LGIDTECH FUTD01

LGIDTECH Mi.Light DMX512 LED Transmitter (Model FUTD01) Instruction Manual

1. Introduction

The LGIDTECH Mi.Light DMX512 LED Transmitter (Model FUTD01) is designed to wirelessly transmit standard DMX512 protocol data. This device facilitates wireless communication between a DMX512 control panel and compatible DMX512 LED light bulbs or LED strip light controllers from the Mi.Light series. Utilizing the 2.4G global ISM frequency, the transmitter ensures reliable data transmission with minimal delay. Each DMX-compatible light bulb or strip controller, or each group of these devices, uses 5 DMX512 communication channels. These 5 channels allow for individual adjustment of red, green, blue, warm white, and cool white brightness from 0% to 100%.
The FUTD01 transmitter can simultaneously control up to 16 individual light bulbs/strip light controllers or 16 groups of these devices, transmitting DMX512 data across 80 channels concurrently.

2. Product Overview

The LGIDTECH Mi.Light DMX512 LED Transmitter is a compact and efficient device for wireless DMX control. It features a digital display, control buttons, and a male DMX connector for integration with DMX consoles.

Figure 2.1: LGIDTECH Mi.Light DMX512 LED Transmitter (Model FUTD01).

Key features include:

- Wireless DMX512 data transmission via 2.4G global ISM frequency.
- Control of up to 16 individual or grouped DMX LED devices.
- 80 DMX channels transmitted simultaneously.
- Individual channel control for Red, Green, Blue, Warm White, and Cool White (5 channels per device/group).
- Digital display for address and zone selection.

Figure 2.2: Transmitter connected to a DMX512 console for lighting control.

