Iradio Electronics UV83 Two-Way Radio User Manual

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RADIO

Radio Electronics UV83 Two-Way Radio

For User

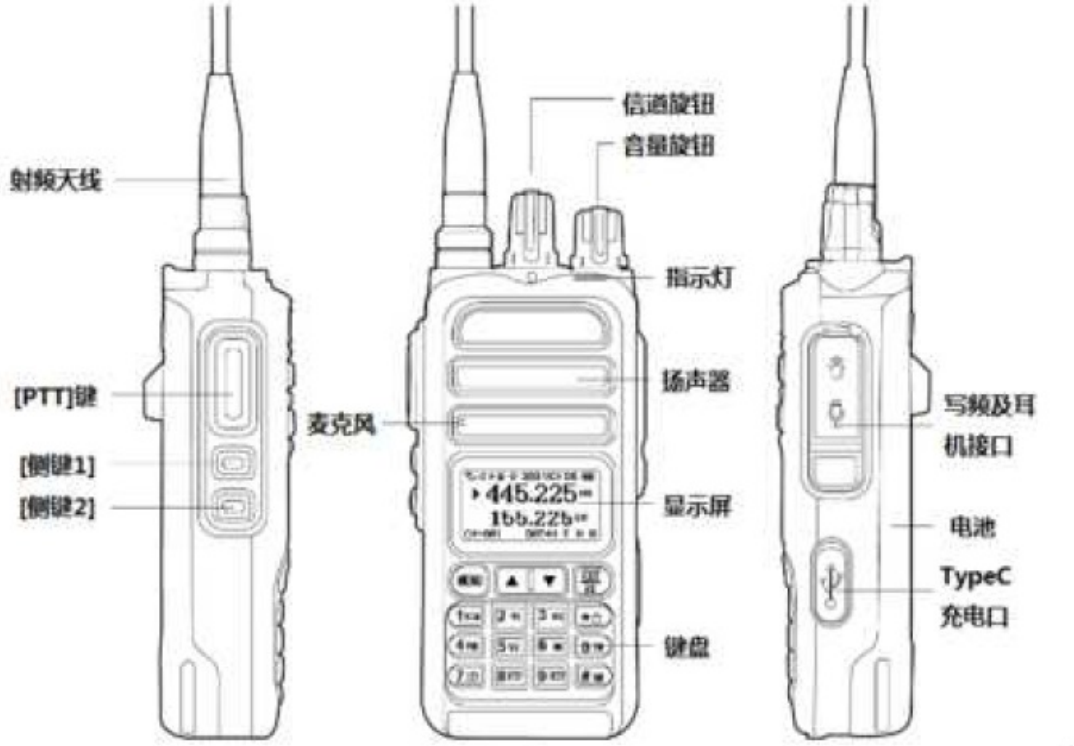
Do not charge the radio or battery in an explosive environment, such as gas, dust, smoke area ect., Please turn off the radio when nearby gas station. Do not disassemble or modify the radio. Do not leave the radio under dusty or wet environment. It's very important for users to understand all instruction knowledge before using the radio, please obey the local legal rules.

Product Checking

Thanks for choosing our radio. Please unbox and check if below all accessories included and well packed. If there's anything missing or damaging after unboxed, please contact your local distributor.

NO	Item	QTY
1	Radio	1
2	Antenna	1
3	Li-ion Battery	1
4	Charger	1
5	Belt Clip	1
6	User Manual	1
7	Guarantee Card	1

Be Familiar with the Radio



1. Antenna
2. PTT
    1. Side Key 1
    2. Side Key 2
3. MIC
4. Channel Button
5. Power Button
6. Indicator Light
7. Speaker
8. Display Screen
9. Keypad
10. Programming Jack/Headset Jack
11. Battery
12. Type C Charging Port

LCD icon display

- Signal strength
- Voice report
- Scan
- Keypad lock
- Weather
- Emergency alarm
- VOX
- Dual standby
- Battery %
- CH cursor
- CH number(Frequency mode)
- Frequency CH mode
- CTCSS/DCS
- Enhanced DCS
- Power
- W/N band
- A A band
- B B band

Functions and Operations

Receiving and Transmitting Signal

Press PTT key to transmit signal, icon shows up the channel cursor turns to white red indicator lights up.

When the radio is under receiving status, green indicator lights up, icon shows up the channel cursor turns to white and points the receiving band, enlarge the frequency digits.
Note: The working band as below:
TX: 144-148MHz, 420-450MHz
RX: 136-174MHz, 400-520MHz (Scanning receiver),
FM: 66-108MHz, NOAA: 162.400-162.550MHz

Keypad Operations

Short press the following keys:

- MENU Key: Enter menu
- EXIT A/B Key: Switch the A/B band, press manual key to exit.
- ▲ ▼ Key: Switch the frequencies/ Channels or switch options from manual.
- * Key: In channel mode, switch the display method to frequencies or channel number.
- # V/M Key: Switch the working method to channel mode or VFO mode.
- 0-9 : In VFO mode, users can input the frequencies through keypad manually. In channel mode, users can switch to the programmed channel by inputting the number.

