

DESCRIPTION

The ALC Switch Modules are intended for installation in homes, which have been pre-wired for use of ALC switch modules. A twisted-pair (TP) communication branch cable and an uninterrupted source of 120 VAC must be present at each switch location. Additionally, an auxiliary switching cable may be present for multi-way switching applications. The ALC TP communication branch and auxiliary switching cables should be located above and outside each wall switch junction box.

NOTE - ALC switch modules must be installed and used in accordance with all applicable electrical codes and regulations.

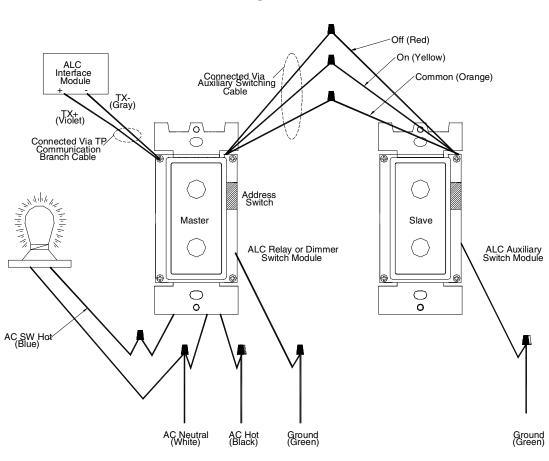


Figure 1

Part Number	Description		Hardware Packaged w/ALC Switch		
			Modules		
	ALC Switch Module	AC Rating	Screws	Splices	Wire nuts
363142-XX	ALC Relay Switch	120 VAC, 12 A	2	5	4
363143-XX	ALC Dimmer Switch	120 VAC, 500 W	2	5	4
363144-XX	ALC Program Switch	120 VAC	2	2	3
363145-XX	ALC Auxiliary Switch	None	2	3	1

• Part numbers ending in -01 are white, -02 are ivory.

INSTALLATION PROCEDURE

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.

- 1. Remove electrical power from the 120 VAC circuit.
- 2. Retrieve the ALC TP communication branch and auxiliary switching cables as required.
- 3. Remove 9.53mm [.375 in] insulation from each cable conductor end.
- 4. Identify and retrieve the 120 VAC "Hot", "Switched Hot", "Neutral" and "Ground" wires as required.
- 5. Remove the insulation from each ALC switch module AC lead.
- 6. Connect all wires according to Figure 2 with the wire nuts and splice terminals supplied.
- 7. Set the switch module address. This step does not apply to the ALC auxiliary switch module.

CAUTION - Verify all wiring connections and terminations prior to applying AC power to the ALC switch modules. Excessive loading and electrical shorts will result in the destruction of the ALC switch modules.

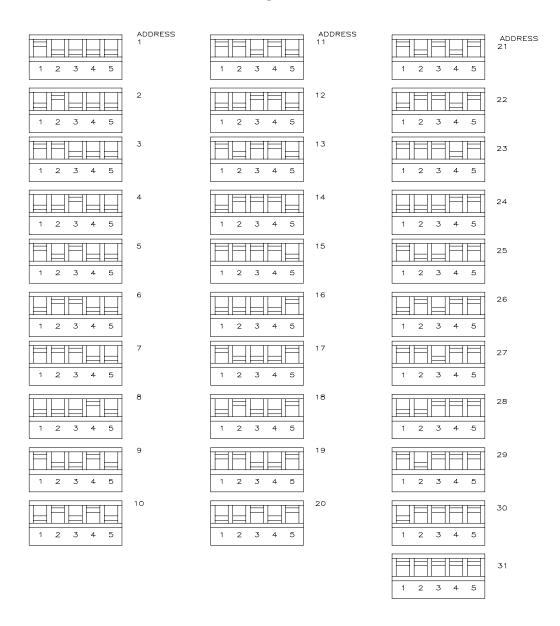
NOTE - Each ALC TP communication branch may include up to thirty-one (31) individually addressable switch modules. Switch modules residing on the same TP communication branch must NOT have the same address. See figure 3. When used with OmniLT, only sixteen (16) switch modules (addressed 1-16) may be used.

