



*WaveAngle*

THE SMART WAY TO WIRELESS

# User's Manual

WARAD-GGS01



*Radian*<sup>™</sup>

**DIGITAL MINI**

Wireless Guitar System

# Welcome!

Thank you for purchasing this product from WaveAngle. In this manual you will find instructions for setup and operation of the WARAD-GGS01 Gold Series Wireless Guitar System.

Enjoy your WaveAngle Radian System - *the smart way to wireless!*

## Limited Warranty

- A. WaveAngle warrants the following product against defects in material or workmanship as follows:

One Year limited warranty for Radian Wireless Guitar System.

Please do not attempt to perform your own service. Warranty is void if product has been tampered with.

- B. Who is covered:

The original owner of the product who can provide a dated proof of purchase, as well as online product registration. The warranty is non-transferable.

- C. How to get service:

Please contact and return to vendor or place of purchase. When packing for return you must enclose:

- Your name, full address, and telephone number
- The original dated proof of purchase (receipt)
- A description of the problem or reason for return

**Please register this product online at: [www.waveangle.com/register](http://www.waveangle.com/register)**

**For comments or questions, please contact: [inbox@waveangle.com](mailto:inbox@waveangle.com)**

## **FCC Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Parts 74, 15, and 90 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.

**FCC NOTE:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

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.

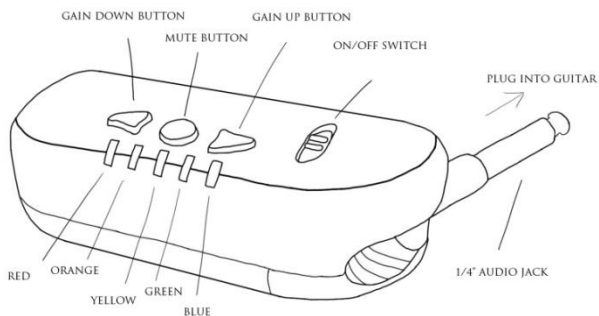
## **Safety Information**

Do not expose the equipment to excessive heat, dust, moisture, rain, mechanical vibrations, or shock.

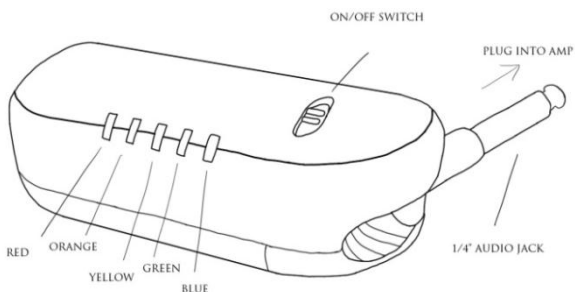
Be sure to dispose of used batteries as required by local waste disposal rules. Never throw batteries into a fire or garbage bin.

When scrapping the equipment, remove the batteries, separate the case, circuit boards, and cables, and dispose of all components in accordance with local waste disposal rules.

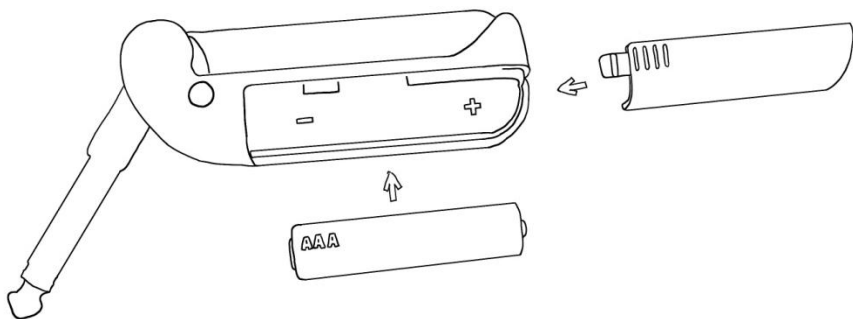
# GGG01 Transmitter and Receiver



**FIGURE 1 - Transmitter**



**FIGURE 2 - Receiver**



**FIGURE 3 - Battery Installation**

# Controls and LED Indicators

<b>Buttons:</b>	Mute	- Mute and unmute audio
	Gain Up	- Turn up Transmitter Gain
	Gain Down	- Turn down Transmitter Gain

<b>LEDs:</b>	Red	- Low Battery
	Orange	- Mute
	Yellow	- Low Radio Signal
	Green	- Sleep mode
	Blue	- Radio Link Status

## Operation and Features

### A. Insert Battery

Insert one AAA battery into the Transmitter and one AAA battery into the Receiver as shown in Figure 3.

### B. Power On

With the Receiver unplugged from the amplifier, turn on the Transmitter and Receiver. A solid blue LED indicates the pair is linked ( see 'Pairing' under section F)

The Transmitter and Receiver will power on in mute mode, as indicated by the orange LED.

### C. Pairing

When first powered on, the Radian Transmitter and Receiver automatically search for a partner to pair with. A blinking blue LED indicates that the device is actively searching.

When a pair is found, a 'private key' is automatically set up and the pair is locked exclusively to each other for as long as the Transmitter and Receiver are both ON.

To create a new pairing (or if paired incorrectly), simply power both units off and on again.

Up to ten pairs can run simultaneously, depending on the environment and what other RF devices may be present and active in the 2.4GHz ISM band.

If interference is present, the Radian Systems will automatically avoid collisions and make best use of available frequencies.

## **D. Plug In**

With the Radian System in mute mode, plug the Transmitter into the instrument and the Receiver into the Amplifier.

## **E. Built-in Tuner**

To use the built-in tuner function, press both 'Gain Up' and 'Gain Down' buttons simultaneously. The LED indicators will flash to indicate the Transmitter is in tuner mode.

The Transmitter will 'lock in' on any string played, using standard tuning, and the LEDs will display (Orange and Red) for sharp, and (Green and Blue) for flat. A steady flashing Yellow LED indicates in-tune.

Note that the tuning function can be used whether muted or unmuted. Press any button to exit tuner mode.

## **F. Mute and Un-mute**

Turn on and off mute mode by pressing the center button on the Transmitter. Mute is indicated by a steady 'Orange' LED on both the Transmitter and the Receiver.

## **G. Sound Adjustment**

The Radian System powers up with nominal unity gain. The Transmitter input gain may be adjusted as desired by pressing the gain up and down buttons.

The LEDs temporarily switch to gain meter mode during adjustment to indicate gain level.

# Specifications

## System Specifications

Transmission Format:	2.4 GHz digital frequency agile
Frequency Response:	10 Hz – 20 kHz
Signal to Noise Ratio:	>100 dB
Total Harmonic Distortion:	0.8%
Audio Dynamic Range:	>90 dB
RF Output Power:	0 dBm
System Gain:	Nominal Unity Gain
Maximum Input Level:	2.8 V <sub>PP</sub>

## Receiver Specifications

Dimensions:	2.9"L x 1"W x 0.9"H
Power Requirements:	1 AAA battery
Weight:	1.3 oz (without battery)

## Transmitter Specifications

Input Impedance:	120 kΩ
Dimensions:	2.9"L x 1"W x 0.9"H
Power Requirements:	1 AAA battery
Weight:	1.3 oz (without battery)