

# SONKEN

MODEL:WM-550R

## DUAL-CHANNEL PROFESSIONAL WIRELESS MICROPHONE SYSTEM

### 1. DESCRIPTION

The Sonken UHF professional frequency-fixed wireless microphone system is a system that operating in UHF band. The traditional wireless microphone system is easy to be interfered by the harmonic coming from the digital apparatus such as CD player and VCD player. To solve the problem, Sonken UHF professional wireless microphone system adopts the unique technology of anti-interference to protect the muting control system being opened by the noises and signals from outside. And it also adopts the selective multilevel narrow band filter for UF and IF to avoid the system being interfered.

### 2. FEATURES

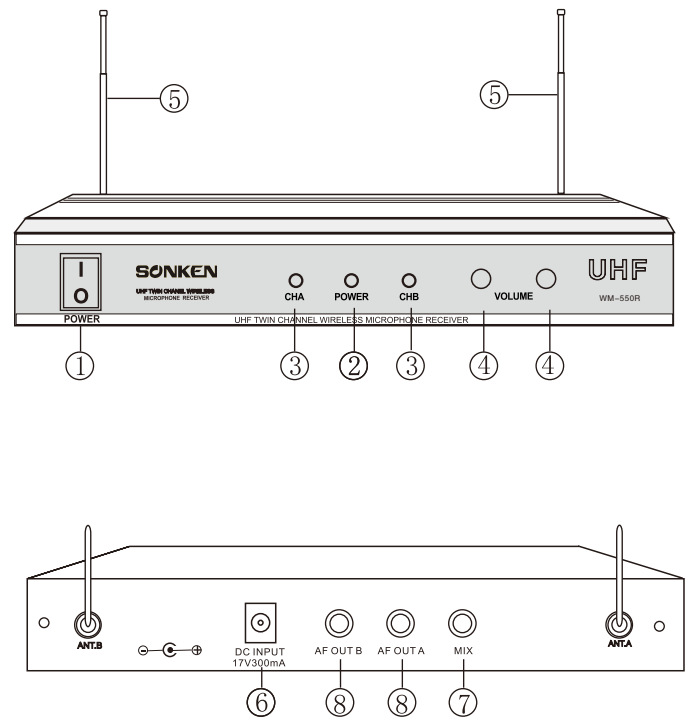
- 1. UHF Frequency Band.** The carrier frequency is UHF 490-550MHz can avoid the frequency interference.
- 2. Narrow Band Filter.** Selective Multilevel narrow band filter for HF and IF eliminate the possibility of interfering signals from outside.
- 3. Battery Fuel Indicate.** There is a coulomb circuit in the handheld microphone indicates when the batteries should be changed.
- 4. Surge Protector.** The surge protector is in the circuit of the switch helps Clear up the impact wave.
- 5. Quartz Crystal Oscillator.** Ensures the frequencies to be most steady.
- 6. Audio Compander.** Using audio compander to increase the dynamic range and lower the noises and reecho greatly.
- 7. Noise Squelch Circuitry.** Protects the muting control system being opened by the noises and signals from outside.
- 8. Crystal and Components:** All the crystal and components in this wireless microphone system are excellent.
- 9. Distance:** Inside: 50m, Outside: 80m.
- 10.Places to Use:** Suitable for stages for speech reinforcement and singing, House of worship, karaoke room, classroom, and home amusement.

### 3. OPERATION OF THE RECEIVER

1. Install the antenna A & B to be Perpendicular to the receiver.
2. Make sure the adaptor is in 12-18VDC, plug the power cable in the power jack of receiver, and then plug the adaptor in the socket.
3. Plug one end of the audio cable in the MIX output while the other end in MIC IN or AUX IN of the amplifier or mixer.
4. Turn on the receiver, the light of the power in the middle of panel will be on and the light of AF both in Channel A & B will

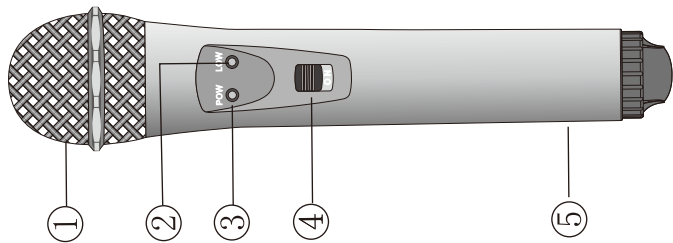
### 4. OPERATION OF THE MICROPHONE

1. Open the battery cover and install 1pieces of 9V batteries and make sure the right polarity.
2. Cover the batteries Compartment.
3. Turn on the microphone, the light of power switch will be on.
4. Turn the mute on for a pause of using the microphone, and off for stop using.



