

Manor-2101

0-10 V-
Ballast or LED Driver Control

Compatible with any LED driver or ballast that is compliant with IEC 60929 annex E

120 – 277 V ~ 50 / 60 Hz

Maximum Capacity
(Limited by whichever is achieved first)

Load	0-10 V- Sink
8 A	30 mA

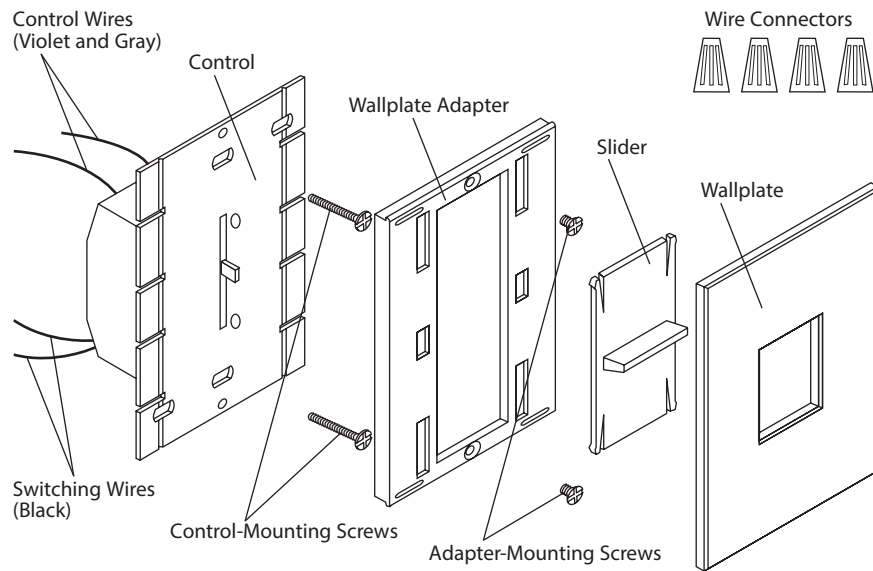
For use with 0 –10 V - Electronic Fluorescent Dimming Ballasts or LED Drivers

Important Notes

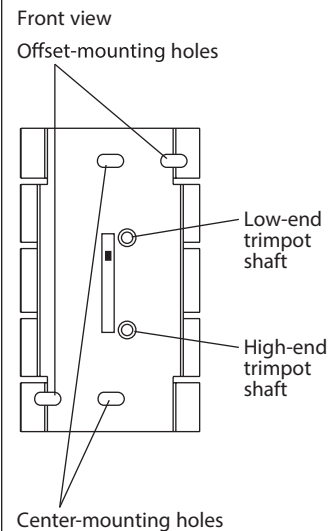
Please Read Before Installation

- **Wallbox Dimensions:** A single-gang wallbox (3 in high × 2 in wide × 2½ in deep (76 mm high × 51 mm wide × 64 mm deep)) will service all individual controls.
- **Derating Instructions:** No derating required for multi-gang installations.
- **Wiring Note:** Always turn OFF power before installation. Install in accordance with all national and local electrical codes.
- **Lamp Seasoning Requirements:** Some fluorescent lamp manufacturers recommend that new fluorescent lamps be operated at full output (seasoned) before they can be dimmed, to render lamp impurities inert, ensuring proper dimming performance and average rated lamp life. Please contact your lamp manufacturer for seasoning requirements.
- **Ballast/Driver Functionality Check:** With power OFF, check new ballast for functionality prior to installation of control by connecting the ballast's violet and gray wires together at the control. Turn power on. The lights should now be at minimum brightness. With power OFF, disconnect the wires. Turn power ON. The lights should now be at maximum brightness.
- **Cleaning Instructions:** Clean dimmer with a soft damp cloth only. Do not use any chemical cleaners.
- Use this product only as intended with recommended accessories.

