

**OVERVIEW**

The nLight **nIO D / nIO 1S** is a low voltage device that interfaces and provides network addressability for a variety of non-nLight devices. The nIO D is an output device that controls the dimming level of 0-10 VDC dimming ballasts / LED drivers. The **nIO 1S** is an input device that detects a toggle or momentary dry contact closure switch. Additionally, the **nIO 1S**'s can read a 0-10 VDC dimming control signal from non-nLight dimming photocells and wall dimmers.

**nIO D / nIO 1S** devices wire into any zone of nLight devices (sensors, power packs, WallPods) using CAT-5e cabling. Class 2 interface wires are present with each unit: an input or an output wire, and a common/ground. The **nIO D / nIO 1S** comes standard in an inline wired housing or with a 1/2" chase nipple for mounting to a luminaire or junction box knockout (**KO** option).

**FEATURES**

**nIO D**

- Outputs 0-10VDC Dimming Signal

**nIO 1S**

- Inputs Dry Contact Switches (Toggle or Momentary)
- Inputs 0-10 VDC Dimming Signal from a non-nLight Device
- Toggles Local Relays On/Off
- Communicates w/ nLight Network
- Remotely Configurable/Upgradeable
- Push-Button Programmable
- Inline Wired - No Mounting Required

**Warranty**

Five-year limited warranty. Complete warranty terms located at:

[www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:** Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.



nLight®

nIO D  
nIO 1S



This item is an A+ capable component, which has been designed and tested to provide out-of-the-box luminaire compatibility with simple commissioning, when included as part of an A+ Certified™ Solution.

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).



**ORDERING INFORMATION**

nIO		Example: nIO D KO LT	
Series	I/O Options	Mounting	Temp/Humidity
nIO	D      0-10VDC dimming output 1S      Contact closure input	[blank]    Inline wired KO          Chase nipple mounting	[blank]    Standard LT          Low Temp

## SPECIFICATIONS

Size (Inline Wired):	2.54"H x 1.98"W x 1.00"D (6.45 cm x 5.03 cm x 2.54cm)
Size ( <b>KO</b> option):	3.38"H x 2.53"W x 1.83"D (8.59 cm x 6.43 cm x 4.65 cm) (dimensions do not include 1/2" chase nipple)
Weight:	2 oz
Color:	White
nLight Network Ports:	2 RJ-45
Bus Power Consumption:	~3 mA
Dimming Input:	<b>(nIO 1S)</b> 0-10VDC
Dimming Output Load:	<b>(nIO D)</b> sinks <20mA, 0-10VDC LED drivers/ ballasts
Wire:	20 AWG (3)

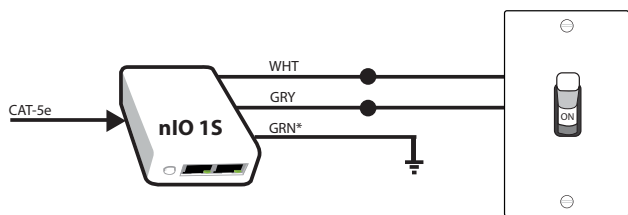
RoHS compliant, Plenum rated

## WIRING

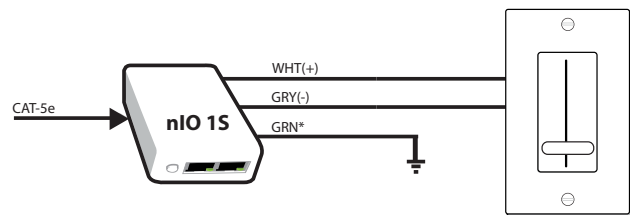
Power to a **nIO D** / **nIO 1S** device is provided by the CAT-5e connection to an nLight power pack/supply or other nLight device supplying bus power. If power is not present on the CAT-5e bus, the **nIO D**'s dimming output will release lights to highest level. T568B pin/pair assignment is recommended for all CAT-5e cables.

### TYPICAL nIO 1S WIRING CONFIGURATIONS

#### ON/OFF SWITCHES (TOGGLE OR MOMENTARY)



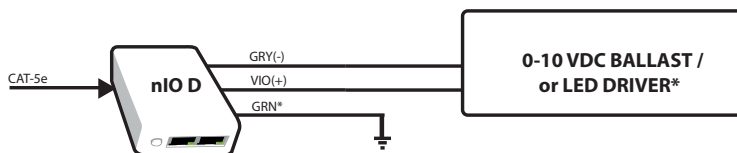
#### 0-10 VDC WALL DIMMERS



#### 0-10 VDC DIMMING PHOTOCELL



### nIO D WIRING CONFIGURATION



\*Note: A green wire is available for an optional connection to an approved ground. This wire is isolated from the class 2 circuitry of the sensor. Connection will provide improved network protection in case of accidental landing of line voltage to VIOLET or GRAY dimming wires. It also provides network isolation from any high voltage leakage from a ballast or driver's 0-10V input wires. If an approved ground is not available the green wire should be capped.