Wireless 6000

Wireless Drive-Thru Audio System

Operating Instructions

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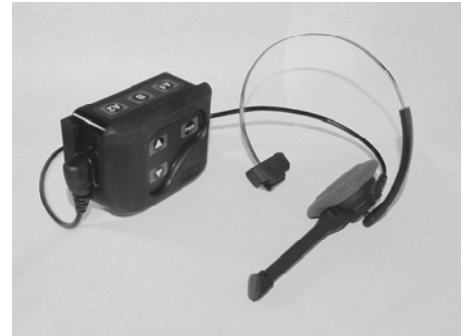
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I. GENERAL

The Wireless 6000 is a wireless audio system primarily for use at quick-service restaurants.

II. EQUIPMENT FUNCTIONS AND USE

Wireless 6000 Base Station

COM6000BP COMMUNICATOR®

Microphone
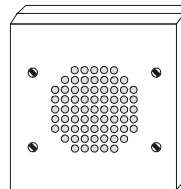
Speaker

Battery
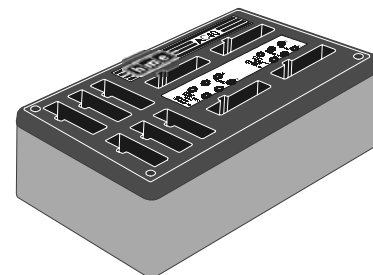
Battery Charger

Figure 1.   Wireless 6000 equipment

A. Base Station

The base station is the electronic heart of the Wireless 6000. It contains the circuitry through which all functions of the drive-thru audio system are channeled.

External base station features are shown in Figure 2, and described on page 3. Its internal controls and connectors are shown in Figure 8 on page 14.

+22V

+12V

+5V

+5V XCVR

"A" TALK

"B" TALK

VEHICLE PRESENT

RECORD

GREEN MESSAGE CONTROL

RED MESSAGE CONTROL

ON

OFF

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8

SPEED TEAM

OFF   ON

VEHICLE DETECT

NORMAL   OVERRIDE (RESET)

OFF   ON
GREEN MESSAGE

OFF   ON
RED MESSAGE

VAA LEVEL CONTROL

VEH. PRES. TONE VOL.

