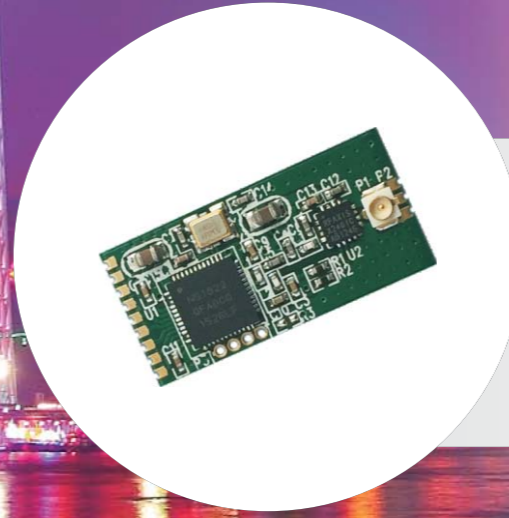


# The world's most complete wireless solutions



## DMX TRANSCEIVER

Adaptive Frequency Hopping Spread Spectrum  
Without Interference Trouble



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INNOVATION  
UNLIMITED



The world's smallest wireless DMX transceiver





# ABOUT US

WIDMX TECHNOLOGY CO., LIMITED (<http://www.widmx.com>), is committed to the development and manufacturing of the Wireless DMX Transmitter and Receiver, DMX512 Signal Analyzer, DMX512 Wired/Wireless Touch Controller, ArtNet-dmx bi-directional converter etc. Our primary goal is to satisfy our customers with cost-effective and highly reliable solutions for wireless DMX control.

As a professional wireless DMX equipment manufacturers, we constantly innovate, obtained several national patents. Our wireless DMX transceiver with adaptive frequency hopping(FHSS), DMA data transfer without delay, intelligent learning console parameters and other international leading technology. It has the best stability in the market.

As a professional DMX product developers, our in-depth understanding of the needs of the industry DMX products. We develop and manufacture an exclusive worldwide wireless DMX equipment. It combines a wireless DMX transmitter, wireless DMX receivers, DMX signal generator, DMX tester in one, with high-definition TFT and touch screen, leading DMX into the visual age. totally subvert the traditional DMX tester. It make all DMX parameters under your control. This will be your excellent portable DMX expert!

We are not agents of any products, only offering original technology. Excelling at in-depth understanding of our customer needs and striving to create value for our clients, we are able to render quick solutions to a variety of customer demands for product customization. Please do not hesitate to contact us for further information. We are looking forward to starting long-term and good cooperation with you!

Absorb the essence of worldwide science and technology and create Chinese brand

聚世界之科技 创中华之品牌

CERTIFICATE OF HONOR



Certificate of Design Patent



Certificate of Utility Model Patent



Certificate of RoHS



Certificate of CE



Certificate of FCC





# TECHNOLOGY



1, **Number of Channels:** According to the standard, ISM frequency range can be used is 2.4GHz - 2.4835GHz. 1MHz bandwidth of each channel, so that only a maximum of 83 channels. But side frequency power are strictly limited. To match the standard, we have reduced the frequency of edges on both sides. The actual frequency range is 2.402GHz - 2.480GHz, a total of 79 channels, meet CE and FCC standards.

2, **Frequency Hopping Spread Spectrum (FHSS):** The transmitter and receiver constantly (1100 hops / sec) change channels according to the same hopping pattern. DMX512 data at four times rate (1Mbps) repeating transmit on different channels (79 channels). Greatly enhanced anti-jamming capability, improved real-time performance and stability.

3, **Direct Memory Access (DMA):** We use the 32-bit arm processor, with its ability to DMA transfers. Air data directly into memory via DMA, the memory data via DMA direct outputs DMX512. Reduce CPU interrupts, data transfer without any delays.

4, **The most widely compatible:** Whether you use fixed frequency Guangzhou protocol or Sweden hopping protocol. Our structure size and the air protocol can be perfectly compatible. Help you to solve you use Guangzhou PCB not stable, Swedish PCB high prices, long delivery problems.

