

ANTENNA

Wireless DMX systems

RECEIVER

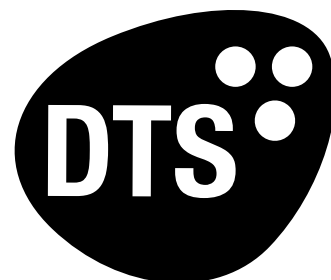
TRANSMITTER

User's manual

ENG
V.1.00



Code 03.E1270 Transmitter system
Code 03.E1275 Receiver system



The Lighting Company

Overview



ANTENNA is a new generation wireless DMX system which employs the **W-DMX technology**. ANTENNA is a compact, plug and play device, easy to set up and use. ANTENNA represents a true innovation in comparison with other wireless DMX systems, because it employs the **adaptive FHSS standard** instead of the commonly used W-LAN standard.

The W-LAN standard uses fixed channels without hopping, so it has a much bigger risk for interference from other competing local wireless networks.

The FHSS standard instead uses **83 discrete frequency channels**, checking every millisecond for interference free transmission.

Units

ANTENNA is made of two units: ANTENNA DMX Transmitter and ANTENNA DMX Receiver.

ANTENNA DMX Transmitter

ANTENNA DMX Transmitter in standard configuration can transmit data to 512 DMX channels.

Multi-cast / Point-to-point transmission

ANTENNA DMX Transmitter can be used either for multi-cast or point-to-point transmission.

* In **Multi-cast** each fixture has a dedicated ANTENNA Receiver: this configuration is particularly useful when you want to control many units totally wireless.

* **Point-to-point** is ideal when you have to bridge a long distance from the console to the first fixture of a lighting system, which is connected to the other units by standard DMX cables.

ANTENNA DMX Receiver

ANTENNA DMX Receiver receives data transmitted over 512 DMX channels.

Electrical specifications: Input 90V AC-250V AC 50-60 Hz Max: 1A at 115V AC-0,5A at 230V AC

Compliance declaration: ETSI: EN300 328 & 300 826 EMC: EN301 489-17 CE: EN60950

FCC: Part 15 sec. 247 & subpart B

Output Power - According to ETSI (Europe) 100 mW (20dBm)

Antenna Sender	Antenna receiver	Line of sight	Max Distance	Frequency
2 dBi	2 dBi	Yes	1,5 km	2,450 GHz
6 dBi	2 dBi	Yes	3 km	2,450 GHz
9 dBi	2 dBi	Yes	7 km	2,450 GHz
2 dBi	2 dBi	No	0,2 km	2,450 GHz
2 dBi	5 dBi	No	1 km	2,450 GHz
9 dBi	15 dBi	Yes	10 km	2,450 GHz

Operating instructions

Logging on a receiver

To log on the receivers in the system simply press and quickly release the function button on the transmitter.

The transmitter will start flashing rapidly red/green scanning for new free receivers. When a receiver logs on to the transmitter it starts to flash rapidly in the same way as the transmitter. After approximately 10 seconds the transmitter will jump back to normal mode and continue transmitting data. The receivers now try to synchronize to the transmitter.

When synchronized to the transmitter 2 different modes are possible:

1. Black box transmitter has detected and transmits a DMX signal, in this mode a solid green light is seen on the transmitter and the receiver.
2. No DMX signal connected, the Black box transmitter will flash red/green and the receiver will flash green (~1 second) / red (~0,1 seconds).

To log a receiver off from a transmitter simply press the function button for approximately 3 seconds, when logged off a solid red light is seen on the receivers meaning it's available for log in on a transmitter.

Logging out a receiver

Press and hold the function button of the receiver for about 3 seconds. When the receiver's status LED is solid red the receiver is logged out.

Logging out all receivers from a transmitter

Press and hold the function button of the transmitter for about 3 seconds. When the receiver's status LED is solid red the receiver is logged out.

Transmitter, Status LED

Flashing red/green, no DMX connected.

Solid green, DMX signal detected and transmitted.

Fast flashing red/green, log in mode (every free receiver, not logged in to any other transmitter, will be logged on)

Receiver, Status LED

Solid red, not logged on to a transmitter (free).

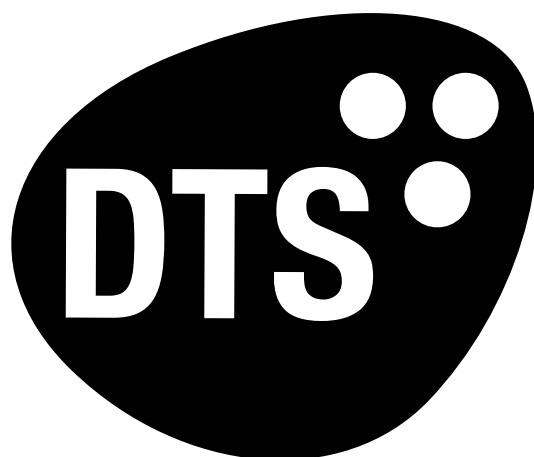
Flashing green ~1 seconds / red ~0,1 seconds, logged on to a transmitter and DMX line idle.

Solid green, logged on to a transmitter and receiving DMX data.

Fast flashing red/green, log in mode (getting log in configuration data from a transmitter)

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MADE IN ITALY



The Lighting Company