HM ELECTRONICS, INC.

COM401

Person-to-Person COMMUNICATOR®

OPERATING INSTRUCTIONS

The COM401 is a person-to-person wireless Communicator. Operation of this belt-pac unit is simply push-to-talk and release to listen. The COM401 comes with its own battery charger.

IMPORTANT: Before using the Communicator, plug the battery charger into an AC electrical outlet, and place all Communicator batteries into it for charging. Refer to the battery charging instructions in section II on page 3.

I. COM401 COMMUNICATOR®

A. Communicator Controls and Indicators

1 – POWER button; turns Communicator on and off.

2 – VOLUME control buttons; adjust listening level in earpiece.

3 – Power light; lights when power goes on, and remains lit until battery needs replacing or Communicator is turned off. The power light blinks rapidly when transmitting on "A" or "B" channel.

4 – Buttons A & B; Either button "A" or button "B" must be pushed and held to talk, and released to listen. The two buttons are in convenient positions whether Communicator is worn on left or right hip.

5 – Button C; switches from one transmit frequency to another, two channels higher. The power light will blink slowly, indicating an alternate frequency is being used. **NOTE:** All COM401's must be on the same frequency in order to communicate.

6 – Battery; provides power for the wireless belt-pac Communicator.

7 – Battery release latch; slides to release battery for removal, and snaps in place when a battery is inserted to secure battery in Communicator.

8 – 5-pin DIN receptacle; receptacle for earpiece/microphone cable connector.

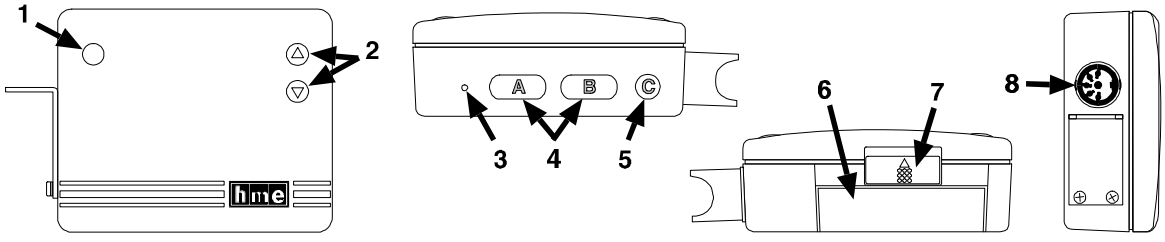

Figure 1. Communicator controls, connector and indicator light

A. Wearing the Communicator

To wear the COM401 COMMUNICATOR® on your belt (or waist band), simply squeeze open the belt clip on the back of the Communicator pouch and slide it over your belt. It can be worn on your left or right side.

Plug the headset cable plug into the receptacle on the side of the Communicator. Refer to Figure 2 for proper wearing of the headset. Place the headset earpiece on your ear, and clip the microphone to your lapel or the front of your clothing, and clip the collar clip to your collar as shown in Figure 2.

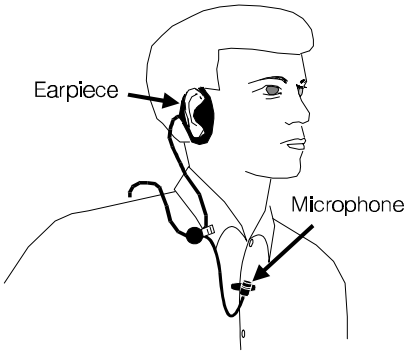

Figure 2. Correct wearing of the HS4 Headset with lapel microphone

B. Operating the Communicator

Turn the Communicator on by pressing the POWER button. Be certain the red power light on top of the Communicator is lit, indicating it is turned on. If the power light is not lit, or if it goes off during Communicator operation, the battery must be changed.

To operate the Communicator, simply push and hold either the “A” or “B” button on top of the unit while talking. Speak into the microphone and listen for your own voice in the earpiece. Adjust the volume by pushing on the up ▲ or down ▼ volume control button on the transceiver until a comfortable listening level is reached. When you have finished talking, release the “A” or “B” button immediately.

