
DMXtra!™ WIRELESS TRANSCEIVER

Operating Instructions



| | |
|---------------------|-------------------|
| 5-Pin Female | P/N 250053 |
| 5-Pin Male | P/N 250054 |
| 5-Pin Set | P/N 250055 |
| 3-Pin Female | P/N 250063 |
| 3-Pin Male | P/N 250064 |
| 3-Pin Set | P/N 250065 |

Thank you for purchasing this DMXtra!™ Wireless Transceiver!

- ❑ **To ensure proper operation of this unit, please take some time to read the manual carefully.**
- ❑ **We believe you will enjoy years of great service if you properly care for your new DMXtra!™ Wireless Transceiver.**

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1. Equipment Supplied

- DMXtra!™ Wireless Transceiver
- AC/DC Power Adapter
- Instruction Booklet

2. Accessories

| | |
|----------------|-------------|
| • 5-Pin Female | P/N: 250053 |
| • 5-Pin Male | P/N: 250054 |
| • 5-Pin Set | P/N: 250055 |
| • 3-Pin Female | P/N: 250063 |
| • 3-Pin Male | P/N: 250064 |
| • 3-Pin Set | P/N: 250065 |

Please check whether all the products you ordered are supplied.

3. Description

The DMXtra!™ Wireless Transceiver allows you to go cord-free with your DMX controlled devices. The DMXtra!™ uses the license free, 2.4GHz ISM (industrial, scientific and medical) band to wirelessly transmit DMX data and FHSS (frequency-hopping spread spectrum) with 79 channels for interference-free operation.

4. Safety Instructions

WARNING: Read and understand all labels and operating instructions before attempting installation.

- Keep away from heat.
- No user serviceable parts. Taking apart the DMXtra!™ will void your warranty.
- Use only the included AC/DC power adaptor. Damage may occur if unapproved adapter is used.
- Do not operate or store in wet locations. The DMXtra!™ is not waterproof.
- May interfere with Wi-Fi signal.
- Do not use in dusty areas.
- Do not use alcohol, acetone or other similar solvents to clean.
- Prevent contact with static electricity.

5. Operating the DMXtra!™

5.1 Electrical Power Requirements

Be sure to use a **NON DIMMABLE** circuit that can provide 1 amp at 100-240Vac 50/60Hz.

5.2 Operating Mode

The wireless transceiver has two operating modes: **set-up mode** and **use mode**.

1. **Set-up mode:** Press and hold the button before you power up. When you see the status indicator turn into the white light, release the button to enter the **set-up mode**. In this mode you can select different transmission protocols. Each time you press the button you will see the status indicator change in the following order: red, green blue and yellow. In the **set-up mode**, different colors are assigned to different communication protocols which are listed on the following table. Choose one of the protocols and press and hold the button(>1second), when you see the white light, release it to enter the **use mode**.

NOTE: The wireless transceiver will remember the chosen protocol even after you disconnect the power supply. There is no need to reprogram.

2. **Use mode:**

- a. Power up and enter the **use mode**.
- b. If it is in **set-up mode**, press and hold the button (>1second) until you see the white light, then release it to enter the **use mode**.

| Color | Protocol |
|--------|--|
| Red | DMXtra!™ |
| Green | W-DMX Receive |
| Blue | W-DMX G3 Transmit |
| Yellow | W-DMX G4 Transmit OR GZ Protocol |

| Protocol | Action | Status Description |
|---|---|------------------------------------|
| DMXtra! (Default) or GZ Protocol | Red, Green, Blue, Yellow, Cyan, Purple (White) | 6 / 7 Different Wireless Groups |
| | Flashing Red | Transmitting DMX |
| | Flashing Green | Receiving DMX Signal |
| W-DMX Receive | White | Connection is Not Established |
| | Red | Deleting Connection |
| | Red (Fast-Flash) | Connection is Lost |
| | Green (Fast-Flash) | Connecting to Transmitter |
| | Green (Slow-Flash) | Connected, Without DMX Signal |
| | Green | Connected, Receiving DMX Signal |

| | | |
|---------------------------|-------------------|---------------------------------------|
| W-DMX Transmit | Red | Deleting all Receiver's Connection |
| | Blue (Fast-Flash) | Connection with the Receivers |
| | Blue (Slow-Flash) | No DMX Signal Input |
| | Blue | Transmitting DMX |

