

**In the event of an electrical power outage —**

such as from a lightning storm or power generator failure, if you experience problems with your HME equipment after the electricity comes on again, unplug the AC power adapters from their electrical outlets and wait 15 seconds, then plug them back in.

## Base Station Internal Controls and Indicators

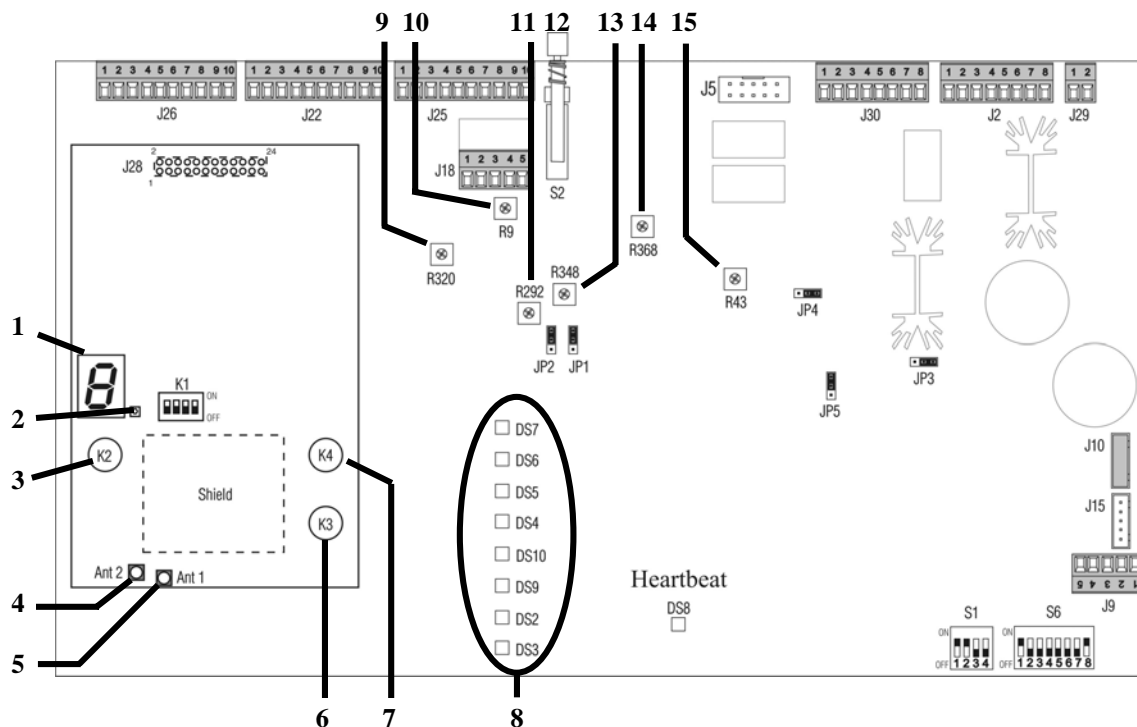


Figure 10. Base station internal features

1. COMMUNICATOR® ID display
2. Status light
3. Reset button
4. Ant2 antenna connector
5. Ant1 antenna connector
6. Start registration button
7. Clear all registration button
8. Indicator lights
 

DS7	Record
DS6	Vehicle Present
DS5	“B” Talk
DS4	“A” Talk
DS10	+5V Xcvr
DS9	+5V
DS2	+12V
DS3	+22V
9. Line-in level adjustment
10. Transmit audio level adjustment
11. Transmit message level adjustment
12. Record mode button
13. VAA attenuation level adjustment
14. Line-out level adjustment
15. Inbound audio level adjustment

# EQUIPMENT SPECIFICATIONS

## Base Station

Voltage input	16VAC $\pm$ 2.5V
AC current input	2.5A maximum
Audio distortion	5% maximum level
Outside speaker output	3 watts RMS into 8 ohms
Ceiling speaker power	3 watts RMS into 8 ohms
Switches/Controls (front panel only)	2-position vehicle detector switch (Normal – Override/Reset) 2-position “Speed Team” ON/OFF switch 2-position “Tandem” ON/OFF switch (replaces “Speed Team” switch only on tandem secondary base station) 2-position “Red Message” ON/OFF switch 2-position “Green Message” ON/OFF switch 1-position “Record” switch (on bottom of cabinet) VAA level Vehicle present tone volume in Communicators Vehicle present tone volume at ceiling speaker Outside speaker volume Outside recorded message volume Inbound volume from outside mic to ceiling speaker Channel “A” volume at ceiling speaker Channel “B” volume at ceiling speaker Recorded message volume at ceiling speaker
TX/RX frequency	2400MHz – 2483.5MHz
Dimensions	7.75”H x 12.75”W x 3.8”D (197 mm x 323 mm x 97 mm)
Weight	4 lbs (1.81 kg) maximum

## COM600BP COMMUNICATOR®

Battery type	3.6V Lithium ion
Battery life	10 hours (typical)
RF frequency	2400MHz – 2483.5MHz
Weight	5.1 oz (.133 kg) with battery
Controls	Power ON/OFF button Volume-up button Volume-down button “A1” button “A2” button “B” button
Indicators	Dual-color LED (red/green)

## AC40 Battery Charger

Voltage input	16.5VAC
Number of charging ports	4
Number of storage ports	6
Charging time	2 hrs maximum
Dimensions	7.6” x 4.6” x 2.6” (193mm x 117mm x 66mm)
Weight	1.5 lb (.68 kg)
Indicators	4 red, 4 green, 4 yellow LEDs

# FCC NOTICE

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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.

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*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 Wireless IQ System is in compliance with the essential requirements and other relevant provisions of R&TTE Directive 1999/5/EC.*



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.



# IMPORTANT!

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## **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.