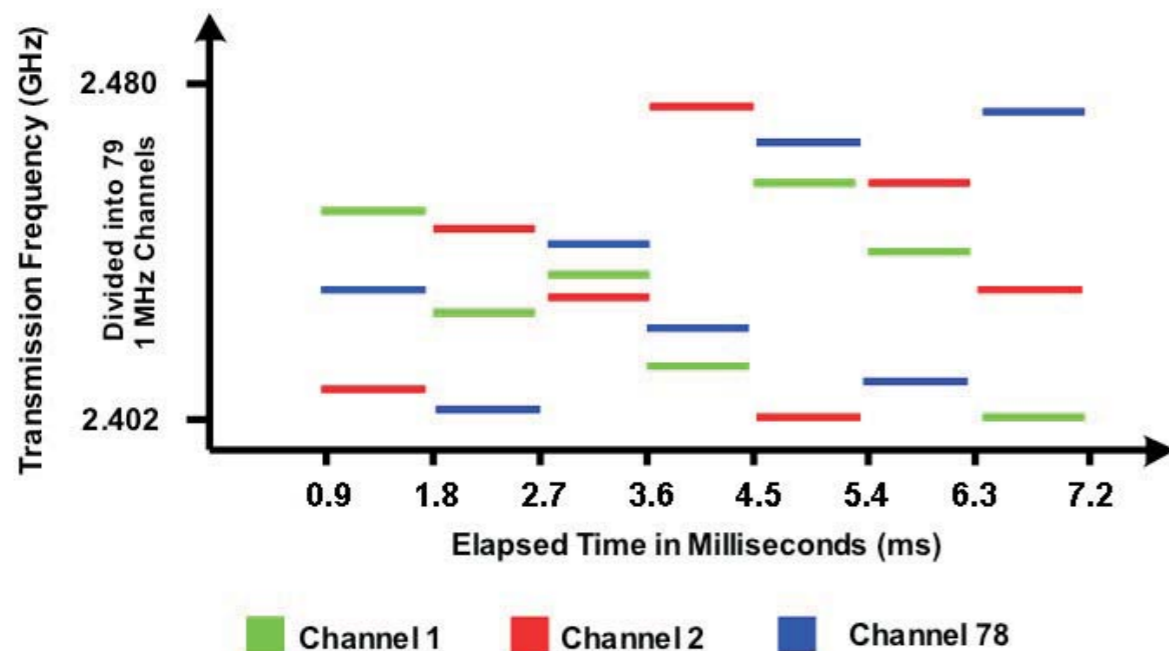
Wireless DMX,  
*Have you make the right choice?*



The only thing that's different is everything.

## Frequency Hopping Spread Spectrum

An Example of a Co-located Frequency Hopping System



Comparison	GZ Transceiver	Swedish Transceiver	WIDMX Transceiver
Patents	Counterfeit, Infringement	None	Design Patents & Utility Model Patents
Certificate	None	FCC/CE/ROHS	FCC/CE/ROHS
MCU	Old 8-bit 51 core	Old 8-bit AVR Core	32-bit ARM core
RAM	512 Byte	1K	20K or 16K
MAX Transmit Power	< 20dBm	<20dBm	22dBm (Only For FCC)
Receiver Sensitivity	-94 dBm@250kbps	-96 dBm@1Mbps	-102 dBm@1Mbps (SOC)
Air Baud Rate	250 Kbps	1 Mbps	1 Mbps
Air Protocol	GZ Fixed Frequency Protocol	G3/G4 Frequency Hopping	WIDMX Adaptive Frequency Hopping GZ and Swedish Protocol
Spread Spectrum	Fixed Frequency	FHSS 1100 or 1800 hops/ sec	FHSS 1100 or 1800 hops/ sec
DMX Delay	Date Storage Interrupt; Transfer may be delayed	Date Storage Interrupt; Transfer may be delayed	DMA Transfer without any delay
DMX Signal	Fixed BREAK, MAB time and Refresh Rate	Fixed BREAK, MAB time and Refresh Rate	Auto sensing Break, MAB time and Refresh Rate
Customization	No ability to customize, just a copiers	Hard to Customization	Nothing we can't do, only something you can't think ...



# OEM MODULES



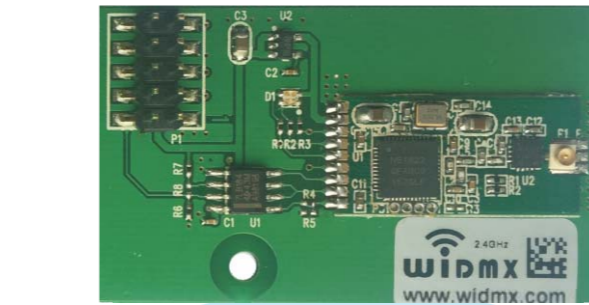
1, **Why can such a small:** We use the most advanced system-on-chip (SOC) and single-chip integrates the PA, LNA. Greatly reducing PCB size to meet the most demanding applications.