- 1. Screw the switch module into the wall switch junction box with the screws provided.
- 2. Place the low voltage wires and splices over the top and outside of the wall switch junction box and behind the wall.
- 3. Install cover plate.
- 4. Apply power to the 120 VAC circuit.
- 5. Test ALC relay and dimmer switch modules by actuating the rocker switch to control power to the attached load.

Figure 2

Switch Module	Switch Module Lead	Connect to (As Required)	
	14 AWG Black, AC	120 VAC Hot	
ALC Relay Switch	14 AWG White, AC	120 VAC Neutral	
-	14 AWG Blue, AC	120 VAC Switched Hot	
	14 AWG Green, AC	AC Circuit Ground	
	22 AWG Gray, Class 2	TP Communication Branch TX-	
	22 AWG Violet, Class 2	TP Communication Branch TX+	
	22 AWG Yellow, Class 2	ALC Auxiliary Switch "ON"	
	22 AWG Red, Class 2	ALC Auxiliary Switch "OFF"	
	22 AWG Orange, Class 2	ALC Auxiliary Switch "COMMON"	
	18 AWG Black, AC	120 VAC Hot	
ALC Dimmer Switch	18 AWG White, AC	120 VAC Neutral	
	18 AWG Blue, AC	120 VAC Switched Hot	
	18 AWG Green, AC	AC Circuit Ground	
	22 AWG Gray, Class 2	TP Communication Branch TX-	
	22 AWG Violet, Class 2	TP Communication Branch TX+	
	22 AWG Yellow, Class 2	ALC Auxiliary Switch "ON"	
	22 AWG Red, Class 2	ALC Auxiliary Switch "OFF"	
	22 AWG Orange, Class 2	ALC Auxiliary Switch "COMMON"	
	18 AWG Black, AC	120 VAC Hot	
ALC Program Switch	18 AWG White, AC	120 VAC Neutral	
	18 AWG Green, AC	AC Circuit Ground	
	22 AWG Gray, Class 2	TP Communication Branch TX-	
	22 AWG Violet, Class 2	TP Communication Branch TX+	
	18 AWG Green, AC	AC Circuit Ground	
ALC Auxiliary Switch	22 AWG Yellow, Class 2	ALC Auxiliary Switch "ON"	
	22 AWG Red, Class 2	ALC Auxiliary Switch "OFF"	
	22 AWG Orange, Class 2	ALC Auxiliary Switch "COMMON"	

Figure 3

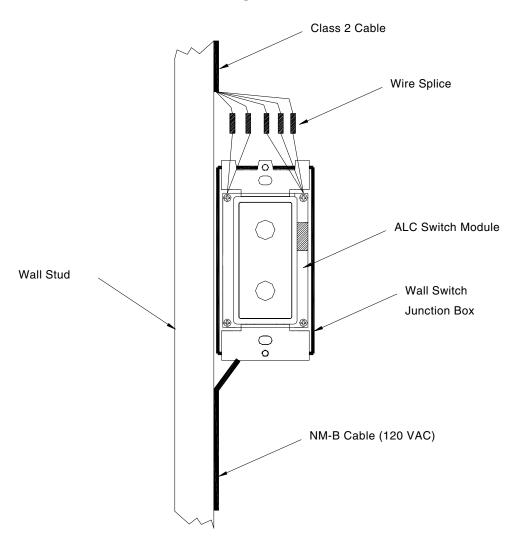


ALC DIMMER SWITCH DERATING

When two (2) dimmer switch modules are ganged together within the same wall switch junction box, neither switch module shall be loaded beyond 400 watts. When three (3) or more modules are ganged together, none of the modules should be loaded beyond 300 watts

CAUTION – To avoid overheating and possible damage to the dimmer switch modules and other equipment, do NOT use the ALC Dimmer Switch Modules 363143-XX to control receptacles, fluorescent lighting, motor operated appliances or transformer-supplied loads.

Figure 4



Low Voltage Wire Splice Terminations

The low voltage wire splices provided will accept two (2) wires at each end. To ensure that all wires are properly terminated, twist the stripped ends together prior to inserting. Insert the wires into the splice terminal. The ends of the wires should be visible at the middle of the splice terminal. Crimp the barrel of the splice terminal with a "SUPER CHAMP" tool or equivalent. Tug each crimped wire to verify proper termination. If a single wire must be inserted into a splice terminal end, install an additional filler wire to ensure a reliable crimp.