



Wireless DMX

10075

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Preface

Thank you for choosing this Wireless DMX module.
This device sends or receives wireless DMX data.

Contents

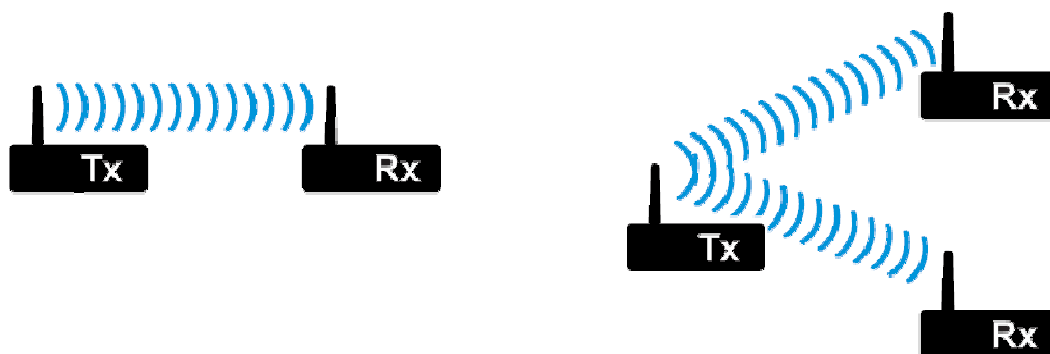
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Concept

This module offers a wireless solution to send DMX data. This gives more freedom than a hardwired DMX data link when building point-to-point and point-to-multipoint installations over a large distance.

The configuration is very simple. All the receivers are automatically detected when the push button on the transmitter is pressed.

The use of this W-DMX will not cause interference with other systems.

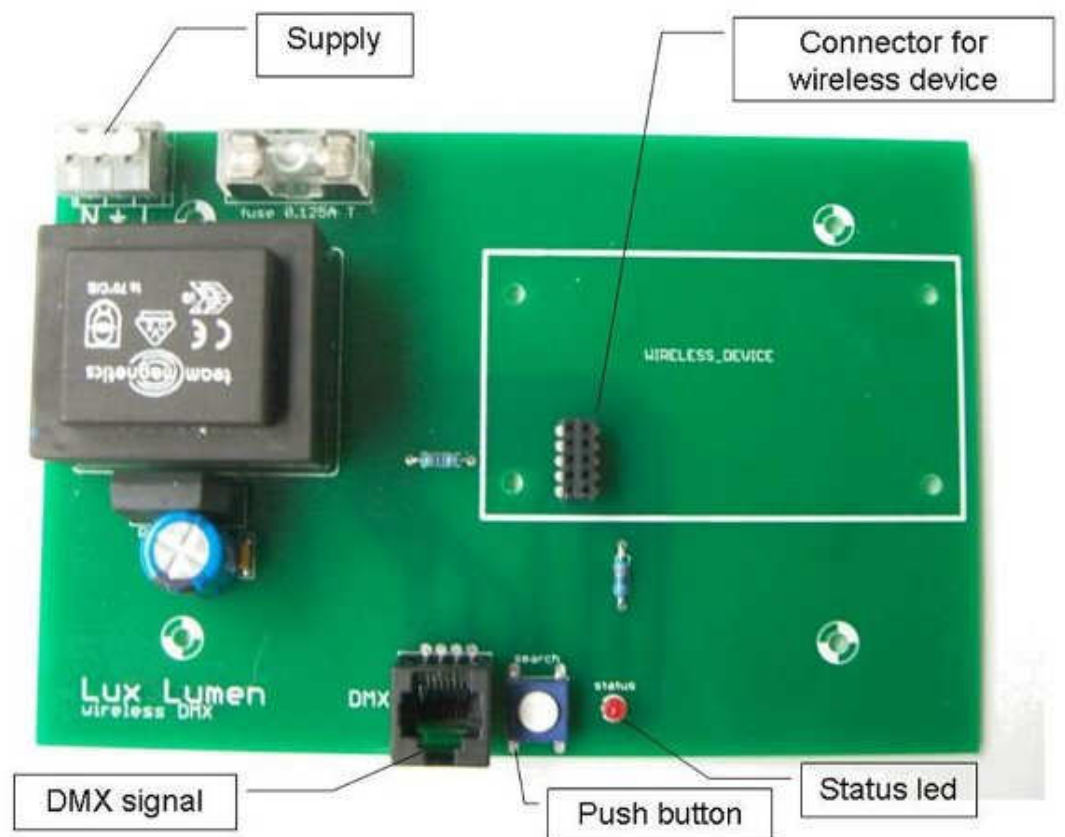
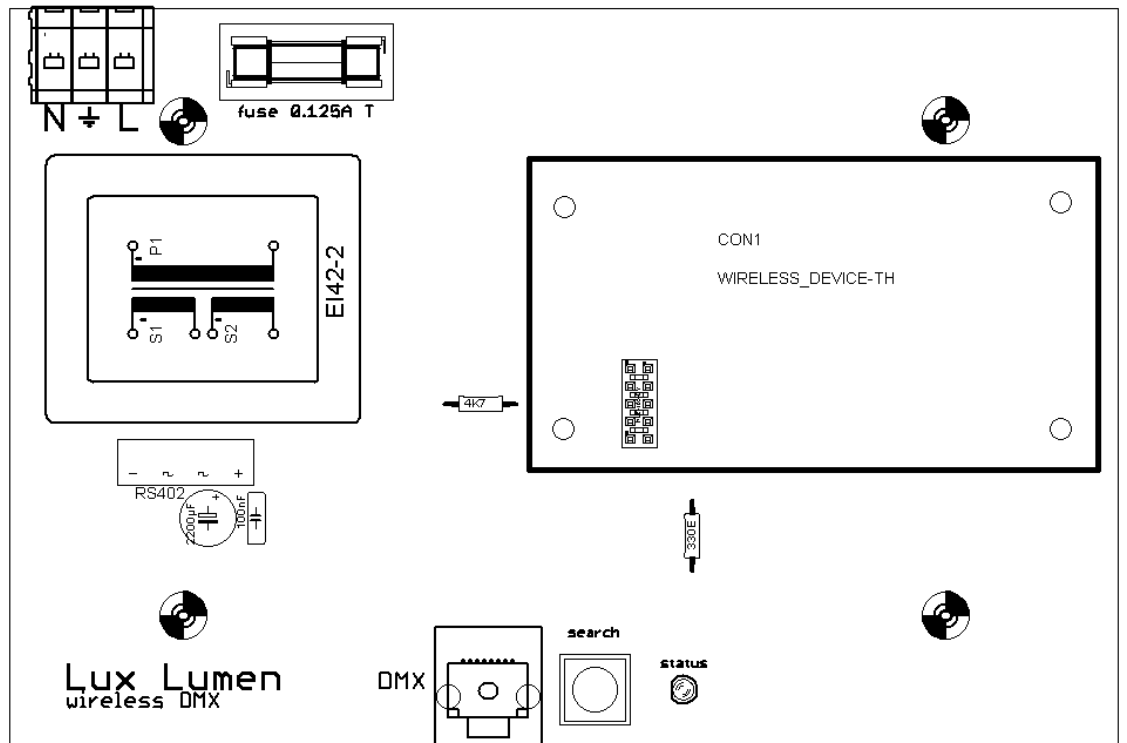