VEH. PRES. TONE VOL. GRILL

SPKR VOL. OUTSIDE

MSG VOL. OUTSIDE

INBOUND VOL. GRILL

A VOL. GRILL

B VOL. GRILL

MSG VOL. GRILL

A

C

B

Figure 2.   Wireless 6000 Base Station with front door open

2

Base Station External Features

Front – (See **A** on Figure 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.
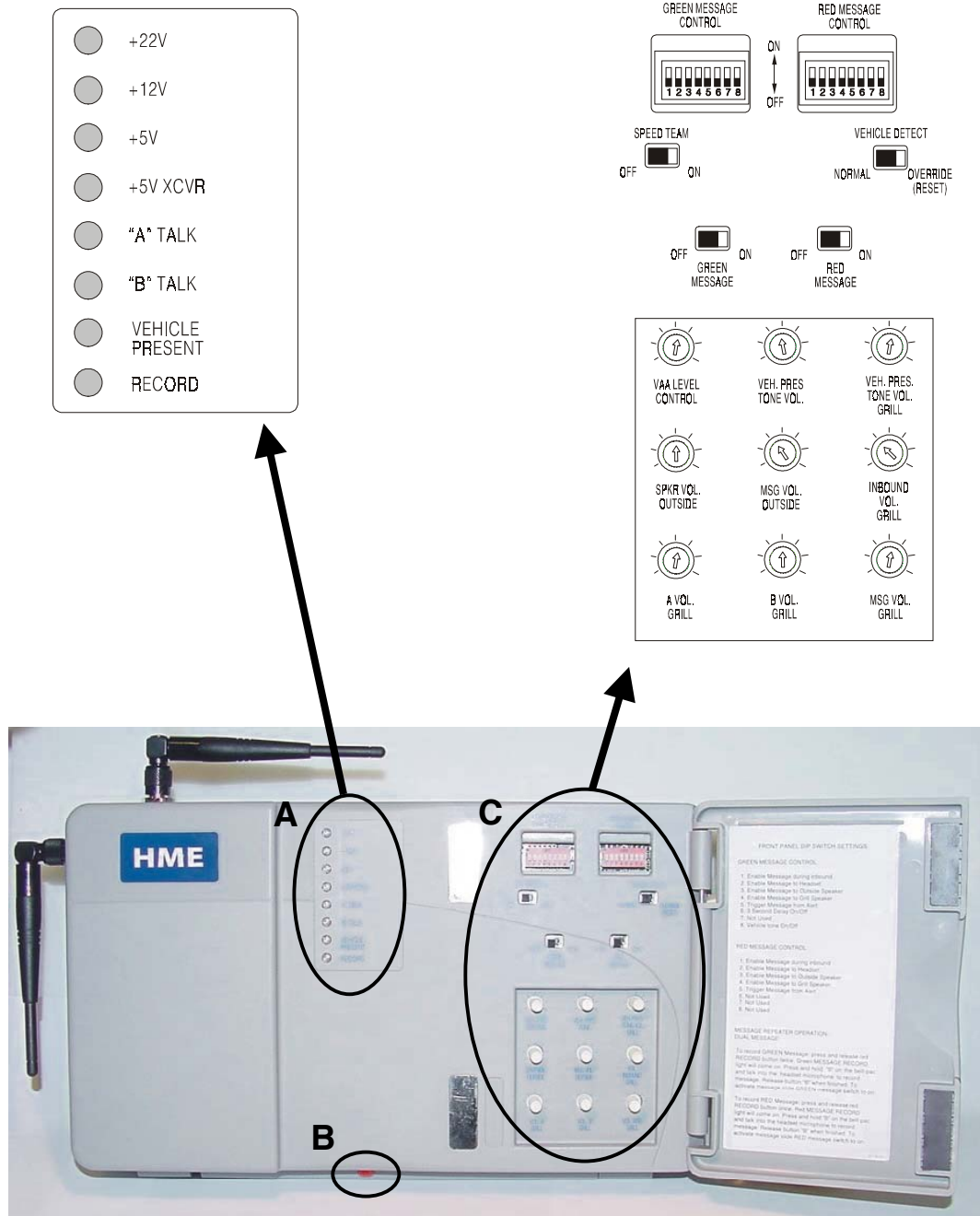- **VEHICLE PRESENT light** is on when a vehicle is present in the drive-thru lane or when the system is in vehicle-detect override.
- **RECORD light** is ON RED when the base station is ready to record red message for the message repeater, and BLINKING RED while a red message is being recorded. It is 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.)
- **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.)
- **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 the order taker, speaking into the headset microphone, will cause the inbound volume of the customer's voice to be lowered in the Communicator headset.
  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.

B. COM6000BP COMMUNICATOR®

1. Features and Controls

Channel "A1" button

Channel "B" button

Channel "A2" button

Power button

Volume-up button

Volume-down button

Headset cable connector socket
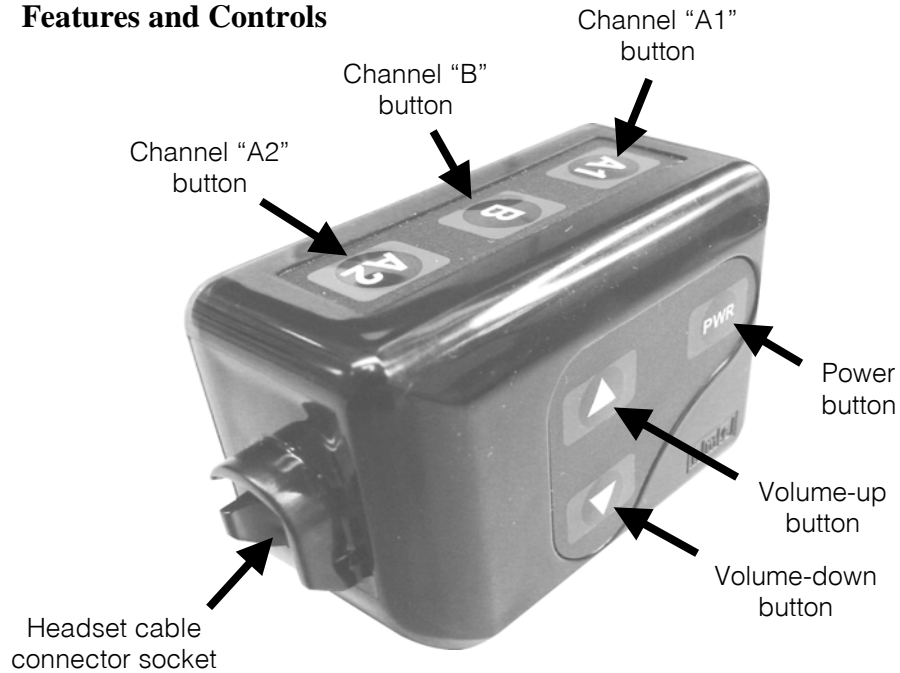
Figure 3.   COM6000BP COMMUNICATOR® beltpac

