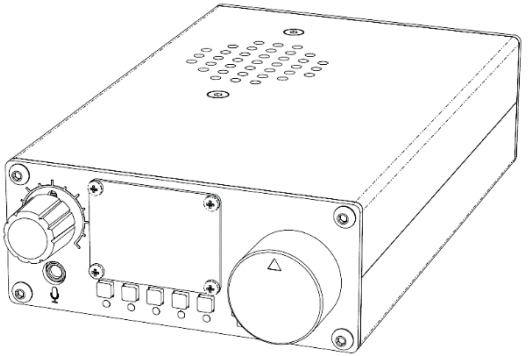
XIEGU

G-CORE

G1M

Operation Manual



HF Four Band Portable SDR Transceiver

V3 Manual

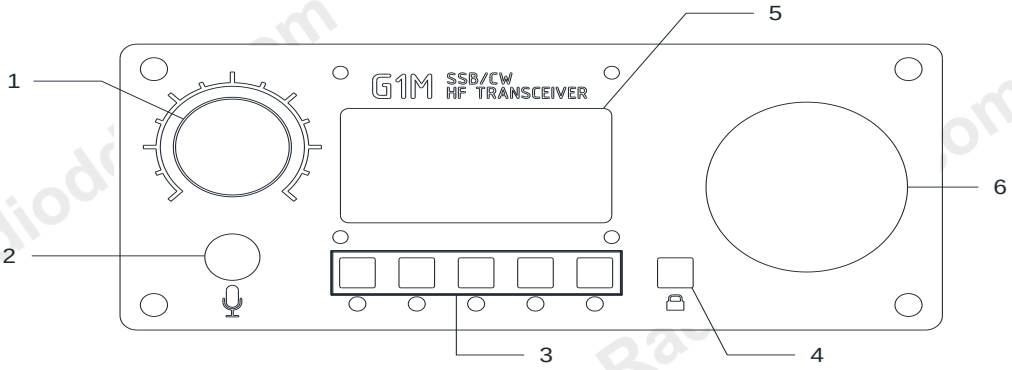
In order to better experience the Rig, please read this manual carefully before use to fully understand the operation of G1M.

The new G1M is a 5W portable QRP transceiver using SDR technology. Its A to D chip is a 16bit and provides excellent performance. The newly added AM broadcast reception capability allows you to listen to news broadcasts from around the world. The new 800Hz narrowband CW digital filter makes CW reception a real pleasure.

Even as an entry-level portable SDR, the G1M SDR provides many advanced features which make your operating experience more enjoyable.

Basic Features:

High performance 16 Bit SDR ADC
Spectrum display function
Added AM broadcast receiving mode
Added CW Trainer function (supports full insertion)
Adaptive speech noise reduction
HF General Coverage Receiver
Support for amateur data communications
Support for on-line computer control



1 Power switch / volume

- Rotate the switch to turn the device on or off;
- Rotate the knob to increase or decrease the volume of the radio.

2 MIC interface

External mic interface.

3 Multi-function button

Menu functions for the screen.

4 LOCK Lock button

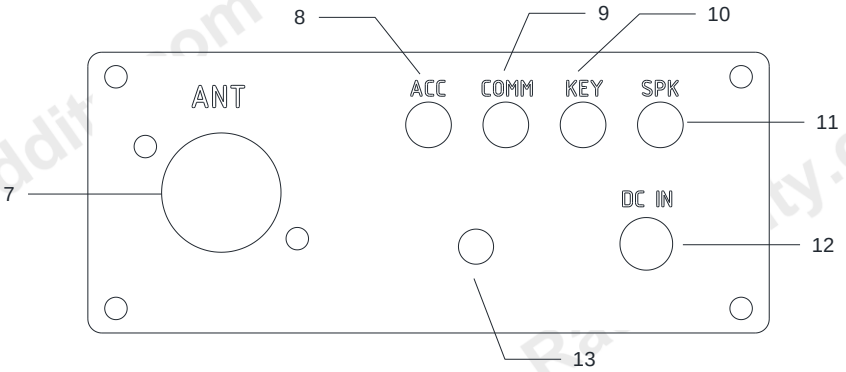
- Light press this button to switch to the current menu page;
- Hold press the button for 2s to lock the button operation.

5 Display screen

Hi-Res OLED Display screen

6 Frequency knob

- Rotate this knob to change the current frequency value;
- Press in this knob to return from the current selection.



7 Antenna interface

BNC Connector. Impedance 50Ω.

