

# TM-500

## DUAL CHANNEL TRUE DIVERSITY WIRELESS MICROPHONE SYSTEM



TM-500 is a true diversity wireless receiver developed by Relacart independently. It can be used with external frequency controller that can be synchronize the microphone automatically, and it can be connected to the central controller, and has returning pages and cascade function.

### Product Specification



**TM-500**  
Dual Channel Wireless Receiver

- EIA Standard Rack 1U metal chassis.
- Receiver equipped with exquisite LED display, can clearly display receiving channel, RF and AF signal.

Receive Bandwidth:	521.25MHz ~ 936.85MHz
Receiving Method:	FM super heterodyne true diversity reception
RF Sensitivity:	5dBv, S/N≥60 dB at 25KHz deviation
Squelch Adjustment:	Set
Frequency Synchronization Method:	IR Sync
Maximum Output level:	Maximum output + 11dBV
Output Level Adjustment Range:	Set
Power Supply:	DC12V / 1A
Normal Working Current:	DV12V, 330mA
Dimensions(mm):	410 (W) × 206(D) × 43 (H)
Net Weight:	1.8kg

### Key Features

#### AFS(Automatic Frequency Selection)

- With "AFS" automatic frequency search function, according to the preset frequency to scan and calculate the interference-free working channel quickly and accurately.

#### Reliable Signal

- The BNC antenna jack can be connected to coaxial antennas and extended antennas, and provides antenna voltage, supports connection to the Relacart antenna distribution system, Extend multiple devices and enhance the receiving distance and improve the signal stability.

#### Anti-Interference

- The antenna diversity FM superheterodyne reception is adopted to ensure the stability of the received RF signal and the receiver's own anti-interference; the operating frequency range is 521MHz ~ 938MHz according to the radio wave control laws and regulations of various countries.

#### IR Infrared

- With [IR] infrared automatic synchronization frequency function, the transmitter's infrared window facing the infrared window of the receiver and press the "SYNC" button. The transmitter is automatically and accurately synchronized to the receiver's operating frequency.

#### Intelligent Design

- The receiver is equipped with LED segment displays, which can clearly display receiver information, such as channel, RF and AF signals.
- Applicable to schools and offices. It has stable function, long receiving distance and easy installation.
- Compliant with RS-485 communication protocol

#### Channel Group Mode

- 128MHz wide-band transmitter, four receivers in different frequency bands can be used interchangeably, which greatly facilitates engineering debugging and management.
- Use the channel group mode, and there are 50 channel groups in each frequency band for user selection.



**TM-5H**  
Pen-type Microphone

- TM-5H handheld microphone is novel in appearance and small in size. Its circuit adopts advanced phase-locked technology, with built-in removable lithium battery, USB-TYPE-C charging interface and laser pen. Low power consumption, continuous working time of one charge ≥ 8 hours. It can be equipped with a wireless charging station certified by Qi, and can also realize wireless charging.

RF Carrier Range:	521.25MHz~938.85MHz
Frequency Stability:	±0.005%
Operating Range (environment dependent):	50m
Companding:	Relacart's classic audio companding circuit
Audio Frequency Response:	50Hz~18KHz/±3dB
Dynamic Range:	>100dB
S/N Ratio(A-Weighted):	>100dB
Total Harmonic Distortion:	<0.6%@1KHz
Operating Temperature Range:	-10°C~+50°C