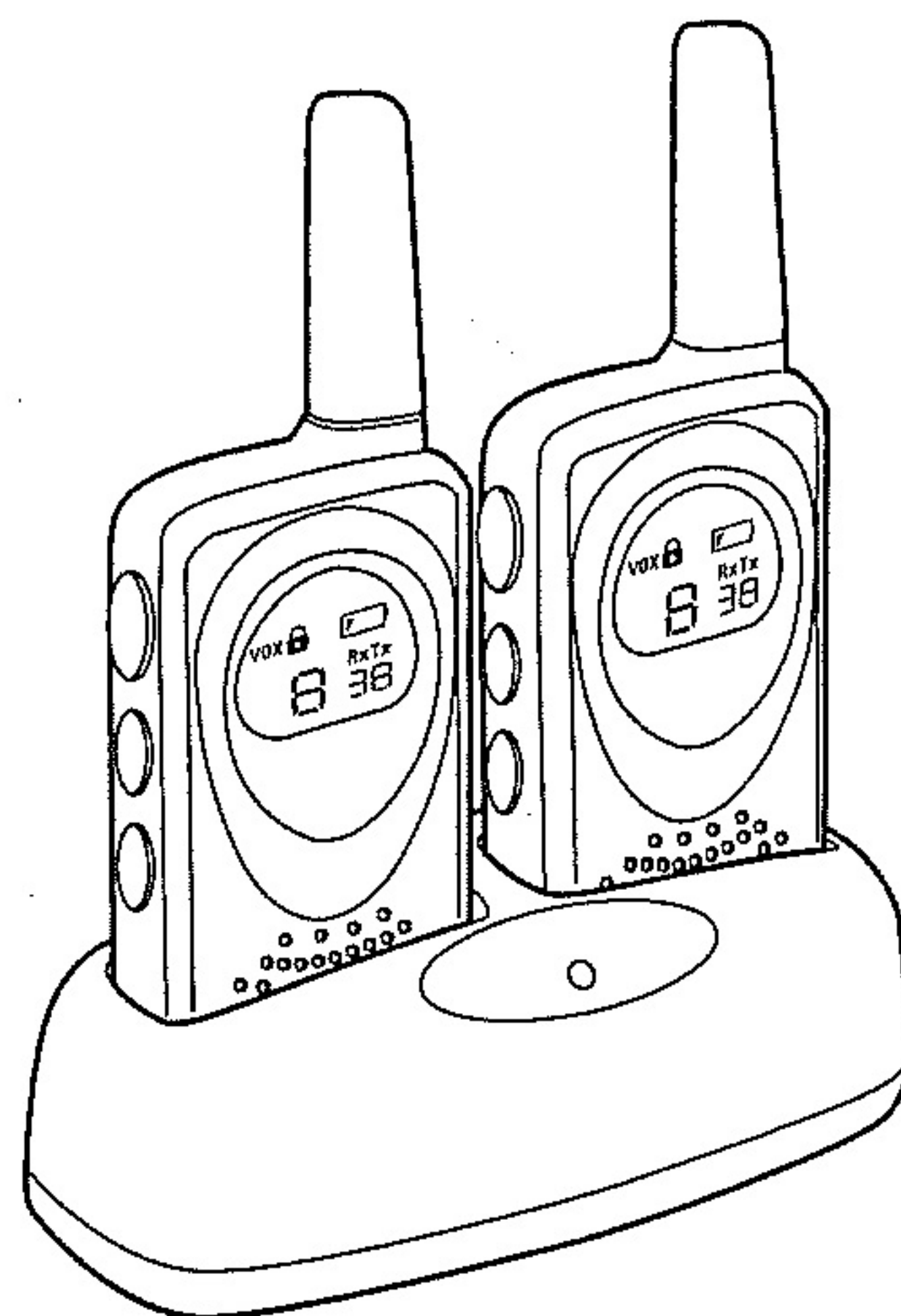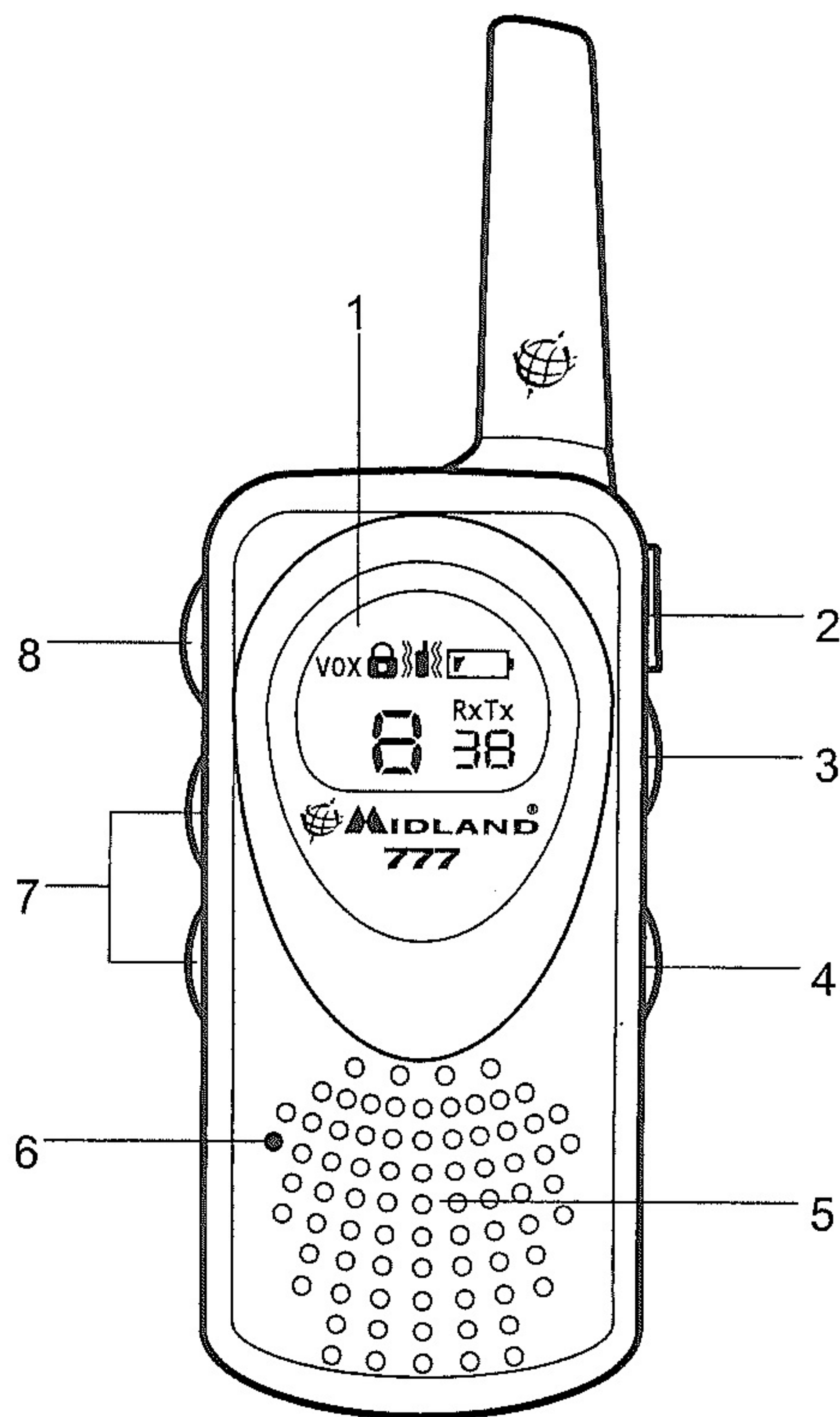# MIDLAND 777/MIDLAND 777E
DUAL BAND (PMR446/LPD) AND PMR446 TRANSCEIVER

