PMR446MR-2CK

Roger Beep

Battery Charger

Channel Monitor

Channel Scan

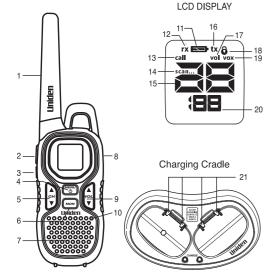
DC IN 9V Jack

Battery Level Meter

- 8 PMR Channels
- 121 Sub Codes
- (CTCSS Tone and DCS Code)
- . Up to 8 Km Range*
- Internal VOX Circuitry
- 10 Selectable Call Tone Alerts Keypad Lock
- Backlit LCD Display
- Optional Headset Accessories
- Headset Jack

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

PMR446MR-2CK RADIO



- 1 Antenna 2 PTT (Push-To-Talk) Button 3 Call/Lock Button 4 Menu/Power key 5 Channel Up/Down key 6 Monitor Key 7 Speaker 8 Headset Jack/DC IN 9V 9 Volume Up/Down key 10 Microphone 11 Battery Level Meter
- 12 Receive Indicator

Congratulations on your purchase of the PMR446. This lightweight, palm-sized, radio is a state-of-the-art device, equipped with many valuable features. Use it at sporting events, to stay in contact with family and friends, hiking, skiing, outdoors, or in a neighborhood watch for vital communication.

PACKAGE CONTENTS

- Your package contains:
 - Two radios
 - Two rechargeable NiMH battery packs
 - One AC adapter EU/UK
 - One dual charging cradle
 - Two belt clips
 - This reference guide

INSTALL THE BATTERY

Your radio uses a supplied NiMH battery pack.

To install the NiMH battery pack:

- 1) Make sure your radio is OFF. 2) Release the battery latch at the bottom of the
- radio, and remove the cover. 3) Install the NiMH battery pack into the battery compartment. Be certain to follow the instructions written on the label on the battery
- pack. Installing the battery pack incorrectly will prevent the unit from operating.
- 4) Before placing the battery cover back on the radio, check the rubber seal around the battery compartment and the ribbon of the battery pack: make sure that the seal is in good condition and that there is no foreign matter under the seal. 5) Replace the battery compartment cover.

USING A HEADSET

You can use an optional headset accessory for more private communications.

To use a headset, lift the rubber cover from over the headset jack, then plug in the headset. Contact your dealer for a headset with correct iack/wiring.

BATTERY LEVEL AND LOW BATTERY ALERT

This unit has a battery level meter on the display to indicate the status of the batteries. When the battery in the unit is low, the battery level meter icon icon flashes. Recharge the NiMH battery pack immediately.

Warning! To avoid the risk of personal injury or property damage from fire or electrical shock, only use the accessories specifically designated for this product.

CHARGING THE RADIO

Your radio can be charged directly or by using the supplied charging cradle.

Make sure to turn the radio OFF before placing the radio in the charging cradle.

Using the Charging Cradle

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- 1) Connect the AC adapter to DC IN 9V jack and to a standard AC wall outlet.
- 2) Set the charging cradle on the desk or tabletop, and place the radio in the charging cradle with the keypad facing forward.
- 3) Make sure that the LED illuminates. Charge the battery pack for 16 hours and remove the radio from the charging cradle after charging.

Charge by Using the 12V DC Cable

- 1) Connect the optional DC adapter to DC IN 9V jack of the radio and to a cigarette lighter port. 2) Charge the battery pack for 16 hours until the
 - battery indicator stops flashing.

Note:

- DC IN 9V Jack of the radio is for charge only. Be sure to install the battery before charge.
- Use only the supplied battery and AC adapter or approved accessories.
- Charge time may vary depending on the battery life remainina.
- For fastest charging, turn off the radio before charging.
- · Battery must be installed for operation, even from external power.
- If battery power is low, you cannot operate the radio even using external power. Allow the batteries to charge before using. If you try to transmit while power is low, the radio will automatically turn off.

USING THE RADIO

In order to get the most out of your new radio, read this reference guide completely before attempting to operate the unit.

Turning the Radio On and Adjusting the Volume

- 1) Press and hold the **MENU/**⁽¹⁾ key to turn the radio ON, and increase the speaker volume by pressing the **VOL** A key. To decrease the volume, press the VOL ▼ key.
- 2) Press and hold the **MENU** \circ key again to turn the radio OFF.

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Adjusting the Sound (Key Beeps)

Your radio emits a beep each time one of the keys (except for the PTT button and CALL key) is pressed.

To turn this sound OFF, press and hold CALL/LOCK while turning ON the radio. Repeat this step to turn the sound ON.