Package Contents and Parts Identification



Control Unit



Pre-Installation

- Determine if this will be a multi-gang installation or a single-gang installation.
- If using a multi-gang installation, before proceeding to the Installation section, follow the Multi-gang Installation procedure and refer to the instruction sheet supplied with multi-gang wallplates.
- If using a single-gang installation, install control as outlined in the Installation section.

Multi-gang Installation

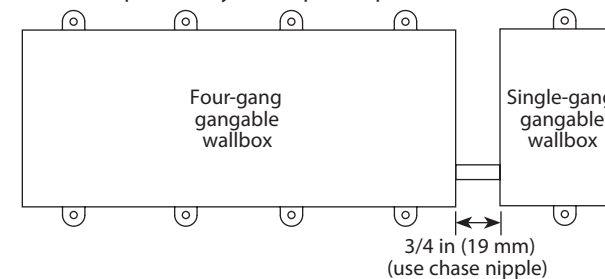
In multi-gang installations, several controls can be grouped horizontally in one ganging wallbox or in a series of connected wallboxes. Multi-gang wallplates are available to simplify and improve the appearance of an installation. For retrofit installations, the side sections can be removed to fit existing wallboxes.

No Side Sections Removed

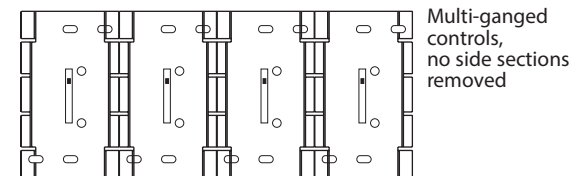
1. Determine the number of wallboxes necessary by using the chart below. Use 3 in × 2 in (76 mm × 51 mm) gangable wallboxes. Do not use plaster rings or gangbox covers.

Number of Controls	1	2	3	4	5	6
Wallboxes	1	1+1	4	4+1	7	7+1

2. Install or modify appropriate wallboxes. For an EVEN number of controls, wallboxes must be ¾ in (19 mm) apart to provide necessary space for the wallplate(s). For example, when ganging four controls, three would be in the four connected wallboxes and one would be in a wallbox separated by the required space.



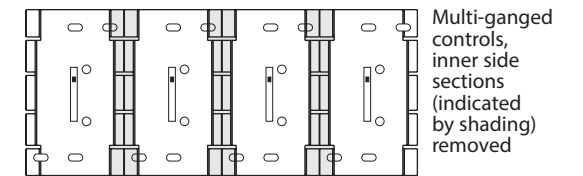
3. When mounting controls, use center-mounting holes for first control and offset-mounting holes for additional controls. Allow 1/32 in (0.08 mm) between controls.



Side Sections Removed

Note: No derating required

1. One gangable wallbox is needed for each control in the multi-ganged control. Individually connect wallboxes or use a pre-assembled, multi-gang wallbox.
2. Remove only inner side sections of control. Use pliers to bend side sections down as far as you can then back to their original positions. Side sections will break off.




Note: Do not remove outer side sections of the two controls that are on the ends of the gang.