ENGLISH

1. Display
2. 1 pin jack for recharge/earphones
3. Scan/Lock
4. On/Off - MODE
5. Speaker
6. Microphone
7. ▲/▼
8. PTT

The **MIDLAND 777** represents the very latest and most advanced technology currently available on the portable radios'market.

With its stylish lines and modern design, the **MIDLAND 777** is a real gem of a radio!

The multitude of features such as the backlit LCD Display and VOX (hands free communication) offered on this radio are only a fingertip away thanks to its easy to use controls.

Smaller than a credit card, extra slim, light weight and ultra compact design: all means that this radio is ideal for use in any application, no matter where you are.

The **MIDLAND 777** incorporates all of the very latest technical innovations that you might normally expect to see on a mobile phone such as a Lithium-Ion long life battery and Vibralarm (Vibrating incoming call alert).

Despite its small size, the **MIDLAND 777** is big on features and offers a real alternative to other forms of communication over short to medium ranges and has the added bonus of being completely free to operate!

Main features:

› Freq. 446.00625 ÷ 446.09375MHz (PMR); 433.075 ÷ 434.775MHz (LPD)
› Channel spacing: 12.5 KHz (PMR); 25 KHz (LPD)
› 8 channels (PMR); 69 channels (LPD)
› Power 500 mW ERP (PMR); 10mW ERP (LPD)
› Battery pack: LI-ION type 3.7 V - 720 mA/h
› Alphanumeric backlit LCD Display
› VOX (hands-free transmission)
› 38 CTCSS tones
› Battery life up to 21 hours (LI-ION battery pack 3.7 V - 720 mA/h)
› Operating temperature from −20° to +55°
› Dual Watch
  Squelch
› Weight 58 gr (w/o battery pack)
› Size 86x16x42mm
› Jack: for audio accessories: 1 pin, 2,5mm (SPK MIC) [2]
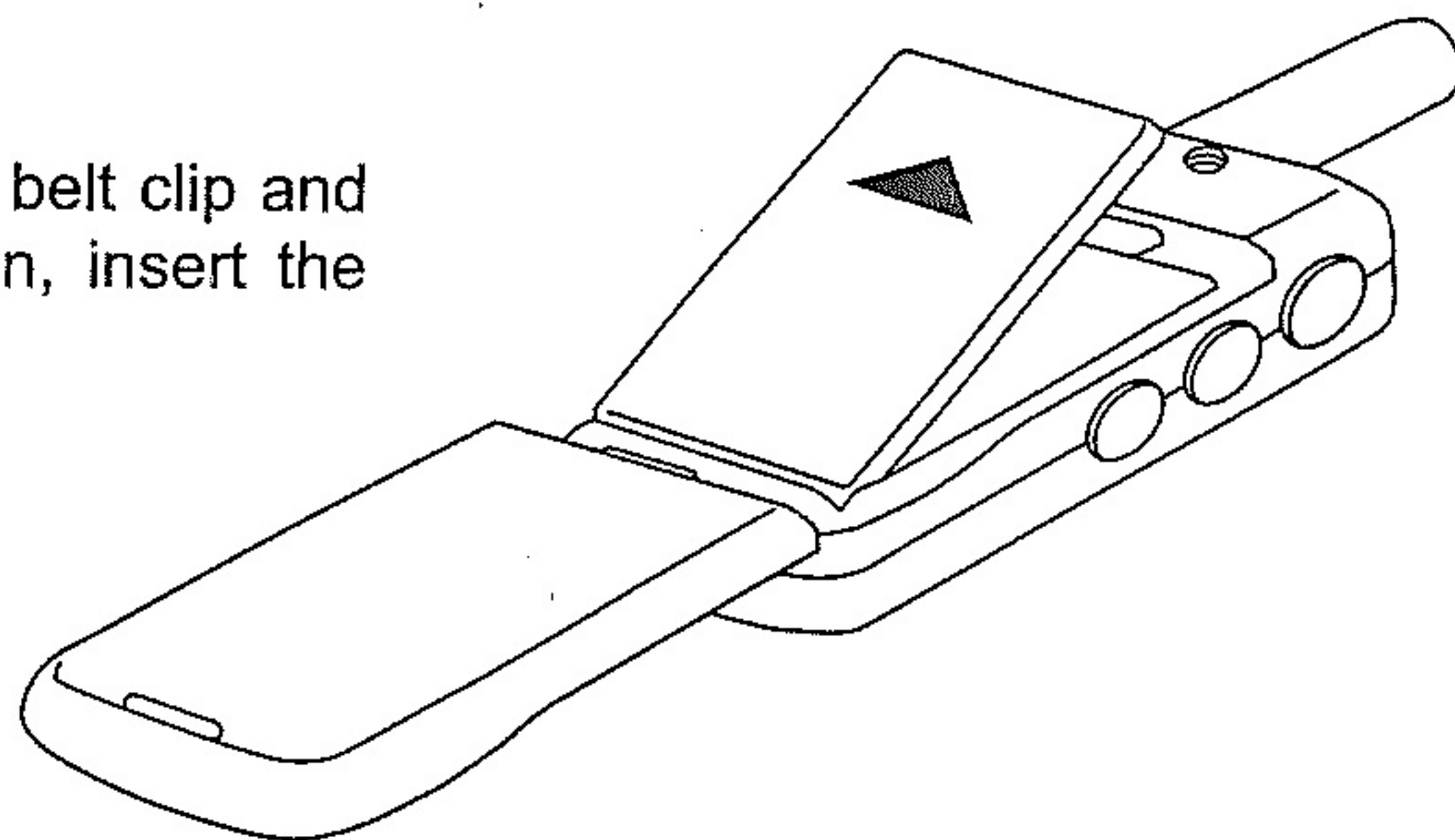› Jack for wall charger (CHG) [2].

