

Congratulations on your purchase of the the PMR

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

neighborhood watch for vital communication - even

and friends, hiking, skiing, outdoors, or in a

Your radio complies with JIS4 water-proof

The radio will only meet this rating if fully

attached and securely fastened.

Two rechargeable NiMH battery packs

standards, which means the radio is resistant

to damage from light rain or water spray from

assembled and all rubber seals and the jack

Note: If your radio is exposed to salt water, clean

vour radio thoroughly with a small amount of fresh

PACKAGE CONTENTS

INSTALL THE BATTERY

Your radio uses a supplied NiMH battery pack.

2) Release the battery latch at the bottom of the

3) Install the NiMH battery pack into the battery

4) Before placing the battery cover back on the

instructions written on the label on the battery

pack. Installing the battery pack incorrectly will

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.

compartment. Be certain to follow the

To install the NiMH battery pack:

1) Make sure your radio is OFF.

radio, and remove the cover.

prevent the unit from operating.

water (do not submerse it), and dry it before

cover is well maintained and correctly fitted. This

means that the Headset plug is not inserted, and

the Headset jack cover and the battery pack are

outside by the pool!

all sides.

turnina it on.

Two radios

Two belt clips

Two carabiners

This reference guide

Your package contains:

One AC adapter EU/UK

One dual charging cradle

(Private Mobile Radio) Splash proof radio. This

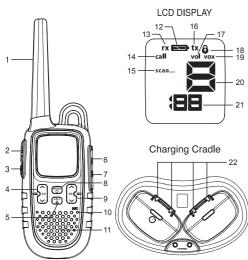
PMR446SPI -2CK

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

- Roger Beep
- · Battery Charger
- · Battery Level Meter · Channel Monitor
- · Channel Scan
- Keypad Lock
- DC IN 9V Jack

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

PMR446SPL-2CK RADIO



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

- 14 Call Indicator 15 Scan Indicator
- 16 Transmit Indicator
- 17 Volume Setting Indicator
- 18 Keypad Lock Indicator
- 19 VOX Indicator
- 20 Channel Indicator
- 21 Sub Code Indicator
- 22 Charging Contacts

Note: If the rubber seal appears worn, nicked, or dried out, replacement seals are available from

vour dealer or www.avera.eu

USING A HEADSET

You can use a Uniden headset 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.

Charge by Using the Radio

- 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.

Using the Charging Cradle

- 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.

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 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.

Warrning!

- · The charging cradle is not waterproof. If the charging cradle falls into water, unplug it before attempting to remove it from the water. Allow the cradle to dry completely before reconnecting the power.
- · Wipe off dirt or shake water from your radio before placing in the charging cradle if your radio is soiled or wet.

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**/ \circlearrowleft key to turn the radio ON, and increase the speaker volume by pressing the $VO \land$ key. To decrease the volume. press the **VO** V key.
- 2) Press and hold the **MENU**/ \circlearrowleft 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 key) is pressed.

To turn this sound OFF:

- 1) Enter the **MENU**/ \circlearrowleft . Advance through the Menu until the **bp** icon appears on the display. The current sound status y (ON) blinks on the display.
- 2) To switch the sound from **v** (ON) to **n** (OFF), press the **CH** V key.
- 3) To confirm the setting, press the **MENU**/ \bigcirc key.

To turn this sound ON:

- 1) Enter the **MENU**/ . Advance through the Menu until the bp icon appears on the display. The current sound status n (OFF) blinks on the display.
- 2) To switch the sound from **n** (OFF) to **v** (ON), press the $CH \land key$.
- 3) To confirm the setting, press the **MENU**/ \circlearrowleft key.







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:

- Press CH ∧ or ∨ key to enter the channel select mode. The channel indicator flashes.
- Then press CH ∧ or V key to increase or decrease the channel number displayed.
- To change the channel continuously, press and hold CH ∧ or ∨ key for more than 1 second in channel select mode.
- 3) To set a desired channel, press **MENU**/ \bigcirc key.

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.
- 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*/ \circlearrowleft 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/ A. PTT. MENU/ kev.

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 2-3 inches 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.
- 2) When you have finished speaking, release the **PTT** button. You can now receive incoming calls.

While receiving, the **rx** icon appears on the display.

Note: If PTT or VOX is continuously used, 1 minute after you start using the feature the transmission stops and you hear a timeout error tone.

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:

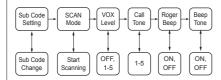
- For brief listening, press MON button. The rx icon blinks.
- Press and hold MON button for 2 seconds until two beeps sound for continuous listening. The receiver circuit stays open, letting both the noise and weak signals be heard.

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**/ \circlearrowleft key.
- Additional presses of the *MENU*/ bkey 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**/ \circlearrowleft key again.
- b. Press the **PTT**, **MON**, or **CALL**/ **A** 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.
- 2) Press either the CH \(\lambda \) or \(\lambda \) 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 5 selectable call tones that are transmitted when the *CALL/* key is pressed.

To select a call tone:

- 1) Enter the Menu. Advance through the Menu until the **call** icon appears on the display. The current call tone number (1-5) is indicated.
- Press the CH \(\simes\) or \(\subseteq\) key to increase or decrease the number to the desired call tone. Each tone will be heard through the speaker.

To transmit the selected call tone, press the *CALL/*A 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*/ A key until the the cion appears.

To exit Keylock on mode, press and hold **MENU/** \bigcirc key again.

Note:

- While in keylock on mode, you can still use theradio to receive transmissions, use CALL, VO ∧ 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 turn OFF Roger Beep:

 Enter the MENU/ . Advance through the Menu until the rb icon appears on the display. The current sound status y (ON) blinks on the display. 2) To switch the sound from y (ON) to n (OFF), press the $CH \lor$ key.

3) To confirm the setting, press the **MENU**/ \circlearrowleft key.

To turn this sound ON:

- Enter the MENU/ . Advance through the Menu until the rb icon appears on the display. The current sound status n (OFF) blinks on the display.
- 2) To switch the sound from \mathbf{n} (OFF) to \mathbf{y} (ON), press the $\mathbf{CH} \wedge$ key.
- 3) To confirm the setting, press the **MENU**/ \bigcirc key.

SPECIFICATIONS

Channels	8 channels
Sub Codes	38 Sub-Audible Tones
	83 DCS Codes
Operating Frequency	446.00625 - 446.09375 MH
Power Source	NiMH Battery Pack
Range	Up to 10 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
3	446.03125	7	446.08125
4	446.04375	8	446.09375

CTCSS Chart (Hz)

Code	Freq.	Code	Freq.		
oFF	OFF	20	131.8		
1	67.0	21	136.5		
2	71.9	22	141.3		
2	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		

DCS Code List Code Octal

No.	Code	No.	Code	No.	Co
39	023	67	174	95	44
40	025	68	205	96	46
41	026	69	223	97	46
42	031	70	226	98	46
43	032	71	243	99	50
44	043	72	244	100	50
45	047	73	245	101	51
46	051	74	251	102	53
47	054	75	261	103	54
48	065	76	263	104	56
49	071	77	265	105	60
50	072	78	271	106	61
51	073	79	306	107	62
52	074	80	311	108	62
53	114	81	315	109	63
54	115	82	331	110	63
55	116	83	343	111	65
56	125	84	346	112	66
57	131	85	351	113	66
58	132	86	364	114	70
59	134	87	365	115	71
60	143	88	371	116	72
61	152	89	411	117	73
62	155	90	412	118	73
63	156	91	413	119	73
64	162	92	423	120	74
65	165	93	431	121	75
66	172	94	432		

Code Octal

Code Octal

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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