

1. Introduction

The patented On-Q Advanced Lighting Control (ALC) products provide enhanced lighting control:

- P/N 363142, ALC Relay Switch - for local and programmable on/off control of lighting and outlets up to 15A
- P/N 363145, ALC Auxiliary Switch - for multi-way local control of ALC Relay, Dimmer and Non-Dimming Switches
- P/N 364721, ALC Quad-Auxiliary Switch – 4 in 1 remote multi-way slave
- P/N 364720, ALC Designer Scene Switch - features four (4) buttons for programmable control of lighting, lighting scenes, and house modes
- P/N 364776, ALC Designer IR Scene Switch - four (4) buttons for programmable local and IR remote control of lighting, lighting scenes, and house modes
- P/N 363143, ALC Dimmer - for local and programmable dimming control of lighting loads up to 600W
- P/N 364335, ALC Hi-Watt Dimmer - for local and programmable dimming control of lighting loads up to 900W
- P/N 364722, ALC Non-Dimming Switch - for local and programmable on/off control of lighting loads up to 900W
- P/N 364820-01, ALC Scene Lighting Universal Remote Control - for remote control of programmed lighting scenes

ALC Dimmer and Non-Dimming Switches are designed for optimum control of the most common lighting types including incandescent, halogen and conventional magnetic low voltage.

2. Compliance

The ALC control modules are FCC, Part 15, Class B verified. All modules are UL listed (UL File No. E180376). ALC control modules require no special AC wiring practices. When installed as directed, ALC installations comply with the installation and wiring practices of the NFPA 70 National Electrical Code.

3. Installation

A UL Class 2 (CL2) rated multi-conductor communication cable and uninterrupted source of 120 VAC must be present at each switch location.

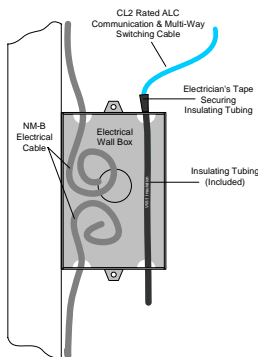


Figure 1. Cable Installation Rough-In

Installation Procedure

- Step 1: Remove electrical power from the 120 VAC circuit.
- Step 2: Retrieve the CL2 cable(s).
- Step 3: Remove .375 in. of insulation from the CL2 cable's conductors.
- Step 4: Identify and retrieve the 120 VAC "Source Hot", "Switched Hot", "Neutral" and Ground wires.
- Step 5: Remove the insulation from each of the module's 120 VAC leads.
- Step 6: Connect all wires as required for the specific application.

NOTE: ALC Switches must be installed and operated in accordance with all electrical codes and regulations.

DANGER: To avoid risk of fire or shock, turn off the power at the circuit breaker or fuse. Test to be sure the power is off before wiring.

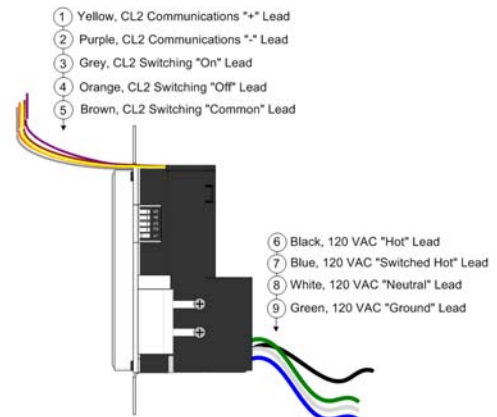


Figure 2. CL2 and 120VAC Lead Connections

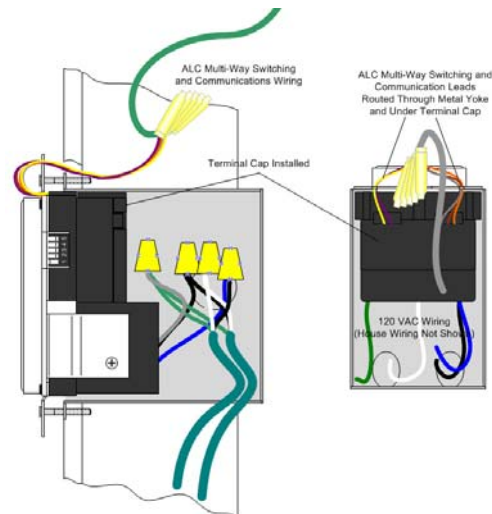


Figure 3. Recommended Installation

The scope of NEC Article 725 covers installation of Class 2 conductors and the conductors of electric light and power circuits together. Article 725-55. (B) through (J) (2005 NEC edition) states that electric light and power circuit conductors can enter an outlet box to connect to the remotely controllable ALC modules, providing that the electric circuit conductors maintain a minimum separation of .25 inches from the other Class 2 conductors connected the ALC modules.