2, **Why better performance:** Our SOC integrated 32-bit ARM® Cortex™ M0 CPU with 128kB flash + 16kB RAM for improved application performance. Internal Direct DMA instead of the previous SPI bus, read and write more faster than the previous. Receiver sensitivity without LAN: SOC: -90dBm@1Mbps, previous: -85dBm@1Mbps, greatly improve the communication distance.

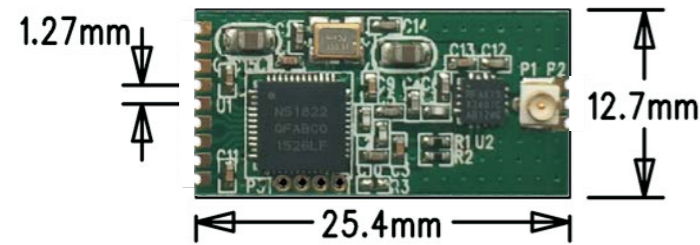
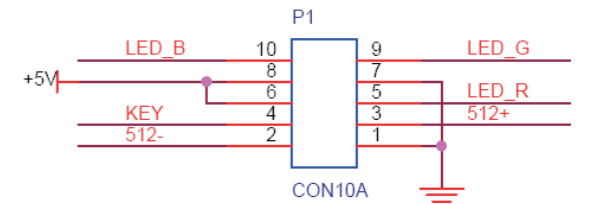
3, **Why does not directly provide SOC:** We know that 2.4G is a high frequency circuit boards, PCB impedance matching needed, otherwise it will greatly affect the performance. In addition, in order to performance and size, we use 0402 small patch material, production and processing of high precision. Furthermore, 2.4G requires expensive test equipment. We use single side component placement, stamp pad can be used directly reflow soldering production.



LC-512W



LC-512C

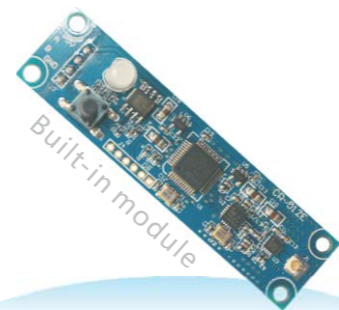


LC-512S



## Features

- ☆ The world's smallest (25.4mm x 12.7mm) wireless DMX transceiver
- ☆ Single side component placement, 1.27mm pitch stamp pad
- ☆ FHSS with 79 Channels, interference-free operation
- ☆ 2.4GHz proprietary SoC Integrated with 32-bit ARM CPU
- ☆ 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
- ☆ Grouping Mode, easy plug-and-play operation; Pairing Mode, supports more transmitter universes



LC-512M

## Features

- ☆ Structure size is fully compatible with W-DMX and NANO, direct replacement, without any modification
- ☆ Air protocol is fully compatible with W-DMX G3, G4, G4S
- ☆ Users can choose to receive and transmit mode, flexible and convenient
- ☆ FHSS with 79 Channels, interference-free operation
- ☆ 2.4GHz proprietary SoC Integrated with 32-bit ARM CPU
- ☆ One-touch operation with a Tri-color status indicator
- ☆ Automatically learning of various parameters of controller, just like DMX transfer via cable
- ☆ Grouping Mode, easy plug-and-play operation; Pairing Mode, supports more transmitter universes





# TRANSCEIVERS



LC-512X

## Features

- ☆ Design Patent and Utility Model Patent certificated
- ☆ FCC, CE and RoHS certificated
- ☆ FHSS with 79 Channels, interference-free operation
- ☆ 32-bit ARM Processor, DMA transfer without delay
- ☆ Standard DMX512 3-pin XLR, 5-pin XLR, 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
- ☆ Grouping Mode, easy plug-and-play operation; Pairing Mode, supports more transmitter universes



Utility Model Patent No:  
ZL2012 2 0523319.9  
Design Patent No:  
ZL2012 3 0451246.2

LC-512X

## Features

- ☆ Chauvet Di Fi USB compatible, Transceiver
- ☆ FHSS with 79 Channels, interference-free operation.
- ☆ 32-bit ARM Processor, DMA transfer without delay
- ☆ 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
- ☆ Grouping Mode, easy plug-and-play operation; Pairing Mode, supports more transmitter universes



