

R1 Radio User Manual



www.camelradio.com

DMR Radio

To customers

Thank you very much for your love of our products! This data sheet is designed to allow you to quickly grasp the use of this product and understand the detailed functions and operation of the product. In order to avoid causing bodily harm or property damage due to improper operation, please read carefully before using this product.

This data sheet applies to the following products:

R1 radio

This product is manufactured based on professional-grade RF chipsets, with reliable quality.

Camelradio promotes the technological progress of the industry

disclaimer

We strive for the completeness and accuracy of the content in the process of compiling the manual, but we do not assume any responsibility for possible errors or omissions.

RF radiation information

Radio frequency refers to the electromagnetic frequency that can radiate into space, which is a widely used technology in communication, and the product will produce a certain amount of radio frequency radiation during use.

Meet the indicators

This product complies with ETSI-TS102 361-1/-2. Metrics are FCC compliant.

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FCC Caution:

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 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.
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- This radio is designed for and classified as “Occupational/Controlled Use Only”, meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards; NOT intended for use in an General population/uncontrolled environment
 - DO NOT operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio, and the antenna gain shall not exceed 2.0dBi by the manufacturer declared.
 - DO NOT transmit for more than 50% of total radio use time, more than 50% of the time can cause RF exposure compliance requirements to be exceeded.
 - During operation, the separation distance between user and the antenna shall be at least 22cm, this separation distance will ensure that there is sufficient distance from a properly installed externally-mounted antenna to satisfy the RF exposure requirements
 - During transmissions, your radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Packing list

The box also contains the following items. If the item is missing or damaged, please contact the dealer where you purchased it.

① equipment



②



Familiarize yourself with the product



Item number	Name	Attribute	Specification	remark
1	Audio output	0	8 oh 1W	Reserved only
2	LCD	0	0.49 inches	
3	data port	I	RJ45	programming, etc
4	Reserved keys	I	Not defined	
5	RF port	I/O	50 euros	
6	Power port	I	9V	Capacity > 2A

LCD icon

469075	#
CC01	

LCD icon	Icon name	Product working status
#	Send a logo	Forward local voice signals
*	Forwarding the logo	Forward IP voice signals
!	Warning signs	Low voltage
469075	Represents the frequency of reception	6 digits (in KHz)
CC	Color code identification	Color code range 0~15

Prepare before use

Install the antenna

Align the antenna connector (as shown in the picture) with the radio frequency port of the host and tighten it clockwise.



Note: Do not turn on the transmission before installing the antenna, otherwise it will reduce the working performance and service life of this product.

Install the power supply



Press the connector of the power cord (as shown in the picture) into the power port of the machine. The connector has anti-reverse connection and anti-shedding functions. Note: When installing and disassembling, press down the shrapnel on both sides of the joint with your hands. If the shrapnel is not pressed during disassembly, it will cause damage to the thread head. The system will automatically turn on after powering on.

Install the cable

(If the device supports it)
Plug the RJ45 data cable that meets the product regulations into the RJ45 interface of the machine, and the machine can be remotely networked through the router.

Basic operation

Power on and off

The machine does not have a switch button. Plug in the power supply and turn it on automatically, and turn off when the power supply is removed. When the power supply voltage is insufficient, there is a '!' Warning.

programming

Connect the programming line and the computer as shown in the figure, and set the frequency and color code in our programming software.

Remark:

Only the first channel works when writing frequency. Users only need to configure the receiving frequency point, transmitting frequency point and color code, and the rest will be processed automatically. The emission timeout (TOT) is recommended to be enabled for 60 seconds, which can be configured according to the situation and should not be too large.

Switch channels

If supported by the software, short press the reservation key 4 to switch channels. It supports up to 16 channels and reciprocating cyclic switching.

Call

If the software supports it, the hand microphone that meets the requirements can initiate a call by pressing PTT. The call parameters match the current channel configuration.

If supported by the software, calls received by the machine will also be copied and sent (staggered time slots).

Warning notes

Warning type	LCD	Countermeasures
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	indication	
Insufficient power supply	!	Increased voltage and current capacity

Troubleshooting

Fault description	Cause analysis	Workaround
The boot is unresponsive	The power supply may not be installed correctly	Remove the battery and reload
	The supply voltage is too low	Charge or replace the battery
	Dirty or damaged power contacts lead to poor contact	Clean the contacts
The boot screen is stuck on 'starting.....'	Programming misconfiguration	Check whether the frequency of transmission and reception and the range of color codes are reasonable
	Hardware self-test error	Contact a dealer for repairs
Unable to talk to the mobile desk	The frequencies used are different	Set the same frequency as other members of the group
	The channel color code is different	Set the same color code
	Too far from the handstand	Try to be as close to other members as possible to make sure you are within their effective communication range
Other calls or murmurs appear in the channel	Interference from users of the same frequency and color code	Change to a new frequency point, or adjust the color code
The noise is	Communication distance with other members is too far	Close to other members

loud	Poor location, such as being blocked by tall buildings, or in basements, etc	After moving to an open flat area, turn on the power and try again
	Subject to external environment or electromagnetic interference	Avoid devices that may cause interference

If the above methods still do not solve your problem, or you encounter some other faults, please contact your local distributor or our company for more technical support.

Maintenance and cleanliness

In order to ensure that this product performs well and prolongs its service life, please familiarize yourself with the content so that you can better maintain and clean the product on a daily basis.

maintenance

- Do not puncture or scratch this product with hard objects.
- Do not store this product in an environment containing corrosive electronic circuit substances.
- Do not use a portable antenna or headphone cable while carrying or using this product.
- When the accessory is not in use, cover the accessory interface cover.

clean

Note: Before cleaning, please turn off the machine.

- Regularly use a clean, dry, lint-free cloth or brush to wipe off dust from the surface of this product and the charging electrode.
- The keys, control knobs, and case of this product are highly prone to dirt. It can be cleaned with neutral detergents and non-woven fabrics, and do not clean with chemicals such as stain removers, alcohol, sprays, or petroleum preparations to avoid damage to the surface and shell of the product.
- After cleaning, make sure this product is thoroughly dry, otherwise do not use it.