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PCB layout



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Placement

The module consists of a printed circuit board mounted in a DIN rail housing.

This way it can easily be integrated into a standard power distribution board, no special tools are required.

The units' measurements are 110mm by 170mm and a height of approximately 70mm + height antenna.

Connectors

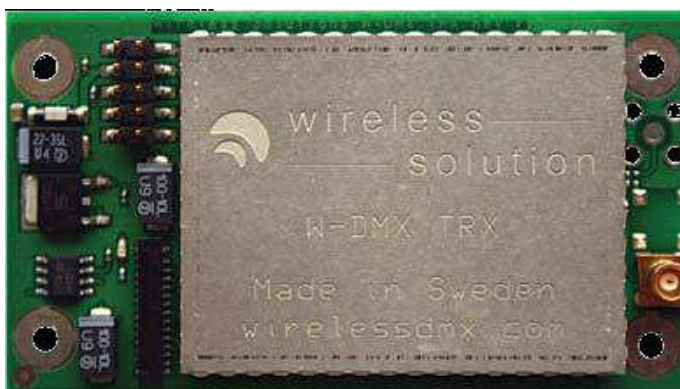
1 x RJ45
3way WAGO cage clamps
HLE-105-DV

DMX in or out
supply
to connect the wireless device

Supply

The board needs mains voltage (230V AC).

Transmitter/
Receiver



TRANSMITTER

The Wireless DMX card can be configured as a transmitter by inserting a W-DMX OEM TRX module from Wireless Solutions into the HLE-105-DV connector.

In this case the RJ45 connector is used for the DMX in signal.

RECEIVER

The Wireless DMX card can be configured as a receiver by inserting a W-DMX OEM Rx module from Wireless Solutions into the HLE-105-DV connector.

In this case the RJ45 connector is used for the DMX out signal.

