XT180
OWNER'S MANUAL

en	de-DE	fr-FR	it-IT	es-ES
pt-PT	nl-NL	da	sv	fi
no-NO	hu	pl	ru	uk
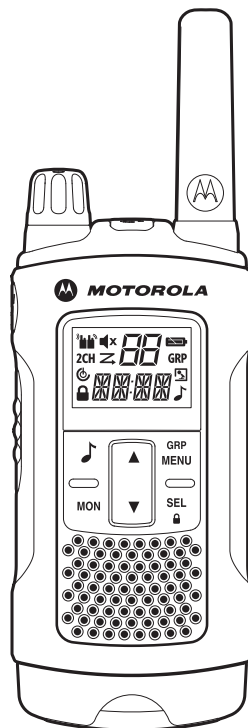
RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE FOR PORTABLE TWO-WAY RADIOS

ATTENTION!

Before using this product, read the RF Energy Exposure and Product Safety Guide that ships with the radio which contains instructions for safe usage and RF energy awareness and control for compliance with applicable standards and regulation.

Package Contents

Package Content	XT180
Radio	2
Belt clip	2
2-slot charging cradle	1
AC adaptor	1
Battery support brackets	2
Rechargeable NiMH battery pack	2
Headset	2
Owner's manual	1

Frequency Chart

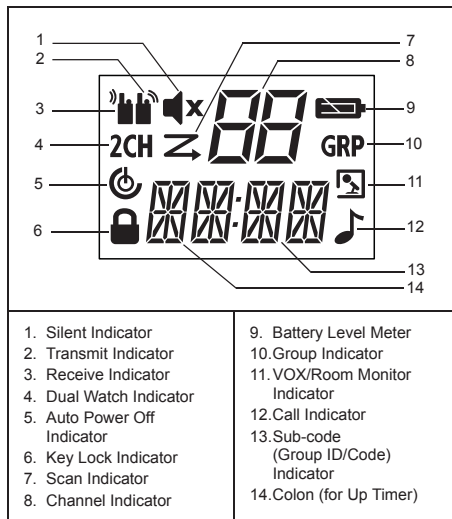| Ch.	Freq. (MHz)	Ch.	Freq. (MHz)	Ch.	Freq. (MHz)
1	446.00625	4	446.04375	7	446.08125
2	446.01875	5	446.05625	8	446.09375
3	446.03125	6	446.06875		

Features and Specifications

- 8 PMR Channels
- 121 Sub-Codes (38 CTCSS Codes & 83 DCS codes)
- Up to 10 km Range*
- Internal VOX Circuitry
- LED Torch
- 10 Selectable Call Tone Alerts
- Backlit LCD Display
- Roger Beep
- Up Timer
- Room Monitor
- Battery Charger
- Battery Level Meter
- Channel Monitor
- Channel Scan
- Dual Watch
- Keypad Lock
- Auto Power Off
- Auto Squelch Control
- Auto Repeat (Scrolling)
- Battery Save
- Battery Low Alert
- Battery Low Sleep
- Tone (On/Off)
- Direct Call (Caller ID Call)
- Group Call
- Silent Mode
- All Call
- Auto Channel Change
- IP Rating : IPX2
- Power Source: NiMH battery Pack / 4 AAA Alkaline batteries
- Battery Life: 16 Hours (under typical use conditions)

*Range may vary depending on environmental and/or topographical conditions.

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Control and Functions

Antenna

Headset jack
(Headset not included)

Volume Knob with
Power SW

▲ Up/Down Menu
▼ Navigation Button

♪ (Call) Button

MON (Monitor) Button

Speaker

GRP/MENU (Menu/
Group) Button

SEL/🔒 (Select/Lock)
Button

Microphone

DC IN 9V Jack

Top Lanyard Bar

LED Torch
Button

PTT
(Push-To-Talk)
Button

Bottom Lanyard Bar

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Display

1. Silent Indicator
2. Transmit Indicator
3. Receive Indicator
4. Dual Watch Indicator
5. Auto Power Off Indicator
6. Key Lock Indicator
7. Scan Indicator
8. Channel Indicator
9. Battery Level Meter
10. Group Indicator
11. VOX/Room Monitor Indicator
12. Call Indicator
13. Sub-code (Group ID/Code) Indicator
14. Colon (for Up Timer)

Installing the Battery

1. Make sure your radio is turned OFF.
2. To remove the battery compartment door, press the tab at the bottom of the compartment door.
3. Install the NiMH batteries into the battery compartment.
4. Replace the battery compartment door.

Caution: Risk of explosion if battery is replaced by an incorrect type. Dispose used batteries according to the instructions.

