

WIDMX-WIRELESS DMX SYSTEM

Thank you for having chosen WIDMX product. If you follow the instructions given in this manual, we are sure that you will enjoy this device for a long period of time. Please keep this manual for further needs.



For your own safety, please read this user manual carefully before you initially start-up.

Every person involved with the installation, operation and maintenance of this device has to

- Be qualified
- Follow the instructions of this manual
- Consider this manual to be part of the total product
- Keep this manual for the entire service life of the product
- Pass this manual on to every further owner or user of the product
- Download the latest version of the user manual from the internet

Delivery Includes:

- 1 WIDMX transmitter/receiver
- 1 Power Supply Unit
- 1 User Manual

1. Product Specification

WIDMX Transmitter and Receiver (70064700, 700647011, 70064702)	
Power Supply	5V DC, 350 mA
70064700, 70064701	Via included power unit connected to 100-260 V ~, 50/60 Hz
70064702	Via phantom power
Carrier frequency	2.4 GHz ISM band, 78 channels
Modulation	GFSK
Coverage	600m (line of sight)
Parallel Operation	max 6 transmitters
DMX connector	
70064700, 70064701	3-pin XLR
70064702	5-pin XLR
DMX channels	1 universe (512 channels)
Dimensions with antenna	212 x 18 x 18 mm
Weight	210 g

2. Safety Instructions

Caution: Be careful with your operations. With a high voltage you can suffer a dangerous electric shock when touching the wires!

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual

Please make sure there are no obvious transport damages. Should you notice any damages on the power unit or on the casing, do not take the device into operation and immediately consult your local dealer. The transceiver falls under protection-class III. The device always has to be operated with an appropriate power unit. Always plug in the power unit last. The power plug must always be inserted without force. Make sure that the plug is tightly connected with the outlet.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

3. Operating Determinations

The WIDMX transmitter and receiver serve for wireless transmission of DMX512 signals in lighting installations. The units are extremely compact and user-friendly; all components are integrated into an extended XLR plug. The units are designed as transceivers, i.e. they can be used as transmitter and receiver as desired. These units eliminate extensive cabling between the DMX controller and DMX-controlled units.

The GFSK (Gaussian Frequency Shift Keying) modulation allows for interference-free operation alongside other wireless devices in the 2.5 GHz band (e.g. Wi-Fi and Bluetooth). When transmitting, the system will alternate between 78 frequencies of the 2.4 GHz range and skip any frequencies already used by other units.

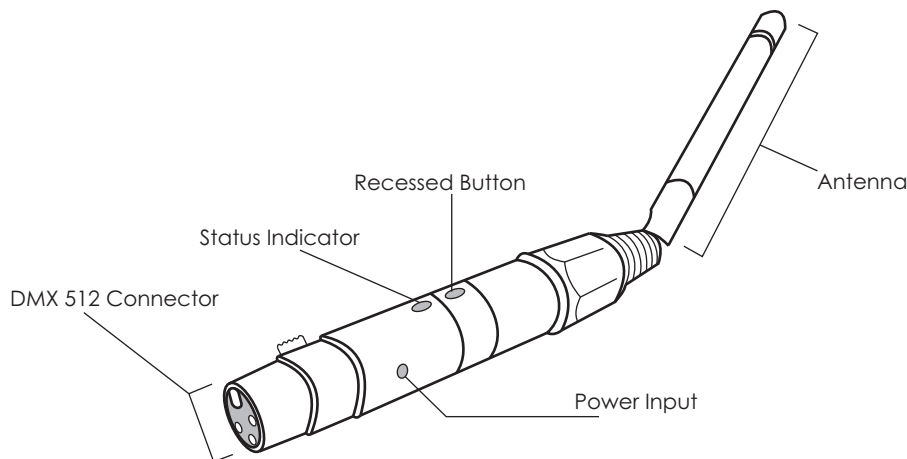
A single transmitter transmits all 512 DMX channels to a maximum of 512 receivers. It is possible to operate 6 transmitters at the same time in order to control a total of 3072 DMX channels. The maximum range is 400m. The system operates in the ISM band in the 2.4 GHz and is license-free and generally approved in EU and EFTA countries.

The units require an operation voltage of 5V direct current supplied via the included power unit or phantom power. The units were designed for indoor use only.

The ambient temperature must always be between -5°C and +50°C. Keep away from direct insulation (particularly in cars) and heaters. The relative humidity must not exceed 100% with an ambient temperature of 25°C. This device must only be operated in an altitude between -20 and 2000m over NN.

Avoid brute force during installation. There should not be any cables lying around. You endanger your own and the safety of others! Please consider that unauthorized modifications on the device are forbidden due to safety reasons! If this device will be operated in any way different to the one described in this manual, the product may

4. Operating elements & connections



1. DMX512 Connector:

- Transmitter: 3-pin XLR mounting plug
- Reciever: 3-pin XLR mounting jack
- Phantom-powerd receiver: 5-pin XLR mounting jack

2. Power Unit:

- Plug in the mains cable of the supplied power unit here

3. Status Indicator:

- Lights permanently red at the transmitter when a DMX signal is being transmitted.
- Flashes green at the receiver when a DMX signal is being received
- Shortly flashes red, green and blue after connecting the power supply

4. Recess

- To change the transmission channel and pair the devices.

