

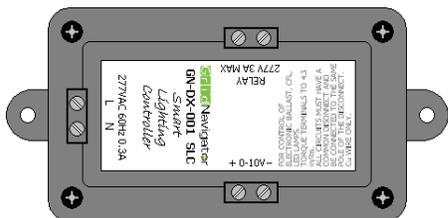
GridNavigator

IFC (120-277V) Installation Instructions

GridNavigator

200 Varick Street, #508
New York, NY 10014
www.GridNavigator.com

Model Number: **GN-DX-001**



Description

GridNavigator's IFC is a control module for 0-to-10-volt dimmer ballasts in LED lighting.

Specifications

General	
RF Frequency	ISM Band - 2.405 to 2.475 GHz
RF Range	Up to 2000 ft (indoor) 4000 ft (open air)
RF Output Power	20 dBm (100 mW)
RF Reception Sensitivity	-102 dBm
Antenna	External or Internal (optional)
Wires	10-24 AWG
Warranty	5 year limited
Physical/Environmental	
Dimensions	5.370" x 2.625" x 1.250"
Weight	4 oz.
Operating Environment	Indoors or Outdoors (inside a weather tight lighting enclosure)
Operating Temperature	-40° to + 65° C
Operating Humidity Range	0% to 95% RH
Storage Temperature	-40° to + 90° C
Certification	UL 916
Electrical	
AC Input Voltage Line Frequency Power	277 VAC +/-10% Phase to Neutral only 50 - 60 Hz 4.5 W maximum
DC Output Voltage Current Isolation	0 to 10 VDC 0 - 50mA (+ control and - control) are fully isolated from AC input, neutral, and relay

Precautions

- Read all instructions and understand them before attempting installation. This document should be

saved for future reference and passed on to any subsequent owner.

- This product is intended for installation by a licensed electrician in accordance with the National Electrical Code and local regulations in the United States and Canada.
- A power disconnect switch or circuit breaker must be provided, clearly marked as the power disconnect device, and within reach of the operator.
- Before installation, ensure that there is no power on the line by turning it off at the service panel. Do not attempt to install the IFC on a powered circuit.
- Use only indoors or in an outdoor lighting enclosure.
- Install with branch circuit breakers rated at 15 amps or fewer.
- Use only copper or copper-clad wire for connections.
- To prevent the risk of overheating and possible damage to other equipment, do not use this device for loads exceeding the specified maximum load or in applications other than its intended use. Doing so may present an electrical hazard and void the manufacturer's warranty.

Installation

Follow these steps to ensure proper installation and operation of the GN Dimmer.

1. Mount IFC

Locate the Grid Navigator identification number on the IFC found on the face of the device and record it below for future reference.

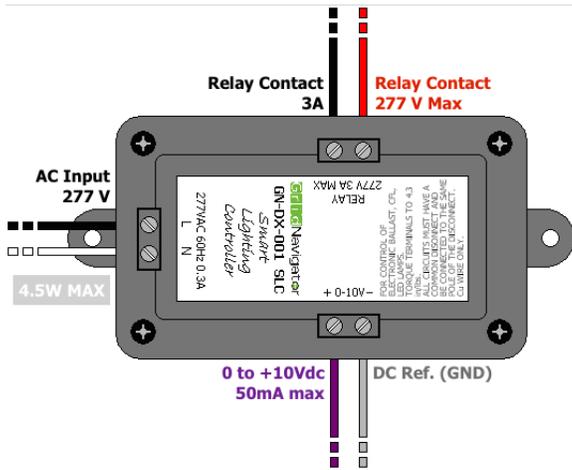
IFC ID number _____

Use screws or optional UL approved double-backed adhesive tape to attach the IFC to a clean surface on the electrical fixture. Be sure to leave space to attach the wires to the IFC.

2. Identify Wires

The IFC wires are color-coded.

- Power In:** black; carries 120-277V AC power from the wall box.
- Neutral:** white
- Relay Contacts:** black; 3 amps, 277VAC maximum.
- Control+:** violet; 0 to +10V DC maximum
- Ground:** gray; DC reference



3. Connect the gray(-) control wire to the corresponding terminal on the GN Dimmer.
4. Connect the white neutral input wire to both the neutral terminal on the IFC and the white wire on the ballast.
5. Connect the black line input wire to both the line terminal and one of the relay terminals on the IFC.
6. Connect the black relay wire from the ballast to the other relay terminal on the IFC.
7. Reapply power at the service panel.
8. Perform the radio synchronization steps as outlined in the GN Bridge Installation Guide.

