

RLYA04D Quick Start Guide

Download to full manual at www.NorthlightDMX.com/RLYA04D.pdf

Connecting for the first time

Make connections one at a time.

First connect the power.

Is anything hot? Does the green LED blink? Did you measure the power with a voltmeter?

Second connect the DMX source.

Does the LED glow or flash very fast?

Use a Ohm meter to check the relays. Are they closing?

Last thing.

Connect your load to the relays.

Features

Quality low power DMX receiver chip equal to 1/8 unit load on DMX line

ESD protection and "fail safe" features on DMX receiver chip

Allows DMX512 digital protocol to control 4 Relays.

Quality Omron relays included on board.

Address all 512 channels.

Accepts AC or DC power.

Phoenix contact screw terminals

Heavy 2 ounce copper traces

DIN rail mounts included

SPECS

Input Signal:

Northlight RLY04 board accepts DMX512 protocol, current and legacy versions.

Output:

Output is 4 Relays capable of 10 Amps @ 110 VAC.

Screw terminals provided for Normally open configuration.

Power requirements:

12 to 24 volts DC @ 350 mA.

Max. 12 VAC

LED Indicators:Green DMX signal present LED.

Board connections:

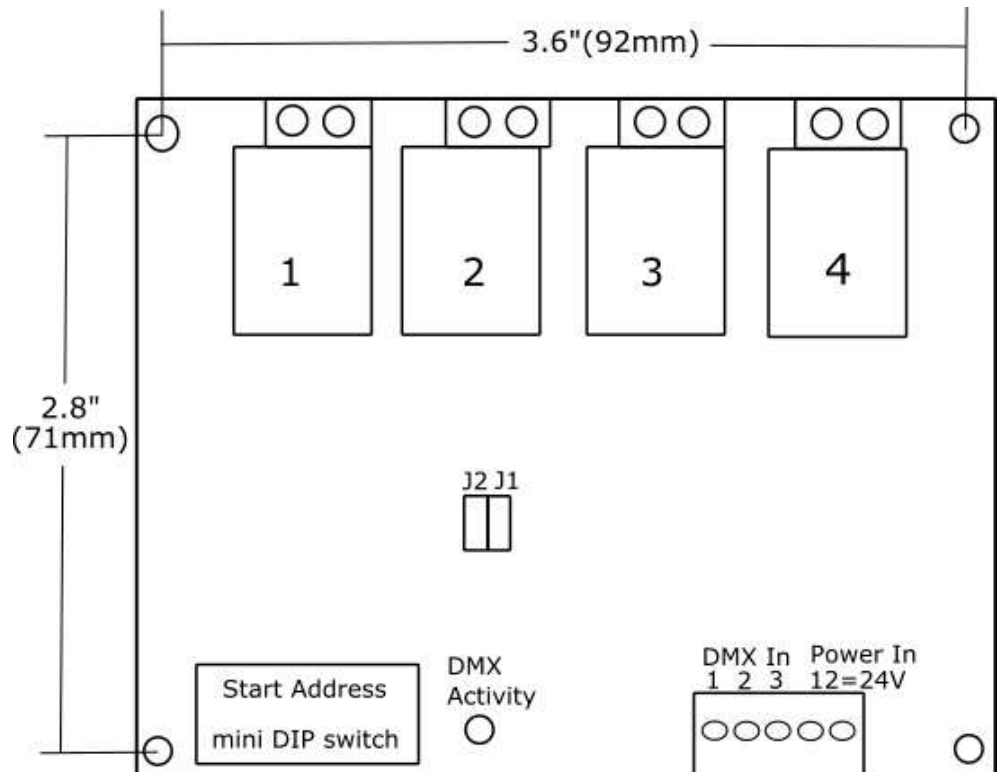
All connections are made with screw terminals. See drawing for connector locations.

Physical Dimensions

3.90"L X 3.00"W +/- .20"

Ground

The signal ground connector is the common signal ground – not earth ground.



DMX512 In

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

Pin 1 is signal ground, not earth ground

Pin 2 is DMX512 -

Pin 3 is DMX512 +

Address switch:

Mini DIP switches on board or panel mount.

The mini DIP switch, individual switches are numbered 1 – 9, left to right.

Set the starting address to the first in a group of 4.

The address is entered on the DIP switches in standard binary code starting with 1.

See the chart of all 512, address switch positions at the back of the full manual.

Each switch on the DIP switch, numbered 1-9, has a decimal equivalent.

To calculate the address on the DIP switch, just add up the decimal equivalents of the switches.

For example, to set the DMX output address to 8, set switch 4 to ON. Switch 4 is equal to 8.

	1	1	Start Address DIP switch
	2	2	
	4	3	
decimal	8	4	
equivalent	16	5	
	32	6	
	64	7	
	128	8	
	255	9	

Using the configuration jumper

There is 1 configuration jumper on the board.

J1 – Determines the output in the event of DMX signal loss.

Open(no jumper) - When the DMX signal is lost, the output will be zero.

Closed(jumper in place) – When the DMX signal is lost the board will hold and continue to output the last valid data.

J2 – Determines the trip point of the relays.

Open(no jumper) – Relays close on DMX level 192(75%) or above.

Closed(jumper in plac) – Relays colse on DMX level 22(8%) or above.

Using the relays

The relays used are Single Pole Single Throw standard relays.

Rated at 10 Amps , 110 VAC maximum.

The screw terminals provide access to the common and normally open contacts.

The board does not provide AC power to the terminals.

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.

Northlight will repair any circuit board for a flat fee of \$20.00 plus return shipping.