EXPOLITE

Wireless Transmitter/Receiver

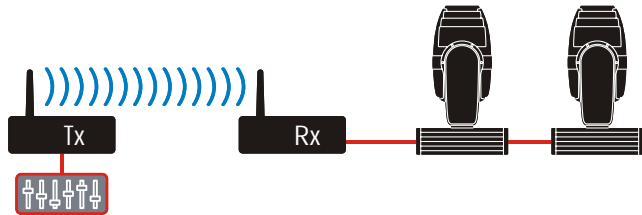# Manual

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NOTES

2.3 POINT-TO-POINT OPERATION

Point-to-point systems are used when you want to send wireless DMX data from a console to a single receiver. As the receiver accepts all 512 DMX channels from the transmitter you can easily daisy chain more fixtures by cable from the original fixture that is wirelessly connected.

2.4 POINT-TO-MULTIPOINT OPERATION

A multipoint W-DMX system can support up to 512 individual receivers responding to a single W-DMX transmitter. All receivers in a multipoint system will listen only to the designated transmitter and they will all receive the full 512 channels of the DMX universe. This makes it straightforward to connect single fixtures or daisy-chained groups of fixtures to any of the receivers in the system.
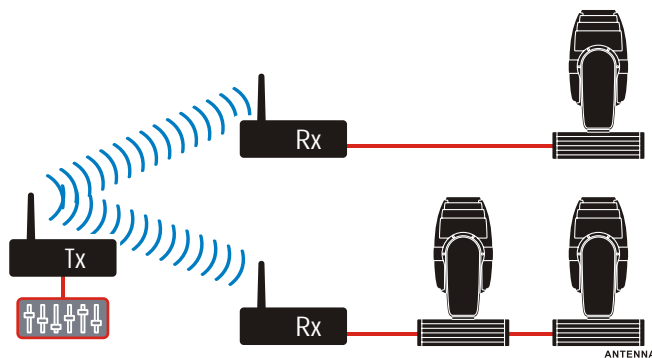
1 PRODUCT SPECIFICATIONS

1.1 W-DMX products

The W-DMX system lies at the heart of every one of our products. The W-DMX radio card is specifically engineered by Wireless Solution Sweden AB to provide the same quality, reliability and perform-ance as any hardwired DMX data link. In fact W-DMX gives you greater freedom to create reliable point-to-point and point-to-multipoint installations over large distances.
W-DMX is unique in its use of certain advanced radio techniques which are more often found in mobile phone and military com-munications. Rather than using fixed frequency channels, W-DMX uses adaptive frequency hopping technology to continually check for interference and to rapidly move operation over to clear radio channels. This occurs one thousand times every second and is used in combination with another advanced technique (called time division multiple access) which makes the most efficient use of every visited frequency channel.
The advantage of such technology will quickly become clear to you: consistent and wide ranging control of your lighting systems over potentially great distances. Indeed, you may actually find that It is all too easy to take W-DMX for granted, for two main reasons:

● Firstly, the complex communication protocols are fully auto-mated and concealed from view - you just plug-and-play, the units do all the hard work.

● Secondly, from the DMX connector of one unit to the DMX connector of another, the W-DMX system is totally transparent. W-DMX fully adheres to the USITT DMX-512 standard and can justifiably be called a 'wireless DMX cable'.

These are the reasons why in every independent comparison with competing products, W-DMX units continually take first prize for distance covered, resilience against interference and ease of installation.

1.2 PHYSICAL DIMENSIONS

1.2.1 DIMENSIONS:204.5X196X174.5mm
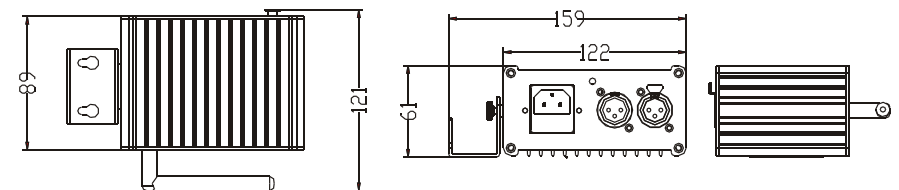
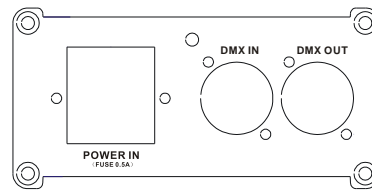### 1.2.2 WEIGHT:0.53KG

2 INSTALLATION

2.1 Transmitter

◆1 Attach the antenna to the connector on the front panel. If using the standard antenna, use also the supplied adaptor.

