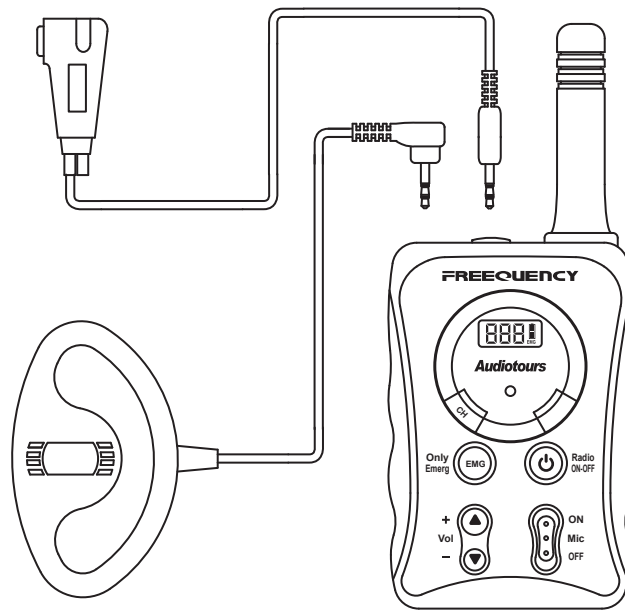


— Instruction Manual —

PMR-WP1U Radio with Earphone and Microphone



TTI Tech Co., Ltd.
5F, Daedok Bldg., 321-2,
Yangjae-dong, Seocho-ku,
Seoul, Korea, 137-130
<http://www.ttikorea.co.kr>

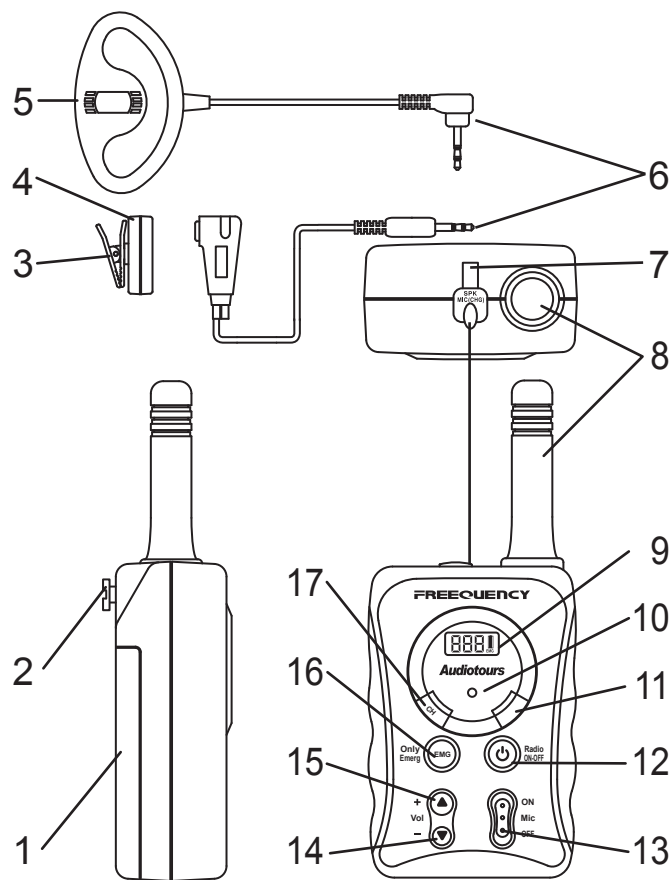
PMR-WP1U
2 of 14

FEATURES

Your PMR-WP1U Radio is a portable, easy to use transmitter and receiver that you can carry almost anywhere. It is skillfully constructed to give you reliable communications. It is intended for use with the supplied earphone or microphone. When used in this manner, the PMR-WP1U is ideal for hands-free use for outdoor activities. Some of the PMR-WP1U features are :

- * Earphone / Microphone
- * Carry-Clip for Hands-Free Operation
- * 200 Channels
- * LCD Display
- * Emergency Channel
- * Volume Adjustment
- * Battery Level Display
- * Low Battery Alert LED

