



Wireless Microphones

SE-350-WT-HAND

SE-350-WT-BODY

Wireless Receiver

SE-350-WR-1CHD





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Compliance statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1-Year Limited Warranty

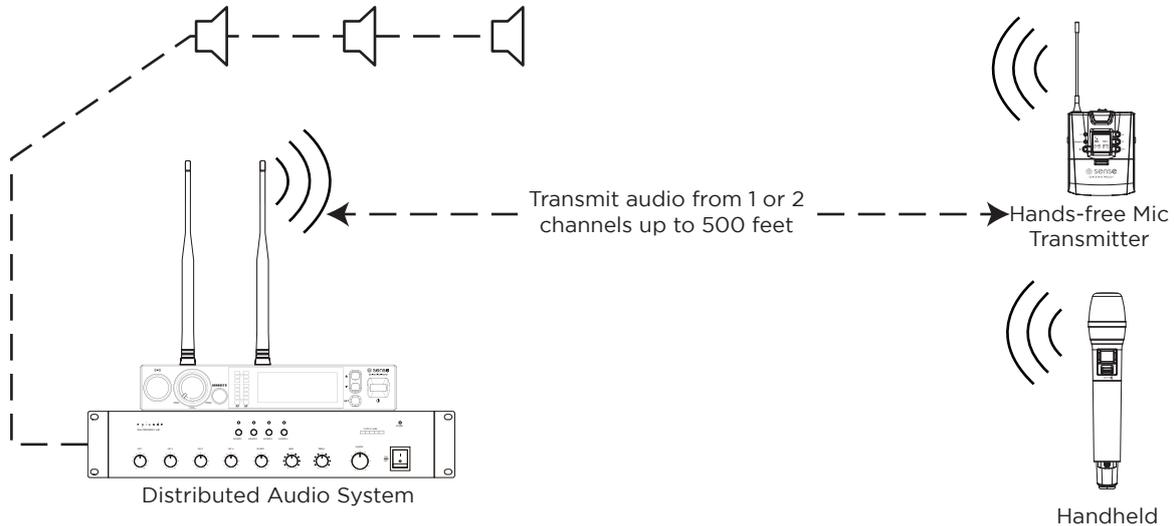
This Sense™ Product has a One-Year Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products that have been abused, modified, or disassembled. Products to be repaired under this warranty must be returned to SnapAV or a designated service center with prior notification and an assigned return authorization number (RA).



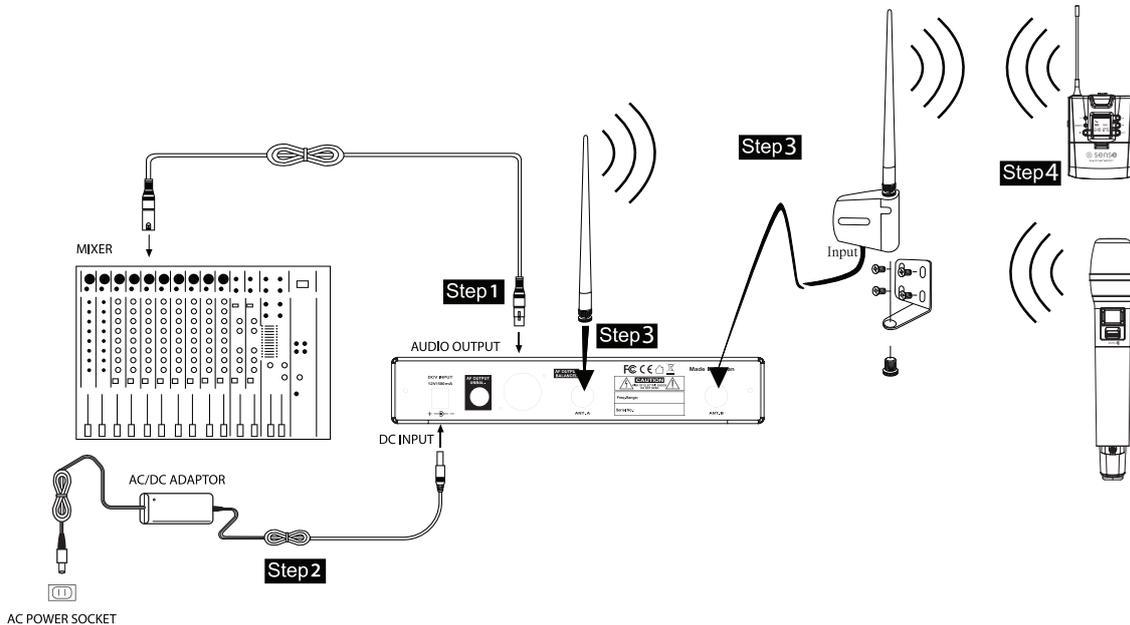
1. Before You Get Started

Sense microphones deliver excellent sound reproduction when and where you need it most. Each microphone and/or microphone accessory is designed for specific applications that serve multiple purposes, so even if you don't have each one of the microphones or accessories listed, read through each description and you may find an idea or more helpful information that allows you to work smarter, not harder.

