

# Simeon *Ranger*



User Manual

Thank you for choosing the Simeon Ranger remote microphone system. Your Ranger system uses UHF wireless radio technology to help you hear better across a distance and in noisy environments. Ranger has 96 transmission channels, extended operating range, higher volume and studio-quality sound. It can be used with many types of listening accessories and can be coupled wirelessly with most hearing aids and cochlear implants.

Included with your Ranger system:

- Ranger transmitter with mini microphone
- Ranger receiver
- Device holster with lanyard (2)
- Dual micro USB charger
- Earphones
- Carry case
- User manual

## Ranger transmitter



When listening in noisy environments, have the speaker wear the transmitter with the plug-in microphone within 25cm of their mouth. For even better performance in noise, use an optional boom (headset) microphone with the transmitter. This will capture the speaker's voice at just a few centimeters from the mouth.

External audio devices such as computers and phones can be connected directly to the microphone input port with a cable. Your Ranger transmitter will detect this audio signal and automatically adjust the signal level.

You can make fine volume adjustment with the transmitter using the -/+ keys. The full range of volume adjustment is made on the receiver.

## Ranger receiver



You can listen to your Ranger receiver with stereo headphones, earbuds and a range of specialized listening accessories.

**⚠ Caution** - avoid excessive volume levels. Listeners with normal hearing sensitivity should use low-output (attenuated) earphones for prolonged use of Ranger. The receiver volume control can be locked with the keypad to prevent unintended volume changes.

If you have telecoil-equipped hearing aids or cochlear implants, use the neckloop or other optional Ranger coupling accessories to connect to your device wirelessly. You may have to select a 'T' or 'MT' setting on our personal equipment. Consult with your hearing professional to select the best listening accessory for your personal equipment.

Note that when no transmission is detected for 20 minutes, the receiver will turn off automatically to conserve the battery power.

## Using the Ranger keypad

### Power On / Off

Press and hold  for 2 seconds

### Volume control

Increase  Decrease 

### Volume control lock / unlock



Press and hold   together for 2 seconds

### Microphone mute / unmute

Press  briefly

### Change channel

Press and hold   together for 2 seconds

Select a channel using  or 

Press  briefly to confirm the channel selection

## Charging your Ranger

Use the micro USB cable to charge the system. A full charge from empty may take six hours. The battery icon will stop flashing when charging is complete. Before storing your Ranger for prolonged periods, fully charge the transmitter and the receiver. Special dual-pocket and multi-pocket charging stands are available for multiple Ranger units.

## Warranty

Your Simeon Ranger has a 3 year warranty as standard, effective from the date of purchase. Peripherals including microphones, chargers, adapters and batteries are warranted for one year.

The manufacturer's warranty provides for repair or replacement of defective components or workmanship. Expressly not covered are damages resulting from water damage and the unapproved substitution of components, batteries or accessories. Extended warranty coverage may be purchased under the Simeon Service Plus extended full service program.

## Technical specifications

	Overall System		
Frequency preparation	PLL synthesized control OSC, 96 UHF channels		
Modulation	Wideband FM		
Carrier frequency range	640 ~ 664 MHz (Ranger 1.0); 514 ~ 544 MHz (Ranger 1.1)		
Nominal / Peak deviation	±20KHz / ±40KHz		
Frequency response	40Hz ~ 18KHz		
Dynamic range	> 80dB		
THD at 1KHz	< 1%		
Service coverage	Up to 100 m (open field)		
Operating temperature	-10°C ~ 50°C		
	Ranger T1.0 T1.1 Transmitter	Ranger R1.0 / R1.1 Receiver	
RF output power	10mW	—	
Antenna type	Whip antenna	Headphone antenna	
3.5 phone jack	Mic / Aux In	Headphone output	
Operating time	12 hours	18 hours	
Battery type	1300mA 3.7V Li-Polymer Rechargeable		
Charging source	DC 5V Micro USB		
Charge time	< 6 hours		
LCD display	Channel, Battery indicator, Lock, Volume		
Regulatory compliance	FCC / Industry Canada		
Dimension	82.6(H) × 40(W) × 12(D)mm Antenna length not included	82.6(H) × 40(W) × 12(D)mm	82.6(H) × 40(W) × 12(D)mm
Weight	49 g		

**Notice :**

This device complies with part 15.236 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.

■ **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for help.

**FCC Caution:** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).