Battery Level and Low Battery Alert

	Indicates that the battery is fully charged.
	Blinks when battery is low; charge the radio or replace batteries immediately. (The alert tone sounds every 5 seconds for 30 seconds when the battery is low.)

Battery Capacity Maintenance

1. Charge the batteries at least once every 3 months when not in use.
2. Remove the battery from the radio after using for storage purpose.
3. Store the batteries in temperatures between -20°C to 35°C and in low humidity. Avoid damp conditions and corrosive materials.

Charging the Radio

Direct Charging :
1. Make sure your radio is turned OFF.
2. Connect the AC adapter to the radio's DC IN 9V. Connect the other end of the AC adapter to a vehicle accessory power outlet.

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3. Charge the battery pack for 14 hours.

Using the Charging Cradle :
1. Make sure your radio is turned OFF.
2. Connect the AC adapter to the DC IN 9V of the charging cradle.
3. Place the charging cradle on a stable surface.
4. Place the radio in the charging cradle with the keypad facing forward.
5. LED indicator will illuminate and remain illuminated as long as the radio is in the charger.

Note: Charge the battery pack for 14 hours.

Using the Battery Support Bracket :
1. Remove the rechargeable NiMH battery pack from the radio.
2. Place the battery support bracket into the charging cradle.
3. Install the NiMH battery pack into the charging cradle. Ensure that the charging contacts are correctly aligned.
4. LED indicator will illuminate and remain illuminated as long as the radio is in the charger.

Note: Charge the battery pack for 14 hours.

Basic Radio Operations

Read this reference guide completely before attempting to operate the unit.

Turning your Radio On/Off

To turn your radio ON, turn the rotary knob clockwise.
To turn your radio OFF, turn the rotary knob counterclockwise.

Adjusting the Volume

Increase volume by turning the rotary knob clockwise.
To decrease volume, turn the rotary knob counterclockwise.

Adjusting the Sound (Key Beeps)

Your radio emits a beep each time one of the buttons is pressed

4 (except the PTT and ♪ button).

Press and hold the ▼ button while turning the radio ON to switch the sound ON/OFF.

Navigating through the Menu

Your radios has two Menu functions: Select Menu and Common Menu.
1. To enter the Select Menu, press the **SEL/ 🔒** button.
2. To enter the Common Menu, press the **MENU/GRP** button**.**
3. Additional presses of the **SEL/ 🔒** button or **MENU/GRP** button will advance you through the Menu.
4. To exit the Menu function, do one of the following :
   a. Press the **MENU/GRP** button,
   b. Press the **PTT** button
   c. Wait 10 seconds until the unit automatically returns to "Normal" mode.

Talking on Your Radio
1. Hold your radio 5–8 cm from your mouth.
2. Press and hold the **PTT** button while speaking. The 📻 appears on the display.
3. Release the **PTT** button. You can now receive incoming calls. When you do, the 📻 appears on the display. To respond, repeat procedure from step 1.

Note: When you continue to transmit for 60 seconds, the radio emits TX Time Out tone and the 📻 icon flashes. The radio will stop transmitting.

In order to speak to someone, both your radios must be set to the same channel and Sub-Code. Refer to "Selecting a Channel and a Sub-Code" below.

### Selecting a Channel and a Sub-Code

To select a Channel:
1. **SEL**/ 🔒 button to enter Select Menu. Advance until the Channel indicator blinks.
2. ▲ or ▼ to the required channel.

To select a Sub-code :
1. **SEL**/ 🔒 button to enter Select Menu. Advance until the Sub-code indicator blinks.
2. ▲ or ▼ to the required Sub-code.
3. Exit the Select Menu.