8 ACC interface

Output band voltage signal and PTT signal. See below.

9 COMM interface

PC Communication interface / firmware upgrade interface.

10 KEY interface

This interface is a 3.5mm stereo jack (3-pin) for connecting manual or automatic telegraph keys.

11 SPK External speaker interface

This interface is a 3.5mm stereo jack (3 conductor) for connecting external speakers.

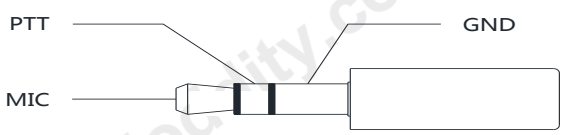
12 DC IN external DC power interface

This interface is a 5.5*2.5mm DC power socket.

13 Grounding screw nut

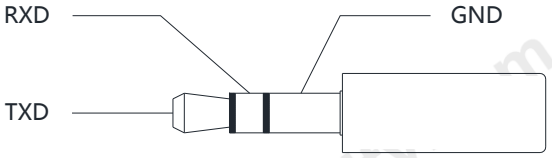
Ground connection for equipment.

1、 MIC

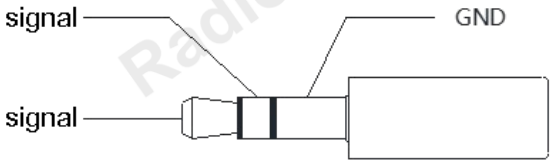


Note: The MIC pin has a bias voltage and cannot be shorted.

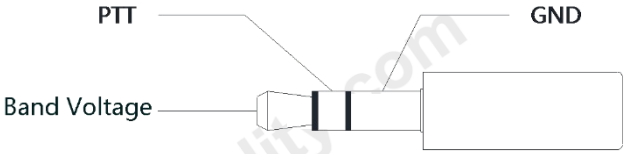
2、 COMM



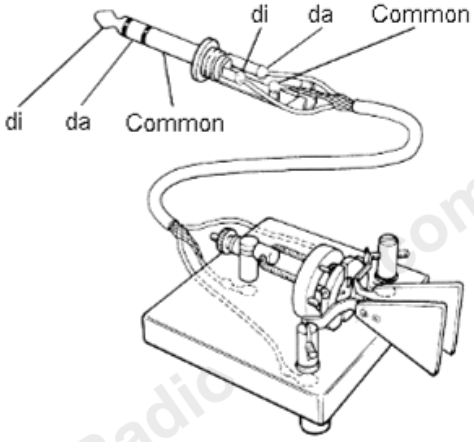
3、 SPK



4、ACC



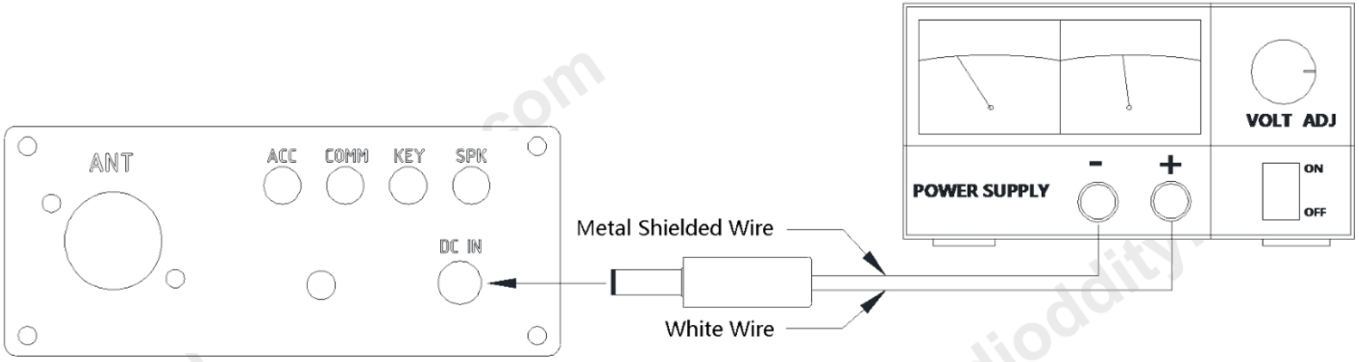
5、CW key lead connection method:



