

LIGHTCASTER™

W-DMX®



2.4 GHz W-DMX®
Wireless System



Blizzard Lighting, LLC
<http://www.blizzardpro.com>
Waukesha, WI USA
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1. GETTING STARTED

What's In The Box?

- 1 x Transceiver or Receiver Unit
- 1 x Totally Awesome AC Power Cord
- A Pretty Swell Pole Mounting Bracket
- An Ever-So-Handy 2dBi Antenna
- This Lovely User Manual

Getting It Out Of The Box

Congratulations on purchasing the LightCaster™ W-DMX™ system, the ultimate solution to make all those messy DMX cord nightmares a thing of the past! Now that you've got your W-DMX system (or hopefully, systems!), you should carefully unpack the box and check the contents to ensure that all parts are present and in good condition. If anything looks as if it has been damaged in transit, notify the shipper immediately and keep the packing material for inspection. Again, please save the carton and all packing materials. If a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

SAFETY INSTRUCTIONS

- Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture.
- In the event of a serious operating problem, stop using the unit.
- Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction.
- Never connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.

CAUTION! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself.

If something is wrong, please open a support ticket on our website. We'll be happy to help, honest.

www.blizzardpro.com/support

Author:	Date:	Last Edited:	Date:
J. Thomas	8/18/2014	J. Thomas	4/22/2019

2. INTRODUCTION

MAIN FEATURES

- One button operation 2.4GHz W-DMX® wireless system
- Compatible with all DMX512 compliant equipment
- FHSS (Frequency-Hopping Spread Spectrum) technology
- POWERCON-compatible power input

SPECIFICATIONS

- Transceiver transmit power: 100mW
- Receiver sensitivity: 98dBm
- Max Operating Range: 500 meters (line-of-sight)
- Latency: < 5mS
- Antenna type: 2dBi
- Universes: 1 per transmitter, max. 16

GENERAL OVERVIEW

The LightCaster™ W-DMX™ system is simple to install and set up. The W-DMX™ system functions just like a wire, allowing you to send a whole universe of DMX data wirelessly, with RDM commands as well, at the full data rate and with non-noticeable delay.

To set up a simple W-DMX™ system, you need a transceiver that plugs into your lighting controller to act as a transmitter, and another transceiver or receiver unit, that receives that wireless DMX signal and outputs that DMX data to your lighting fixtures over a DMX cable. A single transmitter and receiver set-up can be expanded with multiple receivers, functioning like a big 'in-air' splitter, such that the full universe of DMX is transmitted to multiple points.

W-DMX™ Receiver

A LightCaster™ W-DMX™ system can have at a minimum one receiver, and up to an unlimited maximum number of receivers per universe of DMX. A receiver is required to receive the DMX signal transmitted wirelessly by the transmitter and output it to any downstream fixtures.

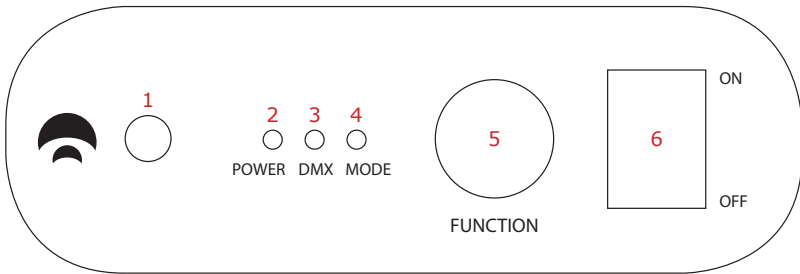
W-DMX™ Transceiver

A LightCaster™ W-DMX™ system requires one transmitter per universe of DMX, to broadcast the signal to any receiver. The controller will normally be plugged straight in to the transmitter.

DISCLAIMER:

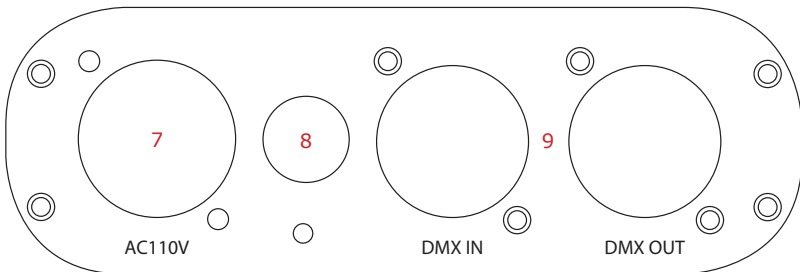
The power connector fitted to the unit and cord are designed for compatibility with products manufactured by Neutrik AG, Neutrik USA and their related entities, however they are not manufactured by, affiliated with or endorsed by Neutrik AG, Neutrik USA, or any related entity. Neutrik® and powerCON® are registered trademarks of Neutrik AG.

Nifty, Spiffy Diagram (front)



1.) Antenna	3.) DMX Indicator	5.) Function Button
2.) Power Indicator	4.) Mode Indicator	6.) Power Switch

Nifty, Spiffy Diagram (back)



7.) Power In	8.) Fuse Holder	9.) DMX In & Out
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Mounting & Rigging

This unit may be mounted in any safe position provided there is enough room for ventilation.

Adjust the angle of the unit by loosening both screws and tilting the unit. After finding the desired position, retighten all screws.