Specifications are subject to change without notice.

Battery pack compartment
Hold the unit face down, unscrew the screw fixing the belt clip and slide the cover towards the bottom of the radio. Then, insert the battery pack as shown in this picture.

Display illumination
Press one of these buttons (**MODE** and **▲/▼**) to activate display illumination for approximately 5 seconds.

Coverage (referred to PMR frequency band)
The maximum range depends on terrain condition and is obtained during use in an open space.
The only limitation to maximum possible range are environmental factors such as blockage caused by trees, buildings, or other obstructions. Inside a car or a metallic constructions, the range can be reduced. Normally the coverage in the city, with buidings or other obstructions is about **1 or 2 Km**. In open space but with obstructions like trees, leafs or houses the maximum possible range is about **4-6 Km**. In open space, without obstructions and in sight, like for example in mountain, the coverage can be **more that 10 Km**.

Content
2 **MIDLAND 777** transceivers, 2 belt clips, 2 neck collars, 1 double desktop charger, 1 wall charger with double jack, instruction sheet

LET'S COMMUNICATE!

To turn radio on/off
Hold the **MODE** [4] button down for 3 seconds. The radio beeps 3 times with different tones (beeps may be inhibited). The LCD [1] displays a "self-test" message for 1 second, it will then show the last channel selected.

Volume adjustment
To adjust the volume level, push ▲/▼ [7] buttons until the required level is obtained.

Channel selection
Press the **MODE** [4] button once and then the ▲/▼ [7] controls to select one of the 8 channels. To confirm the selection, push **PTT** [8] or wait for approximately 5 seconds.

Transmission
For maximum speech clarity, hold the radio 5 to 10 cm away from your mouth, keep the **PTT** button [8] pressed and speak into the unit. During transmission the display shows "**TX**".
When the **PTT** [8] is released, the radio beeps to confirm to other users that your transmission has finished (This function is disabled by default, to enable it see paragraph "Roger Beep").
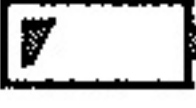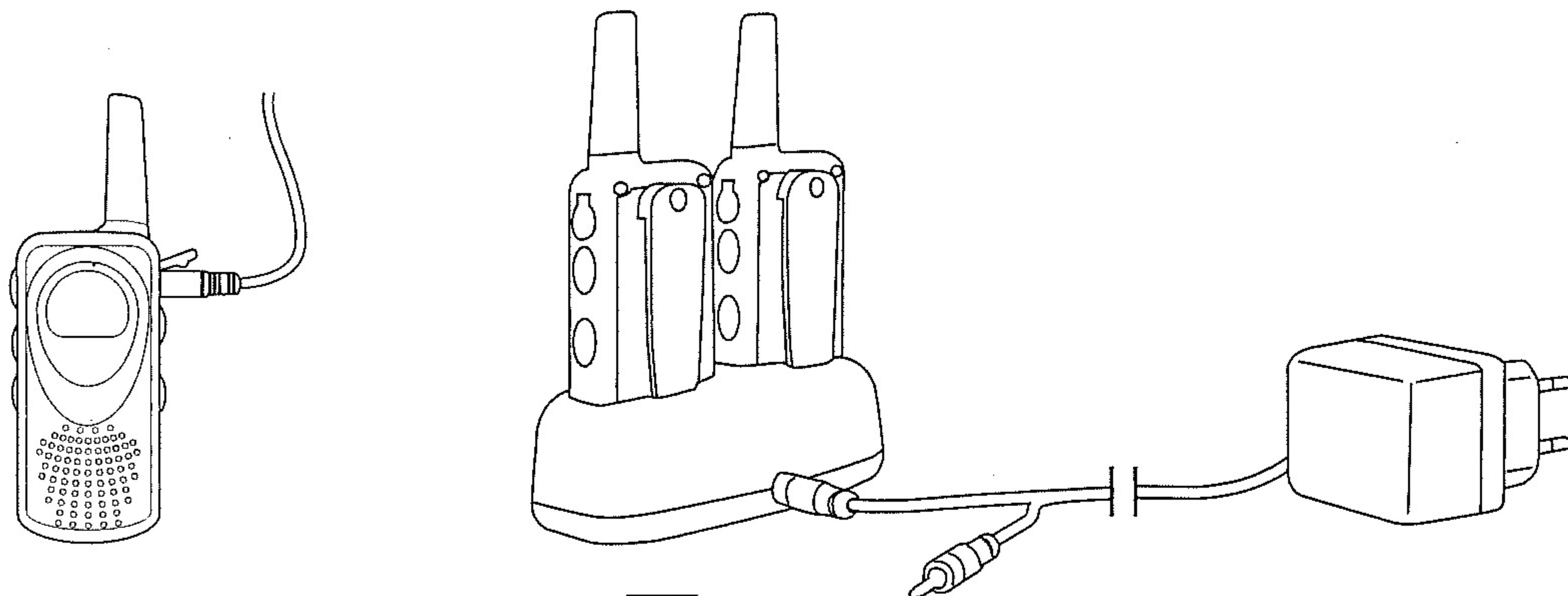
Reception
Simply release the **PTT** [8] button. When you receive a signal, "**RX**" is displayed.

