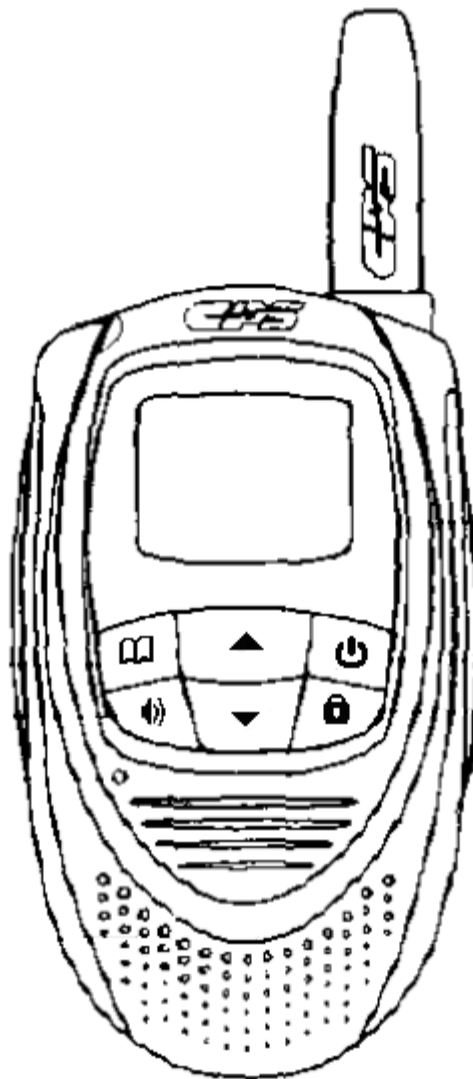


CP101

Recreational Radio User Manual



1. GENERAL INFORMATION

1.1 Introduction

The CP101 Recreational Radio combines quality and versatility into a compact, light and portable two-way radio with state-of-the-art design and easy-to-use features.

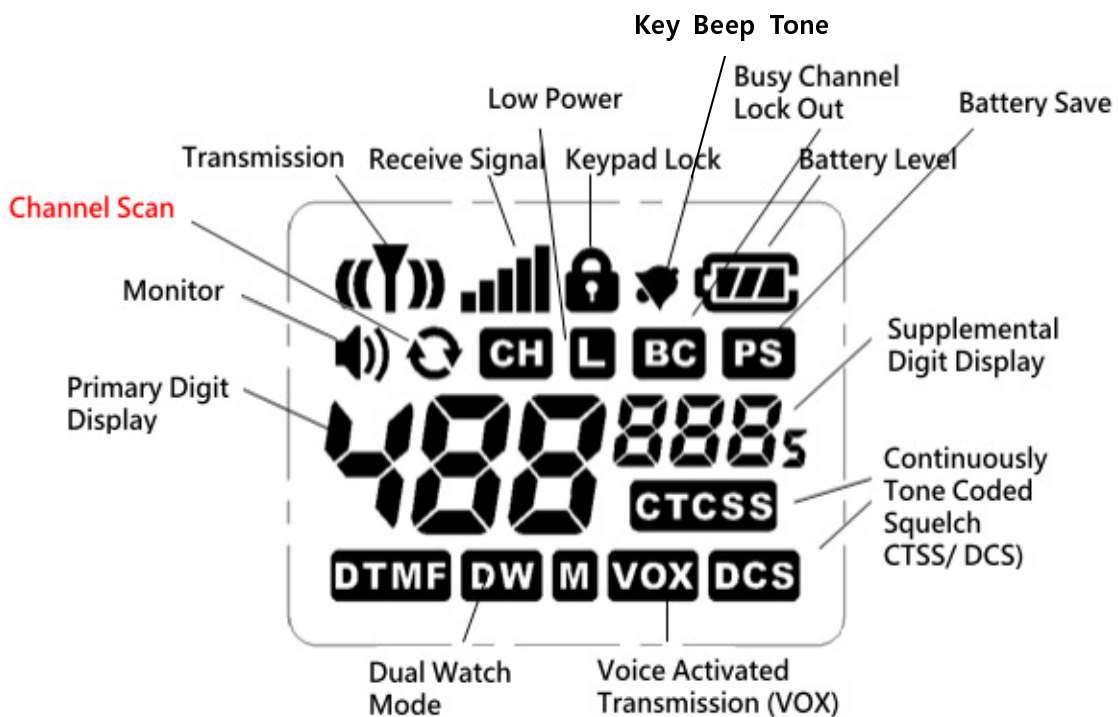
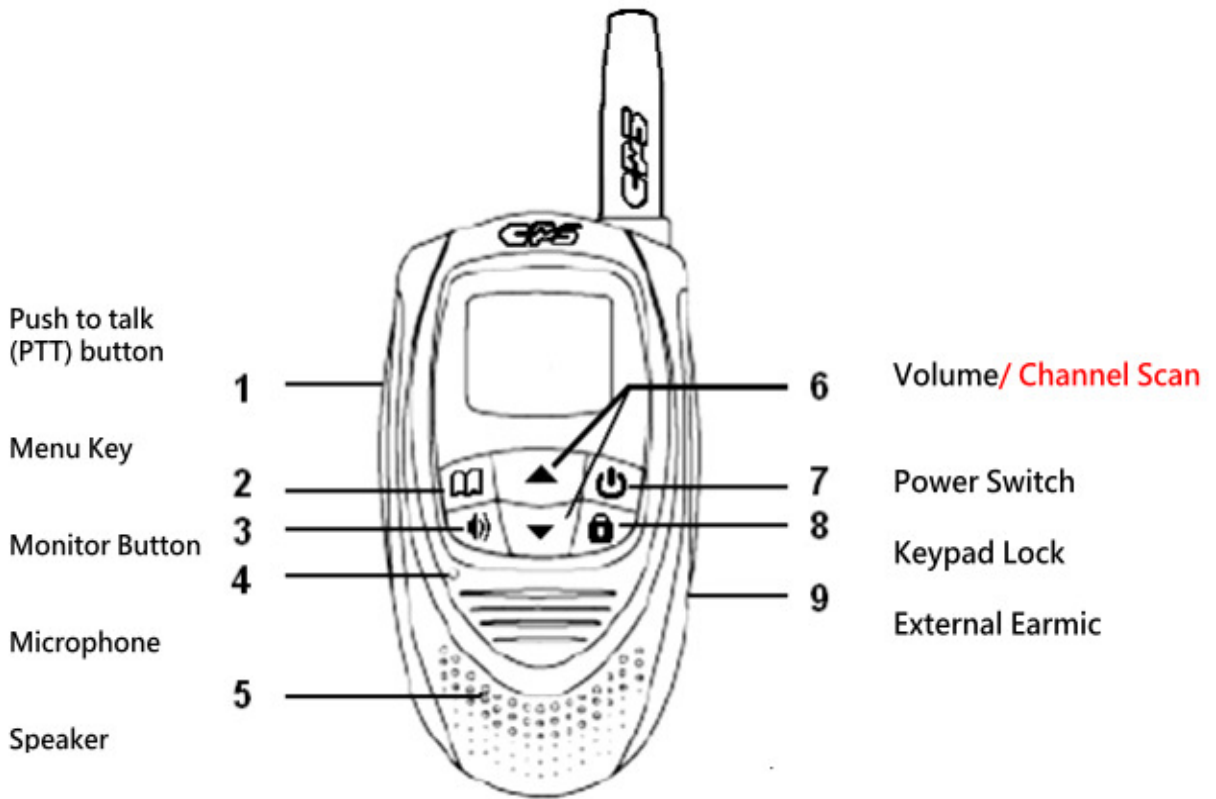
1.2 Key Features