NOTE:

1. **Flashing:** >20ms ON + <180ms OFF (depending on the refresh rate of the DMX signal).
2. **Fast-Flash:** 100ms ON + 100ms OFF
3. **Slow-Flash:** 900ms ON + 100ms OFF

5.3 Selecting The Wireless Group

Each time you press the button, the status indicator will change different colors. In this case different colors mean different groups. Only when the indicators of the transmitter and receiver show the same color they can communicate with each other. When the transmitter connects to the controller, the status indicator of the transmitter would flash red. If the receiver gets the DMX signal, the indicator would flash green.

NOTE: The first time when you press the button, it will not change the color but show you the group that you are in. If you press it again it will switch to other group.

| | |
|--|--------|
| DMXtra!™ mode supports 6 groups (FHSS, 11 hops/sec) | |
| | |
| 1: RED | Red |
| 2: GREEN | Green |
| 3: BLUE | Blue |
| 4: RED + GREEN | Yellow |
| 5: GREEN + BLUE | Cyan |
| 6: RED + BLUE | Purple |

| | |
|--|--------|
| GZ protocol supports 7 groups (Frequency Agile) | |
| | |
| RED | Red |
| GREEN | Green |
| RED + GREEN | Yellow |

| | |
|--------------------|--------|
| BLUE | Blue |
| RED + BLUE | Purple |
| GREEN + BLUE | Cyan |
| RED + GREEN + BLUE | White |

5.4 Restore Factory Settings

By pressing and holding the button (>1second), the devices will flash “RED-GREEN-BLUE” quickly, and then turns red. Indicates that the device has restored itself to factory settings successfully. The default setting is red.

5.5 Connection & Delete Connection

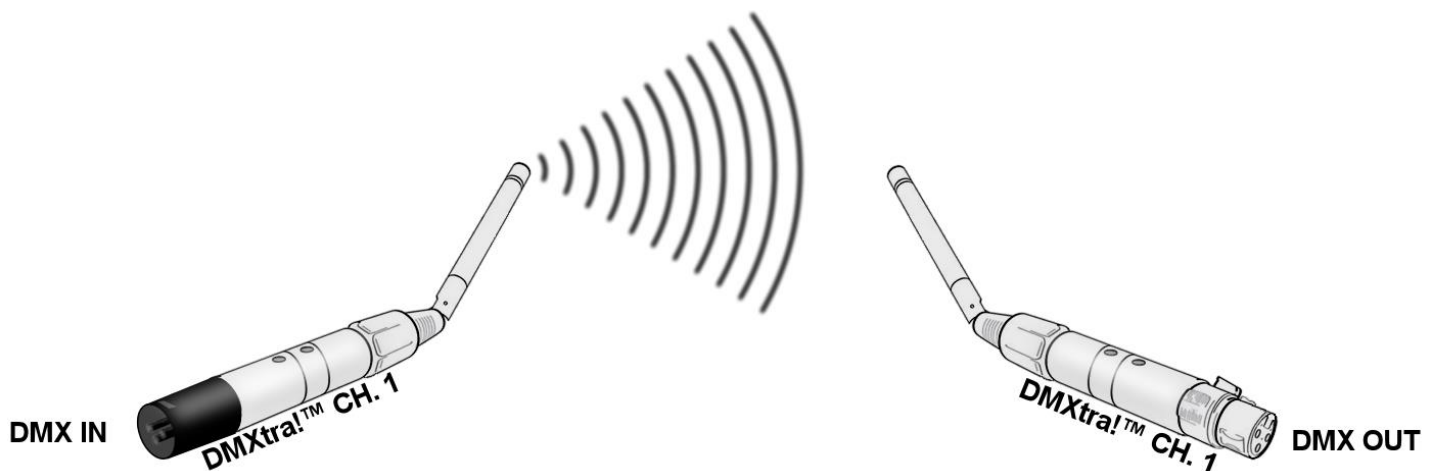
In the W-DMX G3 or G4 Transmit Mode, by pressing the button, the transmitter can be connected to all powered but not connected receivers within the coverage area. Press and hold (>3seconds) the transmitter’s button until the indicator turns red. The device will disconnect with all receivers within the coverage range.