2. How to Wear the Communicator

- Wear the headset with the microphone on your right or left side next to your mouth.
- Adjust the headband for a comfortable fit.
- Clip the beltpac to your belt or waistband on either your right or left side.
- Run the headset cable up your back and clip it to the back of your shirt and collar with clothing clips on the cable.

Figure 4.   Wearing the Communicator headset

3. How to Use the COM6000BP COMMUNICATOR® Controls

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

a. Power On/Off

- **Power On —** Press and release the **PWR** (power) button. A voice message in the earpiece will say "power on," and the beltpac number and software version, and the red power lights next to the **A1** and **A2** buttons on the beltpac 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) ready." 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 approximately two seconds. A voice message in the earpiece will say "power off," and the power lights will go off.

b. Volume Up/Down

- **Volume Up Adjustment —** Press and release the volume-up ▲ button. Each time it is pressed, a beep will be heard in the earpiece as the volume increases one step. When maximum volume is reached, "maximum" will be heard in the earpiece. If you press and hold the volume-up button, repeating beeps will be heard as the volume steps up to maximum. "Maximum" will be heard in the earpiece, and will be repeated until you release the volume-up button.
- **Volume Down Adjustment —** Press and release the volume-down ▼ button. Each time it is pressed, a beep will be heard in the earpiece as the volume decreases one step. When minimum volume is reached, a double beep will be heard. If you press and hold the volume-down button, repeating beeps will be heard as the volume steps down to minimum.

4. Battery Removal and Replacement

Battery-release latch

Figure 5.   COMMUNICATOR® battery-release latch

TO CHANGE BATTERIES: When a battery becomes weak, a voice in the earpiece will say "Change battery." When this happens, take the Communicator out of its pouch and remove its battery. Slide the battery-release latch in the direction of the arrow shown in Figure 5. Pull up on the end of the battery near the battery-release latch and lift the battery out of the Communicator, or turn the Communicator over and catch the battery in your hand.

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 in place under the battery-release latch.

5. COMMUNICATOR® Registration

During installation of the Wireless 6000 system, each Communicator was registered for use with a specific base station. The base station thereby recognizes all registered Communicators when their power is on, differentiating between them and interfering transmissions from other electronic equipment operating on similar frequencies. If a Communicator is replaced, the new one must be registered. A maximum of 15 Communicators can be registered.

When a Communicator is replaced, the old one remains in memory. If the maximum number of 15 is exceeded, all current registrations must be cleared, and all active Communicators must be re-registered. To clear all current registrations, press the "Clear All Registration" button and the "Reset" button simultaneously. Refer to Figure 6 below. 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. All active Communicators can then be registered, one at a time.

Register each Communicator as follows:

- Be certain all Communicators to be registered are powered off and the base station power is on.
- Open the base station and press the registration button shown in Figure 6.
  — If no Communicators are powered on, the status light shown in Figure 6 will be blinking red. If any Communicators are powered on, the status light will be blinking green.
  — After you press the registration button, the Communicator ID display will show a small "o" for open.
- Press and hold the **B** button while pressing and releasing the **PWR** (power) button to turn the Communicator on, then 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.*

When the registration is successfully completed:

— The green status light in the base station will be on steady and the Communicator ID display, to the left of the status light, will show the ID number assigned to this Communicator. ID numbers are assigned sequentially as 0 thru 9, A, b, C, d and E.

