



## USER MANUAL

# ORTEGA DIGITAL WIRELESS SYSTEM

ODWS-1



Thank you for purchasing the Ortega DIGITAL WIRELESS SYSTEM. Please read this manual carefully before using this product. Keep the manual for future reference.



**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**



WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT DISASSEMBLE. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE APPLIANCE TO RAIN OR MOISTURE.

## **CAUTION**

This equipment has been tested and found to comply with the limits of a Class B digital device pursuant to part 15 of FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received including interference that may cause undesired operation.

## CAUTION

**Warning:** Changes or modifications that are not expressly approved in a written format by Ortega may void the users authority to operate this equipment.

**RF Exposure Statement:** This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

**Note:** 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 on, the user is encouraged to try to correct the interference by one or more 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 the receiver is connected to.
- Consult your dealer or an experienced radio/TV technician for help.



**IMPORTANT SAFETY INSTRUCTIONS**  
**STORE THESE INSTRUCTIONS**  
**IN A SAFE PLACE**



**WARNING: BEFORE USING YOUR ORTEGA DIGITAL WIRELESS SYSTEM, CAREFULLY READ THE OPERATING INSTRUCTIONS.**

1. Observe all instructions carefully in the manual.
2. Do not perform service operations beyond those described in the manual. Service is required when the apparatus has been damaged in any way, such as:
  - Liquid has been spilled over or objects have fallen into the apparatus
  - The unit has been exposed to rain or moisture
  - The unit does not operate normally or changes in performance are significant.
  - The unit is dropped or the enclosure is damaged
3. Do not place near heat sources, such as radiators, hot plates, or appliances which produce heat.
4. Prevent objects or liquids from entering the device.  
Do not use or place the unit near water.
5. Clean only with a damp cloth.
6. Only use attachments/accessories specified by the manufacturer.

7. Prolonged listening at high volume levels may cause irreparable hearing loss and/or damage. Always be sure to practice "safe listening."

## **PRODUCT INTRODUCTION**

The Ortega DIGITAL WIRELESS SYSTEM features digital wireless technology delivering incredible audio quality, a simple setup, and is extremely reliable for any gigging musician. It supports a full 20 Hz - 20K Hz frequency range, so you will hear your guitar tone in great detail. This wireless system operates at 2.4GHz ISM band for crystal clear broadcasting ensuring the integrity of your signal on stage and covering 100 feet of range without any signal dropout. The li-ion batteries make the Ortega DIGITAL WIRELESS SYSTEM environmentally friendly. It can last up to 5 hours per charge. The chassis is made out of a durable ABS plastic that can withstand the issues of touring and the harshest climates. This wireless system is a perfect fit to any pedal board thanks to its simplistic and compact design. Go wireless with the Ortega DIGITAL WIRELESS System. It will declutter the stage and offer a higher freedom of movement.

## SYSTEM SPECIFICATIONS

Range	>100 feet Line-0-site outdoors.*
Latency	<5ms
Frequency Response	20-20K Hz,+1dB/-3dB
THD + Noise	<0.05%(1K Hz @-10dbFS)
Dynamic Range	>103dB A weighted
Operating Band	2.4G Hz ISM Worldwide
Operating Temperature	-10°C to 50°C
Sample Rate	24bit/48K Hz uncompressed digital transmission

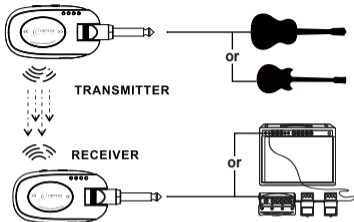
**Auto sleep/wake up mode:**The transmitter will turn to sleep mode if there is no signal input for 10 seconds.

**\*Note:** Actual range is dependent on RF environment, including reflections, interference and absorption

## PACKAGE DETAILS

- 1x Guitar Transmitter
- 1x Guitar Receiver
- 1x USB cable
- 1x Manual

## QUICK START DIAGRAM

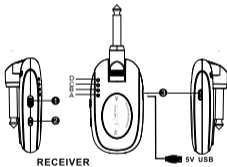
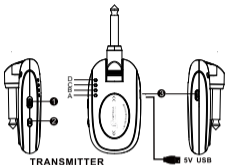


1. Transmitter is plugged into the Guitar (your instrument), the receiver is connected to your effect pedal, AMP, Audio, etc.
2. Turn on the transmitter and the receiver. The A B C D LED indicates the battery life with each LED standing for about 25% of the power left. For example: If the A B C D LEDs all light up, it 100% of the battery charge is left. If only the A LED lights up, about 25% of the battery charge is left. If the A LED turns red and flashes, the battery is low and needs to be charged.