5. Setup

1. Connect the transmitter to the DMX controller and the receiver to the DMX input (with phantom power for item 70064702) of the first DMX-controlled unit in the chain. Connect a 120Ω terminating plug to the DMX output of the DMX unit in the chain. Alternatively, provide each DMX-controlled unit with its individual receiver to avoid cabling between the DMX units.
2. Set each transmitter and receiver into operation by connecting its power unit to the power input and the mains plug to a mains outlet(100-260V~, 50/60 Hz). The status indicator shortly flashes red, green and blue. Afterward, it lights permanently according to the selected transmission channel.
3. Set each transmitter and receiver to the same transmission channel. For this purpose, shortly press the

Channel	Color
1	Red
2	Green
3	Blue
4	Yellow
5	Turquoise
6	Purple

Thus, the wireless DMX network is set up and receivers are paired to the transmitter. The assignment of the receivers to the transmitter is kept memorized even after disconnecting the power supply.

5. As soon as the transmitter receives a DMX signal, the status indicator switches to red. Shortly afterward, the status indicators of the receivers start flashing green to indicate that the DMX signal is being received. The DMX-controlled units can now be controlled via radio.
6. After the operation, disconnect the mains plug of the power supply unit from the mains outlet, to prevent unnecessary power consumption

6. Use

Several receivers may be assigned to a transmitter. It is possible to operate a maximum of 512 receivers.

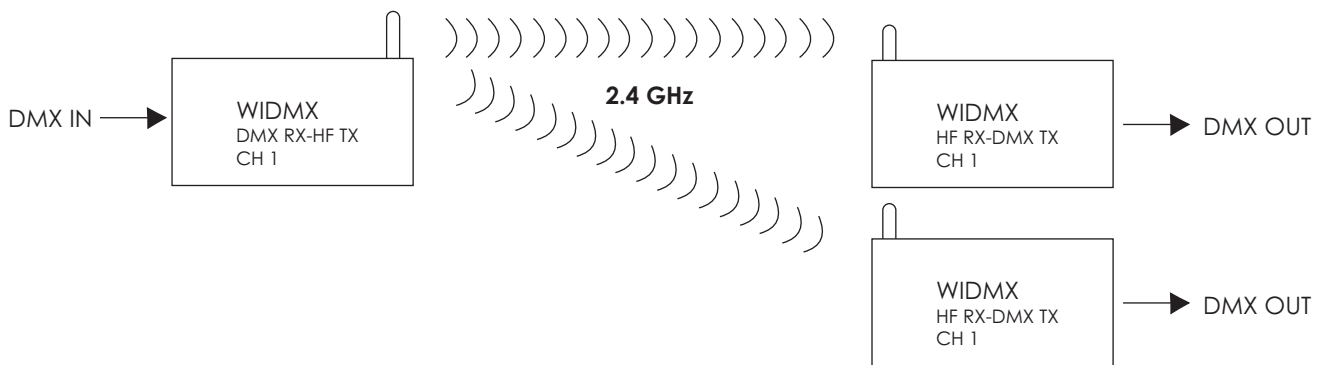
Transmission 1:1



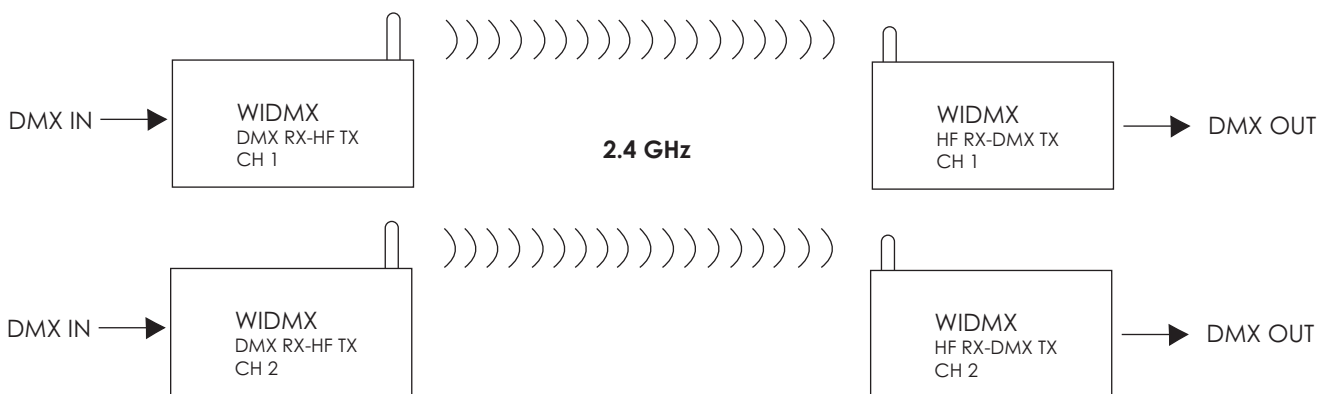
The DMX signal is fed to a transmitter which sends it via RF. A receiver with the same transmission channel receives the RF signal and distributes it as a DMX signal

Transmission 1: Many

The DMX signal is fed to a transmitter which sends it via RF. Several receivers with the same transmission channel receive the RF signal and distribute it as a DMX signal.



Parallel Transmission



It is possible to operate 6 wireless DMX networks with 6 transmitters in parallel without mutual interference by adjusting them to different transmission channels. The wireless DMX networks operate independent of each other in 1 : 1 or 1 : Many transmission mode.

7. Cleaning and Maintenance

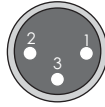
We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents. There are no serviceable parts inside the device. Should you have further questions, please contact your dealer.

8. Pin Connection

3-pin XLR Female connector



3-pin XLR Male connector



XLR-3 Pinout Table	
Pin No.	Function
1	Ground
2	Data -
3	Data +

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.

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.