FUNCTION AND LOCATION OF THE CONTROLS



1. Battery Compartment Cover : Three (3) AA batteries accessible when cover is removed.
2. Carry Clip Stud
3. Lapel / Clothes Clip : To put microphone box to convenient area.
4. Microphone
5. Earphone
6. Microphone / Earphone Plug : To connect microphone / earphone assembly to SPK / MIC jack on radio.
7. SPK / MIC(CHG) Jack : For use with the microphone / earphone assembly ; accepts microphone / earphone connector plug (6). Also accepts wall charger DC input for battery charging.
8. Antenna
9. LCD Display : Displays the current radio channel number. Also displays battery level and volume level upon volume adjustment.
10. Low Battery Alert LED : When the battery level becomes low, this lamp blinks once in every 500ms and the radio sounds a beep at a 10-second rate.
11. Dummy Button
12. Power Button (⏻) : Press and hold this button for 1.5 seconds to turn the transceiver on or off.
13. MIC ON/OFF Switch : Turn on this switch to transmit.
14. Down Button (▼) : Press this button to decrease the volume. Also this is used for channel setting with channel button.
15. Up Button (▲) : Press this button to increase the volume. Also this is used for channel setting with channel button.
16. Emergency Button : Press this button for 3 seconds to move to the emergency channel (99) or return to the home channel.
17. Channel (CH) Button : Press this button to access the channel change mode. And use up (▲) / down (▼) button to change the radio channel number.

POWERING THE TRANSCEIVER

Your radio operates on three AA batteries. Alkaline batteries will provide slightly better performance than rechargeable batteries and will ensure optimum performance for the radio.

Batteries

There are two methods of powering the PMR-WP1U :

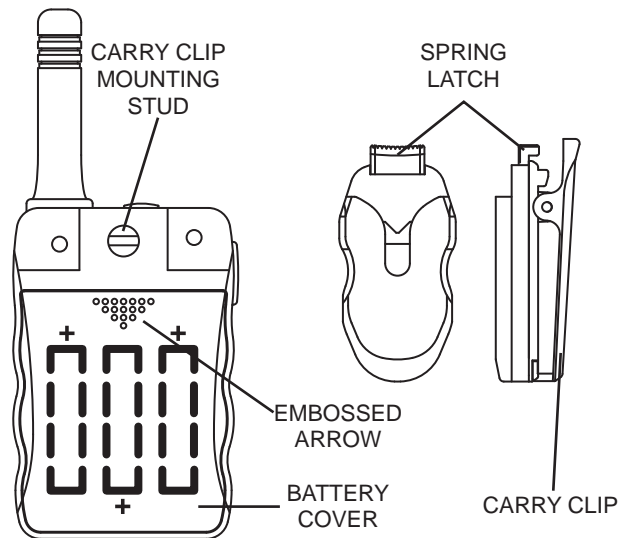
1. Alkaline Batteries.

WARNING : Do not attempt to recharge Alkaline batteries.

2. Rechargeable Ni-MH Batteries.

NOTE : To extend battery life, avoid overcharging the batteries.

BATTERY INSTALLATION AND CHARGING

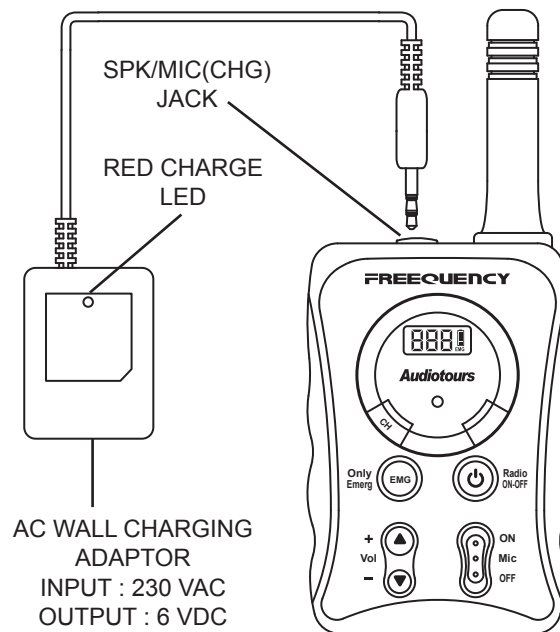


1. Press down on the spring latch securing the clip to radio and slide the clip downward and away from the mounting stud.
2. At battery cover, press downward with thumb on embossed arrow and slide battery cover down and off the radio.
3. Insert four "AA" batteries. Position batteries according to polarity markings. Reverse the procedure outlined in steps 1 and 2 to reassemble.