LC-512U

## Features

- ☆ Built-in high energy lithium battery, working long hours to meet your needs
- ☆ TFT screen and friendly menu interface, to make things easy
- ☆ FHSS with 79 Channels, interference-free operation.
- ☆ 32-bit ARM Processor, DMA transfer without delay
- ☆ Standard DMX512 3-pin XLR, 5-pin XLR, 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
- ☆ Grouping Mode, easy plug-and-play operation; Pairing Mode, supports more transmitter universes



LC-512B



LC-512G



LC-512R



LC-512P

## Features

- ☆ Protection rating IP65 waterproof and dust-proof design
- ☆ High-quality three-color metal switch
- ☆ AC100~240V universal power supply
- ☆ FHSS with 79 Channels, interference-free operation
- ☆ 32-bit ARM Processor, DMA transfer without delay
- ☆ 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
- ☆ Grouping Mode, easy plug-and-play operation; Pairing Mode, supports more transmitter universes

*Have you been tired of the increasingly complex DMX connection?  
Have you suspected the reliability of a variety of splitters and repeaters?  
And are you looking for the alternatives of them?  
Congratulations, wireless DMX transceiver will satisfy all your needs!*



# DMX-ART

## Features

- ☆ Aluminum housing, high-precision CNC machining
- ☆ High Definition TFT and Touch Screen, flexible and efficient touch controls make DMX into visual age
- ☆ The industry's first DMX signal analyzer, accurate measurement of various DMX parameters
- ☆ Comes with wireless controller and wireless DMX monitoring function, so everything is controlled in the hands
- ☆ Built-in high-energy lithium battery, working long hours to meet your needs
- ☆ Supports multiple air protocol, more widely used

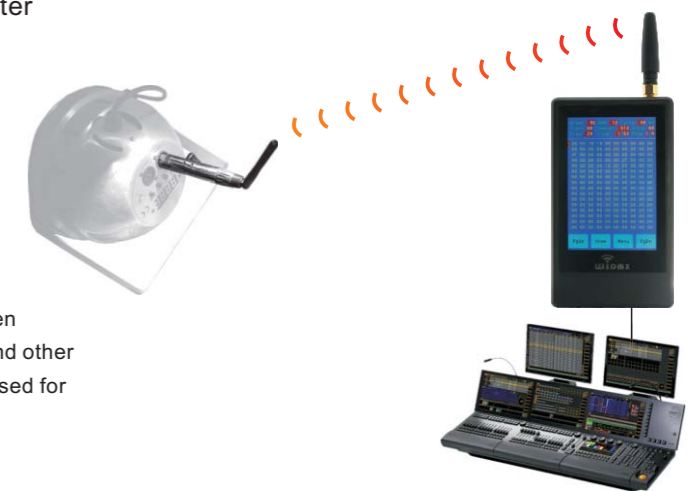


For a long time, console manufacturers need to DMX512 signal detection instruments, lighting engineers need a portable console, contractors need to get rid of complicated wiring. Now DMX-ART experts have everything ready for you.

## Application

### 1. DMX512 Signal Analyzer with Wireless DMX Transmitter

It can accurately measure various parameters of the console, including Break, MAB, number of channels, refresh rate and other parameters. All DMX data visualization. while it act as a wireless dmx transmitter, compatible with LC-512X.



### 2. DMX512 Wired/Wireless Touch Controller

It can be used as an accurate DMX signal generator via a touch screen adjustments include break, MAB, number of channels, refresh rate and other DMX parameters, it can be used as a simple console. it can also be used for DMX512 debugging.



### 3. DMX512 Wireless Receiver with Signal Analysis

It can be used as a wireless DMX signal analyzer, through its high resolution TFT screen, you can clearly understand the operating frequency of the wireless network, clearly see the wireless network frequency agile process. DMX real-time monitoring of various parameters and data. a machine in hand, don't worry wireless.

