		-	
Channel	Description	41	Ch41 Simplex
1	Ch1 Repeater (Semi Duplex)	42	Ch42 Simplex
2	Ch2 Repeater (Semi Duplex)	43	Ch43 Simplex
3	Ch3 Repeater (Semi Duplex)	44	Ch44 Simplex
4	Ch4 Repeater (Semi Duplex)	45	Ch45 Simplex
5	Ch5 Repeater (Semi Duplex)	46	Ch46 Simplex
6	Ch6 Repeater (Semi Duplex)	47	Ch47 Simplex
7	Ch7 Repeater (Semi Duplex)	48	Ch48 Simplex
8	Ch8 Repeater (Semi Duplex)	49	Ch49 Simplex
9	Ch9 Simplex	50	Ch50 Simplex
10	Ch10 Simplex - 4WD / Off-road	51	Ch51 Simplex
11	Ch11 Simplex - Call channel	52	Ch52 Simplex
12	Ch12 Simplex	53	Ch53 Simplex
13	Ch13 Simplex	54	Ch54 Simplex
14	Ch14 Simplex	55	Ch55 Simplex
15	Ch15 Simplex	56	Ch56 Simplex
16	Ch16 Simplex	57	Ch57 Simplex
17	Ch17 Simplex	58	Ch58 Simplex
18	Ch18 Simplex - Motor-homes	59	Ch59 Simplex
19	Ch19 Simplex	60	Ch60 Simplex
20	Ch20 Simplex	61	Disabled - Telemetry Only
21	Ch21 Simplex	62	Disabled - Telemetry Only
22	Disabled - Telemetry Only	63	
23	Disabled - Telemetry Only	-	Disabled - Telemetry Only
24	Ch24 Simplex	64	Ch64 Simplex
25	Ch25 Simplex	65	Ch65 Simplex
26	Ch26 Simplex	66	Ch66 Simplex
27	Ch27 Simplex	67	Ch67 Simplex
28	Ch28 Simplex	68	Ch68 Simplex
29	Ch28 Simplex	69	Ch69 Simplex
30	Ch28 Simplex	70	Ch70 Simplex
31	Ch1 Repeater Input	71	Ch71 Simplex
32	Ch2 Repeater Input	72	Ch72 Simplex
33	Ch3 Repeater Input	73	Ch73 Simplex
34	Ch4 Repeater Input	74	Ch74 Simplex
35	Ch5 Repeater Input	75	Ch75 Simplex
36	Ch6 Repeater Input	76	Ch76 Simplex
37	Ch7 Repeater Input	77	Ch77 Simplex
38	Ch8 Repeater Input	78	Ch78 Simplex
39	Ch39 Simplex	79	Ch79 Simplex
40	Ch40 Simplex – Road Channel	80	Ch80 Simplex

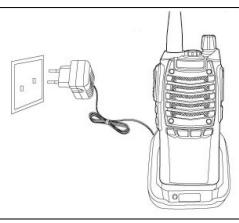
# **BAOFENG** UV-81C

## www.techoman.co.nz

## 5 Watt 80 Channel UHF CB Radio

With Voice Prompts





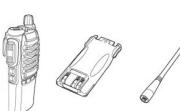
Thank you for purchasing your new UV-81C Portable Radio. This fully pre-programmed radio is easy to use and designed to deliver you instant and reliable communications at peak efficiency. Please read this manual carefully before use. The information will help you to enjoy maximum performance from your radio.

PLEASE NOTE: CHANNELS 1 TO 8 ARE PROGRAMMED FOR REPEATER USAGE ONLY AND USABLE ONLY IF A REPEATER IS AVAILABLE IN YOUR AREA.

#### CONTENTS

- 1. Equipment
- 2. Accessories
- Safety Warnings
- Important Information
- 5. About UHF CB Radio
- Unusable Channels 6.
- 7. Fitting Battery
- 8. Battery Charging
- 9. Battery Tips
- 10. Fitting Antenna
- 11. Channel Selector
- 12. Radio Overview
- 13. Radio Settings
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- 15. Channel Scanning
- 16. Specifications
- 17. Channel Listing (back cover)

## EQUIPMENT









A full range of parts and accessories available from www.techoman.co.nz

- Extended flexible antennas
- External whip antennas
- Vehicle antennas

2

3

- Additional batteries (standard and high) capacity)
- Earpiece/microphones
- Tactical headset/microphones
- Handheld microphone/speakers
- Handheld microphone/speaker/antennas
- Charger cradles and USB cords
- Waterproof bag covers
- Car cigarette lighter charge cables
- Antenna tuning/power meters, and more

### SAFETY WARNINGS

- This radio is a transmitting device.
- When transmitting, keep the antenna more than 25 mm from any part of the head or body.
- Do not transmit near flammable or explosive atmospheres.
- Do not allow children to operate a radio transmitter unsupervised.