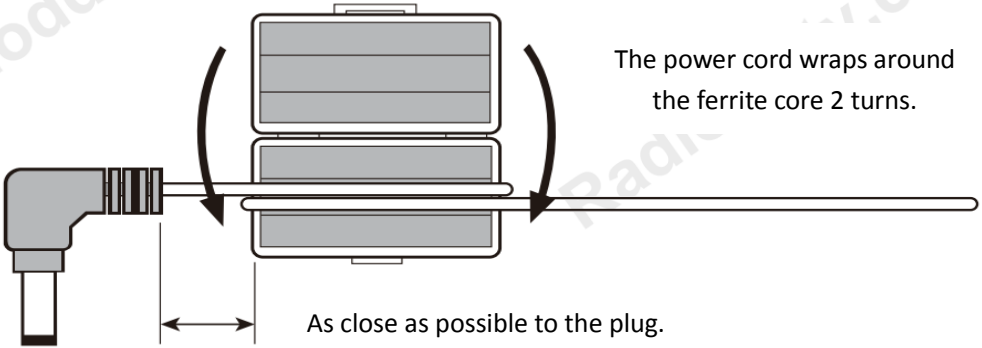
The G1M can use a 13.8V external DC power supply. The DC power supply requires a current load capacity of at least 3A. The supplied power cord can be used to connect radio and DC power.

When connecting the DC power supply, please carefully connect according to the following figure to avoid the polarity of the power supply being reversed.

The white core wire is connected to the positive pole of the power supply, and the metal shielded wire is connected to the negative pole of the power supply.



When the G1M uses an external power supply, in order to prevent external interference from entering the radio through the power line, please place a snap-on ferrite choke close to the DC plug. Loop the DC cord through the choke a few times.

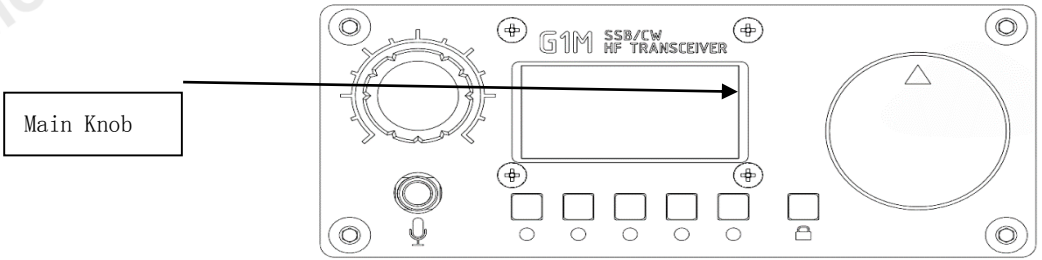


- **When using an external power supply, carefully check the polarity of the power cord to prevent the polarity from being reversed.**
- **The limited warranty of this radio does not include damage caused by an external power connection error, or damage caused by abnormal power supply voltage.**

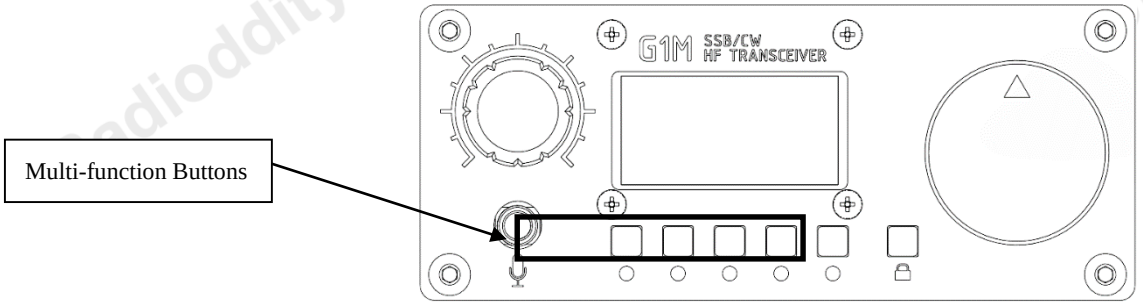
The G1M uses the multi-function menu for various functions. All functions are distributed in different menu pages, and each menu has 5 function options.

The operation is as follows:

Light press IN the main tuning knob to switch to the four page menu.