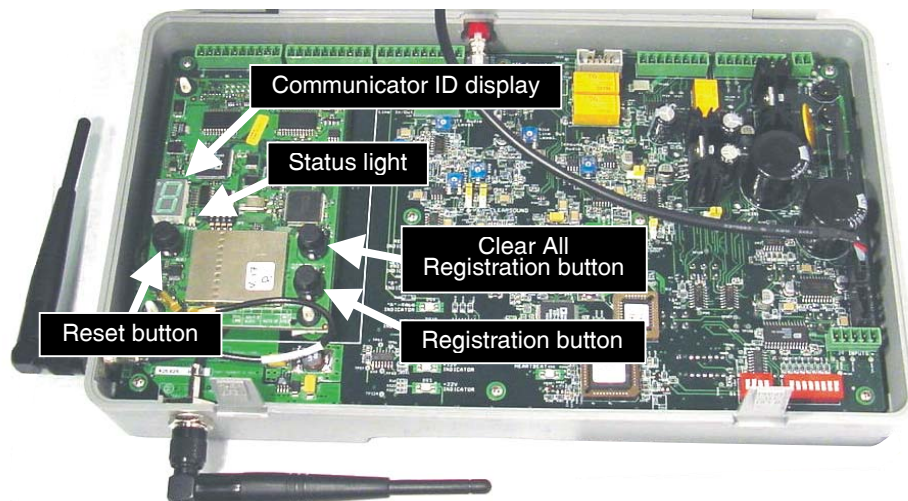— One of the power lights on the Communicator will remain on steady green.

Figure 6.   Registration buttons and indicators

C. 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.

- Insert battery in one of four charging ports until it clicks in place.
- Yellow light next to each battery port stays on while port is empty. When battery is in port, yellow light flashing next to battery port indicates CHARGE PENDING, which means the temperature where the charger is located is out of the battery's operating range (32°-104^oF, 0°-40^oC). Adjust the room temperature or move the charger to a cooler area. When battery is in port, yellow light on steady next to battery port means CHARGE FAILED. Follow diagnostic instructions on side of battery charger.
- Red CHARGING light next to battery port stays on while battery is charging.
- Green READY light next to battery port goes on when battery is fully charged.
- Store fully charged batteries in 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.
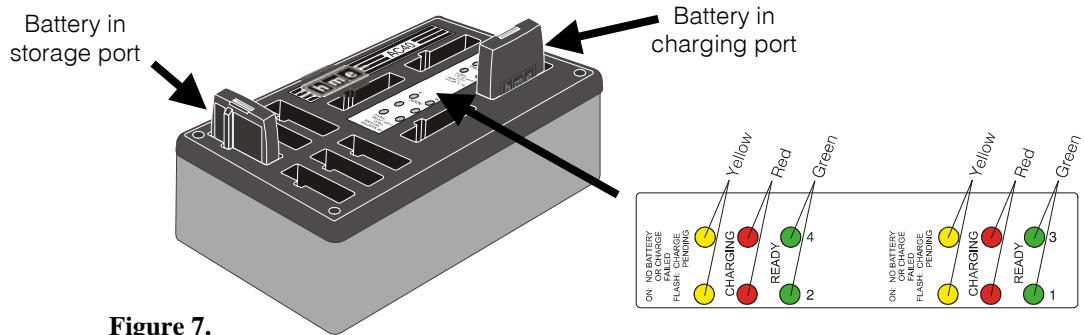

Figure 7.

Batteries in charger

III. WIRELESS 6000 OPERATION

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 6000 should be operated according to section **III. A. 3.** below in single-lane stores, or section **III. B. 3.** (page 9) in 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.

When a customer arrives in the drive-thru lane, you will hear a single beep in the headset for single lane operations and for Lane 1 in dual-lane operations, or a double beep for Lane 2 in dual-lane operations. In dual-lane operation, if you are communicating with a customer when another customer arrives in the opposite lane, a higher pitch double beep will sound in the headset. When the first customer leaves the speaker post, 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 second customer. **NOTE:** In dual-lane operations, if you have a Mode Switch and it is in the "2 OPERATORS" position, you will only hear single beeps in your headset when customers arrive in the lane you are operating.

