





INSTRUCTION MANUAL



TO CUSTOMER

Thank you very much for using our DMR Repeater.
This repeater offers the latest design, enhanced features
Solid performances and easy accessibility.
It is designed to meet different customers requirements.
We believe that you will be pleased with its high quality
and stable functions.

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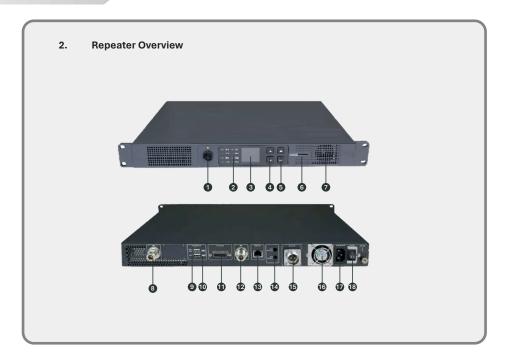


1. Unpacking and Checking

Please unpack carefully and check all the items listed in following table before discarding the packing material. If any damage or loss occur during shipment, please contact your dealer.

1.1 Standard Accessories

Items	Quantity
Repeater	1
LAN Cable	1
AC Power Cord	1
Programming Cable	1
Instruction Manual	1





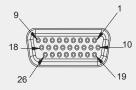
No.	Part Name	No.	Part Name
1	Microphone/Program Connector	10	PoC Program Connector
2	Status Indicator	11	Optional Accessories Connector
3	LCD Display	12	RF Receive Connector (Rx)
4	DMR Channel	13	Ethernet Port
5	PoC Channel	14	PoC Antenna & GPS Connector (Optional)
6	SIM Slot	15	Backup Power Supply Connector
7	Ventilation Part	16	Heat Dissipation Fan
8	RF Transmit Connector (Tx)	17	AC 220V Connector
9	DMR Program Connector	18	Power Switch

2.1 Power On/Off Button



Power on/off the repeater.

2.2 ACCY Connector



2.2.1 Pin Instruction

Pin	Instruction
PIN1	Undefined
PIN2	Undefined

PIN3	Undefined
PIN4	Undefined
PIN5	Undefined
PIN6	GND
PIN7	GND
PIN8	GND
PIN9	GND
PIN10	Slot 2 Speaker Output
PIN11	Undefined
PIN12	D+
PIN13	PTT
PIN14	GND
PIN15	D- RF Receive Connector
PIN16	GND
PIN17	External PTT ,High level is effective
PIN18	GND
PIN19	Slot 1 & Analog's Audio & Speaker Output
PIN20	GND
PIN21	SPK P (-)
PIN22	SPK P (+)
PIN23	Undefined
PIN24	MIC-
PIN25	MIC+

2.3 LFD Indicator



3. Basic Operations

3.1 Powering ON/OFF

When the repeater is turned off, press the power switch " u to power on the repeater. Then the Power LED is on. After the system working normally, the different LED's and display indicates the present working mode. Press to power off the repeater.

3.2 Voice and Data Transfer

The receiving and transmitting frequency are different on the repeater. Repeater will turn the weak receiving signal into strong transmitting signal and transmit on the same channel. TX1 and TX2 LEDs glows red at time of transmission. RX1 and RX2 glows green when repeater is receiving. RX and TX frequency can be seen on display along with repeater mode (Analog/Digital).

3.3 IP Connecting

Default IP address : 192.168.X.XXX. Application update, parameters configuration and second development can be made through this port.



3.4 Warning

When unusual situation happens, warning indicator light will be enlightened. For example, when Receiving Frequency unlocks, the warning light will flash once one second; Transmitting frequency unlocks, the warning light will flash once two seconds; When both transmitting and receiving frequency unlock, the alarm indicator will stay light on. When the repeater occurs unusual situation, please let the related professional to check and recover the repeater.

3.5 Programming Software

For more settings and information of the device, you need to read and set up by software.

- (a) Connect repeater to computer by programming cable.
 - Note: There are two USB ports on the repeater, one for DMR and one for POC, choose the correct port and configure by corresponding software.
- (b) After driver installation, you can read and write to setup channel.

3.5.1 Read Menu

Read data from the repeater, when reading data, a bar pops up and shows the reading process. When finish reading, software will show the progress bars is full and read commend is completed successfully.

3.5.2 Write Menu

Write the configurations into the repeaters. When writing data, a bar pops up and shows the writing process. When finish writing, software will show the progress bars is full and write commend is completed successfully.

3.5.3 Save Menu

Save the current channel configuration, in order to open the file conveniently next time.

If a new created channel or a channel read from the repeater, when saving them, you need to select a new path to save the current configuration file. Exit the software, if the configuration file has not been saved, software will ask user to save it.

3.5.4 Open Menu

Open a configuration file that saved in the storage device.

3.5.5 Information/Basic Setting

Repeater ID: Sets an individual ID that uniquely identifies the radio. In the Multiple Site IP system, this ID is used to uniquely the different repeater.

Repeater Alias: Repeater channel can be named in alphanumeric

Serial Number: Factory settings (Cannot be changed)

Firmware Version: Latest updated firmware (Cab be upgraded when required)

Programming Time: Shows the last time, when radio was programmed.

Frequency Range: VHF Band 136-174 MHz or UHF Band 400-470 MHz can be selected from this menu as per requirement.



High Power (W): Selectable High Power from 10W - 45W.

High Low (W): Selectable High Power from 1W - 10W.

Squelch Low/Medium/High Level: Squelch level can be adjusted 2 - 9, the ideal default level is 3.

LCD Display Mode: Options to customize in Channel Number or Channel Frequency display.

PoC Key/Functions Enable: For enabling and disabling PoC functions.

VSWR Alarm Threshold: Programmable Alarm for high VSWR.

Firmware Language: English

Programming Password Switch: Enabling this, programming password of 8 digits can be set.

Website Setting: When networking, different repeaters can address to build a connecting by setting the network parameters.

Repeater IP: The IP address of repeater, like 192.168.1.100.

Mater UDP Port: The repeaters use the UDP local port to connect to the server. The range of the port is 0~50000.

IP Link Port: The repeater uses TCP server, TCP server connects needs a specific server port. The range value of the port is from 0~50000.



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