Automatic power save
MIDLAND 777 is supplied with an **automatic current economy circuit.** If the transceiver receives no signal for 7 seconds or longer the "power save function" automatically activates. **This may increase the battery life by up to 50 %.**

Recharge
When the battery pack is discharged, the icon ▱ blinks on the display. Provide for the recharge, otherwise to avoid a further discharge, the radio will switch to the modality "only reception". The recharge can be done in two ways: insert the radio into the proper seat of the desktop charger or use the wall adaptor.

When the radio is being charged, the icon ▱ disappears and "**Ch**" is displayed.
If you charge the radio when it's switched off, **"Ch"** appears on the display till the charge is complete; then

"**Ch**" will by replaced by "**FL**" which will disappear after one minute.
If you charge the radio when it's switched on, "**Ch**" and the channel in use are alternately displayed. When the recharge is complete, "**FL**" will be displayed instead of "**Ch**".

Keypad lock
Press and hold the **SCAN** [3] button for longer than 3 seconds. The icon 🔒 is displayed for 3 seconds to confirm the lock has been activated. **PTT** button will still be active.
Repeat the same procedure to unlock the keypad.

KEY FUNCTIONS
VOX: hands-free transmission
VOX function activation
Press the **MODE** [4] key three times. The display shows "**VOX**" blinking at the top left, while on the right of the channel number, "**of**" appears. Select one of the two levels by means of ▲/▼ [7] buttons and push the **PTT** [8] key, or simply wait for 5 seconds for confirmation.
Speak into the microphone [6] or use one amongst the many compatible accessories: **the transmission is automatically activated.**
VOX deactivation
Press the **MODE** [4] key again. The display shows "**VOX**" blinking at the top left, while on the right of the channel number, the current sensitivity level will appear. Select "**of**" using the ▲/▼ [7] buttons and push the **PTT** [8] key, or simply wait for 5 seconds for confirmation.

ROGER BEEP: end transmission tone
When **PTT** [8] is released the radio will beep to confirm to other users that your transmission has finished. This feature is disabled by default.
To enable it, follow these steps:
1. Press the **MODE** [4] button 6 times until the LCD shows "**rb oF**".
2. Select "**oN**" by using the ▲/▼ buttons [7].
3. Press **PTT** [8] key or wait for 5 seconds for confirmation.
4. Roger Beep is now activated.

SCAN FUNCTION
The **SCAN** mode monitors the **busy channels.**
It is used to check speech traffic on the channels before transmitting and allows the unit to stop on a channel that someone is talking on. In case of undesired conversation, you can skip this channel by pushing the ▲/▼ buttons [7].
When the **SCAN** function is enabled, the **CTCSS detector** is activated: the radio automatically detects the sub-audio tone of the calling part, which will be displayed. The CTCSS tone received won't be automatically set during transmission and, therefore, to talk, it must be manually set.
(See par. "CTCSS sub-tone setting")
To enable SCAN:
1. Press **SCAN** [3] key: channels will start scanning on the display [1].
2. Press ▲ or ▼ [7] buttons to skip the channels with a strong background noise or undesired conversation.
Transmission during the SCAN function
Pressing **PTT** [8], the radio will transmit on the channel where the scan started or on the busy channel, using the pre-set subaudio tone.
To deactivate this function, push the **SCAN** [3] key again.

