

# Projector Dowser Quick Start Guide

Download the full manual at [http://NorthlightDMX.com/DOWSER\\_quick\\_start.pdf](http://NorthlightDMX.com/DOWSER_quick_start.pdf)

## Connecting for the first time

**Only use the supplied power supply.**

**Make sure dowser flag is in a safe position when power is first supplied.**

Input Signal: Northlight decoder board accepts DMX 512, current and legacy versions. The DOWSER can receive data at the full rate and is responsive to all 512 channels.

### **Power requirements:**

**Voltage:** 5 volts DC

**Current:** 1 A is typical

### **Physical Dimensions:**

4.75”L X 4.10”Wx 2.10”H

### **Flag Dimensions:**

8.25” long X 4.15” wide

### **Flag adjustment:**

The flag has 3 mounting locations, 1.5” apart, to adjust the overall length.

The flag will travel 90° from DMX level 0-255.

Install the flag to achieve full blackout with DMX level 255 or use the manual switch.



### **Audible noise:**

There is noise from the gears and feedback mechanism inside the servo.

This is not for very quiet situations.

The servo always chatter a bit when there is a load on the servo, it will hunt for position.

That is in the servo, not the controller.

Most low cost dowsers RC servo motors.

Stepper motors will offer more quiet operation at great increase

### **OLED display:**

There is 1 main screen.

The left side of the screen displays DMX status.

When DMX is good it displays “DMX LEVEL” and below is the level for the channel at the Start Address.

When not receiving DMX the display is “NO DMX signal”.

### **Start Address:**

To set the Start Address us the red buttons, up and down. After 30 seconds of no activity the display will show “Saving Address”. The Start Address is saved to permanent memory.

## External manual switch:

The 3 pin XLR is for an external switch wired to short across pins 1 and 2. Shorting pins 1 and 2 is momentary. As long as the pins are shorted the flag will go to full on.

## Ground

Pin 1 on the XLR connector is the signal common – not earth ground. There are no earth ground connections on the Dowser.

Do not install and earth ground to Pin 1 on any XLR.

## DMX512 In

The DMX input pin numbers correspond to the XLR pin numbers.

DMX512 protocol specifies that 5 pin XLR connectors be used. Female on the transmitter and male on the receiver.

When a 3 pin XLR is used it is wired the same as the first 3 pins on the 5 pin XLR.



<u>PIN</u>	<u>WIRE</u>	<u>SIGNAL</u>
1	signal	ground/return
2	signal	data compliment ( - )
3	signal	data true ( + )
4	signal	spare data compliment ( - )
5	signal conductor	spare data true ( + )

Conductors 2/3 and 4/5 should be twisted pairs.

## Wiring of the DMX passive loop through.

### Warranty

Northlight Systems warrants this product against defects in materials and workmanship for a period of 1 year.

### Returns Policy

If there is a defect, we will repair or replace the product at our discretion.

We offer a full refund on the purchase price if returned in original, unused and "like new", condition in less than 30 days.

Return the product with a description of the problem. Free repairs are for defective parts or workmanship only.

Repairs due to improper hookup, over voltage, short circuits, physical damage etc., will be charged to the customer.

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