2. How It Works



The wireless receiver can be placed on a surface or mounted in a rack. The antennas can be mounted in the front, rear, or extended with an antenna booster (sold separately) for wireless sound pick up from a hand-held microphone transmitter or a hands-free body pack (see below for full list of accessories). The SE-350-WR-1CHD receives transmissions up to 500 feet, then outputs into a distributed audio system.



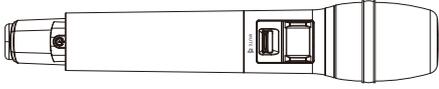
There are just a few steps to take in order to have a proper setup with your Sense microphones.

- Step 1. Connect the wireless receiver to the mixer or a microphone input of an amplifier.
- Step 2. Connect the included AC/DC power supply to the receiver. It is recommended to connect it to a surge protected power outlet.
- Step 3. Connect the two included antennas to the receiver.
- Step 4. Match the frequencies between the receiver and the transmitting microphone on each transmitting device. See **Wireless Transmitter and Receiver Adjustments** section.



3. Compatible Accessories

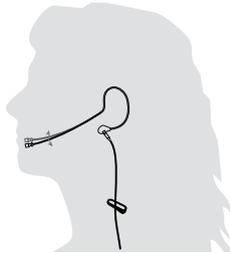
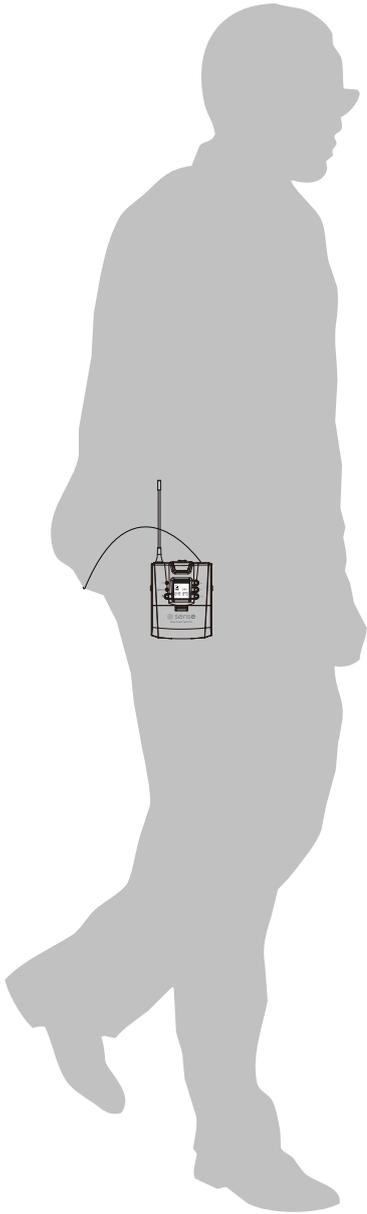
Hand-Held Wireless Transmitter and Microphone



The SE-350-WT-HAND (sold separately) transmits connected microphones via wireless signal in corporate presentations, houses of worship, audio/video conferencing, and more. The hand-held wireless transmitter includes colored end caps, batteries, and a microphone stand adapter.

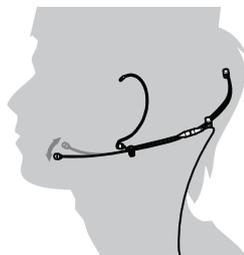
Body-Pack Transmitter

Pair the SE-350-WT-BODY (sold separately) with any of the following three Sense microphones to wirelessly transmit excellent sound reproduction back to the wireless receiver. The hands-free body-pack transmitter includes batteries and a lavalier microphone.



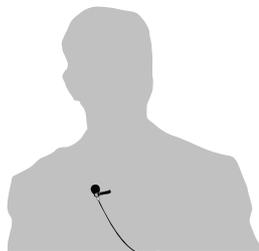
Single Ear Headset Microphone

The SE-500-SEH-T (sold separately) is recommended for speakers in corporate presentations, houses of worship, audio/video conferencing, etc.



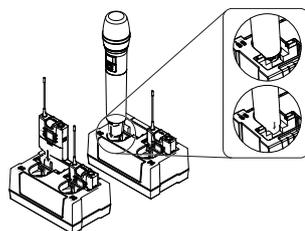
Double Ear Headset Microphone

For animated speakers, the stability and flexibility of the SE-500-DEH-T (sold separately) is ideal for use in corporate presentations, houses of worship, audio/video conferencing, etc.



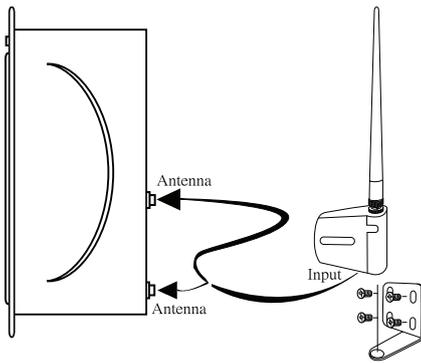
Lavalier Microphone

The traditionally worn SE-300-LAV-BLK (sold with body-pack transmitter or sold separately) lavalier microphone is perfect for corporate presentations, houses of worship, audio/video conferencing, and more.