In the W-DMX Receive Mode, press and hold (>3seconds) the receiver’s button until the indicator turns white. The device would disconnect with the transmitter.

NOTE: Receiver could only be connected to the new transmitter after the old connection is deleted.

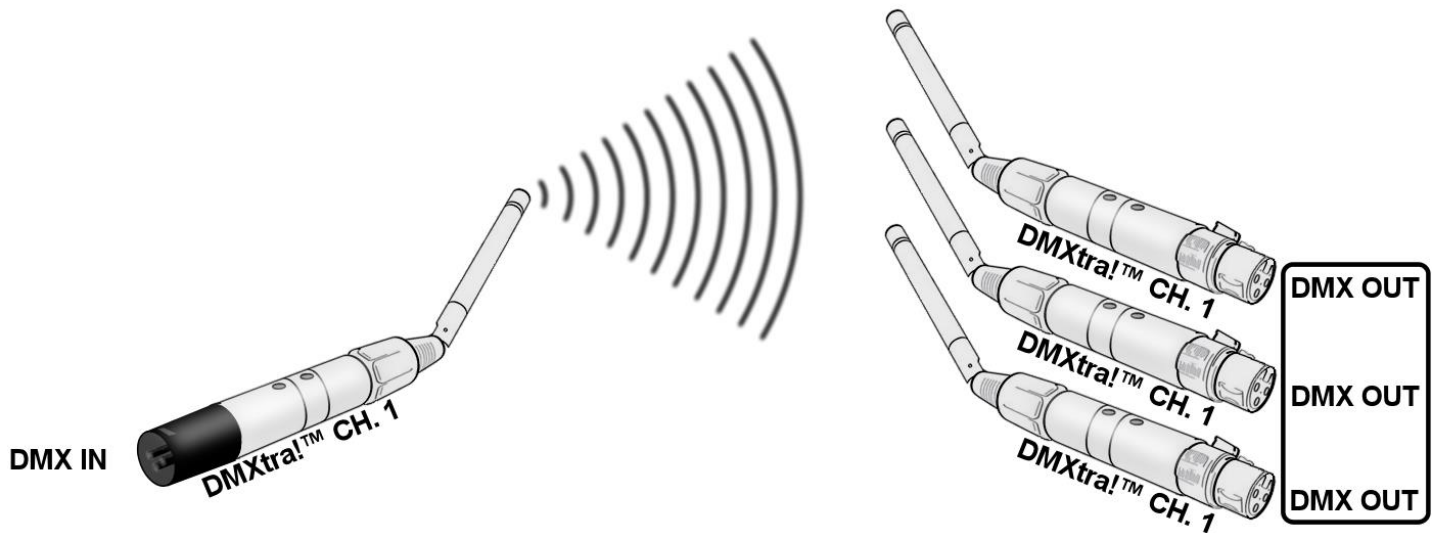
6. Applications

6.1 One Transmitter to One Receiver



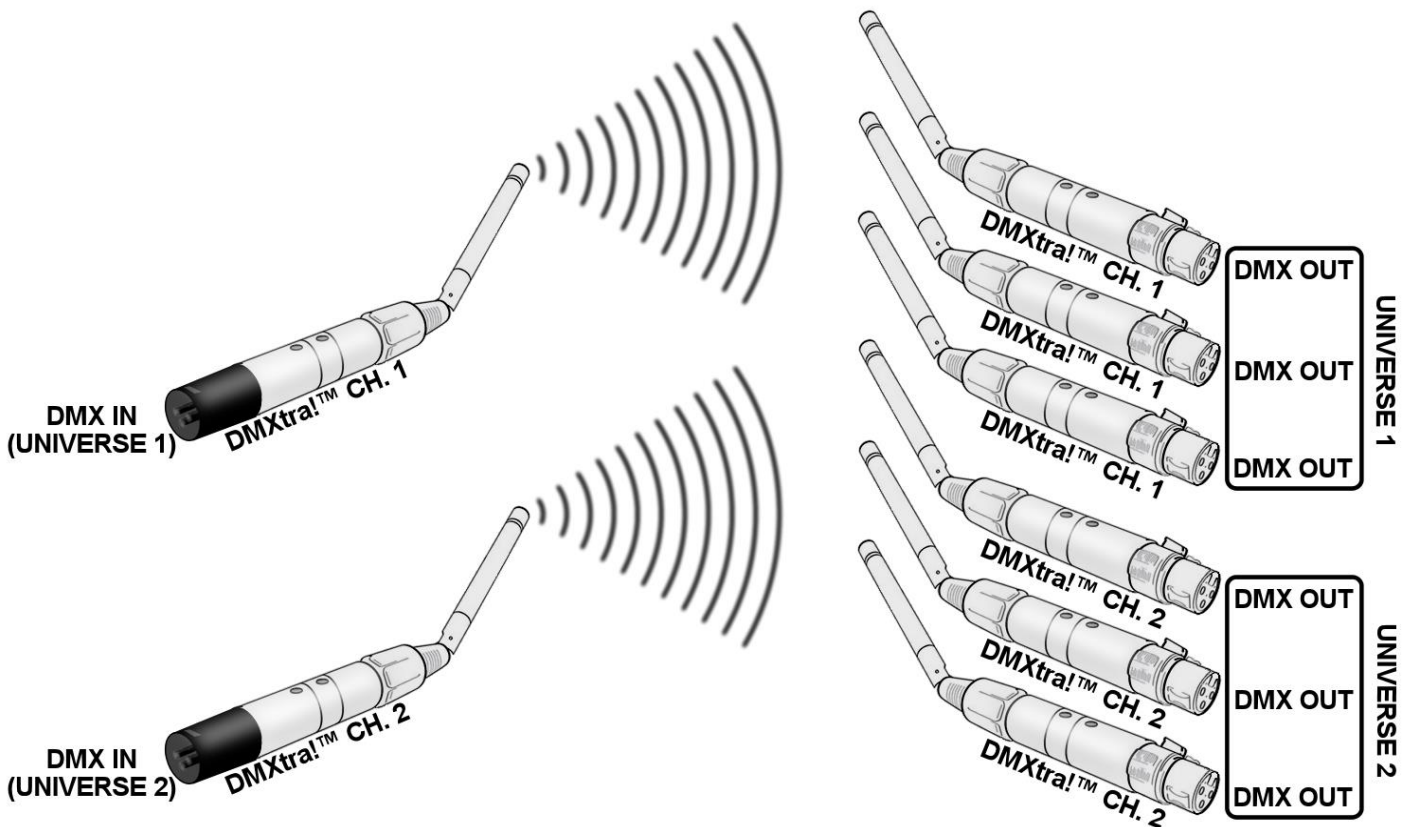