Squelch

In your MIDLAND 777 the background noise reduction device (squelch) is activated at factory.
To extend the rx coverage, it is possible to open the Squelch: press the **MODE** key until **"SL of"** is displayed.
Select **"SL on"** by means of the ▲ button. Press the **MODE** button to disable the function.

CTCSS-sub-tone setting

MIDLAND 777 can receive in two modes:
a) **open traffic:** in this case you will hear any communication transmitted on the selected channel.
b) **group mode CTCSS:** CTCSS tones are access keys that allow you to receive only messages coming from parties using the same channel and code. The speaker will remain muted until the correct CTCSS tone is received.

To activate 1 of 38 different CTCSS tones in RX and TX
1. Turn on the radio.
2. Select a channel.
3. Press twice the **MODE** [3] button until the display shows the channel with the flashing CTCSS code on the right (**"of"** = default condition).
4. Select with the ▲/▼ [7] buttons the desired CTCSS-Code.
5. To confirm the setting, press the **PTT** [8] key or wait for approximately 5 seconds.

To deactivate CTCSS tones
If you want to operate with no CTCSS code:
1. Press twice the **MODE** [4] key until the display shows the desired channel and the CTCSS tone blinking on the right.
2. Select **"of"** with ▲/▼ [7] buttons.

High and low power

To extend the battery life, you can select the low power mode, which can be selected only with the PMR446 channels.

To activate the low power:
1. Turn on the unit
2. Press the **MODE** [4] button 4 times, until the display shows **"Pr hi"**.
3. Select the low power by pushing the ▲ or ▼ [7] buttons.
4. Confirm by pushing the **PTT** [8] or simply wait for 5 seconds.

With this procedure, **MIDLAND 777** will operate in low power.

Keypad beep

To deactivate the keypad beep at the pressure of any key, follow these steps:
1. Turn on your **MIDLAND 777**.
2. Press the **MODE** [4] button 5 times, until the display shows **"bP on"**.
3. Push ▲ or ▼ [7] until **"bP of"** appears on the display.
4. Confirm by pushing the **PTT** [8] or simply wait for 5 seconds.

With this procedure, you won't hear any beep at the pressure of any button.

Call tone

MIDLAND 777 can send 3 different call tones. To send this audio signal to other users, press rapidly the **PTT** [8] key twice.

To select the call tones:
1. Turn on the transceiver
2. Push **MODE** [4] 7 times, until the display shows **"CA 1"**.
3. Push ▲ or ▼ [7]: you will hear the 3 pre-set melodies.
4. Confirm by pushing the **PTT** [8] key or wait for 5 seconds.

Now, each time your **MIDLAND 777** will send out a tone call, it will beep with the selected melody. To disable this feature, set **"of"** on the display.
Note: when Vibralarm is enabled ('ON' setting) the call tone won't be heard.

Vibralarm
MIDLAND 777 is equipped with the function "Vibralarm", which provides a silent alert for incoming calls.
To activate it, follow these steps:
1. Turn on the unit.
2. Press the **MODE** [4] key 8 times, until the display shows 〉〈
3. By pushing ▲/▼ this feature will be disabled or enabled (two available settings: ON and BO – both). Note: if you receive an incoming call and BO is activated, the radio will emit a silent alert (vibration) and a call tone.
4. Confirm by pushing the **PTT** [8] key or wait for 5 seconds.

Dual Watch
This function allows you to monitor two channels of your choice at the same time. To select the Dual Watch, follow the steps outlined below:
1. Switch on the unit
2. Select the first channel to scan (see Par. "Channel selection")
3. Press **MODE** [4] button 9 times, until **"Rx Tx"** is displayed.
4. Push the ▲/▼ controls, the Dual Watch can be activated by selecting the second channel to monitor.
5. Push **PTT** [8] for confirmation or wait for 5 seconds. The transceiver will start monitoring the two channels.
6. When the transceiver detects a transmission on one of the two channels, Dual Watch temporarily pauses, remains tuned for 5 seconds on the corresponding channel, giving the user a chance to respond to a call. After this pause, the transceiver begins scanning again. To talk again to this user, press **PTT** [8].
7. If Dual Watch pauses on a channel on which you would like to send a transmission, press **PTT** [8]. **MIDLAND 777** will transmit on the channel where Dual Watch started; when finished, the scanning will start again after 5 seconds.
8. To exit this function, quickly press **SCAN** [3]