3. When mounting, use center-mounting holes for proper alignment.

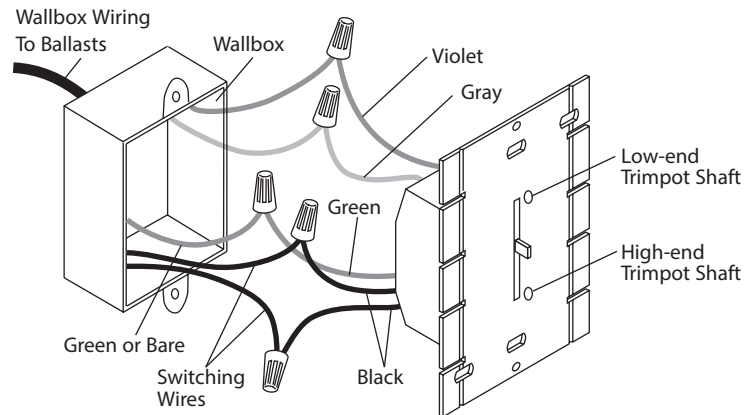


Installation

- Turn power OFF to disable the 0–10 V- electronic ballast(s)/driver(s) to be dimmed.
 **WARNING:** Shock hazard. May result in serious injury or death. Turn off power at circuit breaker before installing the control.
- Remove wallplate, slider, and wallplate adapter (if using offset mounting holes) from control to prevent surface damage and to access mounting holes.
- Strip wallbox wires to the following lengths:
 - 5/8 in (16 mm) for 16, 18, or 20 AWG (1.5, 1.0, or 0.75 mm²) wire
 - 1/2 in (13 mm) for 10, 12, or 14 AWG (6.0, 4.0, or 2.5 mm²) wire
- Wire controls according to the appropriate wiring diagram shown in the Wiring section and on the ballast/driver.

Note: The total 0–10 V- control signal wiring for this control should not exceed 500 ft (152.4 m). Do not use wire smaller than 20 AWG (0.75 mm²).

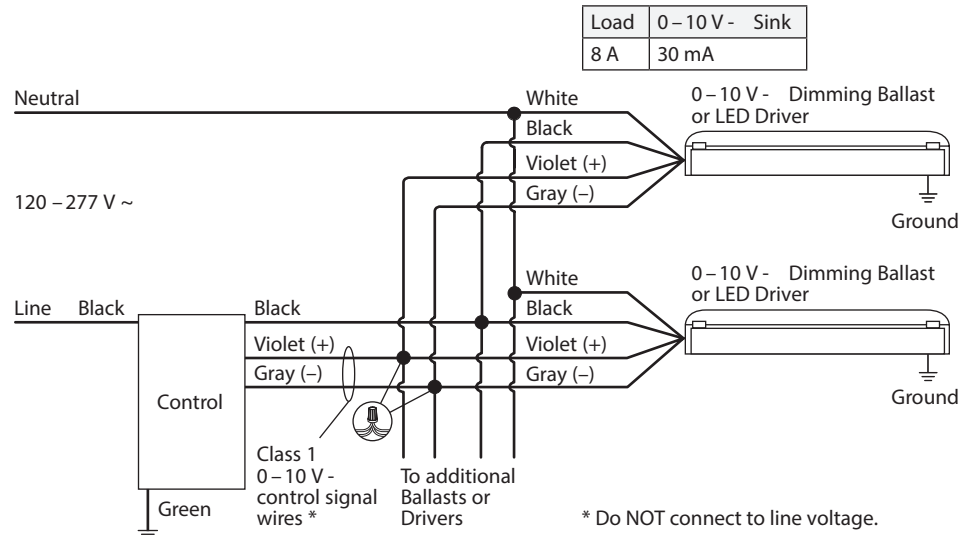
- For Class 1 installations: 0–10 V- wires must be run in conduit or approved cable per NEC or local jurisdiction.
- For Class 2 installations: Conduit is typically not required (local codes may apply).
- For applications with excessive electrical noise: 0–10 V- wires should be run in conduit separate from the mains.



- Carefully push wires into wallbox, allowing room for the control back cover.
- Mount control into wallbox using screws provided. Controls must be mounted vertically.
- Turn power ON. Pushing slider up should increase light intensity; pushing slider down should decrease light intensity.
- The maximum light level intensity may be adjusted as follows:
 - Push slider to the top-most position. If using with fluorescent ballasts, run lamps for 15 minutes to warm lamps. Remove the plastic slider to expose the trim adjustment screws.
 - Maximum light intensity is initially set at the factory to the maximum setting. Use a small screwdriver to turn the high-end trimpot screw clockwise to decrease light level and counterclockwise to increase light level.
- The minimum light level intensity may be adjusted as follows:
 - Push slider to the bottom-most position. Remove the plastic slider to expose the trim adjustment screws.
 - Use a small screwdriver to turn the low-end trimpot screw clockwise to increase light level and counterclockwise to decrease light level.
- Mount wallplate adapter plate with screws provided. Replace slider and snap on wallplate.

