

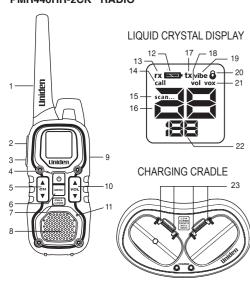
PMR446HR-2CK

- 8 PMR Channels
- 121 Sub Codes (CTCSS Tone and DCS Code)
- Up to 10 Km Range*
- JIS2 Weather Resistant
- Internal VOX Circuitry
- 10 Selectable Call Tone Alerts
- Backlit LCD Display
- Optional Headset Accessories
- Vibrate Call Alert

- Headset Jack
- Roger Beep
- Battery Charger
- Battery Level Meter
- Channel Monitor
- · Channel Scan
- Keypad Lock
- DC IN 9V Jack
- Mini USB Charging Port

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

PMR446HR-2CK RADIO



- 1 Antenna
- 2 PTT (Push-To-Talk) Button
- 3 Monitor Key
- 4 Power Key
- 5 Channel Up/Down Key
- 6 Menu
- 7 Call/Lock Key
- 8 Speaker
- 9 Headset Jack /Mini USB for Charging
- 10 Volume Up/Down Key
- 11 Microphone

- 12 Battery Level Meter
- 13 Receive Indicator
- 14 Call Indicator
- 15 Scan Indicator
- 16 Channel Indicator
- 17 Transmit Indicator
- 18 Volume Setting Indicator
- 19 Vibrate Indicator
- 20 Keypad Lock Indicator
- 21 VOX Indicator
- 22 Sub Code Indicator
- 23 Charging Contact

Congratulations on your purchase of the PMR446 Weather resistant radio. 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 - even outside by the pool!

PACKAGE CONTENTS

Your package contains:

- Two radios
- Two rechargeable NiMH battery packs
- One AC adapter EU/UK
- One dual chargingcradle
- 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.
- 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 door.

Note: If the rubber seal appears worn, nicked, or dried out, replacement seals are available from your dealer or www.avera.eu

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.

Important: Your radio is not waterproof when using a headset jack. When you remove the headset, be sure to fully press the jack cover into place to restore its waterproof capability.

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 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

- Connect the AC adapter to DC IN 9V jack and to a standard AC wall outlet.
- Set the charging cradle on the desk or tabletop, and place the radio in the charging cradle with the keypad facing forward.
- 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 USB Cable

- Connect an optional Mini USB cable to the radio Mini USB port and the other end to a computer or to an AC or DC adapter that provides USB charging power (NOT to a USB hub).
- 2) Charge the battery pack for 16 hours until the battery indicator stops flashing.

Note:

- Use the optional Mini USB cable accessory to connect to an AC or DC adapter that provides USB charging power (NOT to a USB hub).
- DC IN 9V Jack of the charging cradle 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 remaining.
- 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

- Press and hold the ₼ key to turn the radio ON, and increase the speaker volume by pressing the VOL ▲ key. To decrease the volume, press the VOL ▼ key.
- 2) Press and hold the \circ key again to turn the radio OFF.

Adjusting the Sound (Key Beeps)

Your radio emits a beep each time one of the keys (except for the *PTT* button and *CALL/LOCK* 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 ▲ or ▼ 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* key.
- Press the CH ▲ or ▼ key to increase or decrease the code number displayed. You can also select oF (OFF) at this stage.
- 3) Press **MENU** 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 while the scan is paused on a channel allows you to transmit on that channel.

To turn ON channel scan:

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

To turn OFF channel scan:

Press the CALL/LOCK, PTT, MENU key.

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:

Press **MON** button to return to "Normal" mode, and the **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** key.
- Additional presses of the *MENU* 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** 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 an optional headset accessory. 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.
- 2) 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:

- 1) Press MENU/ repeatedly 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.
- 3) 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.

Setting Silent Mode

When you turn on the silent mode, all incoming calls are muted: the radio flashes the display backlight, the channel indicator, **vibe** and **call** to alert you to an incoming call. If you do not respond to the call within 15 seconds, the backlight turns off The radio will also vibrate to remind you that you missed a call. Silent mode is disabled for 15 seconds when you transmit, receive, or press any other button.

Press **MENU** repeatedly until the **vibe** icon and the current setting start to blink on the display.

To turn ON the silent mode:

- 1) Press CH ▲ to display on.
- To exit the Menu, press the *MENU* key advance you through the Menu until exiting to "Normal" mode. vibe appears.

To turn OFF the silent mode:

- 1) Press **CH** ▼ to display **oF**.
- To exit the Menu, press the *MENU* key advance you through the Menu until exiting to "Normal" mode. *vibe* disappears.

Note: To prevent unwanted silent alerts, be sure to use a Privacy code whenever you use the Silent mode feature. You can hear the received voice when you turn on channel scan and an active channel is detected even during silent mode.

Missed Call Alerts

If you receive an incoming call while silent mode is on and do not respond, the radio will turn on the Missed Call icon.

The radio will additionally remind you of a missed call by vibrating every minute after the call for 3 minutes.

Key Lock

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

To exit Keylock on mode, press and hold **CALL/LOCK** key again.

Note:

- While in keylock on mode, you can still use the radio to receive transmissions, use CALL/LOCK, 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** \(\times\) 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 hatteries

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.
- 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.

SPECIFICATIONS

Channels	8 channels
Sub Codes	38 Sub-Audible Tones
	83 DCS Codes
Operating Frequency	446.00625 - 446.09375 MHz
Power Source	NiMH Battery Pack
Range	Up to 8 Km
Battery Life	16 Hours typ
	NiMH Battery Pack
	(5/5/90 duty cycle)

Frequency Chart

Ch.	Freq. [MHz]	Ch.	Freq. [MHz]			
1	446.00625	5	446.05625			
2	446.01875	6	446.06875			
2	446.03125	7	446.08125			
4	446.04375	8	446.09375			
CTCSS Chart (Hz)						
	_		_			

Code	Freq.	q. Code	
oFF	OFF	20	131.8
1	67-0	21	136.5
2	71.9	22	141.3
3	74.4	23	146.2
4	77.0	24	151.4
5	79.7	25	156.7
6	82.5	26	162.2
7	85.4	27	167.9
8	88.5	28	173.8
9	91.5	29	179.9
10	94.8	30	186.2
11	97.4	31	192.8
12	100.0	32	203.5
13	103.5	33	210.7
14	107.2	34	218.1
15	110.9	35	225.7
16	114.8	36	233.6
17	118.8	37	241.8
18	123.0	38	250.3
19	127.3		

DCS Code List

Code	Octal	Code	Octal	Code	Octa
No.	Code	No.	Code	No.	Code
39	023	67	174	95	445
40	025	68	205	96	464
41	026	69	223	97	465
42	031	70	226	98	466
43	032	71	243	99	503
44	043	72	244	100	506
45	047	73	245	101	516
46	051	74	251	102	532
47	054	75	261	103	546
48	065	76	263	104	565
49	071	77	265	105	606
50	072	78	271	106	612
51	073	79	306	107	624
52	074	80	311	108	627
53	114	81	315	109	631
54	115	82	331	110	632
55	116	83	343	111	654
56	125	84	346	112	662
57	131	85	351	113	664
58	132	86	364	114	703
59	134	87	365	115	712
60	143	88	371	116	723
61	152	89	411	117	731
62	155	90	412	118	732
63	156	91	413	119	734
64	162	92	423	120	743
65	165	93	431	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



Printed in Vietnam U01UT076ZZZ(0)