- weight : 53g
- license free
- talk for free!
- 3km/2mi range (open terrain)
- clear, high power audio output
- 20 channels, 53 CTCSS tone code, 104 DCS code
- voice activated transmission (VOX)
- channel scan
- 2 receiving modes
- General receiving mode
- Dual watch mode
- large LCD display with illumination
- monitor mode
- battery save
- battery level indicator
- low battery warning
- keypad lock
- busy channel lockout
- external PTT / microphone and speaker jack
- detachable belt clip

1.3 Optional Accessories

- EM20 External PTT/ microphone

2. CONTROLS AND INDICATORS



3. OPERATION

3.1 Power On / Off

Press and hold the power on Key to switch on or off.

3.2 Adjusting the Radio Volume/ Channel Scan

Adjust the volume level by using ▲ / ▼ key (1-15 steps)

Press and hold ▲ / ▼ key for 2 seconds. Press any key to stop.



3.3 Transmission /Receiving

Press and hold the "PTT" button while speaking at about 5cm from the microphone for transmission. Release the "PTT" button to return to standby mode.


3.4 Channel Selection

Press and hold the , use ▼ or ▲ to select the channel, press PTT key to confirm and back to receiving mode interface.



3.5 Keypad Lock

Press  for 3 seconds to activate and deactivate the keypad lock.  cannot be function.

3.6 Monitor

Press  key to open the speaker squelch for receiving the weak radio signal and monitoring channel with unknown CTCSS frequency.

4. MENU SETTING

Press  key for 3 seconds to enter the Menu Selection Mode. Press  key to select one of the following features:

Channel select >CTCSS/ DCS>Squelch Level >VOX >Dual Watch Mode >Key Beep Tone >Busy Channel Lock Out > Transmit LED indicator >Battery Save >Transmitter Power Select

Press PTT to confirm setting and return to standby mode, the current setting will be confirmed and quit to standby mode if no action to the selected feature for more than fifteen seconds.

4. MENU SETTING

4.1 Channel

Press ▼/▲ to select the channel.

4.2 CTCSS/DCS

Press ▼/▲ to select desired CTCSS or DCS coding.

4.3 Squelch Level

Press ▼/▲ to select squelch level (1 - 9 steps).

4.4 VOX

Press ▼/▲ to select OFF & ON and select the VOX level (OFF – 09). Without pressing the PTT button, the voice signal can be transmitted through the microphone.