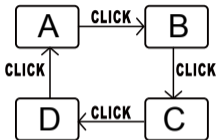
3. Channel Selection: The system's preset channel is channel A. After indicating the battery life, the A LED will flash. If the transmitter and the receiver are connected successfully the channel LED ( of the channel you have selected) will stop flashing and turns solid green. If there is an interruption through the environment, you can click on the "Channel" button to choose another channel.
4. Charging: Put the micro USB plugs into the transmitter and receiver. After that, hook up the standard USB end with a energy souce like your PC or a powerbank. While charging the A B C D LED will all light up indicating the status of the overall battery charge.

## BASIC OPERATION



1. **Power** - Slide Switch to turn on/off TRANSMITTER/RECEIVER
2. **Channel Select** - Align TRANSMITTER and RECEIVER channels.

Click the switch to select a channel (A B C or D).  
Follow the diagram below to set up the channel. The audio signal indicator LED will flash to indicate the selected channel.



### 3. Battery LED and Channel LED

When the system is switched on the lighting LED number indicates the battery life. If 3 LEDs light up, it means  $3 \times 25\% = 75\%$  of the battery life is left. The A LED has 2 functions, one is channel indication, the other is turning to red indicating low battery live and the need to be charged.

### 4. Transmitter audio signal indicator LED

When switched on the A LED will flash to indicate the preset channel „A“.

## Q & A

### **Four channels**

The Ortega DIGITAL WIRELESS SYSTEM has four different channels and can operate with 4 active pairs of systems at the same time. When your band uses several pairs for guitar, bass, keyboard and one other instrument, you can set up 4 different channels preventing signal interferences. When there is only one player, the different channel function can also be used to prevent interferences from different frequency bands of routers or other WIFI devices. Generally we recommend to use Channel A.

### **Portable Plug-and-Play design**

The Ortega DIGITAL WIRELESS SYSTEM features a portable format; both the transmitter and the receiver are designed for plug-and-play. The system is very convenient for fast switching among guitar, bass, amplifiers, effect pedals and other audio equipment.

### **One Transmitter and multiple Receivers**

When using a transmitter, you can use multiple receivers. For example: If you want to connect a guitar

to two amplifiers, you just need to use multiple receivers being set to the same channel as your transmitter.

### **Receiver**

As the system is working with 2.4 GHz, please avoid putting the receiver close to other signal emitting devices. It is recommended that your receiver keeps a distance of more than 3 meters from other 2.4 GHz transmitters and WIFI routers.

### **Auto sleep/wake up mode**

The auto sleep/wake up mode will activate when there is no signal input for over 10 seconds. On the one hand this feature cuts the signal and prevents you from unwanted noise on stage and on the other hand it also helps you to save battery life.

### **Power charge**

You find a "Y" shaped cable in the package. It can charge the transmitter and receiver at the same time. The voltage output is 5V. The channel A LED never turns to red during normal use. If the A LED light is flashing this means low battery life which requires immediate power charge.

When in charging mode, the A B C D LED will flash orderly with indicating the battery status. For example: If both LEDs, A and B, are solid green and the C LED is flashing, it indicates that 2/4 of the battery life is charged fully and that it continues charging. In another words 50% battery life is charged. When the battery is fully restored, the A B C D LEDs will all become solid green.

### **Channel LED flashing after pairing**

If the channel LED light is flashing it indicates that there is a signal interference. Please switch to another channel and turn off or stay away from other 2.4GHZ WIFI sources. Make sure the transmitter and receiver devices are in a signal receiving range.

### **Antenna angle**

The antenna is located at the rear end of the devices. There the signal of the transmitter and the receiver is the strongest. It can be used at about an angel of 180°. Please adjust the devices so that the front of the transmitter and receiver are facing each other during usage. Do not block the antenna with your hand or any other item and keep the signal within the receiving range of the antenna.

Being confronted with interference from other devices or needing a higher reach on stage, you can change the antenna's angle and adjust it to the best condition.

### **Pickups and preamp systems**

The Ortega DIGITAL WIRELESS SYSTEM works with passive and active electronics, piezoelectric acoustic guitar pickups and piezoelectric violin pickups.

Please connect the transmitter directly to your instrument. Avoid connecting it to distortion/overdrive pedals or high power output interfaces.

### **USB**

USB only works for charging the battery and does not support firmware upgrades.



Ortega - a brand of Roland Meinl Musikinstrumente  
GmbH & Co. KG Musik-Meinl-Str.1 | 91468 Gutenstetten,  
Germany | [www.ortegaguitars.com](http://www.ortegaguitars.com)

Designed in Germany | Manufactured in P.R. China