

BOSS WL-20 / WL-20L
Owner's Manual

Before using this unit, carefully read "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (the leaflet "USING THE UNIT SAFELY"). After reading, keep the document(s) where it will be available for immediate reference.

Stable wireless communication with no dropouts (Auto Wireless Connection)

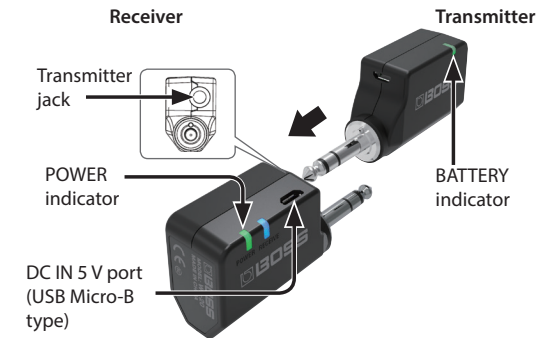
Simply connect the transmitter with the receiver; the receiver scans the local state of the wireless spectrum and automatically chooses the optimal channel.

Switches to standby mode when silence continues

When one hour passes without you playing your guitar (musical instrument), the transmitter enters standby mode and ends the connection with the receiver. When one hour passes after the connection with the transmitter has ended, the receiver enters standby mode.

Charging Both the Receiver (WL-20 / WL-20L) and Transmitter (WL-T)

- 1. Connect the included USB cable and a commercially available USB AC adaptor (5 V/0.5 A or higher) to the receiver's DC IN 5 V port.
- 2. Insert the transmitter into the TRANSMITTER jack so that the transmitter also charges.



NOTE

Insert only the BOSS WL-T transmitter into the TRANSMITTER jack. If you connect headphones, high-volume sound might be emitted, or the headphones might be damaged.

POWER indicator	
Lit orange	Charging.
Blinking green	Charging is completed, and the transmitter is in standby mode.
Rapid blinking red	A charging error occurred. Contact your dealer or a Roland customer service center.

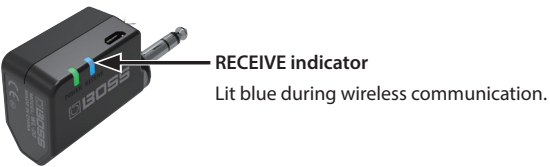
BATTERY indicator	
Blinking orange	The system is monitoring the local state of the 2.4 GHz wireless spectrum for 10 seconds, and automatically making adjustments so that the receiver and transmitter can connect with optimal stability (Auto Wireless Connection).
Lit orange	Charging (Auto Battery Charge). * The charging time differs depending on the remaining battery charge and on the charging environment.
Blinking green	Charging is completed. * We recommend that you disconnect the transmitter after charging is completed. If you leave it connected, a small amount of power is used from the battery, and the indicator blinks green once every eight seconds. * If you have not used the transmitter for a long time, one charge might not be sufficient. Disconnect and reconnect the transmitter to complete charging.
Lit green	When five hours have passed since charging started, charging automatically stops in order to protect the rechargeable lithiumion battery, even if charging was not completed. To charge completely, disconnect and reconnect the transmitter.
Blinking red	A charging error occurred. ➡ "Troubleshooting."

Charging only the transmitter

Connect the included USB cable and a commercially available USB AC adaptor (5 V/0.5 A or higher) to the DC IN 5 V port.

* When charging from the DC IN 5 V port, the wireless connection does not operate.

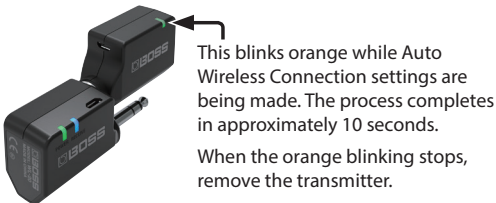
Other parts and their function



Making Wireless Settings (Auto Wireless Connection)

* Execute the following operation before you play your guitar (musical instrument). In particular when you're playing live or in a session, the wireless conditions might change between the rehearsal and the actual event, so you should execute the following operation once again before the actual event.

- 1. Insert the transmitter into the TRANSMITTER jack.



For stable wireless communication

If audio dropouts occur, it might be that the local state of the wireless spectrum has changed. Execute the Auto Wireless Connection operation once again.

Since the WL-20 / WL-20L uses a 2.4 GHz wireless system, we recommend that you place the receiver at least three meters away from a Wi-Fi router or other wireless device.

Using a microwave oven might also cause audio dropouts due to wireless interference.

Using multiple wireless systems together

To prevent confusion between the wireless systems, perform the following steps.

- 1. Power-off the BOSS wireless systems.
- 2. Power-on any wireless systems not made by BOSS, and set them up so that there are no problems with their sound.

First wireless system unit made by BOSS

- 3. Insert the transmitter into the receiver's TRANSMITTER jack and execute the Auto Wireless Connection procedure.

- 4. Plug the transmitter into your guitar (musical instrument), making the BATTERY indicator light.

Second and subsequent wireless system units made by BOSS

- 5. Repeat steps 3 and 4.