3. Installation Steps

A. Wiring a Single Ballast (Figs. 1 and 2)

1. Turn the power off at the service panel.
2. Connect the violet(+) control wire to the corresponding terminal on the GN Dimmer.

Figure 1: Wiring a Single Ballast

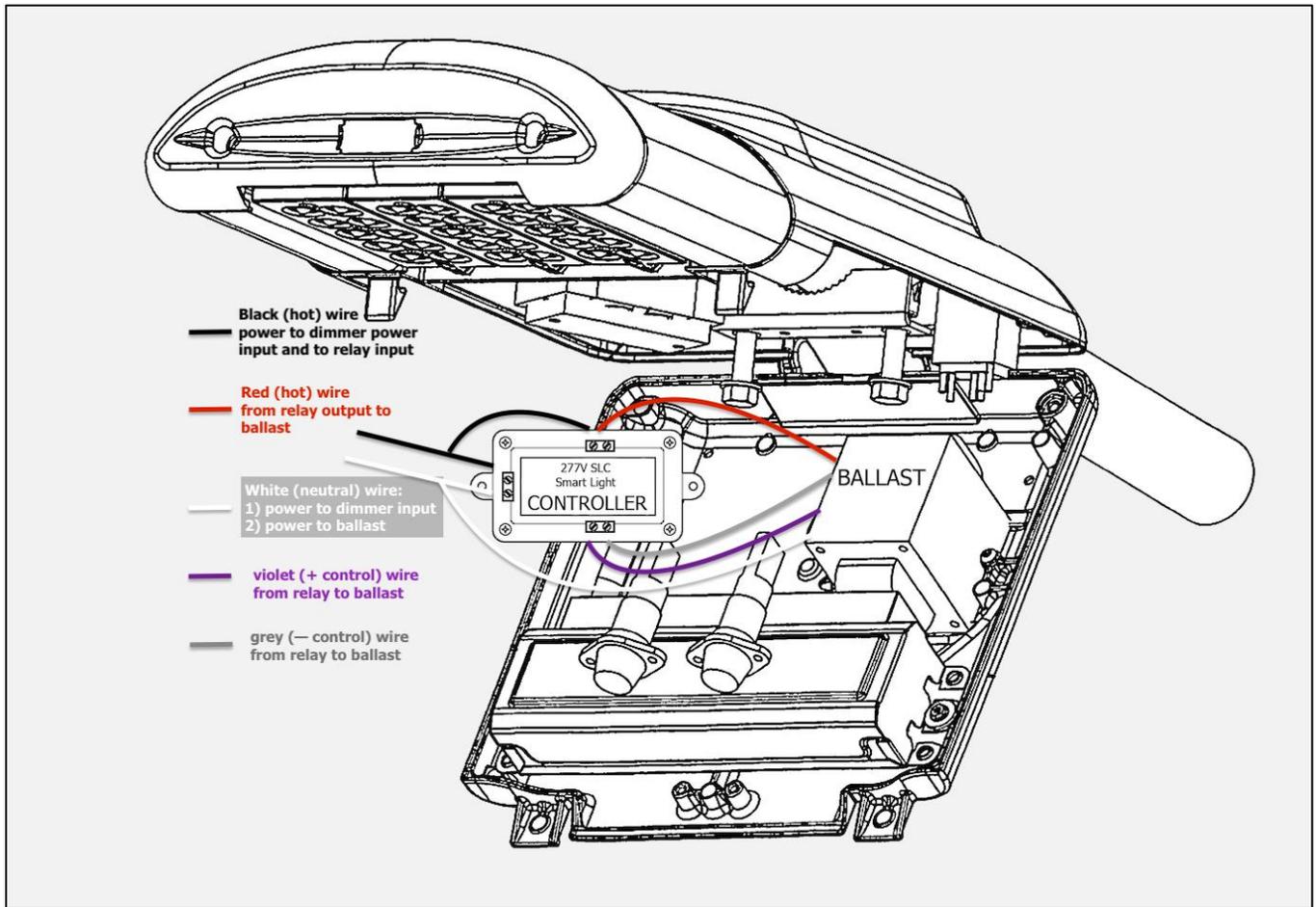
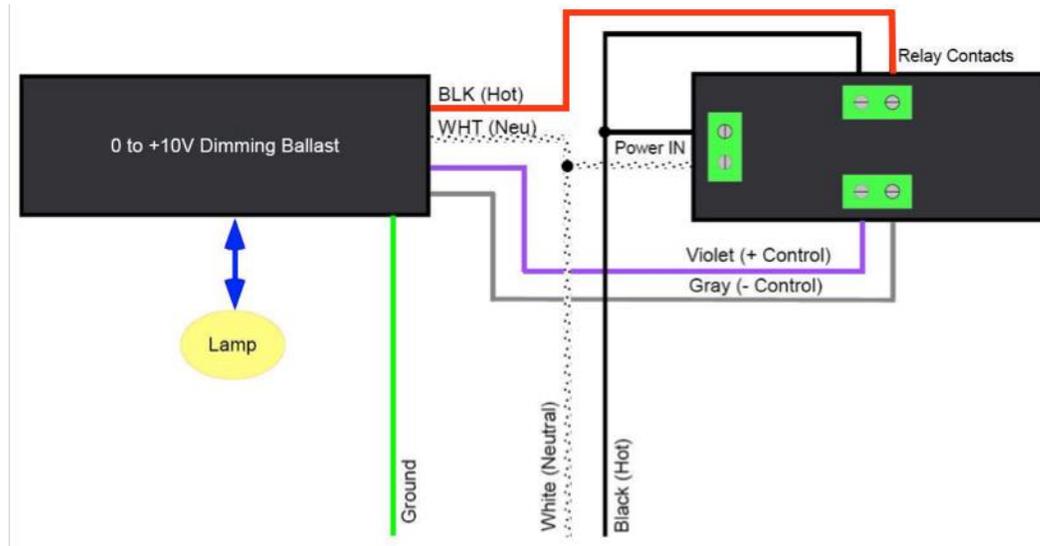