3. Setup Instructions

3.1 Component Identification

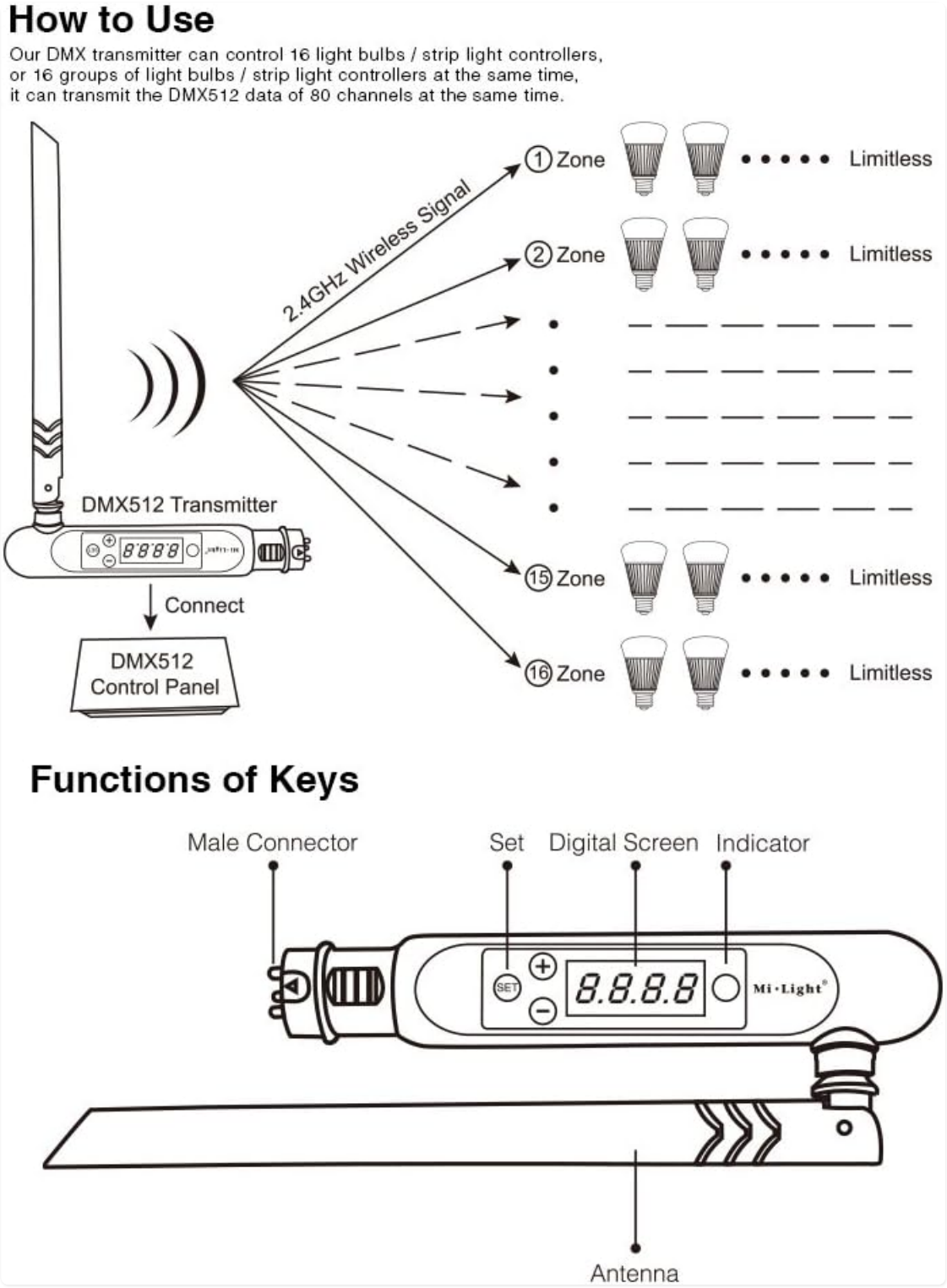

Figure 3.1: Key components of the DMX512 Transmitter.

Familiarize yourself with the transmitter's components:

- **Male Connector:** For connecting to a DMX512 console.
- **Set Button:** Used for entering and confirming settings.
- **Digital Screen:** Displays current DMX address or zone.
- **Indicator:** Provides visual feedback on status.
- **Antenna:** For wireless signal transmission.
- **'+' and '-' Buttons:** For navigating and adjusting values.

Figure 3.2: Male DMX connector and DC 5V power input.

3.2 Initial Connection

1. Connect the male DMX connector of the FUTD01 transmitter to the DMX output of your DMX512 console.
2. Connect the DC 5V power supply to the transmitter.

3.3 Setting the DMX Address

This procedure sets the starting DMX address for the transmitter.

1. Press and hold the "SET" button until the digital display shows "dXXX" blinking.
2. Use the "+" or "-" buttons to select the desired DMX address (from 1 to 512).
3. Once the address is selected, press and hold the "SET" button again until "dXXX" stops blinking to

confirm.

3.4 Linking LED Devices to a Zone

The transmitter can control devices in up to 16 zones. Follow these steps to link a DMX LED light bulb or strip controller to a specific zone.

1. On the transmitter, use the "+" or "-" buttons to select the desired zone (e.g., "CH12" for zone 12).
2. Ensure the DMX LED device you wish to link is powered off.
3. Power on the DMX LED device. Within 3 seconds of the device lighting up, press the "SET" button on the transmitter three times rapidly.
4. The LED device will blink slowly three times with a green color, indicating successful linking to the selected zone.

3.5 Unlinking LED Devices from a Zone

To remove a DMX LED device from its linked zone:

1. Ensure the DMX LED device you wish to unlink is powered off.
2. Power on the DMX LED device. Within 3 seconds of the device lighting up, press the "SET" button on the transmitter five times rapidly.
3. The LED device will blink quickly 10 times with a red color, confirming that it has been unlinked.