A. Single-Lane Operation (one base station for one speaker post)

1. Hands-Free (HF) Mode:
❗ With the power off, press and hold the volume-up ▲ and **B** buttons while pressing and releasing 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 volume-up ▲ or down ▼ buttons to adjust customer's voice level in headset if necessary.   ❗ Touch and release **A1** or **A2** button to speak and listen to customer.   ❗ Touch and release **A1**, **A2** or **B** button to end communication with customer.   ❗ Touch and release **A1** or **A2** button if you want to speak to the customer again.   ❗ If customer drives away from speaker post or menu board, the Communicator stops transmitting.
2. Auto Hands-Free (AHF) Mode:
NOTES: Only one Communicator operator at a time can use this feature. If a Communicator is turned off while in the AHF mode, it will automatically be reset for its previous operating mode.   ❗ With the power off, press and hold the volume-up ▲ and **A1** buttons while pressing and releasing 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 volume-up ▲ or down ▼ buttons to adjust customer's voice level in headset if necessary.   ❗ Speak and listen to customer without pressing any buttons.   ❗ Touch and release **A1**, **A2** or **B** button to end communication with customer.   ❗ Touch and release **A1** or **A2** button if you want to speak to the customer again.   ❗ If customer drives away from speaker post or menu board, the Communicator stops transmitting.
3. Push-To-Talk (PTT) Mode:
❗ With the power off, press and hold the volume-down ▼ and **B** buttons while pressing and releasing 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 volume-up ▲ or down ▼ buttons to adjust customer's voice level in headset if necessary.   ❗ Touch and hold **A1** or **A2** button to speak to customer. Release when finished.

B. Dual-Lane Operation (two base stations for two speaker posts)

1. Hands-Free (HF) Mode:

❗ With the power off, press and hold the volume-up ▲ and **B** buttons while pressing and releasing 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 (single beep for Lane 1, double beep for Lane 2) in your headset, and you will be able to hear the customer at the speaker post or menu board if that lane is selected.

❗ Use volume-up ▲ or down ▼ buttons to adjust customer's voice level in headset if necessary.

❗ Touch and release **A1** button for Lane 1 or **A2** for Lane 2, to speak and listen to customer.

❗ Touch and release **A1**, **A2** (depending on lane) or **B** button to end communication with customer.

❗ Touch and release **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 customer drives away from speaker post or menu board, Communicator stops transmitting.

2. Auto Hands-Free (AHF) Mode:

NOTES: Only one Communicator operator at a time, in each lane, can use this 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.

❗ For **Lane 1** operation, with the power off, press and hold the volume-up ▲ and **A1** buttons while pressing and releasing 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 pressing and releasing 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 (single beep for Lane 1, double beep for Lane 2) in your headset, and you will be able to hear the customer at the speaker post or menu board if that lane is selected.

❗ Use volume-up ▲ or down ▼ buttons to adjust customer's voice level in headset if necessary.

❗ Speak and listen to customer without pressing any buttons.

❗ Touch and release **A1**, **A2** (depending on lane) or **B** button to end communication with customer.

❗ Touch and release **A1** button for Lane 1 or **A2** for Lane 2, to speak to the customer again.

❗ If customer drives away from speaker post or menu board, Communicator stops transmitting.

3. Push-To-Talk (PTT) Mode:

❗ With the power off, press and hold the volume-down ▼ and **B** buttons while pressing and releasing 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 (single beep for Lane 1, double beep for Lane 2) in your headset, and you will be able to hear the customer at the speaker post or menu board if that lane is selected.

❗ Use volume-up ▲ or down ▼ buttons to adjust customer's voice level in headset if necessary.

❗ Touch and hold **A1** button to speak to customer in Lane 1; **A2** to speak to customer in Lane 2.

C. Internal Communication

To communicate internally with other COM6000BP 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 **A1**, **A2** or **B** button. Everyone pressing the same button will be heard by everyone else on that channel without interference.

In dual-lane operations, if your Wireless 6000 system was set up for "Split-B" operation, 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 operations, up to three Communicator operators can have conference-call type communication by all pressing the **A1**, **A2** or **B** button. Everyone pressing the same button will be heard by everyone else on that channel without interference.

If a car arrives in a drive-thru 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.

D. 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**. Placing the speed-team switch, on the base station, in the ON position (shown in Figure 2) will disable the outside speaker and microphone, and the vehicle-alert tone.

