



SWM20-U2 SERIES



PROFESSIONAL UHF DUAL-CHANNEL WIRELESS  
MICROPHONE SYSTEM WITH SELECTABLE FREQUENCIES

SWM20-U2 SERIES

- SWM20-U2HH
- SWM20-U2HB
- SWM20-U2BB



PRODUCT MANUAL

# FEATURES

- This Ultra-High Frequency (UHF) microphone system minimizes radio frequency interference and noises generated by other electronic equipment and digital devices, compared with a Very High Frequency (VHF) system. The wireless system provides cordless freedom and ease of use.
- Easy to set up and operate with Dual-Channel up to 200 selectable UHF frequencies and independent volume controls.
- Quartz crystal oscillation stabilizes frequency transmitting and receiving with two detachable antennas, making sure the sound quality is reliable and consistent.
- Audio compressing-expanding technology can minimize noises and boost dynamic range. The cardioid microphone pickup pattern produces superb feedback and off-axis rejection.
- Two XLR outputs for more professional use and one 1/4" mixed output.
- Up to 300 feet line-of-sight operation range with stellar sound quality.
- Ideal for conferences, broadcasting, weddings, Karaoke, social events and any small to medium-sized venues including meeting rooms, auditoriums, schools, churches and stages.

## RECEIVER

### Front Panel

- ① Power switch
- ② Display
- ③ Volume control A
- ④ Frequency adjustment - up
- ⑤ Scan/Sync
- ⑥ Frequency adjustment - down
- ⑦ IR Sync window
- ⑧ Volume control B



### Rear Panel

- ① Antenna B
- ② Balanced B
- ③ 1/4" mix output
- ④ Power input
- ⑤ Balanced A
- ⑥ Antenna A



# TRANSMITTER

## Transmitter



- ① Windscreen      ② Operating indicator      ③ Power switch
- ④ Battery cover      ⑤ Transmission antenna      ⑥ Headset      ⑦ Display

### Note:

If the operation indicator lights red, it indicates the battery is low and should be changed; if it comes on green, it indicates battery life is good; if it doesn't come on at all, it indicates the battery is dead, so please change it.

### Operation:

#### How to Automatically Synchronize the SWM20 Receiver and Microphone:

- 1、 Connect the SWM20 receiver to an AC outlet through the power adapter provided.
- 2、 Connect the SWM20 receiver to a powered speaker or an amplifier with the 1/4" audio cable provided. Turn on the SWM20 receiver. (If you are connecting the receiver to a passive speaker, mixer, home receiver or television, please refer to the connection diagram section)
- 3、 Insert two alkaline AA batteries into the battery compartment of the microphone. Make sure the positive and negative ends are facing the correct direction. Power on the microphone.
- 4、 Press Sync/Scan button on the receiver; point the LCD display on the microphone towards the receiver approximately 6-inch far and the mic will be tuned to the desired frequency.

#### How to Manually Synchronize the SWM20 Receiver and Microphone:

- 1、 Connect the SWM20 receiver to an AC outlet through the power adapter provided. Install the antennas to the receiver.
- 2、 Connect the SWM20 receiver to a powered speaker or an amplifier with the 1/4" audio cable provided. Turn on the SWM20 receiver. (If you are connecting the receiver to a passive speaker, mixer, home receiver or television, please refer to the connection diagram section)