4. Operating Instructions

4.1 Channel Allocation

Each DMX LED light bulb or strip controller, or each group of these devices, utilizes 5 DMX channels for control:

- Channel 1: Red brightness (0-100%)
- Channel 2: Green brightness (0-100%)
- Channel 3: Blue brightness (0-100%)
- Channel 4: Warm White brightness (0-100%)
- Channel 5: Cool White brightness (0-100%)

4.2 Adjusting Channels for Linked Devices

To adjust the first channel (Red) of any light within a specific zone (CHXX) or DMX address (dXXX), follow these steps:

1. First, ensure the desired light bulb or group is linked to a zone (CHXX) as described in Section 3.4.
2. Determine the starting DMX channel for the Red color using the following formula:
   [dXXX + (CHXX - 1) * 5] / 16 = Q
   Where:
   - **dXXX** is the DMX start address set on the transmitter.
   - **CHXX** is the zone number (1-16) the device is linked to.
   - **Q** is the quotient.
3. If the result **Q** is not a whole number, and the remainder is **E**, then:
   - Press **Q+1** under the 'Scanner' function on your DMX console (if applicable) and select the corresponding light bulb.

- The channels will then be assigned as follows:
    - Red: Channel **E**
    - Green: Channel **E+1**
    - Blue: Channel **E+2**
    - Warm White: Channel **E+3**
    - Cool White: Channel **E+4**

