

## Specification

General		TR-50
Frequency Range		VHF: 146-174 MHz    UHF: 440-470 MHz
Channel Capacity		1
Channel Spacing		25/12.5 KHz
Operating Voltage		AC 100-240V / DC 10.2V~14.6V
Current Drain	Standby	0.2A or less
	Receive	0.8A or less
	Transmit	2.2A or less
Frequency Stability		±2.5 ppm
Operating Temperature		-30°C~+60°C
Antenna Impedance		50 Ω
Dimensions (L×W×H)		8.58 in. X 3.54 in. X 8.66 in.
Weight		5.51 lbs.

Transmitter		TR-50
RF Power Output		4.5±0.5W
Modulation		16k φ F3E / 8k5 φ F3E
Spurious and Harmonics		70dBc
FM Noise		40/35dB
Audio Distortion		≤5%

Receiver		TR-50
Sensitivity		≤3.5 μV
Selectivity		70/60dB
Intermodulation		65/60dB
Spurious Response Rejection		70/65dB
S/N		45/40dB
Rated Audio Power Output		500mW
Rated Audio Distortion		≤5%

All specifications are tested according to TIA/EIA-603, and subject to change without notice due to continuous technology development.



ISO9001:2000 Certificate NO:FM 61540

FCC

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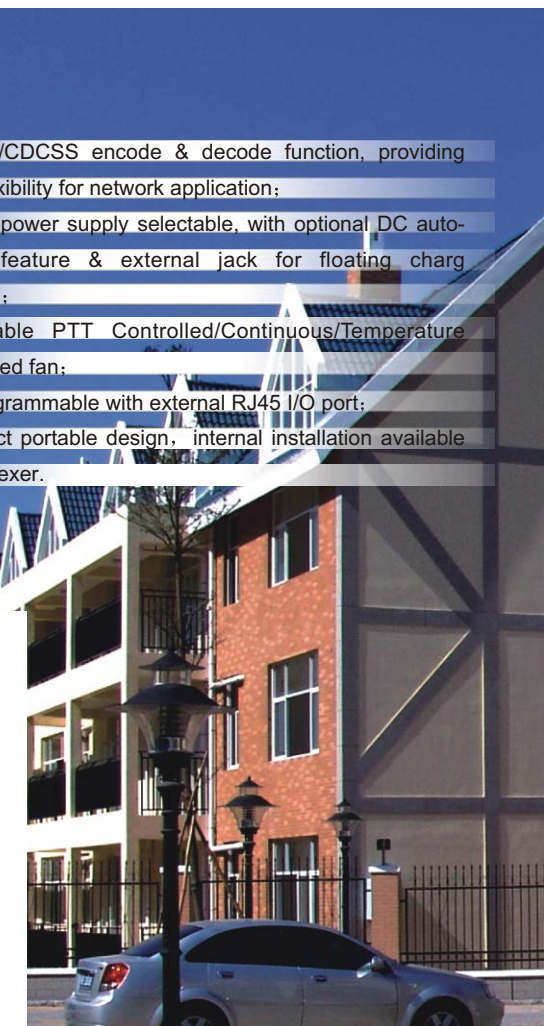
Portable

Repeater

# TR-50

To be mini To be easy

- CTCSS/CDCSS encode & decode function, providing high flexibility for network application;
- AC/DC power supply selectable, with optional DC auto-revert feature & external jack for floating charge function;
- Switchable PTT Controlled/Continuous/Temperature Controlled fan;
- PC programmable with external RJ45 I/O port;
- Compact portable design, internal installation available for duplexer.



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## Features & Advantages:

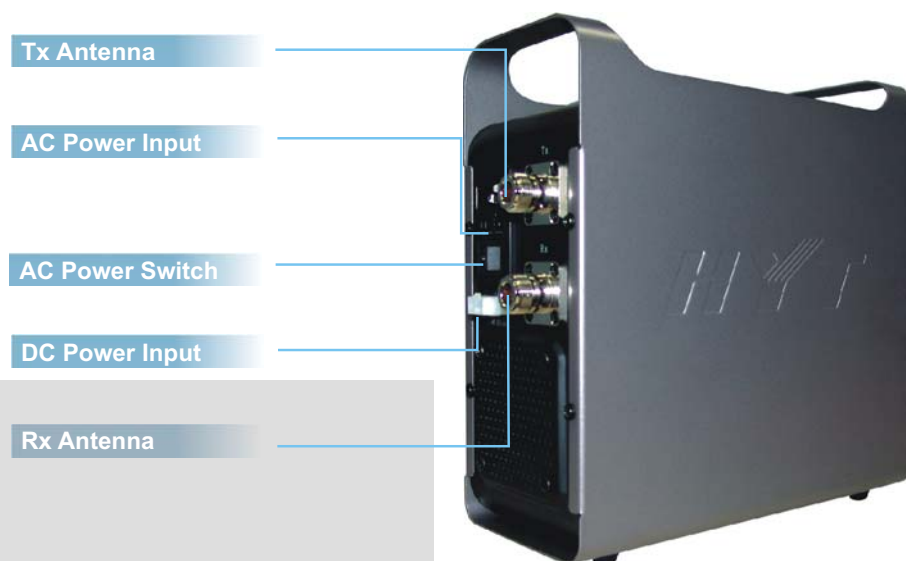
- The smallest portable repeater;
- Exquisite industrial design, the best choice of business consumer and amateur hobbyist;
- Durable die-cast chassis, easily assembled & disassembled;
- Diverse applications for residence security management, hotel & restaurant, entertainment spot, agriculture & farming industry etc.



LED Indicator

Power & Volume Control Knob

RJ45 Interface



Tx Antenna

AC Power Input

AC Power Switch

DC Power Input

Rx Antenna

## Main Features

### CTCSS/CDCSS FUNCTION

CTCSS/CDCSS encoding & decoding, with which to set private line to receive compliant calls otherwise eliminates irrelevant conversations sharing the same carrier frequencies.

### FLOATING CHARGE

The TR-50 provides selectable AC(100~240V 50/60Hz)/DC(10.2V~14.6V) power supply. Normally users can equip battery back-up system connected to the external DC jack with floating charge function in the mean time. This supports auto-switching to DC battery once the AC power supply fails.

### MULTI-CONTROL FOR ONSET OF THE FAN

The powerful DC brushless fan inside the cabinet is to effectively ensure the transmitter's durability and stability while working at tough situations. Three options for the jumpers are PTT controlled, Continuous and Temperature controlled respectively.

### LED INDICATORS

The LED indicators on the front panel highlight system status at a glance, including power-up, receive and transmit.

### PROGRAMMABLE CHANNEL SPACING

Users can set either a 25KHz or a 12.5KHz channel spacing to accommodate present and future channel allocations according to local radio regulations.



### PC PROGRAMMING & TUNING

The repeater provides a real-time tuning function from a desktop or portable PC. Radio parameters for programming are squelch, channel spacing, CTCSS/CDCSS deviation, Rx BPF etc.

### BASE STATION CAPABILITIES & LOCAL SPEAKER

The TR-50 can be operated as a full-duplex base station with the optional SM-08R Microphone connected. In addition, a built-in speaker on the front panel makes it available that the channel conversation can be monitored.

### COMPACT DESKTOP DESIGN & DUPLEXER INSTALLATION

This portable repeater can be placed in office environments or dispatch center with minimal space required whereas duplexer installation is still available inside the cabinet.

## Optional Accessories



Microphone SM08R1



DT01(137-172MHz)/DT03 (380-470MHz)



Receiver Programming Cable Pc15



Transmitter Programming Cable Pc14



External Duplexer Installation Kit BRK06