2 Port Charger

The SE-350-WT-CH slot charger allows simultaneous charging of 2 Sense Microphone units and battery packs with the included NiMH "AA" size batteries. Do NOT use Alkaline batteries with the charger.

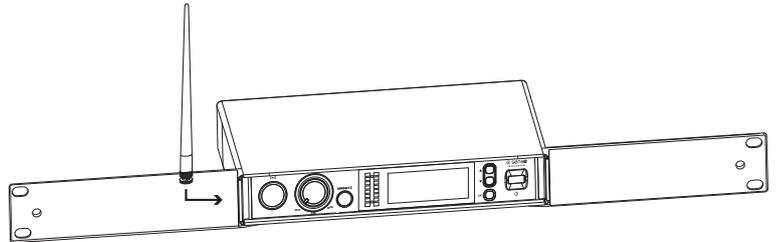


Antenna Booster

Raise your signal strength by 10dB with the SE-ANT-BM. Mount the antennas to a wall or ceiling for an even greater signal pickup. Extend it further with the B-ANT-EXT-20M (also sold separately).

Single Rack Mount

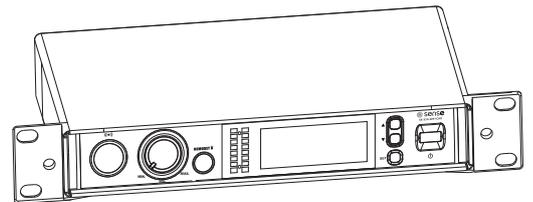
The single rack mount is included with Wireless Receiver. Secure the SE-350-WR-1CHD with 4 screws and secure the mount to the rack with 4 more screws. If desired, thread the antennas to the front rack ears.



4. Rack Mounting

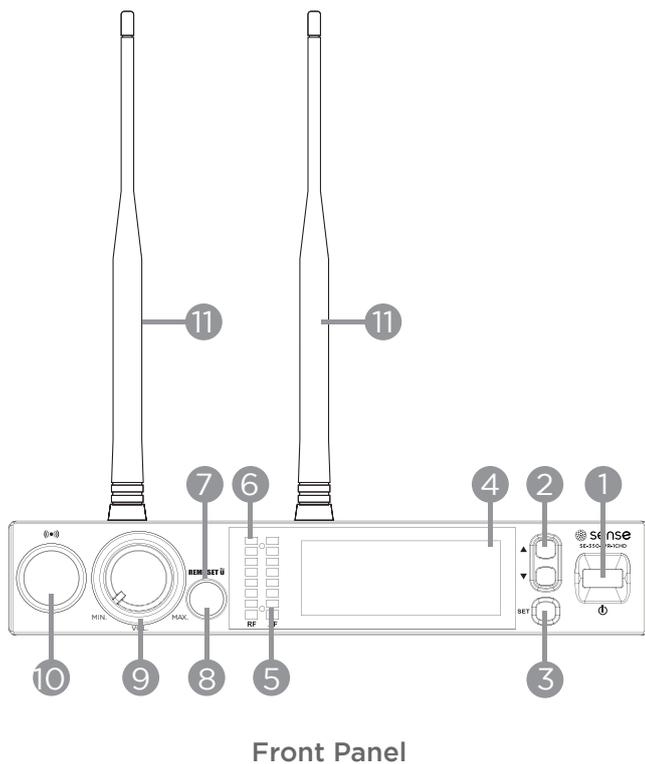
Installation with Single Rack Mount

- Verify no cords are attached to the receiver. Turn over the rack adapter and receiver. Insert the receiver into the desired rack adapter slot.
- Align, insert, and thread 4 included M3 screws into the 4 mounting holes of the rack adapter and receiver.
- Mount the rack adapter to the rack using rack screws (not included) into the rack holes.