Select Menu

Your radio navigates through the Select Menu as follows:

```
Normal  →  Channel  →  Sub-code
              ↕          ↕
            1 - 8      0 - 121
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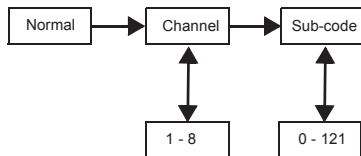
Voice Operated Transmission (VOX)

Transmission is initiated by speaking into the microphone of radio instead of the pushing the **PTT** button.

To select the VOX level:
1. **MENU/GRP** button to enter Common Menu. Advance and select "VOX".
2. **SEL**/ 🔒 to select.
3. ▲ or ▼ to the desired VOX sensitivity level.
4. Exit the Select Menu.

Note: Level "N"(OFF) disables VOX. Levels 1-5 set the sensitivity of the VOX circuit.Use level 1 in quiet environments, and use level 5 in very noisy environments. You can find the appropriate sensitivity level by speaking into the microphone. If the flashes, your voice is accepted.

Transmitting a Call Tone

Your radio is equipped with 10 selectable call tones .

To select a call tone:
1. **MENU/GRP** button to enter Common Menu. Advance to "TONE".
2. **SEL**/ 🔒 to select.
3. ▲ or ▼ to the desired call tone.
4. Exit the Common Menu.

To transmit the selected call tone :
1. ♪ to transmit the selected call tone. The selected tone will automatically be transmitted for a fixed length of time.
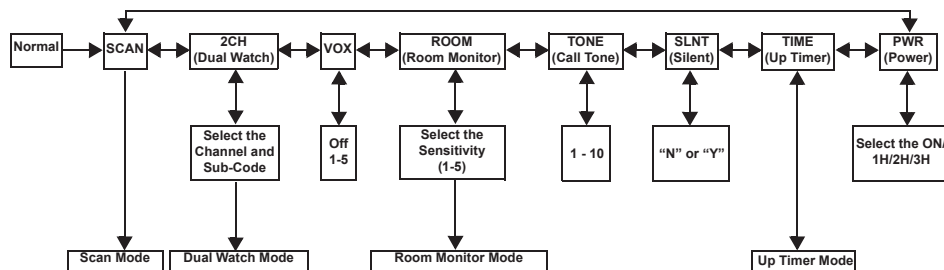2. **PTT** to cancel Call Tone.

Auto Power Off

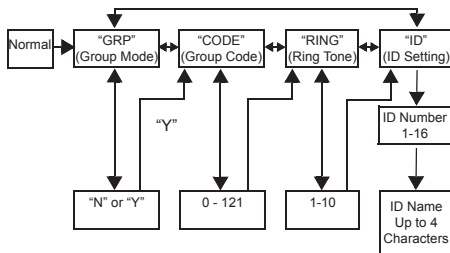Auto Power Off feature allows you to set the time that the radio turns off automatically.
1. **MENU/GRP** button to enter Common Menu. Advance until **"PWR"** and the current Auto Power Off time blinks.
2. **SEL**/ 🔒 to select.
3. ▲ or ▼ to select the time from ON, 1H, 2H, and 3H.
4. Exit the Menu.

Common Menu

Your radio navigates through Common Menu as follows:

| Normal | → | SCAN | ↔ | 2CH (Dual Watch) | ↔ | VOX | ↔ | ROOM (Room Monitor) | ↔ | TONE (Call Tone) | ↔ | SLNT (Silent) | ↔ | TIME (Up Timer) | ↔ | PWR (Power) |

SCAN
Scan Mode

2CH (Dual Watch)
Select the Channel and Sub-Code
Dual Watch Mode

VOX
Off
1-5

ROOM (Room Monitor)
Select the Sensitivity (1-5)
Room Monitor Mode

TONE (Call Tone)
1 - 10

SLNT (Silent)
"N" or "Y"

TIME (Up Timer)
Up Timer Mode

PWR (Power)
Select the ON/ 1H/2H/3H

Group Menu

| Normal | → | "GRP" (Group Mode) | ↔ | "CODE" (Group Code) | ↔ | "RING" (Ring Tone) | ↔ | "ID" (ID Setting) |

"GRP" (Group Mode)
"N" or "Y"

"Y"

"CODE" (Group Code)
0 - 121

"RING" (Ring Tone)
1-10

"ID" (ID Setting)
ID Number 1-16
ID Name Up to 4 Characters

1. Press and hold **MENU/GRP** to enter GROUP MENU.
2. ▲ or ▼ to proceed to each menu (GRP/CODE/RING/ID).
3. **SEL**/ 🔒 to select.
4. ▲ or ▼ to proceed to desired condition or number.
5. **SEL**/ 🔒 to select.
6. **MENU/GRP** to exit.

Set Group Mode
1. Press and hold **MENU/GRP** to enter GROUP MENU.
2. **SEL**/ 🔒 to control Group Mode.
3. ▲ or ▼ to "Y". **SEL**/ 🔒 to go to Group Menu and Group Code Setting.
4. ▲ or ▼ to "N". **SEL**/ 🔒 to exit from Group Menu.

Set Group Code
1. ▲ or ▼ to choose the Group Code.
2. **SEL**/ 🔒 to complete Group Code setting.
3. The radio enters "Ring Tone Setting Menu"
4. **MENU/GRP** to back to Group Menu.

Set Ring Tone
The user can select the Ring Tone for a Direct Call. Ring Tones are the same as Call Tones.
1. ▲ or ▼ to select a Ring Tone.
2. The selected Ring Tone sounds.

Set ID
Each radio in the group needs to be set with an ID. The user can set an ID name of up to four (4) characters.
1. ▲ or ▼ to select an ID number.
2. If the ID is already taken, USED is seen. If USED is not shown, then the ID is available.
3. **SEL**/ 🔒 to advance to setting ID Name.

Set ID Name
The ID Name appears on the other radio's display when you make an All Call or a Direct Call. The ID Name will also on the other radio's display when they are placing a Direct Call. When no ID name is set, the unit number appears.
1. ▲ or ▼ to select a character that will blink on the display.