### **IMPORTANT**

READ ALL INSTRUCTIONS carefully and completely before operating your radio and retain this manual for future reference. **NEVER** connect the radio to a power source other than the supplied battery. This may damage your product.

DO NOT use your radio with a damaged antenna.

AVOID storing or charging your radio in direct sunlight.

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## RADIO SETTINGS

### CHANNEL SCANNING

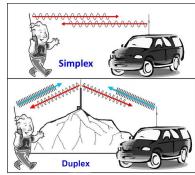
Press and hold on [MENU] key for 2 seconds to enter function setting menu.

Press [UP] or [DOWN] button to step through setting options:

- Squelch level—default=3. 0=open 1. Setting with 9 needs the strongest signal
- 2. Saving mode-battery save mode (1 to 4). Receive sleep ratio for receive the higher number increases the receive sleep time but you may miss the first few syllables before the receiver operates. 1=1:1, 2=1:2, 3=1:3, 4=1:4
- 3. VOX—Select Voice Activated Swtch level-off. 1 to 10 where 1 is low microphone sensitivity and 10 is high sensitivity
- Dual Standby- Leave turned on for both 4. PTT buttons to work
- 5. BEEP—button beeping on or off
- Voice Prompt Language—English and Chinese selection



Your radio is programmed for channels 1 to 8 to work via a radio repeater if one is available in your area. Otherwise use channels 9 to 80 to talk direct



To activate channel scanning press and hold the channel [UP] button.

The green light will flash when scanning and radio will hold for a transmission then continuing 2 sec's after transmission.

Press [[PTT1] or PTT2] to stop scanning.

#### 16**SPECIFICATIONS**

#### Voltage

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• Battery Voltage: 7.4 Volts

#### Transmitter

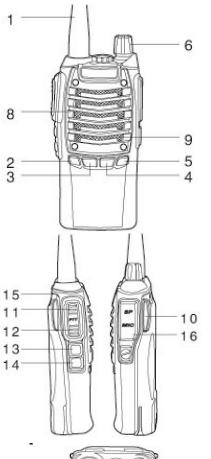
- Output Power: 5 Watts (high)/1 Watt (low)
- Transmission: Narrow Band FM (F3E)
- Frequency Range: 476.425 to 477.4125 MHz
- Maximum Frequency Deviation: 2.5kHz
- Adjacent channel power: <-60dB</li>

#### Receiver

- Sensitivity: -122dBm(12dB SINAD)
- Audio Power: 1 W









## CHANNEL SELECTOR



Press the [UP] or [DOWN] to select the desired Channel you want. (75 channels)

The voice prompt will indicate your selected channel number.

### RADIO OVERVIEW

- 1. Antenna—SMA male 50 ohm antenna connector
- 2. [MENU] button—Press and hold down for 2 seconds to enter function setting menu
- 3. [UP] button— Press to step up to next channel. Press and hold to enter channel scan mode. Press again to cancel scanning mode.
- 4. DOWN] button—Press to step down to next channel. Press and hold for channel stepping down fast.
- 5. [EXIT/LOCK] button—Press and hold for 2 seconds to lock or 2 seconds to unlock the keypad
- 6. Knob (ON/OFF/Volume) Power on/ off and audio speaker volume
- 7. Flash light—Press [M] button to switch on LED light
- 8. Speaker
- 9. Microphone
- 10. Belt Clip Mounting
- 11. Press to Talk (PTT1) Press to transmit
- 12. Press to Talk (PTT2) Press to transmit
- 13. [F] button-Not used
- [M] button—press for LED light. Press and hold for for channel monitor (open squelch)
- 15. Hand strap hole
- 16. Microphone and Speaker Sockets (must use a Baofeng/Kenwood external microphone/earpiece with K type connector
- 17. Indicator lights—Green for receive, red for transmit

**AVOID** storing or using your radio where temperatures are below -20°C or above +60°C.

**ALWAYS** charge your radio at normal room temperature.

**ONLY** use Baofeng approved rechargeable batteries with the supplied charger. **ALWAYS** switch off your radio where notices restrict the use of two-way radio or mobile telephones.

AVOID exposing your radio to water, moisture or dust. It is not waterproof ! DO NOT attempt to modify your radio in any way.

## ABOUT UHF CB RADIO

The use of the Citizen Band radio service is licensed in New Zealand by the Ministry of Economic Development New Zealand (MED). Users can use these Citizens Band channels for free but are subject to operational conditions of the licence.