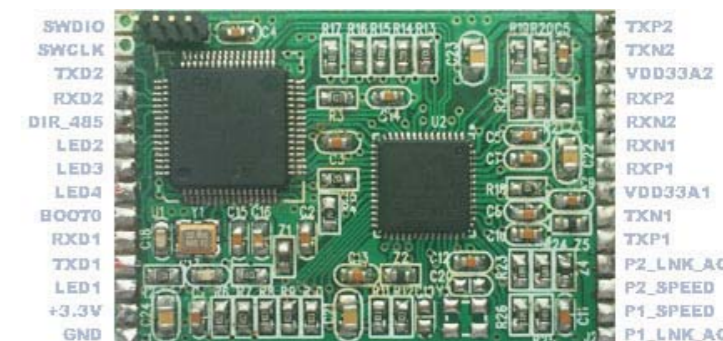
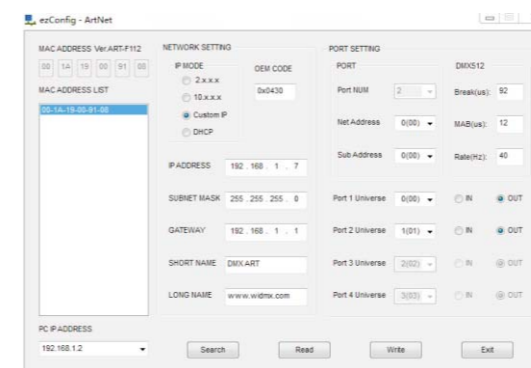






# ARTNET-DMX

ART  
NET  
ETHERNET



Configuration Tools



Built-in module

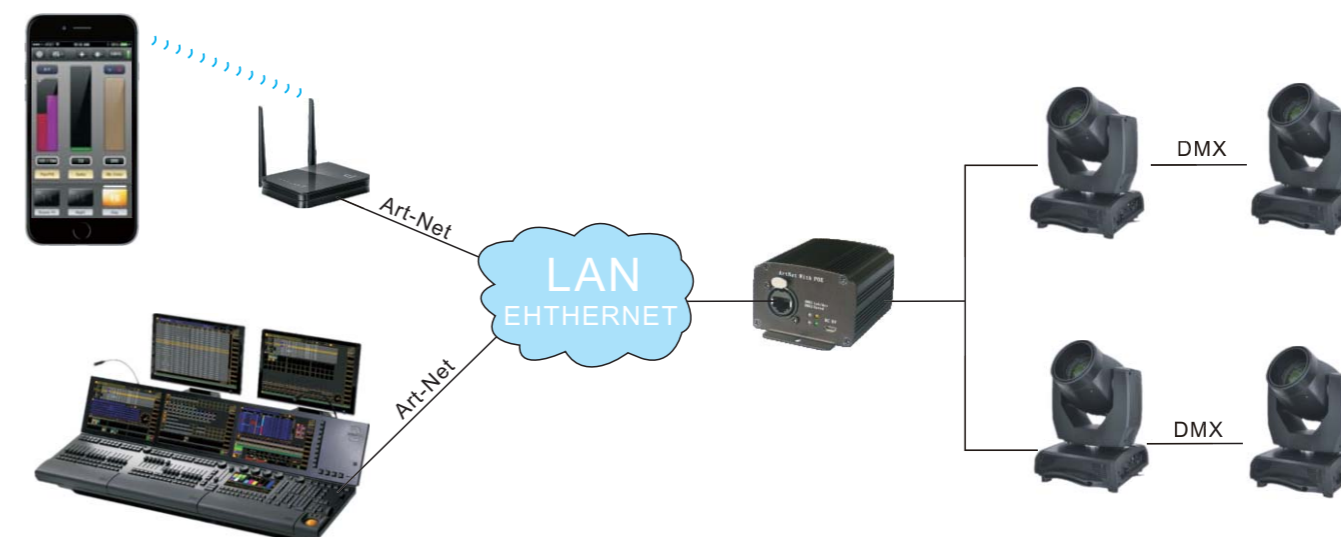


## Features

- ☆ Follows V1.4 Art-Net protocol, supports RMD protocol
- ☆ 2 universe DMX512 signal input / output
- ☆ Adaptive MDI/MDIX, 802.3af / at standard PoE (Power over Ethernet)
- ☆ 32-bit ARM Processor, DMA transfer without delay
- ☆ Through user-friendly ezConfig tools or web browser to read and set the parameter
- ☆ Built-in WDT, ensure long-term stable and reliable work

Do you still use a traditional RS-485 network? Are you tired of the non-standard complicated networking equipments? It is time to upgrade your network! Artnet-DMX converter is using standard TCP/IP network transmission DMX512 signal. Greatly improves network reliability, help you saving expenses on other network equipments.

## Application



SUBVERSION OF YOUR LIGHTING CONTROL





**PARTNERS**

**APPLICATION**