2. **SEL**/ 🔒 to select and move to the next character.
3. **SEL**/ 🔒 to register the ID number and ID Name.
Note: The radio cancels selected ID Number and entered ID Name, then exits from Group Menu when MENU/GRP button is pressed.

Channel Setting in Group Mode
To set Auto Channel Change in Group Mode:
1. **MENU/GRP** to enter Group Mode.
2. **SEL**/ 🔒 to enter Channel Setting.
3. ▲ or ▼ to "Auto Channel Change Setting".
4. **SEL**/ 🔒 to select.
   A channel number will blink and "ALL" is seen.
5. ▲ or ▼ to select the channel.
6. **SEL**/ 🔒 or 🎵 to transmit Auto Channel Change command.
7. **MENU/GRP** to return to Channel Setting in Group Mode.

To set Manual Channel in Group Mode:
1. **MENU/GRP** to enter Group Mode.
2. **SEL**/ 🔒 to enter Channel Setting.
3. ▲ or ▼ to "Manual Channel Setting".
4. **SEL**/ 🔒 to select.
   A channel number will blink and "MY" is seen.
5. ▲ or ▼ to select the channel manually.
6. **SEL**/ 🔒 to exit from Manual Channel setting.
7. **MENU/GRP** to return to Channel Setting in Group Mode.

Set All Call
1. **MENU/GRP** to enter Group Mode.
2. 🎵 to enter All/ Direct Call Setting.
3. ▲ or ▼ to select All Call Transmission. "SYNC" is seen.
4. **SEL**/ 🔒 or 🎵 to exit this setting, and transmit All Call.
   All Call Tone sounds. 📶 and 🎵 blinks while transmitting.
5. **MENU/GRP** to exit.

Set Direct Call

→ The ID Number for Direct Call

→ The ID Name

1. **MENU/GRP** to enter Group Mode.

2. ♪ to enter All/ Direct Call Setting.

3. ▲ or ▼ to select an ID Number.

4. ♪ or **SEL/ 🔒** to transmit Direct Call Command.
   The selected Call Tone sounds. The display shows TX icon and CALL icon while transmitting.

5. **MENU/GRP** to go back to All/Direct Call setting.

Features on Your Radio

Channel Scan Mode

Enables your radio to scan for active channels. When activity is detected, your radio lands (stays) on that channel for 2 seconds (5 seconds for VOX ON without headset). To transmit on that channel, press the **PTT** button. When activity on the landed channel ends, your radio continues scanning other channels.

To turn the channel scan ON:
1. **MENU/GRP** to enter Common Menu. Advance to "SCAN".

2. **SEL/ 🔒** to turn ON channel scan.
3. **MENU/GRP** or **PTT** to turn OFF Scan mode.

Dual Watch Mode

Enables your to scan the current channel and another channel alternately.

To set another channel and start Dual Watch:
1. **MENU/GRP** to enter Common Menu. Advance to "2CH".

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2. ▲ or ▼ to select the channel, then press **SEL/ 🔒** .

3. ▲ or ▼ to select the Sub-code, then press **SEL/ 🔒** .

4. The radio starts to Dual Watch.

Note: If you set the same channel and Sub-code as the current channel, Dual Watch doesn't work.

5. **MENU/GRP** to turn the Dual Watch mode OFF.

Room Monitor

Enables your radio to detect voice/noises (according to the sensitivity level set) and transmit back to the listening radio without pushing the **PTT** button. The monitoring radio is not able to receive any transmissions in this mode.

To turn Room Monitor ON:
1. **MENU/GRP** to enter Common Menu. Advance to "ROOM".

2. **SEL/ 🔒** to select.

3. ▲ or ▼ to the desired room monitor sensitivity level.

Note: Use level 1 in quiet environments. Use level 5 in very noisy environments.

4. **SEL/ 🔒** to turn ON room monitor.
   MENU/GRP to turn OFF Room Monitor.

Note: When the voice/noise in the monitored room continues for more than 60 seconds, the monitoring radio stop monitoring for 5 seconds, and resumes.

Silent Mode

Silent mode will mute all incoming calls. The backlight of the radio blinks when there's an incoming call. If the call is not

answered, the backlight turns off and the ♪ blinks until there is no signal. The XT180 radio will vibrate when there is a missed call.

The silent mode will be disabled for 15 seconds when you transmit, receive or press any other buttons.

To turn silent mode ON:
1. **MENU/GRP** to enter Common Menu.