E. Wired Backup System

In order to use a wired backup system, you must have a Switcher Board (optional) in your base station. Open the base station, and look for the 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 6000 system, the S2 switch must be in the OUT position.
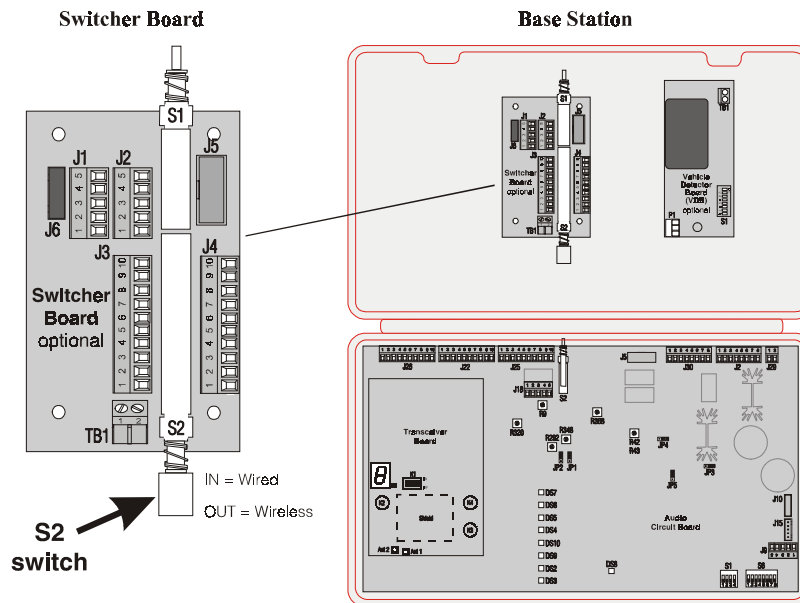

Figure 8.   S2 switch on Switcher Board

F. Message Repeater Operation

	ACTION	RESULT
To record Message #1	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 Message #2	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.

Locate the "RED MESSAGE" and "GREEN MESSAGE" slide 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 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.
> **Switches 6, 7 and 8** not used

GREEN MESSAGE switch in the **ON** position 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 a single-beep alert tone or two short beeps.

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.

IV. EQUIPMENT CARE AND CLEANING

A. Proper Handling

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

B. Cleaning

1. COM6000BP COMMUNICATOR®

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

2. Battery Charger

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

CAUTION: Always unplug the battery charger before cleaning it.

- 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.

V.   IN CASE OF PROBLEMS

PROBLEM	PROBABLE CAUSE	SOLUTION
No sound is heard in COMMUNICATOR® headset when you press button **A** and speak into microphone.	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 certain 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 Power ON/OFF 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. *
Channel **A** or **B** is not working.	Communicator power may not be on.	Press Power ON/OFF button on Communicator. Be certain power light goes on and switches from red to green.
	Battery may be low or defective.	Check Power light. If not lit, replace battery.
	"A" Talk or "**B**" **Talk** light on base station does not light when button **A** or **B** on Communicator is pressed.	Use another Communicator. Call HME. *
Outbound sound is too low.	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.
No outbound sound; Customer cannot hear anything.	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 VEHICLE PRESENT light on base station. Check outside speaker wire connections in base station and at outside speaker.
	Speaker or base station may be defective.	Call HME. *
Customer cannot be heard in push-to-talk (PTT) operation.	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 (full or 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.
Only intermittent voice can be heard in headsets.	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. *
	Circuit board may be defective.	Call HME. *

PROBLEM	PROBABLE CAUSE	SOLUTION
Personnel hear customers in ceiling speaker or headsets, but cannot hear each other.	Circuit board may be defective.	Check to see if status lights on base station are lit. Call HME. *
	Beltpac may be defective.	Use another beltpac. Call HME. *
No tone or sound is heard in ceiling speaker or headsets when vehicle enters drive-thru lane.	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. *
Personnel cannot hear customers in ceiling speaker or headsets.	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.
	Outside speaker, audio circuit board or vehicle detector board may have failed.	Call HME. *
Headset has intermittent sound.	Battery may be low.	Replace battery.
	Headset may be defective.	Use another headset. Call HME. *
There is still sound in headset after all customers have been served.	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.
Battery charger is not working.	Charger may not be plugged in.	Be certain charger is plugged in. If it still is not working, call HME. *
Red or Green message will not play.	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.
Registration of COMMUNICATOR® failed. "Registration failed" message heard in headset. Lights stay red.	Base station power not on. Communicator **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.

2400MHz cordless telephone interference —
If there is a 2400MHz cordless telephone nearby, interference may occur. However,
because the Wireless 6000 is a frequency-hopping system, this problem is unlikely.
If it does occur, changing frequencies on the telephone may alleviate the problem.
If not, move the phone as far as practical from the base station, or use another type
phone. Call HME Customer Support at 1-800-848-4468 if assistance is required.