C. Communicator Frequency Selection

If it is necessary to change the operating frequency of the COM401, refer to Figure 3 for the Communicator DIP switch location, and to the following table for DIP switch settings.

NOTE: **Switch #1** in the Communicator is on the left side.
Switches #5-10 are not used.

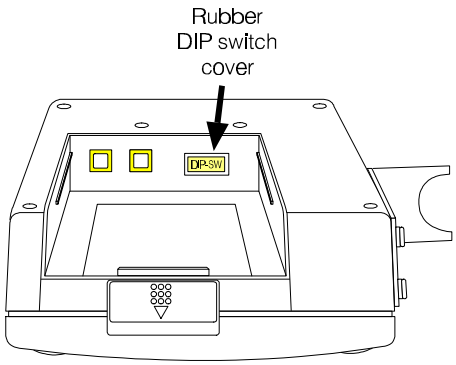

Figure 3. To access the frequency selection switch in the Communicator, remove the rubber DIP switch cover in the battery compartment

	Communicator DIP Switch Configuration Settings					
	Channel	TX and RX frequencies	DIP Switch			
			1	2	3	4
*	0	468.4875MHz				
	1	468.7625MHz	ON			
	2	468.8375MHz		ON		
	3	469.1375MHz	ON	ON		
	4	469.4625MHz			ON	
	5	469.6375MHz	ON		ON	
	6	469.6625MHz		ON	ON	
	7	469.8875MHz	ON	ON	ON	
	8	468.4875MHz				ON
	9	468.7625MHz	ON			ON
	10	468.8375MHz		ON		ON
	11	469.1375MHz	ON	ON		ON
	12	469.4625MHz			ON	ON
	13	469.6375MHz	ON		ON	ON
	14	469.6625MHz		ON	ON	ON
	15	469.8875MHz	ON	ON	ON	ON

* Default

II. The Optional Battery Charger

A. Battery Charger Power Supply Connections in the U.S.A.

NOTE: For use outside the United States, see 230VAC adapter connections in section IV, B.

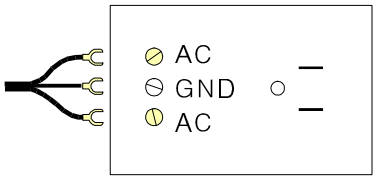

Figure 4. 16.5VAC adapter cable connections

Connect the battery charger cable to the 16.5VAC adapter as shown in Figure 4. Plug the adapter into an AC electrical outlet and secure it to the outlet with the grounding screw (if provided). The green and red lights will come on, one at a time, until they are all lit. Then they will go off, one at a time, indicating the charger is ready for use when all the lights are off.

Place batteries in the AC420 Battery Charger as shown in Figure 5. A few seconds after each battery is placed in the charger, the red CHARGING light on the panel adjacent to the battery will indicate the battery charging status. See the CHARGING LIGHT STATUS TABLE below for a detailed explanation of what is happening. When the battery is fully charged, the green READY indicator below it will light **(approximately 4 hours)**.

CAUTION: Do not remove batteries from the battery charger until the green READY light is lit, or the charger will restart the charge cycle.

