

RLYA01 – Basic 1 Relay

Quick Start Guide

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?

Last thing.

Connect your load to the relay .

Board Features

- Single relay
- Address switch address all 512 channels
- On board relay

Input Signal:

Northlight RLYA01 board accepts DMX512 protocol, current and legacy versions.

Output:

One 10 Amp 110 VAC relay.

Address switch:

Mini DIP switches on the circuit board or panel mount.
Push button address switch.

Power requirements:

12 to 24 volts DC @ 200 mA.

12 VAC @ 150 mA

The power connector is not polarized.

LED Indicator:

Green DMX signal present LED.

Connections

Screw terminals are provided for all connections.

Physical Dimensions

Dimensions in Inches(millimeter)

2.0(50.8)L X 2.25(57.15)W +/- .20"

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

The DMX gnd is signal ground – not earth ground, do not connect to earth ground.

Connections to the Relay board

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.

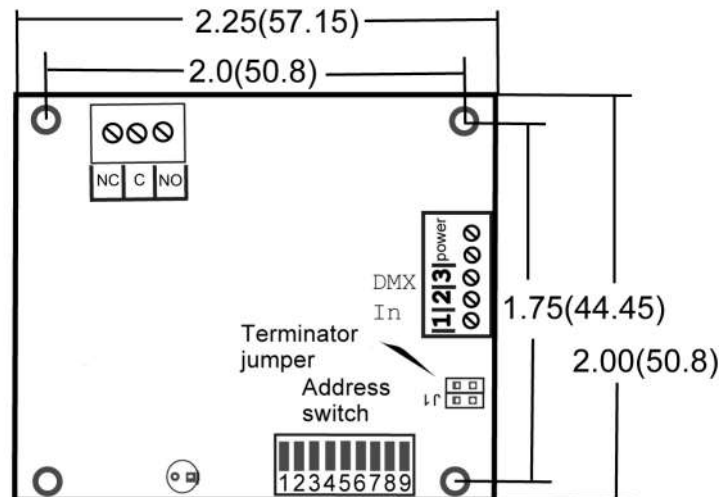
Pin 1 is signal ground, not earth ground

Pin 2 is DMX512 -

Pin 3 is DMX512 +

Setting the address for DMX512

Set the starting address .



The address is entered on the DIP switches in standard binary code starting with 1.
See the chart of all 512, address switch positions in the full manual.

The **Push button** address switch is a snap fit for a panel up to .13" thick.
The switch connects to board via 14 pin ribbon cable. The ribbon cable is installed with the ribbon going away from the board.
When using the Push button switch, set the starting address to the channel desired. Start with address 1 up to 512.

Relay

The relay used is a 10 Amp, 110VAC ,Single Pole Double Throw relay.
The screw terminals provide access to the common, normally open and normally closed terminals.

Using the configuration jumpers

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 relays will open.

Closed(jumper in place) – When the DMX signal is lost the relays will hold the last valid data.

J2 –Sets the RLYA01 as a DMX sense relay. J1 and J3 are not used when this jumper is set.

Open(no jumper) – not used

Closed(jumper in place) – When DMX in is valid relay will close. Relay opens on DMX signal loss.

J3 –Sets the relay trip point. J3 has no effect when J2 is used.

Open(no jumper) – sets the relay to turn on at DMX level 192(75%)

Closed(jumper in place) – sets the relay to turn on at DMX level 19(8%).