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.
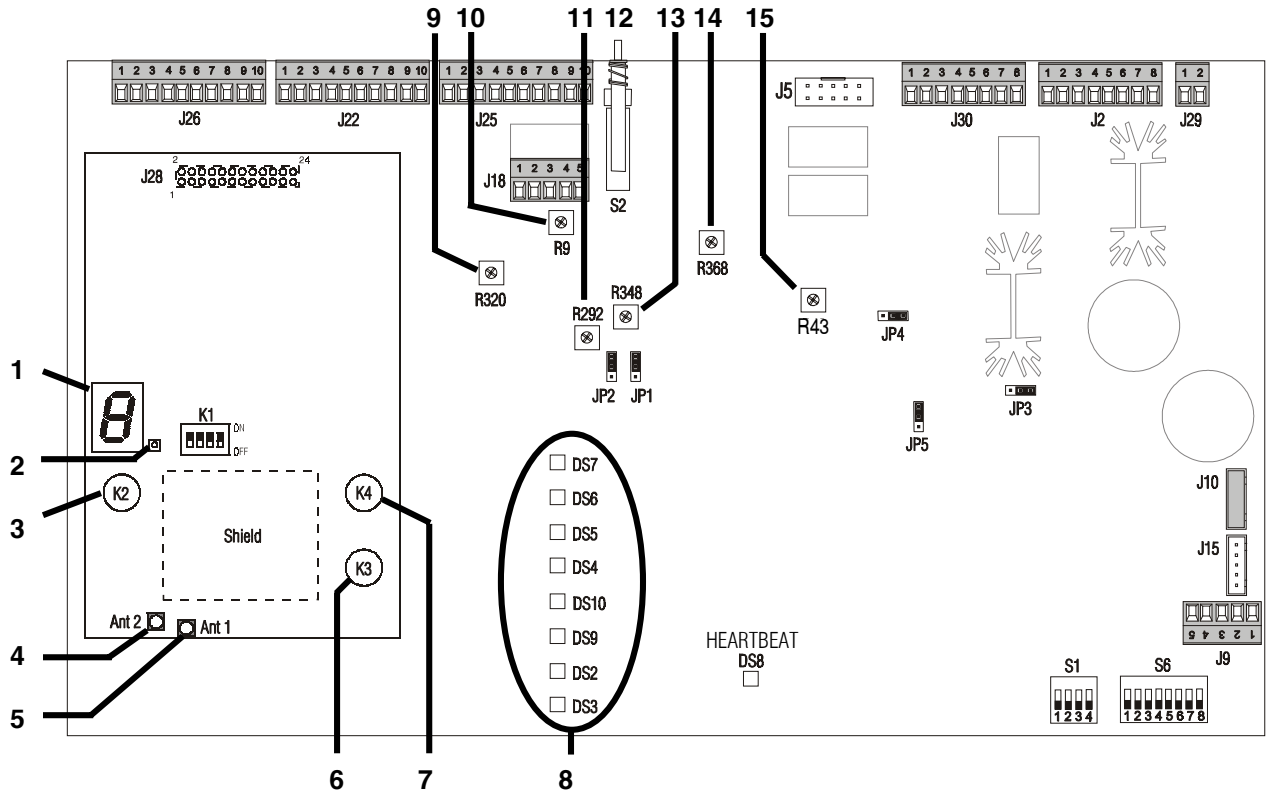

Figure 9.

Base Station Internal Controls and Indicators

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
   (See Figure 2)   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

VI.   SPECIFICATIONS

Base Station

Voltage input	16VAC ±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	2-position vehicle detector switch (Normal – Override/Reset)
(front panel only)	2-position "Speed Team" ON/OFF switch
	2-position "Red Message" ON/OFF switch
	2-position "Green Message" ON/OFF switch
	1-position "Record" switch (0n bottom of cabinet)
	VAA level control
	Vehicle present tone volume control in Communicators
	Vehicle present tone volume control at ceiling speaker
	Outside speaker volume control
	Outside recorded message volume control
	Inbound volume control from outside mic to ceiling speaker
	Channel "A" volume control at ceiling speaker
	Channel "B" volume control at ceiling speaker
	Recorded message volume control 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

COM6000BP 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

VII. OPTIONAL EQUIPMENT

Equipment	Model Number
COMMUNICATOR®	COM6000BP
Battery for Communicator	BAT40
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 Record Switch	No model number
Remote Antenna Kit	No model number
Remote Speed Team Switch	SW2

VIII. 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.

$C\epsilon \oslash$

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.