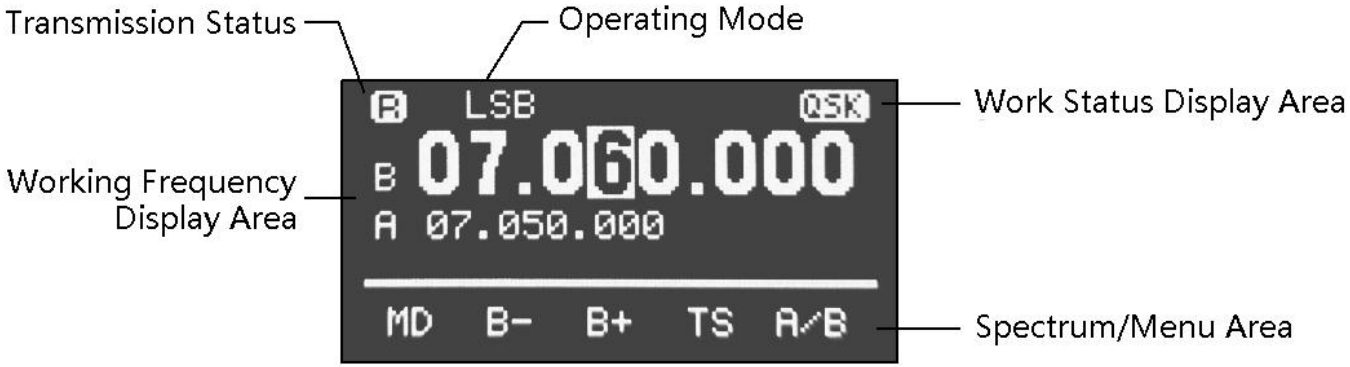
The five multi-function buttons at the bottom of the screen correspond to the displayed function menu.



Momentarily press the "lock" button to switch the menu page.
Hold press the "lock" button to lock the button operation.

Menu page	Button mode	Features				
1		**MD**	**B-**	**B+**	**TS**	**A/B**
	Light press	Mode switching	Band decrement	Band increment	Step selection	VFO switching
	Hold press	Pre-amplifier switch	Channel storage	Clear channel	Step back 1 selection	Frequency/channel mode switching
2		**KS**	**KM**	**IMB**	**QSK**	**CSN**
	Light press	Automatic key rate setting	Auto key mode setting	Iambic A/B select	QSK switch	To Set the boot-up Call Sign
	Hold press	/	CW Sidetone setting	Code ratio setting	QSK time setting	/
3		**SCL**	**DIS**	**SPL**	**BP**	**/**
	Light press	Spectrum SCALE setting	Display mode selection	Different frequency setting	System tone switch	/
	Hold press	/	/	/	/	/

The G1M uses an OLED display screen that displays all status information for the user. It has excellent visibility in outdoor sunlight.



Connection to a computer

The G1M can be connected to a computer and controlled with third-party software.

Connection cable method:

1. Install the driver for the data cable on the PC side.
2. Plug the data cable into the COMM port and connect the G1M to the computer.
3. Run the corresponding computer software.

- *When using software such as HRD, G1M must be in VFO mode，it cannot be in channel mode, otherwise it will not be able to connect. Try the IC-7000 configuration for CAT control. Others may work as well. Check Forum.*

Computer Control Instruction

G1M uses the standard CIV instruction set. You can use the standard instructions of this instruction set to remotely control the transceiver.

You can also configure the control instructions of other software to control the G1M.

Band Voltage Data

G1M's ACC port provides band data voltage for the four TX bands. The band data can control a peripheral device to automatically switch the band of the G1M.. (such as the XPA-125B)

Band	Voltage	Band	Voltage	Band	Voltage	Band	Voltage
3.5MHz	460mV	7MHz	920mV	14MHz	1380mV	21MHz	1840mV

- In the other frequency bands except the above four amateur bands, the band voltage is uniformly outputted at a high level, 5V.

Specifications:

Receiving frequency：0.5～30MHz（Continuous）
Transmitting frequency： 3.5～4.0MHz
7.0～7.3MHz
14.0～14.35MHz
21.0～21.45MHz
Operating mode： SSB/CW/AM (AM Used only to receive broadcasts)
Receiving sensitivity： 0.45uV @12dB SINAD
Transmit power： 5W @13.8V DC
Spurious suppression：≥45dB
Frequency stability： ±1.5ppm （30 minutes after turning on the power）
Audio output power： 0.5W
Operating Voltage： 12～15V DC
stand-by current： 0.5A @Max
Transmitting current： 2.5A @Max
Case size:： 97*40*155 (mm)

Box Packing List:

- G1M：1 PCS
- Mic：1 pcs
- POWER CABLE： 1pcs
- User manual： 1pcs
- Certificate： 1pcs
- Warranty Card： 1pcs

V3.0

1010160206-C