Long press the following keys:

- ▲ ▼ key Quickly switch the frequencies/ channels or switch options from menu list. In FM mode, radio will scan the FM frequencies by long pressing this key.
- * Key, lock or unlock the keypad.
- # V/M Key: Switch the working mode to channel mode or VFO mode.
- 0 FM Key: There are two options for this key, FM radio or NOAA weather channels.
- 1 Scan Key: Activate or stop scanning.
- 2 PRI Key: Prior transmitting function
- 3 VOX Key: Activate or stop VOX
- 4 PWR Key: High/ Low power switching
- 5 SQL Key: Set up Squelch level.
- 6 DW Key: Activate or turn off dual band dual standby function.
- 7 LED Key: Turn on/off the backlight.
- 8 STEP Key: Set up step frequency

Side Key Operation
Short press side key:

- Side Key 1 Turn on/off monitor function.
- Side Key 2 Turn on/off local emergency alarm. When activate this function, SOS icon will show in the display screen, and radio alerts.

  Long press side key:
- Side Key 1 Turn on/off FM
- Side Key 2 Turn on/off the remote emergency alarm. When activate this function, SOS icon will show in the display screen, and radio alerts on the current frequency.

Channel Memory and Deletion
Enter menu and select channel storage, you will see a form like CH-XXX Y/N, Y means effective channel, N means blank channel. Press menu key to save the channel.
If user want to change the frequency, please press # V/M firstly and switch to VFO mode, under this mode, users can input the frequency manually. Then enter menu and select channel storage to save the current channel.
Through menu and find out the channel deletion, select the channels you want to delete and press menu key to confirm.
Frequency Scanning
Enter menu, select frequency scanning, once the main radio receives signal from other unmatched radio, the main will auto scan the frequency and privacy code from the unmatched radio. Press PTT to exit or press MENU to

save the matched frequency and privacy code.
Note: The 23b and 24b in mute mode are non-standard privacy codes, when user activates these modes, the standard privacy code will be invalid.
Once matched the radio with non-standard privacy code, the decoded result will be 23b or 24b.

Battery Saving
There's five level for battery saving: 1:1-1:5, please select the level according to your needed. 1:5 means the longer standby time, but it will cause more delay for the first time receiving.
FM/ NOAA function
Enter menu, in FM radio mode, there's FM and Weather channel options. 0 FM is a shortcut key to turn on/off this function, the following table is for NOAA weather channels:

1	162.55000M	7	162.52500M
2	162.40000M	8	161.65000M
3	162.47500M	9	161.77500M
4	162.42500M	10	161.75000M
5	162.45000M	11	162.00000M
6	162.50000M		

In FM mode, the radio will dual standby for FM radio stations or main frequency. When the radio receives signal from main frequency, will auto exit FM function. In weather channel mode, the radio will auto scan the 11 NOAA channels. Once detecting the 1050Hz emergency signal from any NOAA channel, the radio will lunch alerts, and icon shows up.

Note: The NOAA function is only workable for The United States or any countries which support NOAA channels.

Specifications

General	
Frequency range	TX: VHF 144-148MHz&UHF 420-450MHz RX only: 66 -108MHz(FM); 162.400-162.550MHz(NOAA) 136-174MHz, 400-520MHz(Scanning receiver)
Channel Spacing W/N	25kHz/12.5kHz
Voltage	7.4V DC
Working mode	Same frequency simplex/ Different frequency simplex
Antenna type	Removable
Frequency stability	±2.5ppm
Working temperature	20 ~ 60°C

Dimension	134 X 59 X 38 around225g
Transmitting	
RF output power	5.78Watts(High), 2.36Watt(Low)
Modulation mode	FM
Max. Frequency deviation W/N	≤5KHz /≤2.5KHz
SNR W/N	-45dB/ -40dB
TX current	≤1500mA
Receiving	
Sensitivity W/N	0.22μV/ 0.25μV 12dB SINAD
Inter-modulation W/N	65dB/ 60dB
Audio distortion	5
Audio output power	≤1W 16Ω
RX current	≤350mA
Standby current	≤70mA

Note: The above parameters are subject to change without prior notice!

FCC Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
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, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

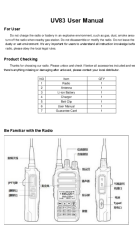
Note:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not inst alled and used in accordance with the instructions, may cause harmful interference to radio communications. Ho wever, there is no guarantee that interference will not occur in a particular installation. If this equipment does cau se harmful interference to radio or television reception, which can be determined by turning the equipment off a nd on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

SAR tests are conducted using standard operating positions accepted by FCC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is available for sale to the public, it must be tested and certified to the FCC that is does not exceed the exposure limit established by the FCC. Tests for each product are performed in positions and locations as required by the FCC. For body-worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal.

Your wireless hand-held portable transceiver contains a low power transmitter. This product sends out radio frequency (RF) signals when the Push-to-Talk(PTT) button is pressed.
The device is authorized to operate at a duty factor not to exceed 50%.

Documents / Resources

	Iradio Electronics UV83 Two-Way Radio [pdf] User Manual UV-83, UV83, Y23UV-83, Y23UV83, UV83 Two-Way Radio, UV83, Two-Way Radio