### 5. RECEIVER CONTROLS & INDICATORS

- 1. Power On / Off Switch:** Turns the receiver on and off.
- 2. On/Off LED:** Glows red when the receiver is on.
- 3. RF Level Indicator:** One LED per therefore antenna channel glows to indicate the microphone is on, and the signal is being received.
- 4. Microphone Monitor Volume Control:** Rotate this knob to the right to increase microphone volume; rotate it to the left to decrease microphone volume.
- 5. Antenna A and B:** 50 ohm 1/4 wavelength.
- 6. Power Jack:** Accepts power from the supplied AC adapter 15-18VDC.
- 7. Mix Output Connector:** Provides unbalanced level (Impedance: 600 ohm) output.
- 8. Unbalance Output Connectors:** Provides unbalanced level (Impedance: 600 ohm) output.



### CONTROL AND FUNCTION LIST (HANDHELD)

1. Grille: protects the microphone cartridge and helps reduce breath sounds and wind noise
2. Battery level indicator: The LED flash when the Battery power is low
3. Power supply indicator: The LED on is for power on.
4. Power and the audio mute switch
5. Battery cover

### 1. COMPREHENSIVE PERFORMANCE

Carrier Frequency: UHF 490-550MHz  
 Frequency Stabilization:  $\pm 30$ ppm  
 Dynamic Range:  $>90$ dB  
 Total Harmonic Distortion:  $<0.5\%$   
 Frequency Response: 40Hz-15KHz  $\pm 3$ dB  
 Audio Output Level: Separate Type: 0- $\pm 400$ mV  
 Mix Type: 0-200mV

### 2. FIXED RECEIVER

Power Supply: DC17V  
 Power Consumption: 4W  
 Signal/Noise Ratio:  $>90$ dB  
 Image & Spurious Rejection:  $>80$ dB  
 Border Upon Channel Rejection:  $>80$ dB  
 Receiving Sensitivity: 10dBuV (SINAD=30dB)

### 3. HANDHELD MICROPHONE

Transmitter Power: 8.5mW  
 Modulation Type: FM, F3F  
 Max Deviation:  $\pm 25$ KHz  
 Spurious Emission:  $>40$ dB  
 Battery Voltage: 9V  $\times 1$   
 Battery Life: 8 hours

## PROBLEM AND SOLUTION

#### 1. LED of the power is not on when the power is on.

-Make sure if the power jack is well connected with the power cable of the adaptor.

#### 2. LED of AF is twinkling but no sounds coming out.

-Check and make sure the volume is not in Min, and the audio cable is well connected.

#### 3. The distance of signal receiving becomes shorter and signal becomes unsteady.

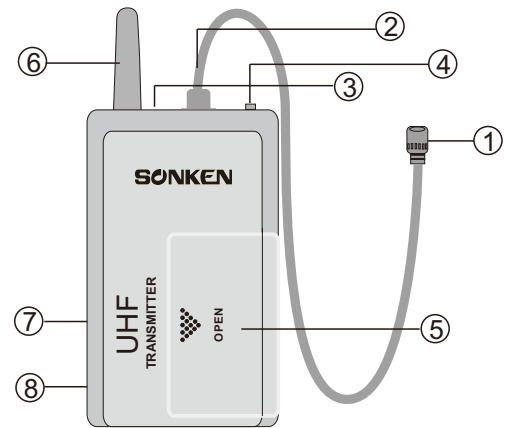
- Check and see if the antenna is well set up.
- Make sure the power of batteries is enough.
- The receiver should put in the right place-1 meter far from the wall and 0.5 meter high up the floor.
- Make sure there is no electromagnetic interference.

#### 4. Timbre becomes worse

- Change the new batteries if the voltage is not enough.
- Make sure there is no electromagnetic interference.
- Make sure not to use the same wireless microphone system with same frequencies at the same time. You are advised to separate them at least 100 meters.

## BODY-PACK TRANSMITTER (ACCESSORIES)

### CONTROL AND FUNCTION LIST

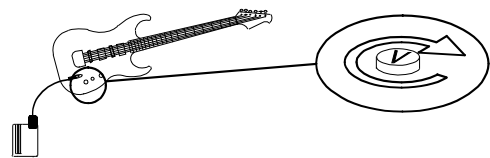


1. MICROPHONE
2. INPUT JACK
3. POWER LAMP
4. POWER SWITCH
5. BATTERY COMPARTMENT
6. ANTENNA
7. ADJUSTABLE PROTECTIVE RING FOR CONTROLS

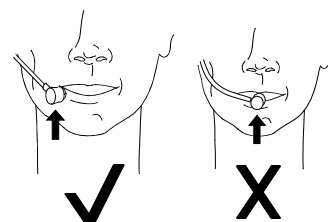
### INSTRUMENT ADAPTER CABLE FOR



1. HEADSET
2. GUITAR
3. LAVALIER



INSTRUMENT ADAPTER CABLE FOR GUITAR



HEADSET GIRD MEANS