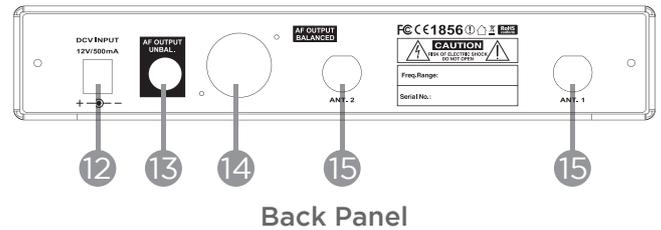




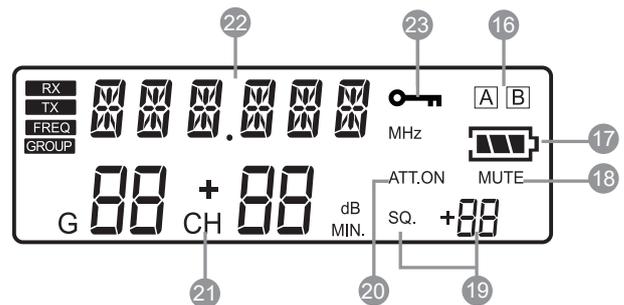
5. Wireless Receiver



Front Panel



Back Panel



LCD Display

Annotations

- Power On/Off Switch:** Press once to turn on the power. Press and hold for 2 seconds to turn off.
- ▲ ▼:** (Frequency Adjustment) While in setting mode, press to select between function settings. Pressing while not in setting mode will adjust the volume.
- Set:** (Function Settings) Press and hold for 2 seconds to enter setting mode. Press again to select the function to set.
- LCD Display**
- AF Signal Level**
- RF Signal Level**
- Remoset Indicator:** Shows current pairing status. Flashes rapidly during data transfer and stops when transfer is complete. The flashing will slow down if a sync fail occurs.
- Remoset U:** Allows synchronization of the transmitter after a setting is modified. Press Remoset U to sync the settings to the transmitter.
- Volume Control**
- Ultrasonic Transmission Unit:** Transmits data at ultrasonic frequency. Point the ultrasonic receiver of the microphone to the transmitting unit of the receiver while setting. The effective range is 30° to either side at a distance of 30 cm.
- Antenna**

Support: 866.838.5052

Back Panel

- DC Power Socket:** 12 VDC 500mA power supply.
- 6.3 mm Phone Jack:** Unbalanced audio output jack.
- 3P XLR Male Port:** Balanced audio output jack
- Female BNC Antenna Port:** Connect the 50 ohm BNC antenna here. The antenna also boosts power for and external antenna booster.

LCD Display Symbols

- Antenna AB:**
- Transmitter Battery Level:**
- Receiver Mute:** MUTE
- Squelch Level:** SQ.
- Output Attenuation:** ATT.ON
- Group/Channel:** G 00 / CH 00
- Frequency:**
- Key Lock:**



6. Body-pack Transmitter (Sold Separately)

The SE-350-WT-BODY transmits sound via wireless signal used for corporate presentations, houses of worship, audio/video conferencing, video, film and sound reinforcement, or other applications where low-profile, discreet placement is preferred.

Features

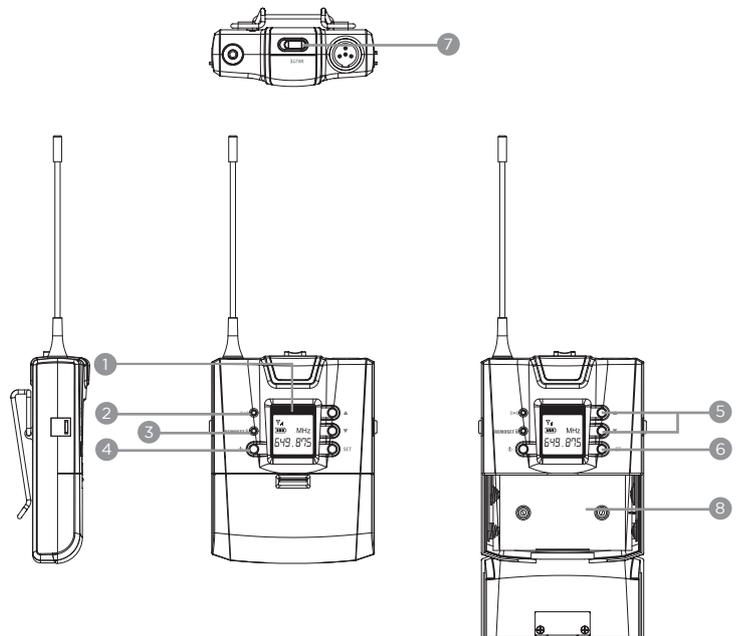
- Phase-locked Loop (PLL) synthesized tuner ensures reliable performance
- 2 “AA” Alkaline batteries are included
- Compatible with rechargeable AA batteries. Recharge with SE-350-WT-CH
- Equipped with Auto-Off battery conserving feature
- Equipped with 4-Pin Mini XLR connector
- LCD display with channel and battery life indicator
- The **lock-on** function prevents tampering and RF interruption
- REMOSET U technology automatically communicates frequency parameters from the SE-350-WR-1CHD receiver to the transmitter
- Extended dynamic range and smooth frequency response

Installation Tips & Guidelines

After placing batteries inside the SE-350-WT-BODY and attaching the microphone, pair the wireless frequency with the wireless receiver. Refer to section 8 for full instructions on how to pair the frequency.

Annotations

1. **LCD Display**
2. **Ultrasonic Receiving Unit:** Receives pairing signals from **Transmission Unit**
3. **REMOSET Indicator:** **Blue** = Pairing successful | **Flashing Blue** = Data receive error
4. **Power:** Press once to turn on | Press and Hold until display shows **Power Off** to turn off | Press to return to the main screen when in **Setting Menu**
5. **▲ ▼:** Use to cycle through settings in **Setting Menu**
6. **SET:** Press to enter Setting Menu and Save Settings
7. **Mute Switch/LED Indicator:** Green = Power On | Red = Low Battery | Flashing Green = Transmitter Muted | Flashing Red & Green = Transmitter Muted, Low Battery
8. **Battery Tray**





Channel Scan

Scan oF	Function is deactivated
SCAN on	Function is activated. Scan to confirm if the channel is occupied. The program will skip this channel to prevent interference.