Choosing a Channel

Your radio has 8 channels and 121 Sub codes you can use to talk to others. In order to speak to someone, each of you must be set to the same channel and Sub code.

To choose a channel:

With the radio in "Normal" operating mode, press the **CH** \blacktriangle or \bigtriangledown key to increase or decrease the channel number displayed.

Choosing a Sub Code

Each of the channels 1-8 may have any one of the codes, OFF or 1-121 selected. Code oF (OFF) indicates no Sub code selected and your radio can receive a signal regardless of the code settings of the transmitting radio.

1) Press *MENU/* \bigcirc key.

2) Press the **CH** \blacktriangle or \checkmark key to increase or decrease the code number displayed. You can also select oF (OFF) at this stage. 3) Press MENU/ O key.

Channel Scan Feature

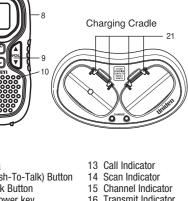
Your radio has a channel scan feature that allows you to easily scan all 8 channels. When an active channel is detected, the radio pauses on that channel until the channel is clear. Then, after a 2 second delay, the radio continues scanning. Pressing the PTT button will stop the Channel Scan Feature.

To turn ON channel scan:

Press MENU/ twice. The scan... icon and oF(OFF) blink. Press CH ▲ key to select on, and then press **MENU/** \odot key. The channel number changes as the radio rapidly cycles through the channels.

To turn OFF channel scan:

Press the CALL/LOCK. PTT. MENU/ O kev.



16 Transmit Indicator 17 Volume Setting Indicator 18 Keypad Lock Indicator 19 VOX Indicator 20 Sub Code Indicator

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Talking on Your Radio

To talk to others using the radio:

- Press and hold the *PTT* button and speak in a clear, normal voice about 5-10 cm away from the microphone. While you are transmitting, the tx icon appears on the display. To avoid cutting off the first part of your transmission, pause slightly after pressing the *PTT* button before you start talking.
- When you have finished speaking, release the *PTT* button. You can now receive incoming calls. While receiving, the **rx** icon appears on the display.

Monitor Mode Feature

Your radio allows you to listen for weak signals on the current channel at the press of a key.

To turn ON the Monitor Mode:

- For brief listening, press *MON* button. The **rx** icon blinks.
- Press and hold *MON* button for 2 seconds until two beeps sound for continuous listening. The receiver circuit stays open, letting both the noise and weak signals be heard.

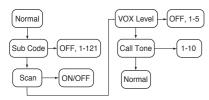
To turn OFF Monitor Mode:

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Press MON button to return to "Normal" mode, and the \mathbf{rx} icon stops blinking and disappears.

Navigating through the Menu

Use the MENU key to access your radio's advanced functions.



- 1) To enter the Menu, press the *MENU/* \odot key.
- Additional presses of the *MENU/* the key advance you through the Menu until exiting to
- "Normal" operating mode. 3) Other methods of exiting the Menu function are:
- a. Press and hold the **MENU**/ \odot key again.
- b. Press the PTT, MON, or CALL/LOCK key
- c. Wait 10 seconds until the unit automatically returns to "Normal" mode.

Voice Operated Transmission Your radio is equipped with a user selectable Voice Operated Transmitter (VOX) that can be used for automatic voice transmissions. The VOX feature is designed to be used with a headset with a microphone. Transmission is initiated by speaking into the remote microphone instead of pushing the *PTT* button.

To select the VOX level:

 Enter the Menu. Advance through the Menu until the vox icon blinks on the display. The current level (OFF, 1-5) will be indicated. Level oF (OFF) disables VOX, while levels 1-5 set the sensitivity of the VOX circuit.

 Press either the CH ▲ or ▼ key to the desired VOX sensitivity level. Use level 1 for increased sensitivity to voice in normally quiet environments, and use a higher level to reduce undesired activation in very noisy environments.

Transmitting a Call Tone

Your radio is equipped with 10 selectable call tones that are transmitted when the *CALL/LOCK* key is pressed.

To select a call tone:

- Press *MENU*/ trepeatedly until the call icon and Call Tone start to blink on the display.
- Press CH▲ / CH▼ to move through the available call tones. Each tone will be heard through the speaker but will not be transmitted. Cycle through these tones and stay on the tone you want to select.
 Exit Call Tone to set the selected tone.

To transmit the selected call tone, press the *CALL/LOCK* key. The selected tone will automatically be transmitted for a fixed length of time. Call Tone will be cancelled when the *PTT* button is pressed.

Key Lock

Press and hold the *CALL/LOCK* key until the the **b** icon appears.

To exit Keylock on mode, press and hold $\ensuremath{\textit{CALL/LOCK}}$ key again.