4.5 DUAL WATCH

Press ▼/▲ to select OFF & On Dual Watch Channels.

4.6 KEY BEEP TONE

Press ▼/▲ to select On & OFF this feature.

4.7 BUSY CHANNEL LOCK OUT (BCLO)

Press ▼/▲ to select and disable this feature. If this feature is turned on, transmission function will be temporary disabled when signal is being received.

4.8 BACK LIGHTING () + LED

Press ▼/▲ to select disable this feature. Back Lighting will be ON when you press PTT to indicate transmitter is function.

4.9 TRANSMISSION POWER ADJUST ()

Press ▼/▲ to select Low or High Power. When the radio is on stand-by mode, Press PTT and ▼ to select Lo Power, Press PTT & ▲ to select Hi power.

CTCSS / DCS TABLE

CTCSS 表

NO.	Frequency (Hz).	NO.	Frequency (Hz).	NO.	Frequency (Hz).	NO.	Frequency (Hz).
1	67	15	110.9	29	179.9	43	196.6
2	71.9	16	114.8	30	186.2	44	199.5
3	74.4	17	118.8	31	192.8	45	206.5
4	77	18	123	32	203.5	46	229.1
5	79.7	19	127.3	33	210.7	47	254.1
6	82.5	20	131.8	34	218.1	48	165.5
7	85.4	21	136.5	35	225.7	49	171.3
8	88.5	22	141.3	36	233.6	50	177.3
9	91.5	23	146.2	37	241.8	51	60.7
10	94.8	24	151.4	38	250.3	52	62.5
11	97.4	25	156.7	39	69.3	53	64.7
12	100	26	162.2	40	159.8		
13	103.5	27	167.9	41	183.5		
14	107.2	28	173.8	42	189.9		

DCS 表

NO	DCS code	NO	DCS code	NO	DCS code	NO	DCS code
1	23	27	165	53	413	79	731
2	25	28	172	54	423	80	732
3	26	29	174	55	431	81	734
4	31	30	205	56	432	82	743
5	32	31	223	57	445	83	754
6	43	32	226	58	464	84	53
7	47	33	243	59	465	85	122
8	51	34	244	60	466	86	36
9	54	35	245	61	503	87	145
10	65	36	251	62	506	88	212
11	71	37	261	63	516	89	225
12	72	38	263	64	532	90	246
13	73	39	265	65	546	91	252
14	74	40	271	66	565	92	255
15	114	41	306	67	606	93	266
16	115	42	311	68	612	94	274
17	116	43	315	69	624	95	325
18	125	44	331	70	627	96	332
19	131	45	343	71	631	97	356
20	132	46	346	72	632	98	446
21	134	47	351	73	654	99	452
22	143	48	364	74	662	100	454
23	152	49	365	75	664	101	455
24	155	50	371	76	703	102	462
25	156	51	411	77	712	103	523
26	162	52	412	78	723	104	526

TECHNICAL SPECIFICATIONS

General

Channel Number	22CHs
Frequency Range	462.5500MHz ~ 467.7125MHz
Modulation Type	FM
Temperature Range	-20° C ~ +55° C
Power Supply	AAA battery x 3
Operating Voltage	3.8V (3.3V ~ 4.5V)
Size(W x H x D)	47 x 111 x 34 mm
Weight without battery	53g

Receiver

Sensitivity	-120dBm
Audio Output Power	0.5W / 8Ω 阻抗
Audio Distortion	< 5%

Transmitter

Output Power	< 0.5W
Modulation Distortion	< 5%
Frequency Stability	±2.5ppm

CHANNEL FREQUENCY CHART

Channel No.	Frequency (MHZ)	Channel No.	Frequency (MHZ)
1	462.5625	12	467.6625
2	462.5875	13	467.6875
3	462.6125	14	467.7125
4	462.6375	15	462.5500
5	462.6625	16	462.5750
6	462.6875	17	462.6000
7	462.7125	18	462.6250
8	467.5625	19	462.6500
9	467.5875	20	462.6750
10	467.6125	21	462.7000
11	467.6375	22	462.7250



Website: www.cps-telecom.com

Product Safety and RF Exposure

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

FCC Caution:

Caution: To maintain compliance with the FCC's RF exposure guidelines hold the transmitter and antenna at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face, use only the supplied belt clip for this product and transmitting, use of other accessories may not ensure compliance with FCC RF exposure guidelines.

This equipment complies with FCC radiation exposure limits set forth for uncontrolled environment. Unauthorized antennas, modification, or attachments could damage the transmitter and may violate FCC regulations

The device is authorized to operate at a duty factor not to exceed 50%.

Hazardous Environments:

Do not operate the communicator in hazardous environments, explosion or fire may result. Do not operate the communicator near unshielded electrical blasting caps. Under certain conditions, radios can interfere with blasting operations and may cause an explosion. Turn your radio to the OFF position to prevent accidental transmission when in a blasting area or in areas posted: "Turn off two-way radios." Construction crews often use remote control RF devices to set off explosives.

Never use cleaners or solvents to clean your device. Use a dry, lint-free cloth to clean the battery contacts. Do not submerge the unit in water.