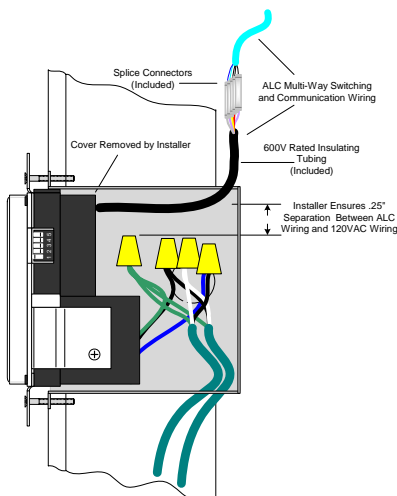


Figure 4. Alternative Installation

CAUTION: It is the Installers responsibility to ensure proper installation and compliance with the provisions of NEC Article 725. All Class 2 communication and multi-way switching conductors entering the outlet/wall box must be completely insulated.

Step 7: Set the modules address. (This step does not apply to the ALC Auxiliary slave switch module) Each ALC communication-wiring branch may include up to 31 individually addressable modules. Modules residing on the same communication branch must NOT have the same address.

CAUTION: Verify all wiring connections and terminations prior to applying AC power to the ALC modules. Excessive loading and electrical shorts will result in destruction of the ALC modules. Misapplication will void the product warranty.

CAUTION: Ensure that all conductors remain completely insulated and do not become pinched between the ALC module's metal yoke and the wall surface, outlet box or cover plate. Any shorts caused by piercing of a conductor's insulation will cause loss of operation.

Step 8: Screw the ALC module into the wall switch junction box with the screws provided. Position the CL2 conductors to allow flush installation of the ALC module to the finished wall surface.

Step 9: Install decorator style switch cover plate.

Step 10: Apply power to the 120 VAC electrical lighting/power circuit.

Step 11: Test ALC Relay, Non-Dimming Switch and Dimmer modules by actuating the front paddle switch to control power to the attached electrical load.

Dimmer and Non-Dimming Switch Module Derating

In many installation scenarios it is necessary to mount more than one Dimmer or Non-Dimming Switch at a switchbox location. When this occurs, side sections of each module's metal yoke must be removed in order to physically permit the devices to fit within the same switchbox. Removal of these side sections, however, reduces the ability of each module to dissipate heat. To ensure that each module can continue to operate within specified design parameters, the load capacity must be derated. Remove the yoke side sections by using pliers to carefully bend the tabs up and down several times until each tab breaks off.

Module P/N	Single-Gang	End-of-Gang	Middle-of-Gang
363143	600 W	600 W	600 W
364335	900 W	700 W	600 W
364722	900W	700W	600W

Table 1. ALC Dimmer and Non-Dimming Switch Derating

CAUTION – To avoid overheating and possible damage to the modules and other equipment, do NOT use the ALC Dimmer or Non-Dimming Switch modules to control receptacles. Do NOT use the ALC Dimmer to control fluorescent lighting, motor operated appliances or transformer-supplied loads.

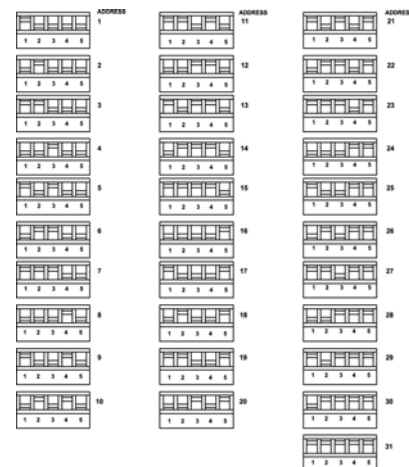


Figure 5. ALC Unit Addresses

Warranty

On-Q/Legrand warrants to the end-user, each new ALC module to be free of defects in materials or workmanship for a period of one year from the date of original purchase from On-Q or its authorized reseller or installer. Each product is deemed warrantable under conditions of normal use and when installed and operated within On-Q specifications and in accordance with the applicable National Electrical Code and Safety Standards of Underwriters Laboratories. When determined to be warrantable, On-Q shall at its option and expense, replace any defective product with a new or reconditioned product. On-Q will continue to warrant any replaced product for a period of ninety (90) days from shipment, or through the end of the original warranty period, which ever is longer.