Note:

- While in keylock on mode, you can still use the radio to receive transmissions, use CALL, VOL ▲ or ▼, PTT and MON.
- To turn the radio off and on, exit keylock on mode.

Automatic Power Save Feature

Your radio has a unique circuit designed to dramatically extend the life of the batteries. If there is no transmission nor an incoming call within 3 seconds, your radio switches to the Power Save mode. The radio is still able to receive transmissions in this mode.

LCD Backlight

The LCD Backlight automatically turns ON when any key (except the *PTT* button) is pressed. The LCD illuminates for 10 seconds before turning OFF.

Roger Beep

Roger Beep is a BEEP that is sent to notify the end of transmission (both PTT and VOX transmission). Roger Beep can be heard through the speaker when both Roger Beep and Key Beep are set to ON. When Roger Beep is set to ON and Key Beep OFF, Roger Beep will not be heard from the speaker but it will be transmitted to your party. When Roger Beep is set to OFF, Roger Beep neither be heard nor transmitted.

- To change Roger Beep setting:
- Press and hold *VOL* A while turning the radio on and off. If Roger Beep is ON, it will be turned off; if it is OFF. it will be turned on.

USE OF ALKALINE BATTERIES

Your radio comes with a NiMH battery pack, but will also operate with regular AAA alkaline batteries.

NEVER try to charge the radio when alkaline batteries are installed. NEVER put the radio in the charging cradle when

alkaline batteries are installed.

To install the batteries:

- 1) Make sure your radio is OFF.
- 2) Release the battery latch at the bottom of the radio, and remove the cover.
- 3) Install the regular AAA alkaline batteries into the battery compartment. Be certain to follow the instructions written on the label on the battery pack. Installing the battery pack incorrectly will prevent the unit from operating.
- Before placing the battery cover back on the radio, check the rubber seal around the battery compartment and the ribbon of the battery pack: make sure that the seal is in good condition and that there is no foreign matter under the seal.
 Replace the battery compartment cover.

CD	ECI		C /\		М
	ELJI	гι	U/A	UI	N

U		AHOM				
Channels	8 (8 channels				
Sub Codes		38 Sub-Audible Tones				
о II Е		83 DCS Codes				
Operating Frequency Power Source	,	446.00625 - 446.09375 MHz NiMH Battery Pack				
Range		Up to 8 Km				
Battery Life	· •	16 Hours typ				
-		NiMH Battery Pack				
		(5/5/90 duty cycle)				
Frequency Char						
Ch. Freq. [MH 1 446.006	-	Ch. 5	Freq. [MHz] 446.05625			
2 446.018 3 446.031	75	6 7	446.06875 446.08125			
4 446.043	75	8	446.09375			
CTCSS Chart (H	z)					
Code Freq. oFF OFF		Code 20	Freq. 131.8			
1 67.0 2 71.9		21 22	136.5 141.3			
3 74.4 4 77.0		23 24	146.2 151.4			
5 79.7 6 82.5 7 85.4		25 26 27	156.7 162.2 167.9			
8 88.5 9 91.5		28 29	173.8 179.9			
10 94.8 11 97.4		30 31	186.2 192.8			
12 100.0 13 103.5 14 107.2		32 33 34	203.5 210.7			
14 107.2 15 110.9 16 114.8		35 36	218.1 225.7 233.6			
17 118.8 18 123.0		37 38	241.8 250.3			
19 127.3						
DCS Code List						
Code Octal No. Code	Code No.	Octal Code	Code Octal No. Code			
39 023 40 025	67	174 205	95 445 96 464			
40 025 41 026 42 031	69 70	223 226	97 465 98 466			
43 032 44 043	71 72	243 244	99 503 100 506			
45 047 46 051 47 054	73 74 75	245 251 261	101 516 102 532 103 546			
47 054 48 065 49 071	76 77	263 265	103 546 104 565 105 606			
50 072 51 073	78 79	271 306	106 612 107 624			
52 074 53 114 54 115	80 81 82	311 315 331	108 627 109 631			
54 115 55 116 56 125	82 83 84	331 343 346	110 632 111 654 112 662			
57 131 58 132	85 86	351 364	113 664 114 703			
59 134 60 143	87 88	365 371	115 712 116 723			
61 152 62 155 63 156	89 90 91	411 412 413	117 731 118 732 119 734			
64 162 65 165	92 93	413 423 431	120 743 121 754			
66 172	94	432				

DECLARATION OF CONFORMITY

This equipment complies with the European R&TTE directive.

To view the complete Declaration of Conformity, please refer to the free download available at our web site: www.avera.eu. For sales and service please contact info@avera.eu



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