Never mount in places where the unit will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

3. OPERATION

The LED status indicators on both the transceiver and the receiver units display its current status or mode. **Below, each status is described:**

LED Status Indicators

1. POWER LED: When lit, the power is connected.
2. DMX LED:

Transceiver Only:

- LED off: The unit is ready for you to choose the mode.
- Flashing every 1.5 seconds: Transmission is off.
- Flash every 1 seconds: Transmitting, but there is no DMX signal.
- Flash every 0.2 seconds: Searching for a receiver.
- On: Transmitting a DMX signal.

Receiver Only:

- Off: Not receiving.
- Flash every 1s: Receiving, but no DMX signal.
- Flash every 0.2s: Searching for transceiver.
- On: Receiving DMX signal.

3. MODE LED:
 - Off: Wireless Mode 1 (Frequency 1)
 - Flash: Wireless Mode 2 (Frequency 2)
 - On: Wireless Mode 3 (Frequency 3)

Setting Up

1. One transceiver with multiple receivers:

Power on all units. The DMX LED indicators on all units should be off (if some DMX LED indicators are on or are flashing, press & hold the **<FUNCTION>** button until they turn off), then press the transceivers **<FUNCTION>** button again. All the receivers should flash quickly, and then all be matched up correctly.

2. Multiple transceivers, multiple receivers; e.g. 3 groups consisting of a transceiver & receiver(s) named A, B, and C:
 - 1.) Turn power off of all units.
 - 2.) Group "A" gets powered on, then follow step 1 above.
 - 3.) Group "B" gets powered on, then follow step 1 above.
 - 4.) Group "C" gets powered on, then follow step 1 above.

Disconnecting A LightCaster™ W-DMX™ Wireless Unit

1. Press and hold the transmitter **<FUNCTION>** button for 5 seconds. The transmitter will disconnect from all receivers. The DMX LED indicators on the receivers will then be turned off.
2. Press and hold the each receivers **<FUNCTION>** button for 5 seconds. Each receiver will disconnect from the transmitter, and its DMX LED indicator then will be turned off.

Frequency/Mode Change *(Performed only on transceivers)*

There are 3 different modes (frequencies) that you can manually choose from. They are recognizable by the status of the Mode LED:

- *Mode 1: OFF*
 - *Mode 2: Blinking*
 - *Mode 3: ON*
1. To manually change the mode, hold the **<FUNCTION>** button for 8 seconds until the DMX indicator turns off.
 2. Press the **<FUNCTION>** button to switch between modes.
 3. Press and hold the **<FUNCTION>** button for 7 seconds, and the transmitter will begin transmitting the DMX signal through the newly set frequency.

Set a Transceiver to Transmit or Receive

Turn the power off, then turn it back on. Press the **<FUNCTION>** button for 2 seconds, it will switch from a transmitter to receiver or a receiver to transmitter. If during this process you see the DMX indicator change, it is a transmitter, otherwise it is a receiver.

Point-2-Point Operation

Basic Point-2-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 fixture with the wireless connection.

Multipoint-2-Multipoint Operation

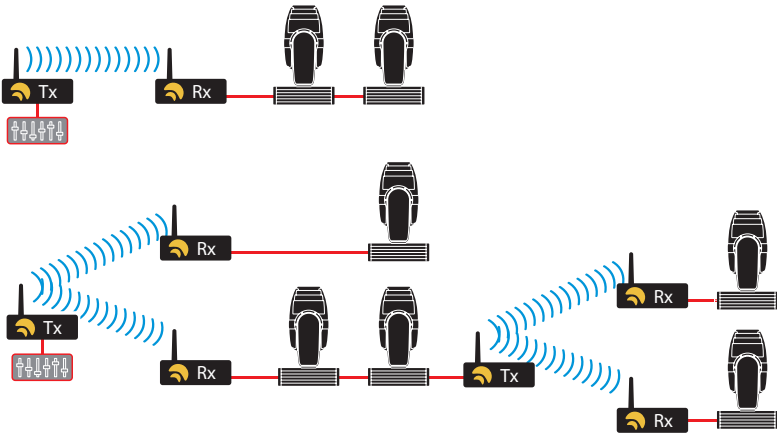
Up to 16 universes of DMX can be transmitted simultaneously using a multipoint to multipoint approach. All receivers in a multipoint system will listen only to the designated transmitter without any delays or interference from the systems working alongside.

Need more receivers?

Simply add as many receivers as desired to the transmitter, assigning them with a simple button push.

Possible Configurations

The diagrams below show possible configurations. Multiple receivers may be used in any possible configuration.



Returns (Gasp!)

We've taken a lot of precautions to make sure you never even have to worry about sending a defective unit back, or sending a unit in for service. But, like any complex piece of equipment designed and built by humans, once in a while, something doesn't go as planned. If you find yourself with a unit that isn't behaving like a good little unit, you'll need to obtain a Return Authorization (RA).

Don't worry, this is easy. Just go to our website and open a support ticket at www.blizzardpro.com/support, and we'll issue you an RA. Then, you'll need to send the unit to us using a trackable, pre-paid freight method. We suggest using USPS Priority or UPS. Make sure you carefully pack the fixture for transit, and whenever possible, use the original box & packing for shipping.

When returning your fixture for service, be sure to include the following:

- 1.) Your contact information (Name, Address, Phone, Email).
- 2.) The RA# issued to you
- 3.) A brief description of the problem/symptoms.

We will, at our discretion, repair or replace the fixture. Please remember that any shipping damage which occurs in transit to us is the customer's responsibility, so pack it well!

Shipping Issues

Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.



**Enjoy your product!
Our sincerest thanks for your purchase!
--The team @ Blizzard Lighting**