NOTE: This function only works in preset mode.



Audio Output Attenuation (XLR)

ATT oF	No Audio attenuation at output
ATT on	20dB attenuation at output



Key Lock

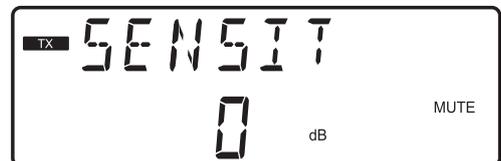
LOCK on	Key lock ON
LOCK oF	Key Lock OFF



When Transmitter is Selected

Microphone Input Sensitivity

Normal Sensitivity	Gain:	+15dB
	Gain:	+14dB
	Gain:	—
	Gain:	+2dB
	Gain:	+1dB
	Gain:	0dB (default)
	Gain:	-1dB
	Gain:	-2dB
	Gain:	—
	Gain:	-14dB
	Gain:	-15dB



ATT Microphone Audio Input Attenuation

ATT oF	No attenuation at Input
ATT on	20dB attenuation at audio input. (This depends upon if the transmitter supports this function.)

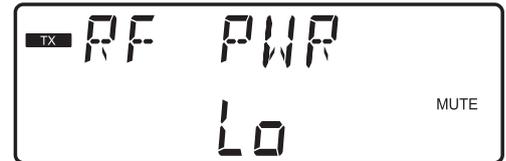




RFP: RF Microphone Power

The Transmitter comes with 2 stages of RF power output

Lo	10mW
Hi	50mW



ATOF: Automatic Microphone Off Countdown Under Mute Status

OF	Deactivated
1	1 minute to off
10	10 minutes to off
30	30 minutes to off

NOTE: the default setting is 10



REMOSET Configuration

FRE	Only frequency and group settings will be synchronized
ALL	All data settings will be synchronized



7. Hand-held Microphone (Sold Separately)

The SE-350-WT-HAND transmits connected microphones via wireless signal and is typically used for corporate presentations, houses of worship, audio/video conferencing, video, film and sound reinforcement, etc.

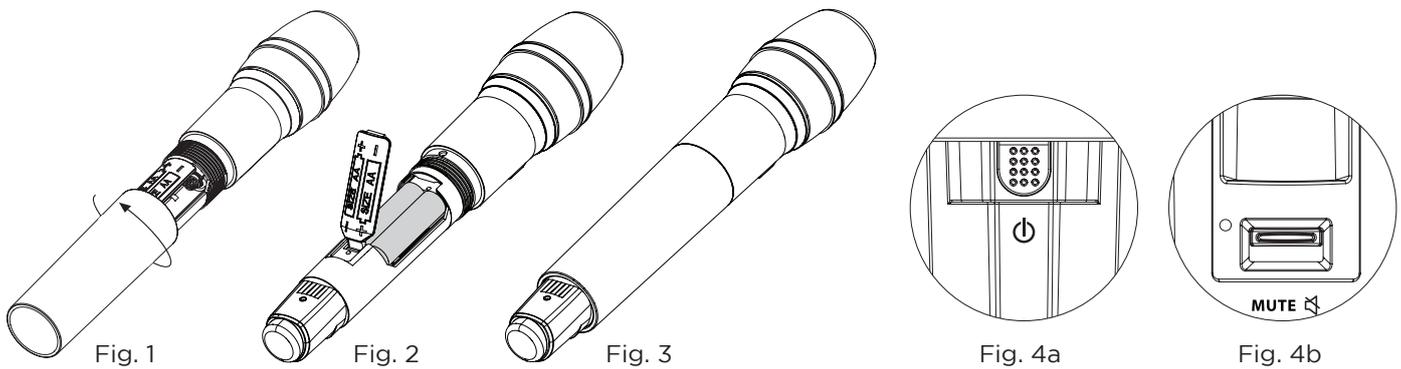
Features

- Phase-locked Loop (PLL) synthesized tuner ensures reliable performance
- 2 "AA" Alkaline batteries are included
- Compatible with rechargeable AA batteries. Recharge with SE-350-WT-CH
- Equipped with Auto-Off battery conserving feature
- LCD display with channel and battery life indicator
- Advanced circuitry ensures stable signal transmission
- Extended dynamic range and smooth frequency response
- Noise mute and tone-key squelch
- Internal antenna design
- REMOSET U technology automatically communicates frequency parameters from the SE-350-WR-1CHD receiver to the transmitter



Installation Tips & Guidelines

To place or replace batteries inside the SE-350-WT-HAND by taking the following steps.