◆2 Link the DMX source to the DMX in socket on the rear panel.

◆3 Connect power to the unit via the AC power input (90 to 250VAC).

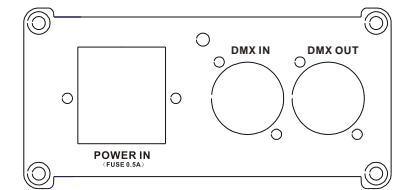◆4 If required, attach the supplied truss holder brackets to the top cover of the unit .

DMX Interface
Transceivers on bus: 32 (max)
Data rate: 250 kbps (max)
ESD protection*: ±15 kV

AC input
90-250VAC 50/60Hz
1A at 115VAC (max)
0.5A at 230VAC (max)

Compliance declarations
ETSI: EN300 328 & 300 826
EMC: EN301 489-17
CE: EN60950
FCC: UQT-WDXOEMPCBF
IC: 6812A-WDMXOEM
ARIB: 06215559/AA/00

RF characteristics
Output power:
20   25** dBm
100   300** mW
Frequency range:
2402 to 2479 MHz
Channel bandwidth: 1
Sensitivity at 0.1%
BER: -95dBm
* Slewrate limited for
    minimum of EMI in
    unterminated networks.
** Only in FCC output
    power mode.

TRANSMITTER INTERFACE

DMX IN   DMX OUT

POWER IN
（FUSE 0.5A）

2.1.1 To add receivers

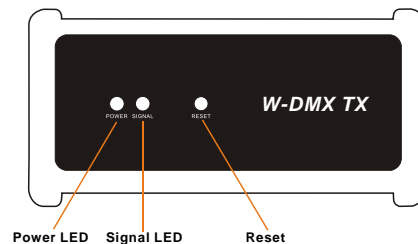Note: You can add receivers at any time, even during operation.

◆1 Power on the receiver unit(s) and ensure that they are not linked with any other transmitter (LINK indicators should be OFF).

◆2 On the transmitter unit, press and release the FUNCTION button. The transmitter will scan for all unlinked receivers for a period of ten seconds - the LINK indicator will flash rapidly.

◆3 If successful, each receiver's LINK indicator will go ON. If any failed, check that the receiver is in range and repeat procedure.

2.1.2 To unlink all receivers

◆1 On the transmitter, press and hold the FUNCTION button until LINK begins flashing. All registered receivers will be unlinked.

POWER SIGNAL   RESET   *W-DMX TX*

Power LED   Signal LED   Reset

2.2 Receiver

◆1 Attach the antenna to the connector on the front panel. If using the standard antenna, use also the supplied adaptor.

◆2 Link the DMX source to the DMX in socket on the rear panel.

◆3 Connect power to the unit either via the AC power input (90 to 250VAC).

◆4 If required, attach the supplied truss holder brackets to the top cover of the unit .

DMX Interface
Transceivers on bus: 32 (max)
Data rate: 250 kbps (max)
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Channel bandwidth: 1
Sensitivity at 0.1%
BER: -95dBm
* Slewrate limited for
    minimum of EMI in
    unterminated networks.
** Only in FCC output
    power mode.

RECEIVER INTERFACE

DMX IN   DMX OUT

POWER IN
（FUSE 0.5A）

2.2.1 To link with a transmitter

◆1 Ensure that this receiver is not linked with any other transmitter (LINK indicator should be OFF).

◆2 On the transmitter unit, press and release the FUNCTION button. The transmitter will scan for all unlinked receivers for a period of ten seconds.

◆3 If successful, the receiver's LINK indicator will go ON. One or more Level indicators will then show the signal strength.
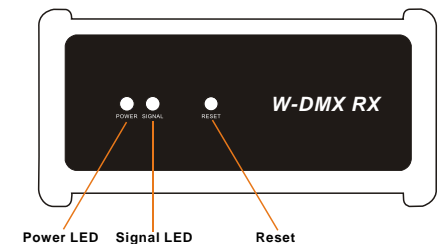
2.2.2 To unlink from a transmitter

◆1 On the receiver, press and hold the FUNCTION button until the LINK indicator goes OFF. The receiver is now unlinked.

POWER SIGNAL   RESET   *W-DMX RX*

Power LED   Signal LED   Reset