NOTE : Make sure the battery + and – terminals are aligned as shown.

CAUTION :

- * Incorrect battery installation can damage the unit.
- * Never attempt to charge alkaline batteries.
- * Do not mix old and new batteries.
- * The use of alkaline-type batteries is recommended to provide the longest operating time.
- * Do not mix alkaline, standard(carbon-zinc) or rechargeable batteries.
- * If the unit is not to be used for an extended period of time, remove the batteries. Old or leaking batteries can cause damage to the unit and will void the warranty.



USING YOUR RADIO

Turning the Radio On and Off (Ⓞ)

Pressing the Power button (12) for 1.5 seconds will activate the unit and the self-test display momentarily appears followed by the frequency standby display. The earphones will sound a short melody to confirm the transceiver's activation and the LCD backlight will come on for about 1.5 seconds. To turn the unit off, simply press and hold the power button for 1.5 seconds then release it ; a short tone will be heard as the unit powers off.

Volume Level

Audio reception volume is controlled by the Up (15) and the Down (14) channel / volume buttons. Momentarily pressing either button will increase or decrease the volume level, with each step accompanied by a beep tone whose volume increases or decreases accordingly. The display will indicate U1 (lowest setting) or U7 (highest setting).

Emergency Button (16)

When this button is pressed for 3 seconds, the radio will go to channel 99 with a short confirming melody. To return to home channel, press this button for 3 seconds again, then the radio goes to the home channel with a confirming melody.

Low Battery Alert

When the battery level becomes low, the radio will sound a beep at a 10-second rate and LED lamp will blink once in every 500ms, indicating that the batteries should be changed.

Channel Selection

Momentarily press the CH button so the two-digit channel display flashes. Press the VOL Up (▲) or Down (▼) button to select the desired channel (001-200).

USING YOUR RADIO

To Transmit :

1. Set the desired primary channel.
2. Turn on MIC ON/OFF Switch and speak slowly and clearly in a normal voice into the microphone.
3. The LCD backlight will come on while transmitting.

To Receive :

1. Set the desired channel.
2. Adjust the volume control to the desired listening volume by using the up and down buttons.
3. The transceiver will play strong received signals through the earphone.

WARNING

- * Remove the batteries from the transceiver if it is not expected to be used for long periods. This will eliminate the possibility of battery acid leaking from the batteries and corroding the transceiver.
- * Avoid exposing the unit to water or extremes of temperature.
- * Do not use this device in or near a mining facility, which uses remotely triggered explosives or in areas labeled "Blasting Area". Premature or accidental detonation may result.
- * Do not attempt to modify or in any way increase the output of this transceiver. Its output is designed to meet the legal limits.
- * Do not use this device or change its batteries in potentially explosive atmospheres as sparks in such areas could result in an explosion.
- * Turn your transceiver off wherever posted notices restrict the use of radios or cellular telephones. Facilities such as hospitals may use equipment that is sensitive to RF energy.
- * Turn your transceiver off on-board aircraft when requested to do so.
- * Do not place your transceiver in front of a vehicle's air-bag. If the air bag deploys, it could propel the transceiver like a projectile.

SPECIFICATIONS

Channels	200	
Battery Life		
Alkaline	TX	20 Hours
	RX	34 Hours
Power Source	4.5 Vdc	
Receiver		
Sensitivity	-120dBm Min.	
Max. audio output @ 10% THD	1.5V (75 ohm Load)	
Max. S/N ratio @ 1mV RF inout	40dBm Min.	
Squelch Sensitivity Threshold	-120dBm Min.	
Adjacent Channel Selectivity	50dB Min.	
Transmitter		
Max. Effective Radiated Power	10mW	
Audio Distortion	5%	
Hum and Noise	35db Min	

* These specifications are subject to change without notice.
They represent typical values, individual units may vary.