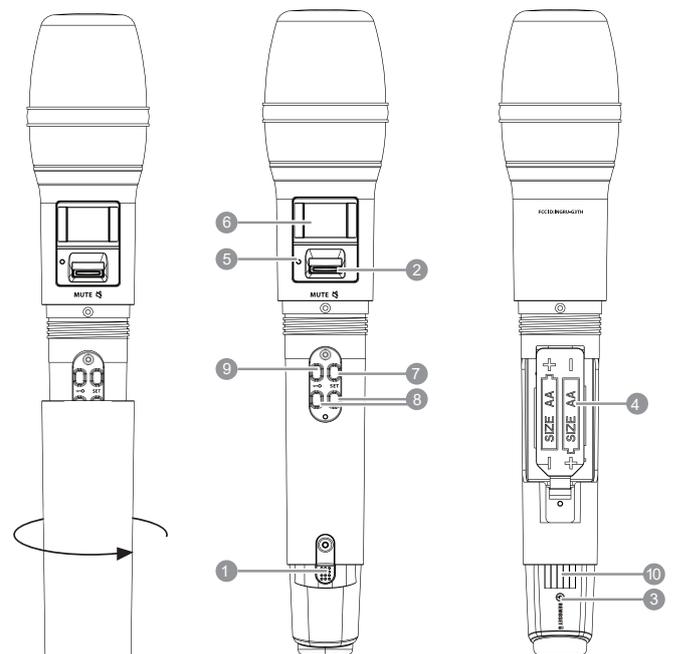


1. Figure 1: Unscrew the outer tube of the microphone
2. Figure 2: Insert 2 AA batteries in the battery holder, + to + and - to -.
3. Figure 3: Replace the battery holder and screw the outer tube back onto the microphone.
4. Figure 4: Push the power button OR slide the Mute button up to power on the microphone. Adjust settings as needed. See section 8.

Once you have re-attached the microphone head, pair the wireless frequency with the wireless receiver's frequency. Refer to section 8 for full instructions on how to pair the frequency.

Annotations

1. **Power:** Push to power on the Microphone, press and hold to turn off.
2. **Mute:** Slide up to talk and down to mute while the microphone is powered on. Slide the Mute Button up to turn the microphone on if powered off. The microphone will power down automatically after 1, 10, or 30 minutes of muting depending on settings selected
3. **Ultrasonic Receiving Unit:** Receives pairing signals from the ultrasonic transmission unit on the receiver
4. **Battery Holder:** Holds 2 AA batteries. AA sized rechargeable batteries are also compatible.
5. **LED Indicator:** displays Mute and Low Battery
6. **LED Indicator:** displays the microphone settings
7. **SET:** press to change and select microphone settings, including frequency, group, channel, sensitivity, transmission power, auto off countdown and machine code
8. **▲ ▼:** Use with the SET button to change settings
9. **🔑:** Push and hold the LOCK button to lock all buttons. Press and hold to unlock after buttons have been locked.



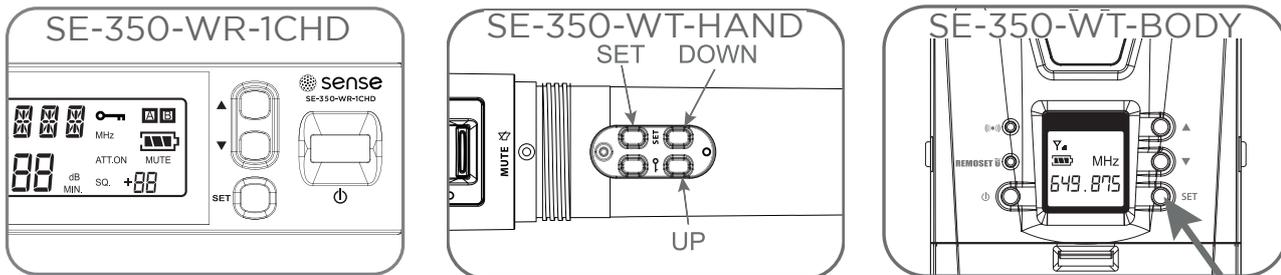
SE-350-WT-HAND



8. Wireless Transmitter and Receiver Adjustments

10. Charging Contact: For use when rechargeable batteries are installed

The most important step is pairing the wireless receiver and transmitter's frequency. The wireless receiver, body-pack transmitter, and hand-held wireless transmitter's setup menus function identically. Each device has a SET, UP, and DOWN button to make adjustments to the frequency, group, sensitivity, or pickup gain, and can automatically transmit these parameters from the receiver to the transmitter via REMOSET U technology.



Frequency Pairing

Match the frequency on both the transmitter and the receiver for wireless communication.

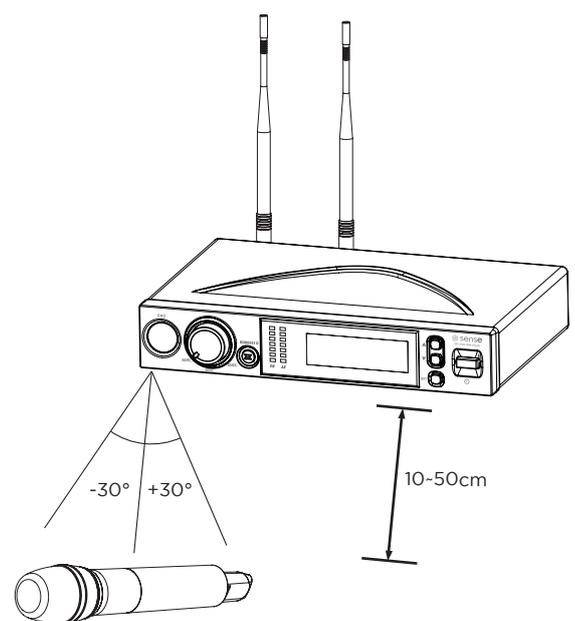
- Push the SET button once to select between frequency / group / sensitivity / RF outputs.
- Push the UP or DOWN button to adjust the setting of a menu.
- Press and hold SET for 3 seconds to activate that frequency.
- Once you see **MHz** blinking, you are ready to select your desired frequency by using the UP and DOWN buttons.
- Push SET again to save the setting.

