Catalog Number: | Date: | Project:

OVERVIEW

The nLight AIR rSI is a system input device used to convert dry contact and analog (0-10V) outputs into wireless nLight AIR broadcasts. The rSI is the ideal device for eliminating wiring when interfacing with third-party systems and devices, such as fire alarms, pillow switches, momentary and maintained style switches and push buttons, analog dimming switches, and more.

KEY FEATURES

- Each device has two isolated inputs that connect with 0-10V or dry contact outputs
- Inputs can be programmed to interface with separate outputs or in collaboration to work with a single multi-output device
- Programming options allow the rSI to connect to proportional and disproportional analog outputs and momentary and maintained dry contact outputs
- Binary or analog BACnet points represent the status for any connected output when connected to an nLight ECLYPSE™

INSTALLATION FEATURES

- Chase nipple or side slot access to dry contact inputs
- Wireless communication enables simple integration and eliminates long wire runs
- External antenna option provides flexible mounting options and addresses Chicago Plenum needs
- UL 2043 listed for plenum applications
- LED indicators clearly identify when an output is sensed

ADVANCED WIRELESS FEATURES

- Device supports Autonomous Bridging Technology, repeating group and network messages for nLight AIR devices
- Fully compatible with other nLight AIR devices
- Supports network-wide broadcasts when connected to an nLight ECLYPSE™
- Includes comprehensive wireless security measures that are standard to nLight AIR devices

nLight® AIR rSI System Input Device



Warranty

Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

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

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ORDERING INFORMATION

rSI					Example: rSI 2S ST UVOLT G2
Series	**System Inputs**	**Input Location**	**Antenna**	**Power**[1]	**Generation**
rSI	2S 2 Inputs	[blank] Inputs via chase nipple ST Inputs via side terminal	[blank] Internally housed antenna CP Chicago Plenum	UVOLT 120-480V	G2 Generation 2 compatibility

Note:

1. 120–277 VAC (typical), up to 480 VAC line-to-neutral where available

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SPECIFICATIONS

Size:	4.725" x 4.80" x 1.865"
Weight:	11.1oz
Mounting:	½" knockout
Color:	White
Temperature:	-4°F to 140°F (-20°C to 60°C)
Humidity:	5 to 90% non-condensing
Location:	Damp location rating
Wires:	18AWG line and low voltage wires
Operating Voltage:	120-480VAC
Output Ratings:	24VDC, 1mA source current per scene input
Frequency:	50/60Hz
Supported Connections:	Dry contact output or analog output (sinking only)
Radio Frequencies:	900Mhz up to +20dBM, 2.4 GHz up to +10dBM
Wireless Standard:	900MHz: IEEE 802.15.4-based; 2.4GHz: Version 4.0+ of the Bluetooth specification
Security:	Application Data Encryption AES 128 bit, Mutual Entity Authentication, Message Confidentiality, Message Authentication and Replay Prevention, Limited Anonymity. Complies with California Civil Code Title 1.81.26, Security of Connected Devices, approved under Senate Bill No. 327 (2018)
Regulatory Compliance:	FCC ID: 2ADCB-RMODIT3 IC: 6715C-RMODIT3 IFETEL: RCPNLNL20-2057 cULus RoHS

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WIRING

When paired to an nLight ECLYPSE, the rSI can respond to security and fire alarm interfaces by sending partial or entire networks to full output, ignoring other commands until the emergency condition ends.

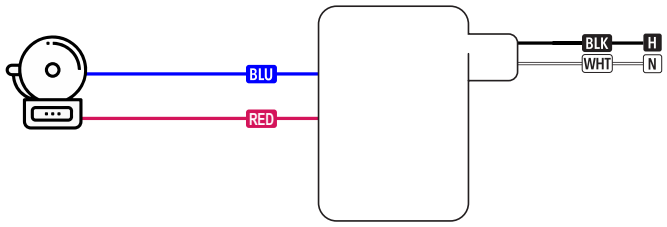


Fig 1. - rSI 2S ST Wiring to Fire Alarm

The rSI supports wiring to both single and double-pole outputs, including pillow switches. When connected to a single-pole pillow switch, "loop mode" allows the rSI to send on/off and raise/lower broadcasts to nLight AIR output devices and luminaires. When connected to a double-pole pillow switch, each individual input of the rSI can be used to send on/raise or off/lower broadcasts. Additional programming options are available for other switch types. See the PROGRAMMING OPTIONS section for more information.