Controller inputs DMX signal onto a wireless transmitter which transmits signal to a receiver within the same protocol group and channel.

6.2 One Transmitter to Many Receivers



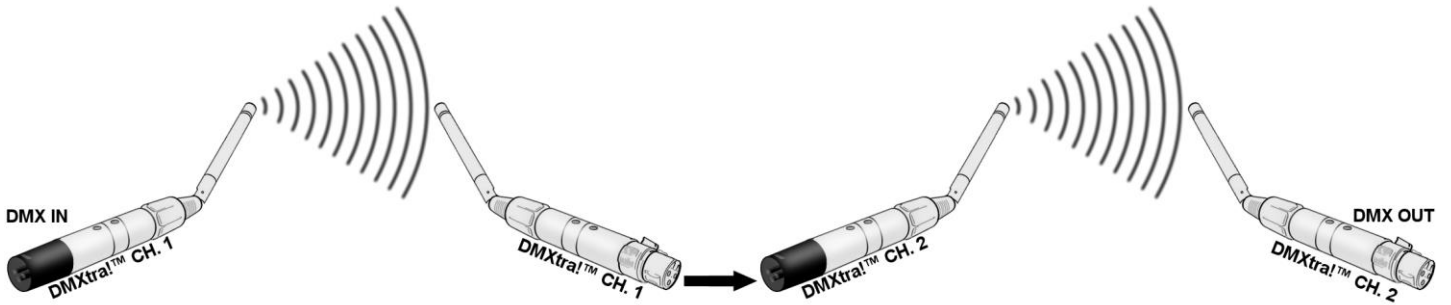
Controller inputs DMX signal onto a wireless transmitter which transmits signal to all the receivers within the same protocol group and channel.