Using REMOSET U Automatic Pairing

- To pair the SE-350-WT-HAND, remove the bottom sleeve to expose the controls and battery bay.
- Turn on both the receiver and transmitter.
- Press and hold the REMOSET button on the receiver and ensure the pairing window on the ultrasonic sensor faces the pairing window on the receiver.
- The green light on the receiver will flash rapidly while pairing is in process and light solid green when pairing is successful. The light will flash slowly if pairing fails.

Group Adjusting

Multiple microphones can transmit on the same frequency using matching groups. *Caution: This receiver can ONLY be used with a single transmitter at a time. Multiple transmitters may be paired with one receiver, however, ONLY one transmitter should be turned on at a time.*





- Press SET for 3 seconds, the group (G) will flash on the LCD display.
- Push UP or DOWN to select a desired group.
- Push SET again and the Channel (CH) will flash.
- Push UP or DOWN to select the desired channel.
- Push SET again to save the setting.

Sensitivity Adjusting

Optimize sound pick up by adjusting the sensitivity. Caution: Increasing sensitivity can cause system feedback.

- Press the SET button twice to select the sensitivity by holding it down for 3 seconds, releasing, and pressing again for 1 second. The display will show **Sensit.**
- Use the **UP** and **DOWN** buttons to make the necessary adjustments.
- Push **SET** again to save the setting.

RF Outputs

To adjust the transmission gain, select between **low** or **high**. For extended battery life, select **rF Lo**.

- Push the **SET** button several times until the **rF Lo** or **rF Hi** flashes.
- Push **UP** to choose **Hi** for high transmitting power (50mW) and push **DOWN** to choose **Lo** for transmitting power (10mW).
- Push **SET** again to save the setting.

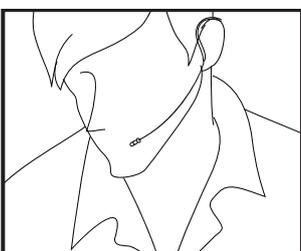
9. Headset Microphones

Sense attachable headset microphones have an intuitive installation and work great for corporate presentations, houses of worship, audio/video conferencing, and other applications where low-profile, discreet placement is preferred.

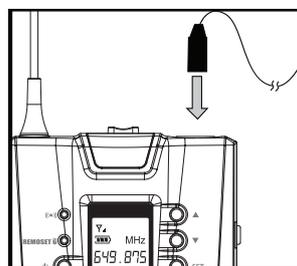
Features

- Low-profile design provides unobtrusive pickup
- Durable, flexible material allows for custom fit
- Highly sensitive, omni-directional capsule
- Natural skin tone blends in seamlessly
- Collar clip adds stability

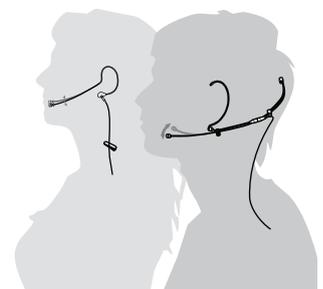
Installation Tips & Guidelines



- Adjust the gooseneck so that it is about $\frac{1}{2}$ " away from the mouth.
- Do not bend the boom past a 20° angle.



- Connect the 4 pin mini-XLR cable into the "MIC IN" of the body pack.

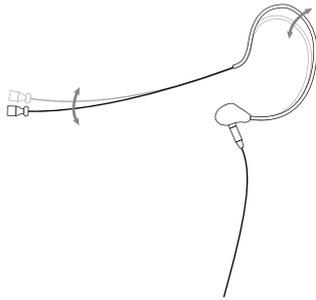


- Attach the detachable cable clip to wherever feels comfortable, such as your back or collar, keeping the cord out of the way.



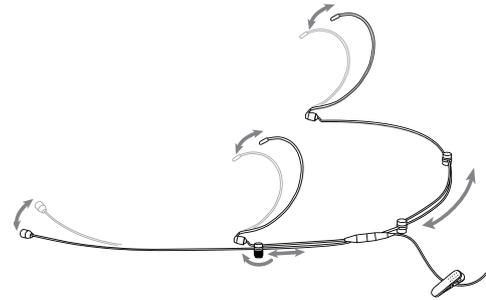
Single Ear Headset Microphone SE-500-SEH

To contour the Single Ear Headset Microphone for your face, gently bend the earpiece into a shape that securely grasps the ear. Then gently bend the boom so that it follows the face and the microphone is positioned close to the mouth.



