

RLYA04E Quick Start Guide

Download at www.NorthlightDMX.com/DMXtoRelay.htm/RLYA04E.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 pluggable screw terminals.

Heavy 2 ounce copper traces.

Phoenix Contact DIN rail mounts included.

DIN rail not included.

Wall mount power supply included.

Input Signal:

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

XLR connectors

Neutric 5 pin male and female connectors are provided on the front panel.

Wired as a thru configuration, all 5 wires pass from the input to the output connector.

Output:

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

Pluggable screw terminals provided for Normally open configuration.

Output Connector

The RLYA04 has 4, normally open dry contact relays. Max rating 10 Amps, 110 VAC.

The pluggable terminal blocks are held in place with a locking tab located on the top of the terminal block. The locking tab must be pried up to remove the terminal.

The terminal block can be difficult to remove once installed so it is recommended to connect the wires before the terminal block is installed.

If installing wires after the terminal block is installed, do not press down when tightening the screws without supporting the connector from the bottom when tightening the screws.

Acceptable wire size is 12 – 22 AWG.

The output connectors are not connected to the DC power supply or AC line voltage inside the enclosure. They are just single pole switches. Power comes from an external source and is switched to the load.



Power requirements:

12 to 24 volts DC @ 350 mA. Max. 12 VAC
A standard center positive ,
2.1mm barrel jack is provided.

LED Indicators:Green DMX
signal present LED.

Physical Dimensions

4.20"W X 5.00"L

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.

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

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 9, set switch 4 and switch 1 to ON. Switch 4 is equal to 8 plus 1 equals
address 9.

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.