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Push button

Transmitter

Short push

Node scan: the transmitter searches and links with the receivers

Long push

All receivers nodes log off

Receiver

Long push

Receiver log off



Status led

Transmitter

Continuously on

The transmitter is on

Blinking

The transmitter searches for nodes

Receiver

On

The receiver node is linked

Off

The receiver node is not linked



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Both the W-DMX OEM transmitter module and the receiver module of Wireless Solutions need an antenna. The type of antenna and the environment determine the transmission range of the system. There many types of antennas available:

Indoor Antennas

- **Indoor 2:** Omni 2 dBi
Radiation (HxV): 360x360
RP-SMA Male
- **Indoor 5:** Omni 5 dBi
Radiation (HxV): 360x90
RP-SMA Male
- **Indoor 7:** Omni 7 dBi
Radiation (HxV): 360x20
RP-SMA Male



Outdoor Antennas

- **Outdoor 2:** Omni 2 dBi
Radiation (HxV): 360x360
N Female
- **Outdoor 5:** Omni 5 dBi
Radiation (HxV): 360x30
N Female
- **Outdoor 8:** Panel Directional 8 dBi
Radiation (HxV): 45x45
N Female
- **Outdoor 9:** Omni 9 dBi
Radiation (HxV): 360x20
N Female
- **Outdoor 12:** Panel Directional 12 dBi
Radiation (HxV): 30x30
N Female
- **Outdoor 21:** Parabolic Directional 21 dBi
Radiation (HxV): 13x13
N Female



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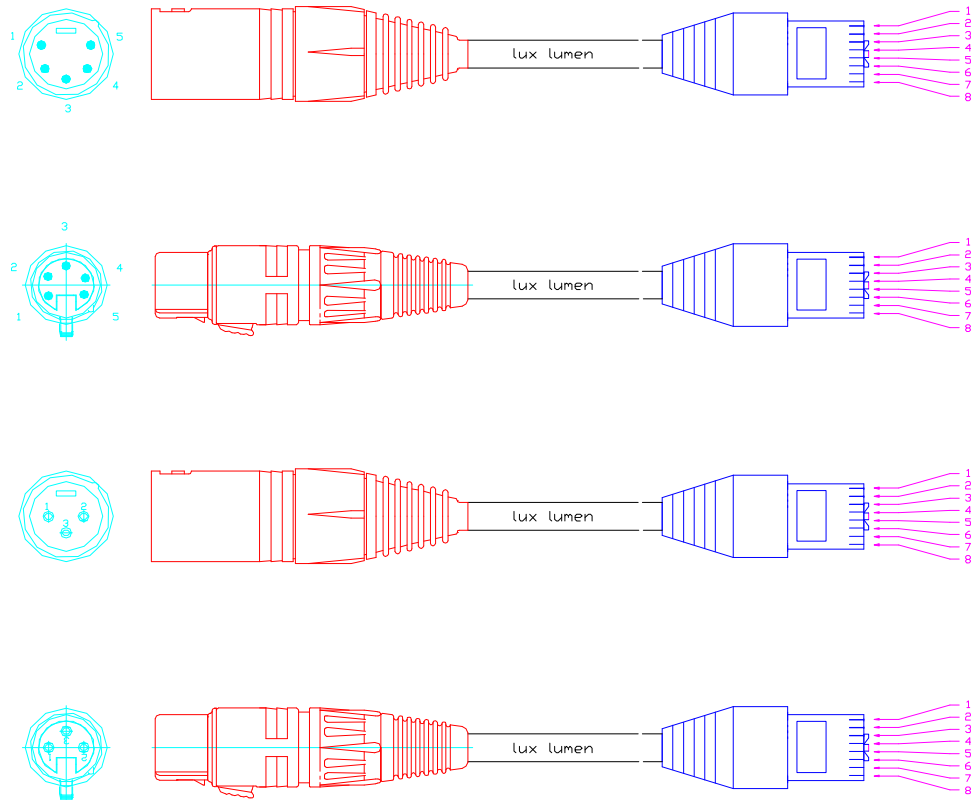


DMX-RJ45 wiring

XLR pin 1 wired to UTP contacts 7 and 8.
Wire color usually brown, shielding usually white/brown

XLR pin 2 wired to UTP contact 2. Data(-) connection.
Wire color usually orange

XLR pin 3 wired to UTP contact 1. Data(+) connection.
Wire color usually orange/white



XLR front view

UTP contacts view,
tap away from observer

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The Lux Lumen wireless DMX modules are compatible with the Wireless Solution products.

Here are some examples of Wireless Solution transmitters:

Blackbox S-1, Transmitter 512ch

This is a standalone transmitter. The S-1 transmits 512 channels DMX (one universe) wireless through the W-DMX technology and is easy to use. The systems can be adapted to support up to 8,192 DMX channels (16 DMX512 universes).

All W-DMX BlackBox S-1 units are delivered with a standard 2 dBi rubber whip antenna. A multitude of other antenna options are available to increase the standard transmission range.



Blackbox Micro S-1, Transmitter 512ch

This transmitter fits the complete W-DMX S-1 system into a compact package with less than half the volume of the full size casing. The battery when fully charged can run the unit up to 6 hours.

All W-DMX Micro units are delivered with 2 dBi omni-directional built-in antenna. They have a range up to 400 meters (1200 feet) in line of sight.



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