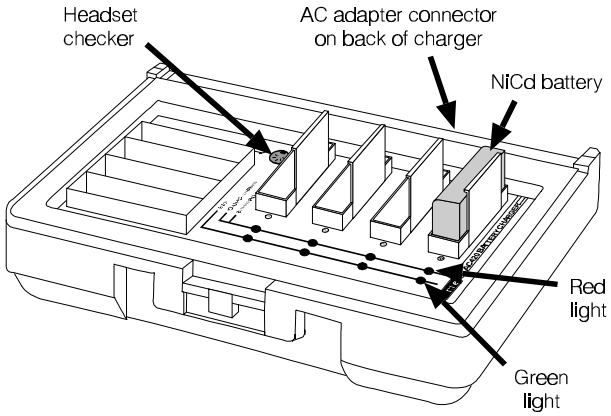

Figure 5. Battery charger shown with a properly installed battery

CHARGING LIGHT STATUS TABLE – WITH BATTERY INSERTED		
RED CHARGING LIGHT	**WHAT IT MEANS**	**WHAT TO DO**
OFF	Charger doesn't see the battery	SEE NOTE
STEADY ON	Battery is being charged	Wait. Do not remove battery.
BLINKS: 2 seconds ON; 2 seconds OFF	Battery is being discharged	Wait. Do not remove battery.
BLINKS: 2 times quick; 3 seconds OFF	DISCHARGE ERROR	Battery is not discharging properly. SEE NOTE
BLINKS: 3 times quick; 3 seconds OFF	CHARGING ERROR	Battery is not charging properly. SEE NOTE
BLINKS: 4 times quick; 2 seconds OFF	LOW BATTERY ERROR	SEE NOTE
BLINKS: 5 times quick; 2 seconds OFF	CHARGING ERROR	SEE NOTE
NOTE: Either the battery or the charger has a problem. Mark the battery and retry in a different slot. The battery is faulty if it has the same problem in a different slot AND a known-good battery passes in the same slots. The charger circuitry is faulty if a known-good BATTERY fails in the same slots.		

B. Battery Charger Power Supply Connections Outside the U.S.A.

In countries that require a 230 volt AC power supply, the power supply cable connections must be made as described below.

Step 1 Connect an electrical plug to the wires on the power cable according to color codes (**Brown** = live, **Blue** = neutral, **Green with yellow stripes** = ground).

Step 2 Remove the spade lugs from the wires of the cable on the back of the battery charger. Cut the connector off the AC adapter output cable. Strip enough of the insulation from the wires of both cables, so they can be spliced. Splice the wires from the AC adapter cable to the wires of the battery charger cable. Cover the splice with electrical tape or shrink tubing.

Step 3 Plug the electrical plug into the power supply. The green and red lights will come on, one at a time, until they are all lit. Then they will go off, one at a time, indicating the charger is ready for use when all the lights are off.

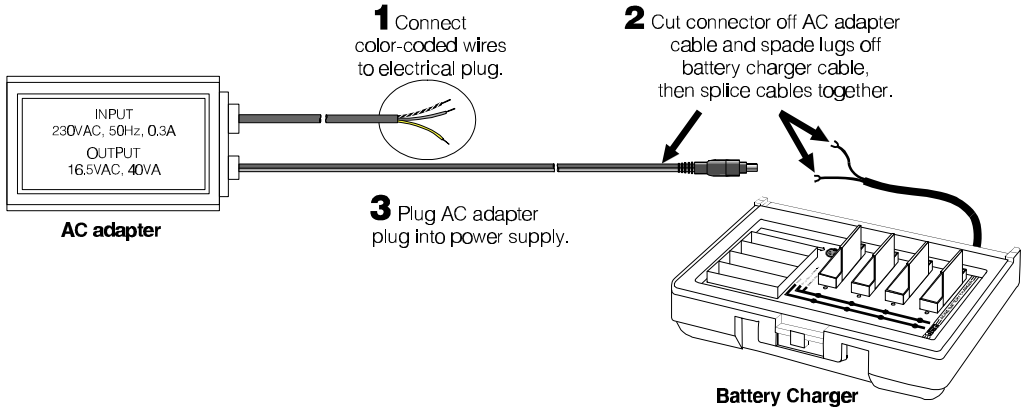

Figure 6. 230VAC power supply wiring for battery charger

The COM401 is a wireless radio system, type-accepted under Part 74 and Part 90 of the Federal Communications Commission (FCC) Code of Federal Regulations governing general purpose applications. The system requires an FCC station license if operated within the United States or its possessions. Because licensing depends on the system's application, it is the user's responsibility to apply for a license from the Federal Communications Commission.