CHANNEL FREQUENCY TABLE

CH	Freq.(MHz)	CH	Freq.(MHz)	CH	Freq.(MHz)	CH	Freq.(MHz)
1	402.0125	26	402.3250	51	402.6375	76	402.9500
2	402.0250	27	402.3375	52	402.6500	77	402.9625
3	402.0375	28	402.3500	53	402.6625	78	402.9750
4	402.0500	29	402.3625	54	402.6750	79	402.9875
5	402.0625	30	402.3750	55	402.6875	80	403.0000
6	402.0750	31	402.3875	56	402.7000	81	403.0125
7	402.0875	32	402.4000	57	402.7125	82	403.0250
8	402.1000	33	402.4125	58	402.7250	83	403.0375
9	402.1125	34	402.4250	59	402.7375	84	403.0500
10	402.1250	35	402.4375	60	402.7500	85	403.0625
11	402.1375	36	402.4500	61	402.7625	86	403.0750
12	402.1500	37	402.4625	62	402.7750	87	403.0875
13	402.1625	38	402.4750	63	402.7875	88	403.1000
14	402.1750	39	402.4875	64	402.8000	89	403.1125
15	402.1875	40	402.5000	65	402.8125	90	403.1250
16	402.2000	41	402.5125	66	402.8250	91	403.1375
17	402.2125	42	402.5250	67	402.8375	92	403.1500
18	402.2250	43	402.5375	68	402.8500	93	403.1625
19	402.2375	44	402.5500	69	402.8625	94	403.1750
20	402.2500	45	402.5625	70	402.8750	95	403.1875
21	402.2625	46	402.5750	71	402.8875	96	403.2000
22	402.2750	47	402.5875	72	402.9000	97	403.2125
23	402.2875	48	402.6000	73	402.9125	98	403.2250
24	402.3000	49	402.6125	74	402.9250	99	403.2375
25	402.3125	50	402.6250	75	402.9375	100	403.2500

CHANNEL FREQUENCY TABLE

CH	Freq.(MHz)	CH	Freq.(MHz)	CH	Freq.(MHz)	CH	Freq.(MHz)
101	403.2625	126	403.5750	151	403.8875	176	404.2000
102	403.2750	127	403.5875	152	403.9000	177	404.2125
103	403.2875	128	403.6000	153	403.9125	178	404.2250
104	403.3000	129	403.6125	154	403.9250	179	404.2375
105	403.3125	130	403.6250	155	403.9375	180	404.2500
106	403.3250	131	403.6375	156	403.9500	181	404.2625
107	403.3375	132	403.6500	157	403.9625	182	404.2750
108	403.3500	133	403.6625	158	403.9750	183	404.2875
109	403.3625	134	403.6750	159	403.9875	184	404.3000
110	403.3750	135	403.6875	160	404.0000	185	404.3125
111	403.3875	136	403.7000	161	404.0125	186	404.3250
112	403.4000	137	403.7125	162	404.0250	187	404.3375
113	403.4125	138	403.7250	163	404.0375	188	404.3500
114	403.4250	139	403.7375	164	404.0500	189	404.3625
115	403.4375	140	403.7500	165	404.0625	190	404.3750
116	403.4500	141	403.7625	166	404.0750	191	404.3875
117	403.4625	142	403.7750	167	404.0875	192	404.4000
118	403.4750	143	403.7875	168	404.1000	193	404.4125
119	403.4875	144	403.8000	169	404.1125	194	404.4250
120	403.5000	145	403.8125	170	404.1250	195	404.4375
121	403.5125	146	403.8250	171	404.1375	196	404.4500
122	403.5250	147	403.8375	172	404.1500	197	404.4625
123	403.5375	148	403.8500	173	404.1625	198	404.4750
124	403.5500	149	403.8625	174	404.1750	199	404.4875
125	403.5625	150	403.8750	175	404.1875	200	404.5000

CE DECLARATION

CE version of the PMR-WP1U which displays the "CE" symbol on the product label, complies with the essential requirements of the European Radio and Telecommunication Terminal Directive 1999/5/CE.



This warning symbol indicates that this equipment operates in non-harmonised frequency bands and / or may be subject to licensing conditions in the country of use. Be sure to check that you have the correct version of this radio or the correct programming of this radio, to comply with national licensing requirement.

SAFETY REQUIREMENT

For charging the rechargeable batteries, only CE-approved AC adaptor must be used in compliance with the following specifications :

- * INPUT : AC 230V 50Hz
- * OUTPUT : DC 6V 200mA