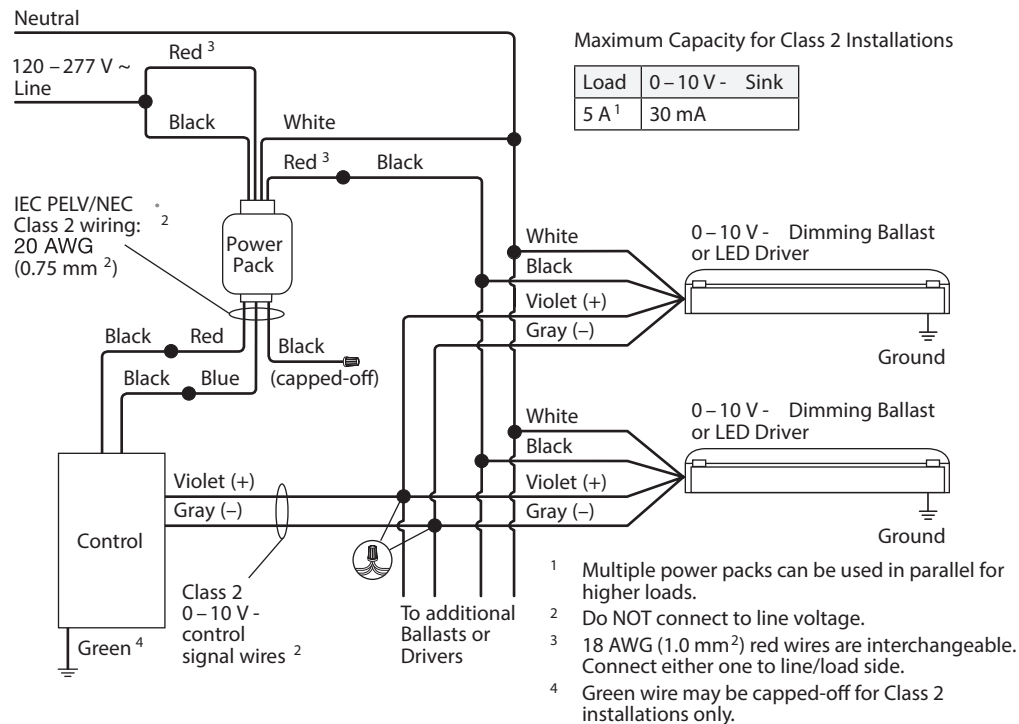
Wiring

Manor-2101 Control Class 1 Installation



Manor-2101 Control Class 2 Installation

On/Off Control using Power Pack (PP-120H, PP-277H, or PP-347H)



Notice: Alcon Lighting is not liable for damage due to miswiring 0–10 V- control signal wires with line voltage. Do not run Class 2 wires and line voltage conductors together in the same conduit.

Troubleshooting

Problem	Possible Solution
Lights do not operate at full brightness	<p>Push slider up. Turn trimpot counterclockwise with a small screwdriver to achieve maximum light intensity.</p> <p>Check to see that violet and gray wires are not cross-connected in any fixture, conduit, or wallbox.</p>
Lights do not dim low enough	<p>Push slider down. Turn trimpot counterclockwise with a small screwdriver to achieve minimum light intensity.</p> <p>Check to see that violet and gray wires are not cross-connected in any fixtures.</p> <p>Check the lamp or LED output with a light meter in the absence of other sources of illumination (or correct for other sources) at both high- and low-light readings. The low-end light output may be limited by the ballast or LED driver. Check the manufacturer's specifications.</p>
Lights do not dim at all	Check to see that the violet and gray wires are not disconnected in any fixtures.