6.3 Parallel Transmission



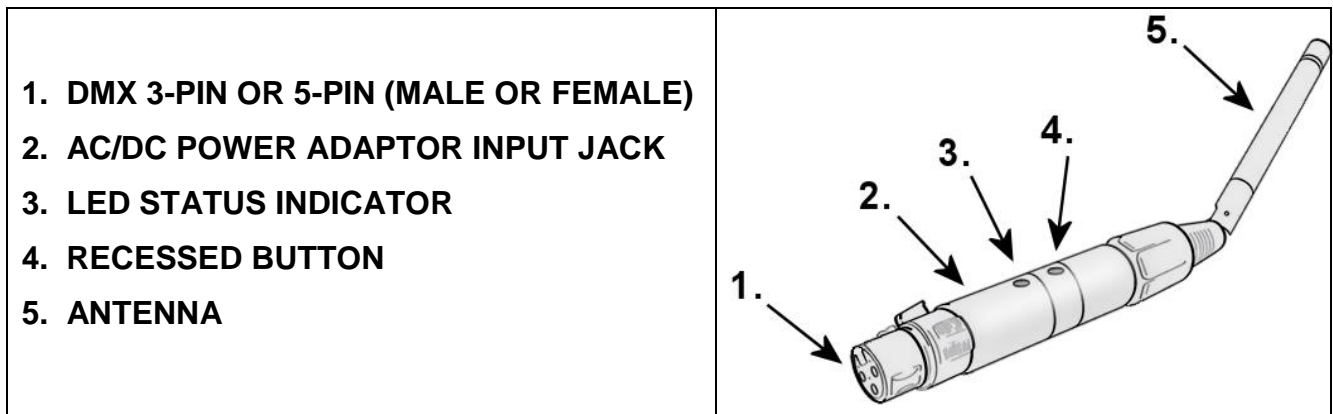
Many sets of radio transmitters can be operated simultaneously without mutual interference.

6.4 Repeater or Amplifier



If directly connecting a receiver to a transmitter (both the receiver and transmitter work in different groups or in different sets), it would become a repeater or amplifier. Doing this can increase the working distance.

6.5 Parts Location



7. Technical Data

| DMXtra!™ | | | | | |
|----------------------------|--------------------------|---|----------------------------|--------------------------|-------------------------|
| 5-Pin Female PN: 250053 | 5-Pin Male PN: 250054 | 5-Pin Set PN: 250055 | 3-Pin Female PN: 250063 | 3-Pin Male PN: 250064 | 3-Pin Set PN: 250065 |
| Dimensions | | 8.5" x 3/4" x 3/4" (215mm x 19mm x 19mm) | | | |
| Weight w/ Power Cord | | | | | |
| Included Accessories | | AC/DC Power Adapter | | | |
| Operating Temperature | | 32°F-122°F (0°C-50°C) | | | |
| Band | | 2.402GHz-2.480Ghz, ISM, 79 Channels | | | |
| Spread Spectrum | | FHSS, 1100 hops/sec | | | |
| Modulation | | GFSK | | | |
| Maximum Transmit Power | | 23dBm | | | |
| Receiver Sensitivity | | -94dBm | | | |
| Electrical Supply | | Input: 100-240Vac 50/60 Hz | | | |
| | | Output: 5VDC 1A | | | |
| Limited Warranty | | One Year | | | |
| Rev. 05/26/2016 | | | | | |

7.1 Federal Communications Commission (FCC) 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. **Warning:** Changes or modifications made to this device not expressly approved by **Shenzhen 3Geyes Technology Co., Ltd.** may void the FCC authorization to operate this device. **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.



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July 16, 2015