Performing

When you plug the transmitter into your guitar (musical instrument) and plug the receiver into your amp or effect unit, the transmitter and receiver power-on automatically.

* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

POWER/BATTERY indicator	
Lit green	There is sufficient remaining battery capacity.
Blinking green	Standby mode.
Lit orange	Battery will be exhausted in less than two hours.
Lit red	Battery will be exhausted in less than 30 minutes. Please recharge.

Switches to standby mode when silence continues

- When one hour passes without you playing your guitar (musical instrument), the transmitter enters standby mode and ends the connection with the receiver. The BATTERY indicator blinks green.
- When one hour passes after the connection with the transmitter has ended, the receiver enters standby mode. The POWER indicator blinks green.

Note when returning from standby mode

- When you raise the volume of your guitar (musical instrument) and play it, the transmitter returns from standby mode in approximately two seconds.
- The receiver must be disconnected and reconnected.

When not using the system for an extended time

Unplug the transmitter and receiver. Standby mode does consume battery power, although only very slightly.

Turning the Power Off

- 1. Minimize the volume of your guitar (musical instrument) and of output devices such as the amp, and then turn off the power.
- 2. Unplug the transmitter from the guitar (musical instrument).
- 3. Unplug the receiver.

Troubleshooting

Problem	Items to check/Action
No sound when you play the guitar (musical instrument) in which the transmitter is inserted	Remove and reinsert the transmitter in the guitar (musical instrument).
	Is the receiver too far away from the transmitter? Alternatively, are there obstructions between them?
	Decrease the distance between the receiver and the transmitter.
	Could you be recharging transmitter from the DC IN 5 V port?
	Disconnect the USB cable when you're playing.
The sound of a different guitar (musical instrument) is heard	Is the transmitter's BATTERY indicator lit?
	If it is unlit, recharge the transmitter.
	Is the receiver's RECEIVE indicator lit?
	If it is unlit, execute the Auto Wireless Connection procedure.
	Could there be a different receiver or transmitter nearby?
The BATTERY indicator blinks red	Execute the Auto Wireless Connection operation once again.
	If this does not solve the problem, it could be that radio-frequency congestion on the 2.4 GHz band is causing channels to conflict with another wireless system.
	To reduce radio-frequency congestion, turn off the power of any unused Wi-Fi router, Bluetooth device, or microwave oven, and then execute the Auto Wireless Connection operation once again.
	A charging error occurred.
	• If the transmitter's internal temperature rises, charging might pause. This occurs in order to protect the rechargeable lithium-ion battery. When the internal temperature falls, the BATTERY indicator changes to be lit orange, and charging resumes.
	• Could the ambient temperature be above 35 °C?
	Charging might stop for a while in order to protect the rechargeable lithium-ion battery. Use the unit in the recommended ambient temperature range of 10–30°C.
	• If the indicator continues blinking red even though you are charging in the recommended temperature range (10–30°C) Contact your dealer or a Roland customer service center.

Main Specifications

BOSS wireless system: WL-20 / WL-20L

RECEIVER	
Wireless Format	BOSS proprietary digital audio format
Wireless carrier frequency	2.4 GHz
Compatible Channels	14 (May vary due to local conditions)
Transmission Range	15 meters (50 feet) line-of-sight (May vary due to local conditions)
Latency	2.3 ms
Dynamic Range	110 dB or greater
Frequency Response	20 Hz–20 kHz
Nominal Output Level	-10 dBu
Output Impedance	1 kΩ
Recommended Load Impedance	10 kΩ or greater
Indicators	POWER RECEIVE
Connectors	Output plug: 1/4-inch TRS phone type TRANSMITTER jack: 1/4-inch TRS phone type DC IN 5 V port: USB Micro-B type
Power Supply	Rechargeable lithium-ion battery Supplied from the DC IN 5 V port
Current Draw	While charging: 500 mA
Battery charging time	Charging only the receiver: Approximately 3 hours Charging simultaneously with the transmitter: Approximately 4 hours
Dimensions	87 (W) x 25 (D) x 38 (H) mm 3-7/16 (W) x 1 (D) x 1-1/2 (H) inches
Weight	60 g 3 oz
Accessories	Owner's Manual Leaflet USING THE UNIT SAFELY Transmitter Micro USB cable for charging (*1) *1: Use a standard USB AC adaptor (5 V/over 0.5 A) for charging.

* 0 dBu = 0.775 Vrms

TRANSMITTER (WL-T)	
Nominal Input Level	-10 dBu
Indicator	BATTERY
Connectors	Input plug: 1/4-inch TRS phone type DC IN 5 V port: USB Micro-B type
Power Supply	Rechargeable lithium-ion battery Supplied from the DC IN 5 V port
Battery charging time	Charging only the transmitter: Approximately 3 hours Charging simultaneously with the receiver: Approximately 4 hours
Dimensions	87 (W) x 22 (D) x 36 (H) mm 3-7/16 (W) x 7/8 (D) x 1-7/16 (H) inches
Weight	43 g 2 oz

* 0 dBu = 0.775 Vrms

* This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.

https://roland.cm/wl-20_wl-20l_spec