Double Ear Headset Microphone SE-500-DEH

To contour the Dual Ear Headset Microphone for your face, you will need to adjust the size and bend it into the proper shape. Loosen the adjustment screws, pull the headset to the correct size, then re-tighten the screws to lock the positions in place. Next, gently bend the headset in various locations to create the ideal fit.



10. Lavalier Microphone (included with Body-Pack)

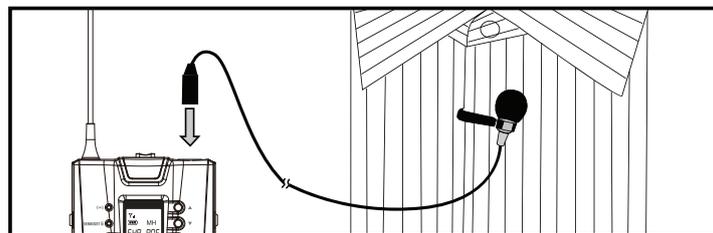
Sense lavalier microphones have an intuitive installation and work great for corporate presentations, houses of worship, audio/video conferencing, video, film and sound reinforcement, and other applications where low-profile, discreet placement is preferred.

Features

- Low-profile design provides unobtrusive pickup
- Wide dynamic range and frequency response for excellent sound reinforcement
- Omni-directional pickup pattern for various applications
- Included clip for securing to clothing.

Installation Tips & Guidelines

- Attach lavalier microphone to a tie, lapel, or wherever is suitable and about 6-10" away from your face.
- Plug the female, 4-pin mini-XLR cable connector into the **MIC IN** of the body pack.



Important Note: Due to the distance between the talker's mouth and the microphone, lavalier microphones are not designed for use in spaces where the talker is being reinforced in the same room - such as training rooms. Using them in these applications will often result in feedback due to the higher gain necessary for proper pickup. For these applications, the single ear hook and double ear hook microphones are recommended.



11. Specifications

SE-350-WR-1CHD			
Frequency Preparation	PLL Synthesized Control		
Carrier Frequency Range	506-542 MHz		
S/N Ratio	>105dB		
T.H.D	<0.6%@1KHz		
Audio Output Level	ϕ6.3 Phone Jack: -10dBV XLR Jack: -4dBV(Line), -24dBV(MIC)		
Controls	Power, group, channel, frequency, muting, button lock, volume, output attenuation (XLR), channel scan (on/off)		
AF Output Impedance	600Ω		
Squelch	Pilot Tone & Noise Mute		
Operation Voltage	12VDC, 500mA		
Output Connector	1 × balanced XLR Jack 1 × unbalanced ϕ6.3 jack		
Dimensions	212.3mm(W) * 38.3mm(H) * 144mm(D)		
Antennas	Dual Half-wave		
REMOSET Technology	Ultrasonic		
Included Accessories	1U Rack Ears w/ Antenna Mounts, 12VDC 2.5A Power Supply included		
SE-350-WT-BODY		SE-350-WT-HAND	
Frequency Preparation	PLL Synthesized Control	PLL Synthesized Control	PLL Synthesized Control
Carrier Frequency Range	506-542 MHz	506-542 MHz	506-542 MHz
RF Outputs	10mW / 50mW	10mW / 50mW	10mW / 50mW
Output connector	4-pin mini-XLR (M)	-	-
Stability	±10KHz	±10KHz	±10KHz
Frequency Deviation	±48KHz	±48KHz	±48KHz
LCD Display	Frequency, Battery Level, Sensitivity	Frequency, Battery Level, Sensitivity	Frequency, Battery Level, Sensitivity
Controls	Power, mute, group, channel, frequency, sensitivity adjustment, input level attenuation, auto off	Power, mute, group, channel, frequency, sensitivity adjustment, auto off, button lock	Power, mute, group, channel, frequency, sensitivity adjustment, auto off, button lock
Spurious Emissions	<-50 dBC	<-50 dBC	<-50 dBC
Audio Frequency Response	50-18,000 Hz	50-16,000 Hz	50-16,000 Hz
Battery	AA alkali battery or NIMH rechargeable battery (× 2)	AA alkali battery or NIMH rechargeable battery (× 2)	AA alkali battery or NIMH rechargeable battery (× 2)
REMOSET Technology	Ultrasonic		
Rechargeable	Yes		
Included Accessories	Lavalier Mic., Batteries	Colored End caps, Batteries, Mic. Stand Adapter	
SE-500-SEH-T, SE-500-DEH-T		SE-300-LAV-BLK	
Connector	4-pin mini-XLR (F)	4-pin mini-XLR (F)	
Frequency Response	60-15,000Hz	60-15,000Hz	
Polar Pattern	Omni-directional	Omni-directional	
Sensitivity (at 1KHz)	-64±3 dB* (0.63mV)	-60±3 dB* (1mV)	
Impedance	1.8kΩ	2.2kΩ	
Max. SPL for 1% THD	130dB	130dB	
SE-ANT-BM			
Carrier Frequency Range	470-870 Mhz		
Antenna Gain	1.8 dBi		
Booster Gain	10 (+2, -1) dB		
Coverage Angle	360°		
Operation Voltage	12-18v		
Rating	Indoor/Outdoor (not waterproof)		