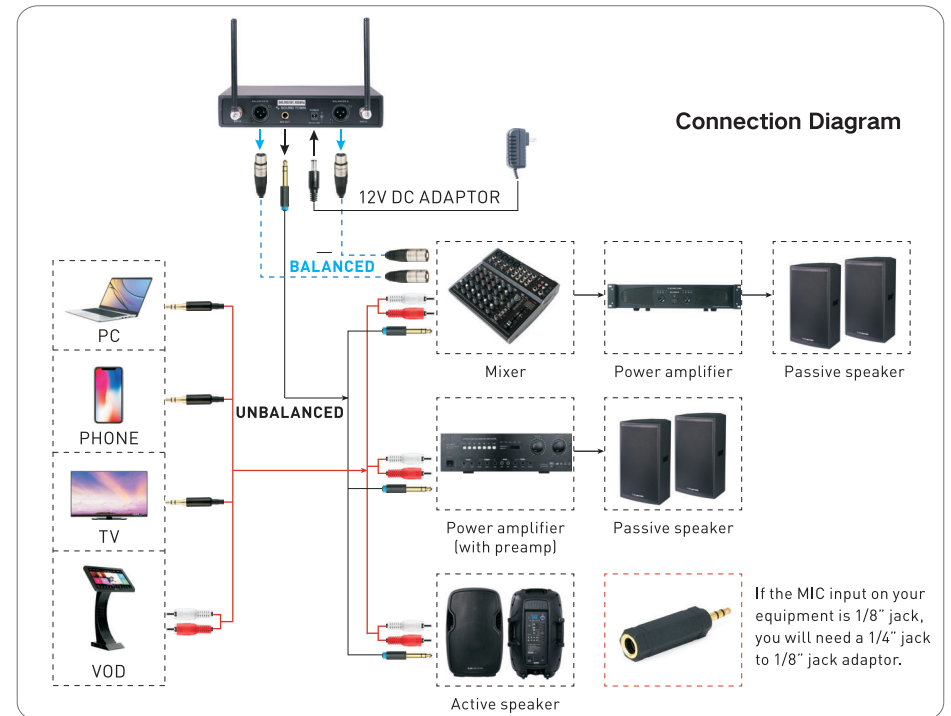
- 3、 Put two alkaline AA batteries into the battery compartment of the microphone. Make sure the positive and negative ends are facing the correct direction.
- 4、 Power on the hand held microphone, after 3 seconds, there will be a frequency showing on the LCD screen.
- 5、 Press the UP or DOWN button on the receiver until the frequency matches what the handheld microphone has on its screen. There are two channels on the receiver with different frequency ranges and use the channel that covers the frequency range of the microphone.
- 6、 After selection is made, it becomes locked after 3 seconds. The LCD screen on the receiver now shows the battery life of your microphone. Use the volume knob on the receiver to adjust the volume.

For headset microphone, please connect the headset microphone to the bodypack transmitter through the mini XLR cable first.

### Note:

It is advised to check the input connectors of your device before connecting the wireless microphone to it. Most PA speakers come with 1/4" Mic input connectors and amplifiers come with XLR input connectors, they are capable of directly connecting to microphones.

For devices such as certain home receivers that do not come with 1/4" Mic or XLR input connectors, a preamp or mixer is recommended to optimize sound performance when connecting the microphone to a home receiver. Preamps and mixers act as an intermediary between the receiver and the microphone. They can increase the volume level on the microphone and mitigate the volume loss that occurs by connecting your microphone to your home receiver.



# PARAMETER

## Specifications

Frequency Range	UHF 530-580 Mhz, 200 Selectable Frequencies
Oscillation Mode	Quartz Controlled
Carrier Wave Stability	10PPM
Sensitivity	-100dB @ sinad=12 dB
S/N Ratio	>100dB
T.H.D.	<0.5% @ 1KHz
Image Rejection	85 dB typical
Spurious Rejection	75 dB typical
Frequency Responses	50Hz~15KHz
Working Distance	300 Feet
Squelch Control	Dual-Squelch Circuit
AF Output Impedance	2.2K $\Omega$
Max. Output Level	Balanced : 0-400mv, Unbalanced : 0-200mv
Display	LED
Power Supply	12~18V DC / 0.35A
Output Connector	Balanced XLR Outputs, 1/4" mix out
Dimensions (inch)	15.38 X 11.5 X 2.8
Weights (lbs)	2.78

## Transmitter

Transmitter Power	15mW
Spurious Emission	<40dB(with carrier)
Display	LED
Battery Voltage	1.5V X 2 (2 X AA)
Battery Life	10 hours

# TROUBLESHOOTING

## Troubleshooting

### Faint Sound or No Sound

- Verify connections to PA system
- Adjust channel volume
- Turn on handheld microphone or bodypack
- Check that batteries are installed correctly.
- Change or charge batteries
- Verify power adapter is plugged securely into the outlet
- Check that receiver unit is powered on
- Verify that antennas are connected securely

### Audio Interference, Artifacts, or Dropouts

- Identify and remove sources of interference: mobile phones, Wi-Fi access points, signal processors, electronics, etc.
- Charge or change batteries
- Move system away from metallic surfaces
- Provide line-of-sight from handheld microphone or bodypack to receiver unit antennas

### Distortion

- Lower channel volume
- Change or charge batteries
- Verify fidelity of signal cable to PA

If you are still experiencing issues after following this troubleshooting guide, please call us directly at (323) 618-0688 or email to [support@soundtown.com](mailto:support@soundtown.com) for expert assistance.

## In the Package

### SWM20-U2HH

- 1 SWM20-U2 receiver
- 2 handheld wireless microphones

### SWM20-U2BB

- 1 SWM20-U2 receiver
- 2 headset microphones
- 2 bodypack transmitters

### SWM20-U2HB

- 1 SWM20-U2 receiver
- 1 handheld wireless microphone
- 1 headset microphone
- 1 bodypack transmitter