Figure 2: Wiring Diagram for a Single Ballast



B. Wiring Fixtures/Ballasts in Parallel (Fig. 3)

Note: The relay contacts on the GN Dimmer are rated for up to 3 amps AC. If the lighting fixtures you intend to wire in parallel are 80 -90 watts each, you can wire up to 9 fixtures safely as long as the zero to 10-volt control input on each fixture is less than 5.5 milliamps per fixture, which is typical.

1. Turn the power off at the service panel.
2. Connect the violet(+) control wire to the corresponding control wire on the first ballast and continue the wiring to each subsequent violet ballast control wire.
3. Connect the gray(-) control wire to the corresponding gray wire on the first ballast and continue the wiring to each subsequent gray ballast-control wire.
4. Connect the white neutral input wire to the white wire on the IFC and to the white wire on each subsequent ballast.
5. Connect the black line input wire to both the black power-in wire and the black relay wire on the IFC.
6. Connect the black relay wire on the IFC to the black power-in (Hot) wire on each subsequent ballast.
7. Reapply power at the service panel.
8. Perform the radio synchronization steps as outlined in the Grid Navigator control switch instructions.

WARRANTY

All products sold by GRIDNAVIGATOR are guaranteed against defects in material and workmanship for a period of five year from the date of shipment. GRIDNAVIGATOR responsibility is limited to repair, replacement, or refund, any of which may be selected by GRIDNAVIGATOR at its sole discretion. GRIDNAVIGATOR reserves the right to substitute functionally equivalent new or serviceable used parts.

This warranty covers only defects arising under normal use and does not include malfunctions or failures resulting from: misuse, neglect, improper application, improper installation, water damage, acts of nature, lightning, or repairs by anyone other than GRIDNAVIGATOR.

Except as set forth herein, GRIDNAVIGATOR makes no warranties, expressed or implied, and GRIDNAVIGATOR disclaims and negates all other warranties, including without limitation, implied warranties of merchantability and fitness for a particular purpose. Some states or jurisdictions do not allow limitations on implied warranties, so these limitations may not apply to you.

Limitation of Liability:

In no event shall GRIDNAVIGATOR be liable for any indirect, special, incidental, or consequential damages. Some states or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

Regulatory Compliances

Contains: Transmitter Module FCC ID: W70MRF24J40MDME

The enclosed device complies with Part 15 of the FCC Rules and Industry Canada License Exempt RSS Standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does not cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment to an outlet on a circuit that is different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

GridNavigator

200 Varick Street
Suite # 508

New York, NY 10014

www.GridNavigator.com