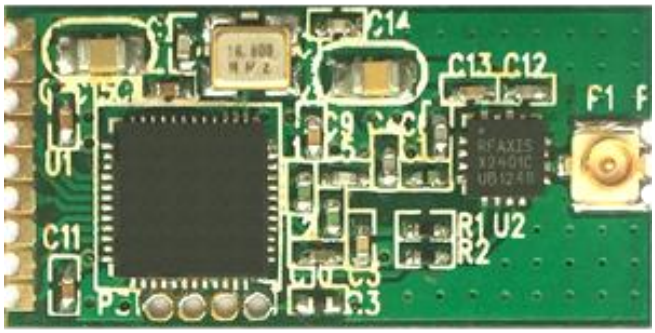
LC-512S

Wireless DMX512 Transceiver

- FHSS with 79 Channels, interference-free operation.
- 32-bit ARM Processor, DMA transfer without delay
- 1.27 pitch stamp pads, Transceiver
- One-touch operation with a Tri-color status indicator
- Built-in Wireless Solution Compatibility Mode
- Automatically learning of various parameters of controller, just like DMX transfer via cable



- Group Mode, easy plug-and-play operation; Pairing Mode, supports more transmitter universes

Overview

LC-512S is the world smallest embedded wireless DMX512 transceiver module. It's compact size (25.4 x 12.7 mm), just as big as a fingernail. With single side component placement, stamp pad and 3.3V Single-Supply, As a DMX component, you can easily put LC-512S inside your light equipment and you would own the world's leading wireless DMX control system.

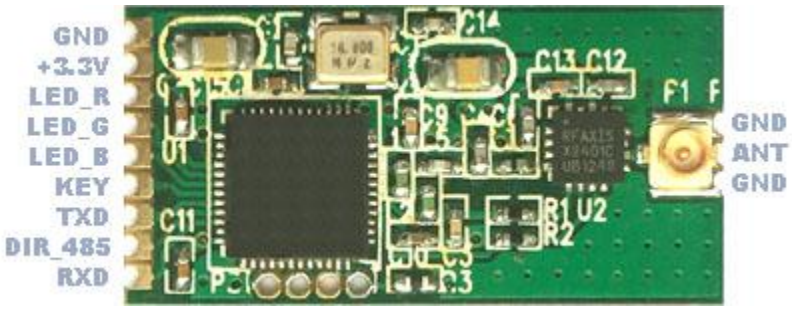
Multiple Communication Protocol, There are no upgrading troubles

WIDMX LC-512S is now compatible with the world's leading wireless communication protocols like the Sweden's protocol or the GZ protocols. There are no upgrading troubles.

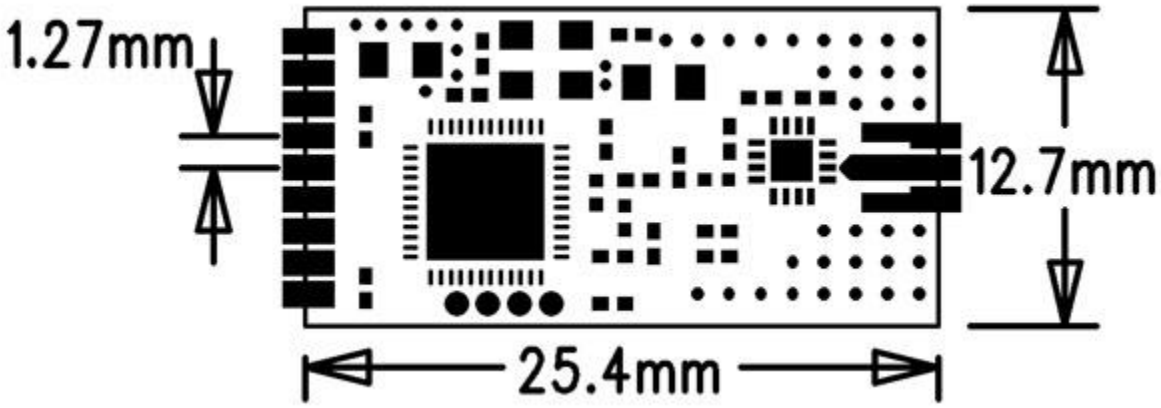
Application

- Stage lighting applies to the Grand Variety Show, Gymnasium, Temporary Set-up Stage, TV Station, Centers Conference, Theaters, Opera, Theme Parks, Dance Halls, and Bars, or any lighting equipment with standard DMX512 XLR etc.

Pinout



Dimensional drawings



Description of Status Indicator

1）In the Set-up mode, different colors mean different communication protocols:

1. Red ---------- WIDMX Protocol
2. Green ---------- W-DMX Receive Protocol
3. Blue ---------- W-DMX G3 Transmit Protocol
4. Yellow ---------- Guangzhou(GZ) Protocol

2）In the User mode, Description of Status Indicator:

Protocol	Action	Status Description
WIDMX or GZ Protocol	Red, Green, Blue,Yellow, Cyan, Purple (, White)	6 / 7 Different Wireless Groups
	Flashing Red	Transmitting DMX Signal
	Flashing Green	Receiving DMX Signal
W-DMX Receive Protocol	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 Protocol	Red	Deleting all Receivers' Connection
	Blue(Fast-Flash)	Connecting with the Receiver(s)
	Blue(Slow-Flash)	No DMX Signal Input
	Blue	Transmitting DMX

Operation Guide

1. Set-up mode:

Press and hold the button before you power up. When you see status indicator turns 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 would see the status indicator changes in follow order: red, green, blue and yellow. Choose one of the protocols, then press and hold the button (> 1S), when you see the white light, release it to enter the use mode.

2. Use mode:

1) Powered up and enter the Use mode;
2) If it is in Set-up mode, press and hold the button (> 1S) until you see the white light, then release it to enter the Use mode.

2.1. In WIDMX protocol or GZ protocol, you could select different DMX Group:

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

2.2. In W-DMX Transmit protocol:

1) By pressing the button, the transmitter can be connected to all powered but not connected receivers within the coverage area;
2) Press and hold (> 3S) the transmitter’s button until the indicator turns red. The device will delete all the receivers' connection within the coverage range.

2.3. In W-DMX Receive protocol:

Press and hold (> 3S) the receiver’s button until the indicator turns white. The device would disconnect with the transmitter.

Specifications

Weight and Dimension

Dimension: 25.4 x 12.7 x 2 mm

Weight: 5 g

System Information

CPU: 32-bit ARM Core

Radio Parameters

Range: 600 meters (line-of-sight)

Frequency: 2.402 - 2.480GHz, ISM, 79 channels

Spread Spectrum: FHSS, 1100 hops / sec

Modulation: GFSK

Maximum Transmit Power: 23dBm

Receiver Sensitivity: -94dBm

DMX Signal Interface

RS485

Environmental Limits

Operating Temperature: -40 ~ 85 °C

Storage Temperature: -65 ~ 150 °C

Ambient Relative Humidity: 5 to 95% (non-condensing)

Power Requirements

Power Input: DC 3.3V, ±5%

Power Consumption: 350 mA@3.3V DC max.

Reliability

Automatic Reboot Trigger: Built-in WDT (watchdog timer)

Warranty

Warranty: One-Year Limited Warranty