Your UV-81C meets the latest UHF CB 477 MHz band plan with 80 channels — standard AS/NZS 4365:2011

The same amount of spectrum is available; however, radio transceivers can now operate in a narrower bandwidth and hence use less spectrum. These radios are generally referred to as narrowband or 12.5 kHz radios. By using 12.5 kHz channel spacing instead of 25 kHz, the 40 channels originally allocated has now expanded to 80 channels thereby doubling the channel capacity and relieving congestion in the UHF CB band.

Original 40 channel wideband radios will continue to operate on the original 40 channels, however they will not be able to converse on the newer channels 41 - 80. The newer narrowband radios will be able to converse with all older 40 channel wideband radios on all channels 1 to 40 as well as the newer channels allocated from 41 to 80.

The mixing of narrowband and wideband radios in the same spectrum can cause some possible operating issues of interference and varying levels of received volume.

When a new narrowband radio receives a transmission from an older wideband radio the speech may sound loud and distorted – simply adjust your radio volume for best performance. When an older wideband radio receives a signal from a new narrowband radio, the speech may sound quiet - simply adjust your radio volume for best performance.

Depending on how close your receiving radio is to another transmitting radio, there can be interference from the transmitting radio if it is using a channel adjacent to the channel you are listening to. Simply try going up or down a few channels from the currently selected channel.



ACMA regulations have allocated channels 22, 23, 61, 62 & 63 for telemetry only applications and have prohibited the transmission of speech on these channels. Consequently the UV-81C will skip these channels

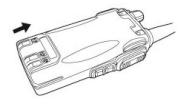
22, 23, 61, 62 & 63

#### FITTING BATTERY

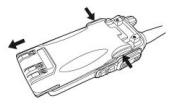
TO INSTALL BATTERY Place the battery bottom about 1 to 2 cm below the bottom of the radio's body.

Make sure the battery is in parallel and in good contact with the aluminium chassis.

Align the battery with the guide rails on the aluminium chassis and slide it upwards until a 'click' is heard.



#### TO REMOVE BATTERY Turn off the radio before removing the battery. Squeeze the battery latches, at the top of the battery in the direction indicated by the arrows.



# Slide down the battery for about 1 to 2 centimetres, and then remove the battery from the radio's body.

### BATTERY CHARGING

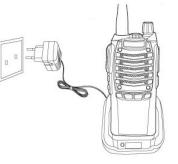
Use only the charger specified by the manufacturer. The charger's LED indicates the charging progress.

**WARNING:** Turn off the radio before charging otherwise battery will not fully charge.

Please follow these steps:

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- 1. Plug the AC connector of the power pack into the AC outlet socket.
- 2. Place the radio with the battery attached, or the battery alone, in the charger.
- Make sure the battery is in good contact with the charging terminals. The charging process initiates when the red LED lights.
- 4. The green LED lights indicating the battery is fully charged. Remove the radio with the battery attached or the battery alone from the charger.







- 1. When your radio battery is getting low a voice prompt will indicate 'Battery Low'.
- When charging your battery, keep it at a temperature between 5C and 40C. Temperature out of the limit may cause battery leakage or damage.
- When charging a battery attached to a radio, turn the radio off to ensure a full charge.
- 4. Do not turn off the power supply or remove the battery when charging a battery.
- 5. Never charge a battery that is wet. Dry it with a soft cloth prior to charging.
- The battery will eventually wear out when the operating time (talk-time and standby time) is noticeably shorter than normal performance. It is time to buy a new battery.

#### INITIAL USE

New batteries are shipped uncharged from the factory. Charge a new battery for 5 hours before initial use. The maximum battery capacity and performance is achieved after three full charge/discharge cycles. If you notice the battery power runs low, please recharge the battery.

#### TO PROLONG BATTERY LIFE:

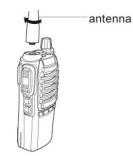
- 1. Battery performance will be greatly decreased at a temperature below 0C . A spare battery is necessary in cold weather. A cold battery is unable to work in this situation will work when back to room temperature.
- 2. Dust on the battery contacts may cause the battery to not work or charge. Please use a clean dry cloth to wipe them before attaching the battery to the radio.

#### BATTERY STORAGE:

- 1. Fully charge a battery before you store it for a long time to avoid battery damage due to over-discharge.
- 2. Recharge a battery after 6 months storage to avoid battery capacity reduction due to over-discharge.
- Store your battery in a cool and dry place under room temperature to reduce selfdischarge.



Install the antenna as shown as below:



**NOTE:** - When installing the antenna, don't rotate it by its top,. Hold it by its base and turn clockwise. Don't overtighten.

If you use an external antenna, make sure the 'SWR' is about 1.5:1 or less to avoid damage to the transceiver's final transistors.