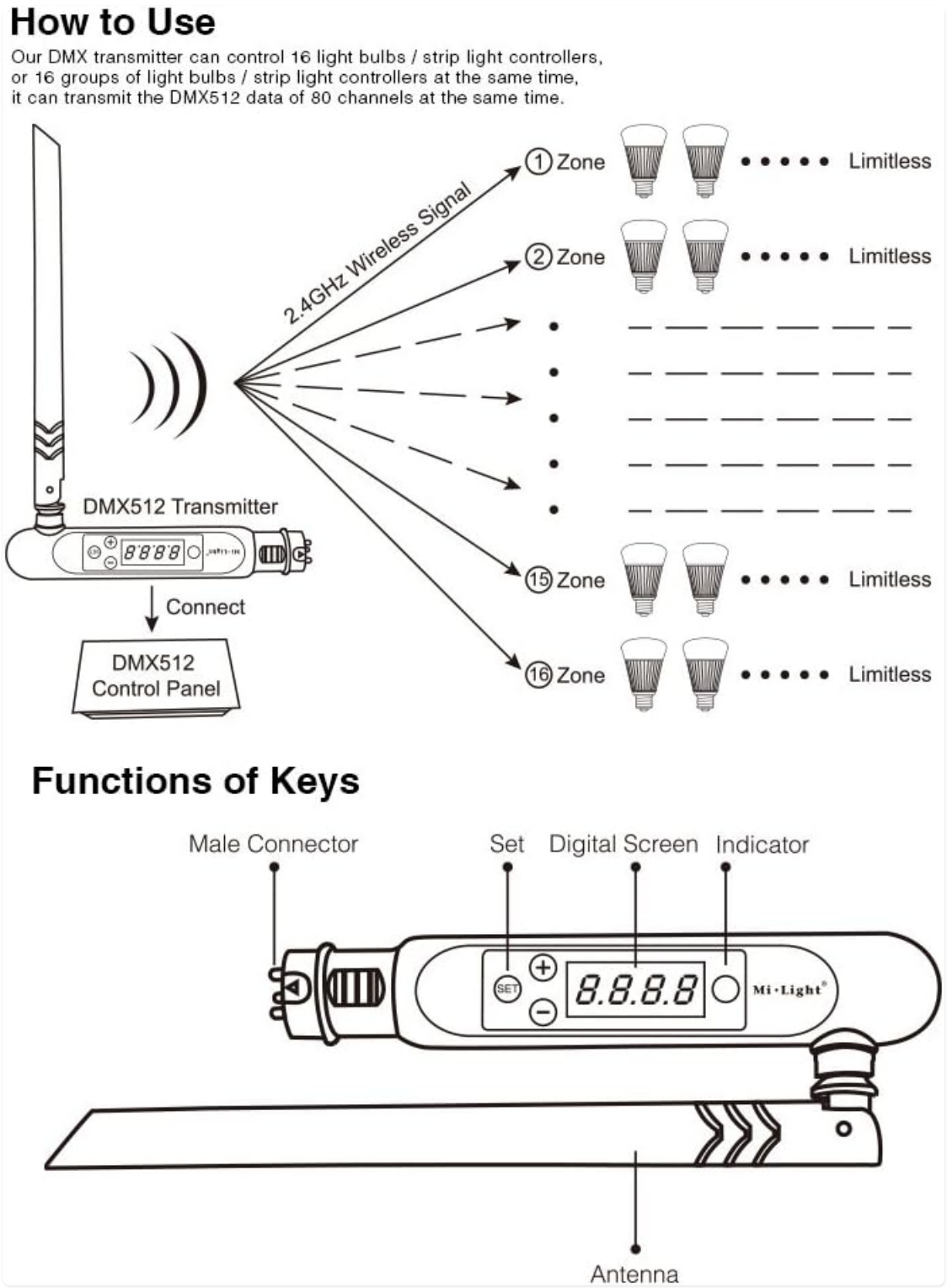

Figure 4.1: Wireless signal transmission to multiple zones.

5. Maintenance

To ensure optimal performance and longevity of your LGIDTECH Mi.Light DMX512 LED Transmitter, follow

these general maintenance guidelines:

- Keep the device clean and free from dust. Use a soft, dry cloth for cleaning.
- Avoid exposing the transmitter to extreme temperatures, humidity, or direct sunlight.
- Do not attempt to open or repair the device yourself. Refer to qualified service personnel for any repairs.
- Ensure proper ventilation around the device during operation.

6. Troubleshooting

If you encounter issues with your LGIDTECH Mi.Light DMX512 LED Transmitter, consider the following troubleshooting steps:

- **No Power:** Verify that the DC 5V power adapter is correctly connected and that the power outlet is functional.
- **No Signal to LED Devices:**
  - Check if the DMX address on the transmitter is correctly set.
  - Ensure the LED devices are properly linked to a zone on the transmitter (refer to Section 3.4).
  - Confirm that the DMX512 console is sending a valid DMX signal to the transmitter.
  - Check for any obstructions between the transmitter and the LED devices that might interfere with the 2.4G wireless signal. Maintain a clear line of sight if possible.
- **Incorrect Color/Brightness:** Verify the DMX channel assignments and values on your DMX console, ensuring they correspond to the 5-channel allocation per device/group (Red, Green, Blue, Warm White, Cool White).
- **Intermittent Connection:** Ensure the transmitter is within the specified operating distance (30m) from the LED devices and that there are no strong 2.4GHz interference sources nearby.

If problems persist after attempting these steps, contact customer support for further assistance.

7. Specifications

Detailed technical specifications for the LGIDTECH Mi.Light DMX512 LED Transmitter (Model FUTD01):

Figure 7.1: Product parameters and dimensions.

Parameter	Value
Product Name	DMX 512 LED Transmitter

Model No.	FUTD01
Voltage	DC5V-500mA
Frequency	2400-2483.5MHz
Transmitting Method	GFSK
Power	6dBm
Distance	30m (approx. 98 feet)
Dimensions (L*W*H)	188mm * 47mm * 23mm (approx. 7.4" * 1.85" * 0.9")
Item Weight	3.8 ounces
Indoor/Outdoor Usage	Indoor
Included Components	Power Cord

8. Warranty and Support

For information regarding warranty coverage, technical support, or service inquiries for your LGIDTECH Mi.Light DMX512 LED Transmitter, please refer to the documentation provided at the time of purchase or visit the official LGIDTECH website. Keep your purchase receipt as proof of purchase for warranty claims.