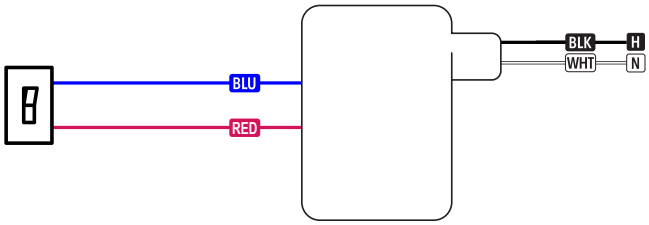


Fig 2. - rSI 2S ST Wiring to Single Pole Pillow Switch

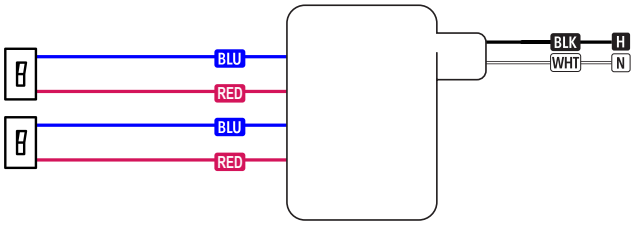


Fig 3. - rSI 2S ST Wiring to Double Pole Pillow Switch

Slider switches, photocells, and other analog devices can send raise/lower and on/off broadcasts based on their 0-10V outputs.

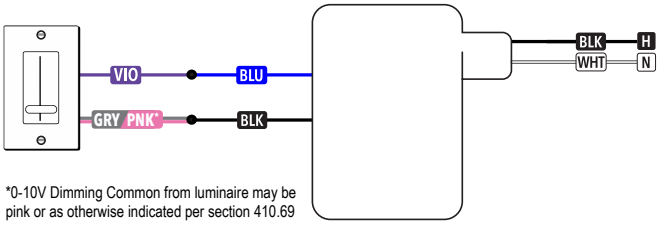


Fig 4. - rSI 2S ST Wiring to Analog Slider

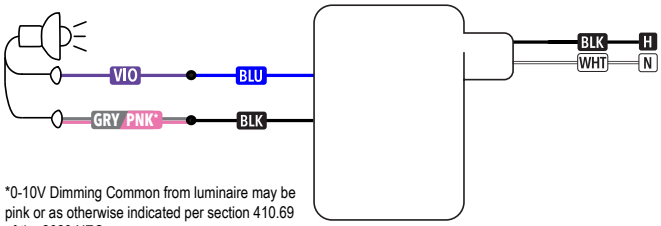


Fig 5. - rSI 2S ST Wiring to Analog Photocell

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PROGRAMMING OPTIONS

The below are descriptions of how each input can be programmed.

- Wallpod Mode
  - Momentary contact type: A TOGGLE command is sent when the contact is closed. No command is sent when the contact is opened.
  - Maintain contact type: An ON command is sent when the contact is closed, and an OFF command is sent when the contact is opened.
- On Mode
  - Momentary contact type: An ON command is sent when the contact is closed. No command is sent when the contact is opened.
  - Maintain contact type: An ON command is sent when the contact is closed. No command is sent when the contact is opened.
- Off Mode
  - Momentary contact type: An OFF command is sent when the contact is closed. No message is sent when the contact is opened.
  - Maintain contact type: An OFF command is sent when the contact is closed. No message is sent when the contact is opened.
- On + Raise Mode
  - Momentary contact type: An ON command is sent when the contact is closed for less than 0.5 seconds.
  - Maintain contact type: A RAISE command is sent when the contact is held for greater than 0.5 seconds, raising light levels for the duration of the hold.
- Off + Lower Mode
  - Momentary contact type: An OFF command is sent when the contact is closed for less than 0.5 seconds.
  - Maintain contact type: A LOWER command is sent when the contact is held for greater than 0.5 seconds, lowering light levels for the duration of the hold.
- Loop Mode
  - Momentary contact type: A TOGGLE command is sent when the contact is closed for less than 0.5 seconds.
  - Maintain contact type: A LOOP command is sent when lights are held for greater than 0.5 seconds, raising the light level to 100% or lowering the light level to 1% in a cycle for the duration of the hold.
- Trigger Local Preset Scene
  - Momentary contact type: Local Scene is triggered when the contact is closed. No command is sent when the contact is opened.
  - Maintain contact type: Local Scene is triggered when the contact is closed. No command is sent when the contact is opened.
- Trigger Global Preset Scene
  - Momentary contact type: Global Scene is triggered when the contact is closed. No command is sent when the contact is opened.
  - Maintain contact type: Global Scene is triggered when the contact is closed. No command is sent when the contact is opened.
- Trigger Global Profile Scene
  - Momentary contact type: A TOGGLE command is sent when the contact is closed. No command is sent when the contact is opened.
  - Maintain contact type: An ON command is sent when the contact is closed, and an OFF command is sent when the contact is opened.
- Start Global Profile Scene
  - Momentary contact type: An ON command is sent when the contact is closed. No command is sent when the contact is opened.
  - Maintain contact type: An ON command is sent when the contact is closed. No command is sent when the contact is opened.
- Stop Global Profile Scene
  - Momentary contact type: An OFF command is sent when the contact is closed. No message is sent when the contact is opened.
  - Maintain contact type: An OFF command is sent when the contact is closed. No message is sent when the contact is opened.
- Analog Mode – Photocell: Light levels will configurably increase proportionally or non-proportionally based on a 0-10V signal from an analog photocell. User can configure dimming curve, transition on/off times, and off threshold.
- Analog Mode – Switch: Light levels will configurably increase proportionally based on a 0-10V signal from an analog switch. Lights transition off when the sensed voltage drops below 0.85V.

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