

Digital Two-Way Radio User Manual DM66

November 2025

Important Safety Precautions

To ensure the safe and efficient use of this two-way radio, please read the following information carefully.

- ◆ **Explosive Atmospheres:** Turn off the radio (and do not operate it) in potentially explosive atmospheres, such as gas stations, blasting areas, or locations containing detonators, to prevent possible ignition.
- ◆ **Environment:** Do not expose the radio to excessive dust, moisture, or place it in unstable positions where it might fall.
- ◆ **Temperature:** Avoid placing the radio near high-temperature sources or in direct sunlight.
- ◆ **Transmission:** Avoid continuous transmission for extended periods. The radio may become hot, potentially causing skin burns or damage to the unit itself.
- ◆ **Connectors:** When not in use, ensure the dust cover is closed for any connectors (e.g., charging port, headphone jack).

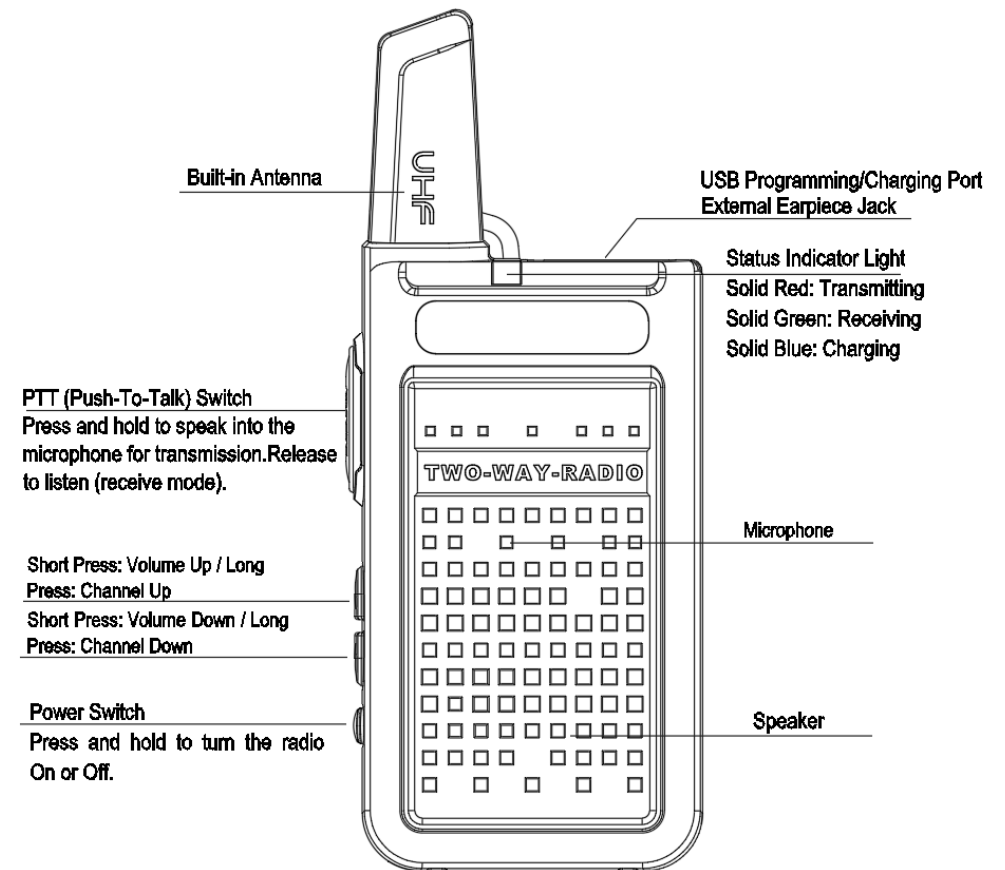
- ◆ **Cleaning:** After prolonged use, the case and keys may become soiled. Clean them with a soft cloth dampened with a neutral cleanser solution. Do not use strong chemical solvents, such as paint thinners, alcohol, sprays, or petroleum-based cleansers, as they can damage the radio's surfaces and housing.

Acknowledgment

Thank you for choosing our brand of two-way radio. We are confident that this device will provide you with reliable, clear, and efficient communication.

To help you fully understand the features, operation, and maintenance of this product, please read this manual thoroughly before use.

Getting to Know Your Radio



Basic Operations

Power On/Off

Power On: Press and hold the Power button. The radio will power on, and you will hear a confirmation beep. If the voice prompt feature is enabled, the current channel number will be announced.

Power Off: Press and hold the Power button to turn the radio off.

Volume Adjustment

Briefly press the Volume + button to increase the volume.

Briefly press the Volume - button to decrease the volume.

Channel Selection

Press and hold the Channel + or Channel - button to switch channels.

16 channels are available for selection.

Transmitting (Talk)

Press and hold the [PTT] button. Speak clearly at a normal tone into the microphone. The red indicator light will illuminate while transmitting.

Release the [PTT] button to stop transmitting and return to receive mode.

Charging

Use a 5V/1A power adapter and connect it to the radio's TYPE-C USB charging port using the provided cable.

The status indicator will glow blue during charging.

The indicator light will turn off once the battery is fully charged.

Technical Specifications

General Specifications	
Frequency Range	400.000 – 470.000 MHz
Number of Channels	16 Channels
Antenna Impedance	50Ω
Operating Temperature	-0°C ~ +45°C
Operating Voltage	4.2VDC (Max)
Frequency Stability	0.5 ppm
Weight	Approx. 100g
Dimensions (L x W x D)	134x55x27mm
Receiving Section	
Sensitivity (Analog)	0.22 μ V (12dB SINAD)
Sensitivity (Digital)	0.22 μ V (BER5%)
Occupied Bandwidth	≤11KHz
Adjacent Channel Selectivity	60dB @ 12.5KHz 1
Intermodulation	65dB @ 12.5KHz
Audio Output Power	0.5W
Audio Distortion	≤5%
Current Consumption (Receive)	Standby: 0-10mA Audio Output: ~480mA

Transmitter Section	
RF Output Power	2W
FM Modulation	11K0F3E @12.5KHz
4FSK Digital Modulation	7K60FXD (Data only) @ 12.5 kHz 7K60FXW (Data & Voice) @ 12.5 kHz
Conducted/Radiated Spurious Emission	-36dBm <1GHz -30dBm >1GHz
Modulation Noise	< 40dB
Audio Distortion (Modulation)	< 5%
Modulation Limit	±2.5KHz @ 12.5KHz,
Adjacent Channel Power	60dB @ 12.5KHz,
Current Consumption (Transmit)	≤1.3A

Disclaimer: Every effort has been made to ensure the accuracy and completeness of this manual. However, no responsibility is assumed for any errors or omissions that may exist. The company reserves the right to change product design and specifications 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 condition that this device does not cause harmful interference.

RF Exposure Statement:

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 an available for sale to the public, it must be tested and certified to the FCC that it 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 and accessory designated for this product or when used with and accessory that contains no metal. To maintain compliance with FCC 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.

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 installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not

occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and 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.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

SAFETY STATEMENT INFORMATION

Hereby, we declare that the radio is compliance with Radio equipment Directive (RED) 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: xxxxxx
The device in the environment with the temperature between 0-40°C and operating under 2000m, otherwise, it may damage your radio.

For this device, Head SAR and Body SAR was performed with the device configured in the positions according to EN 50566:2017 & EN IEC/IEEE 62209-1528:2021, and face-up SAR was performed with the device 25mm from the phantom, and Body SAR was performed with the device 0mm from the phantom. Body SAR was also performed with the headset and belt clip attached and without.

CAUTION:

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.