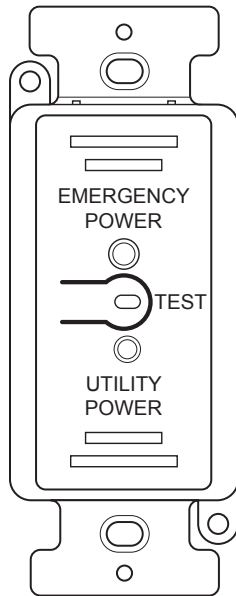


## AD-RRU-X-UNV • Les Numéros de Catalogue • Los Números de Catálogo:

Country of Origin: Made in China • Pays d'origine: Fabriqué en Chine • País de origen: Hecho en China



## SPECIFICATIONS

### Mechanical Specifications:

Mounting..... 4-11/16" Junction box with extension box  
Frame ..... Use single gang plaster ring or blank cover  
Installation ..... Suitable for installation in the plenum  
Plastic Flame Rating ..... UL94-5VA, Tested to UL2043  
Shipping Weight ..... 8 oz.  
Color ..... White  
Operating Temperature ..... -40° - 149°F (-40° - 65°C)  
Flush Mounted Size..... 4-1/2" x 2-3/4" x 1/4"  
Body Size ..... 2-7/8" x 1-3/4" x 1-7/32"

### Electrical Specifications:

Sensing Input ..... 120-277V  
Contact ..... Form C (N.O. + N.C.) Contact  
Auxiliary N.O. Contact ..... 1A/30VDC  
20 Amp Ballast Load Rating ..... 120-277V  
20 Amp General Use Rating ..... 120-277V  
1200W Incandescent Load Rating ..... 120V  
1500W Incandescent Load Rating ..... 277V  
UL Listing ..... UL 924 Listed (usUL/cUL)

## OVERVIEW

In the past, all emergency lights were left on 24 hours a day to meet safety codes. The Emergency Shunt Relay converts up to 20A of normal light fixtures to approved emergency lights. During normal operation, the AD-RRU-X-UNV dims designated emergency lights with the same control as normal lights. During a utility power interruption, the AD-RRU-X-UNV turns designated emergency lights on, at full brightness, regardless of dimmer position. An Emergency Shunt Relay requires a dedicated switch/dimmer to control the emergency lights. In other words, the switch/dimmer must be wired on the emergency power circuit.

## SAFETY INSTRUCTIONS

**READ AND FOLLOW ALL SAFETY INSTRUCTIONS!** When using electrical equipment, basic safety precautions should always be followed, including the following:

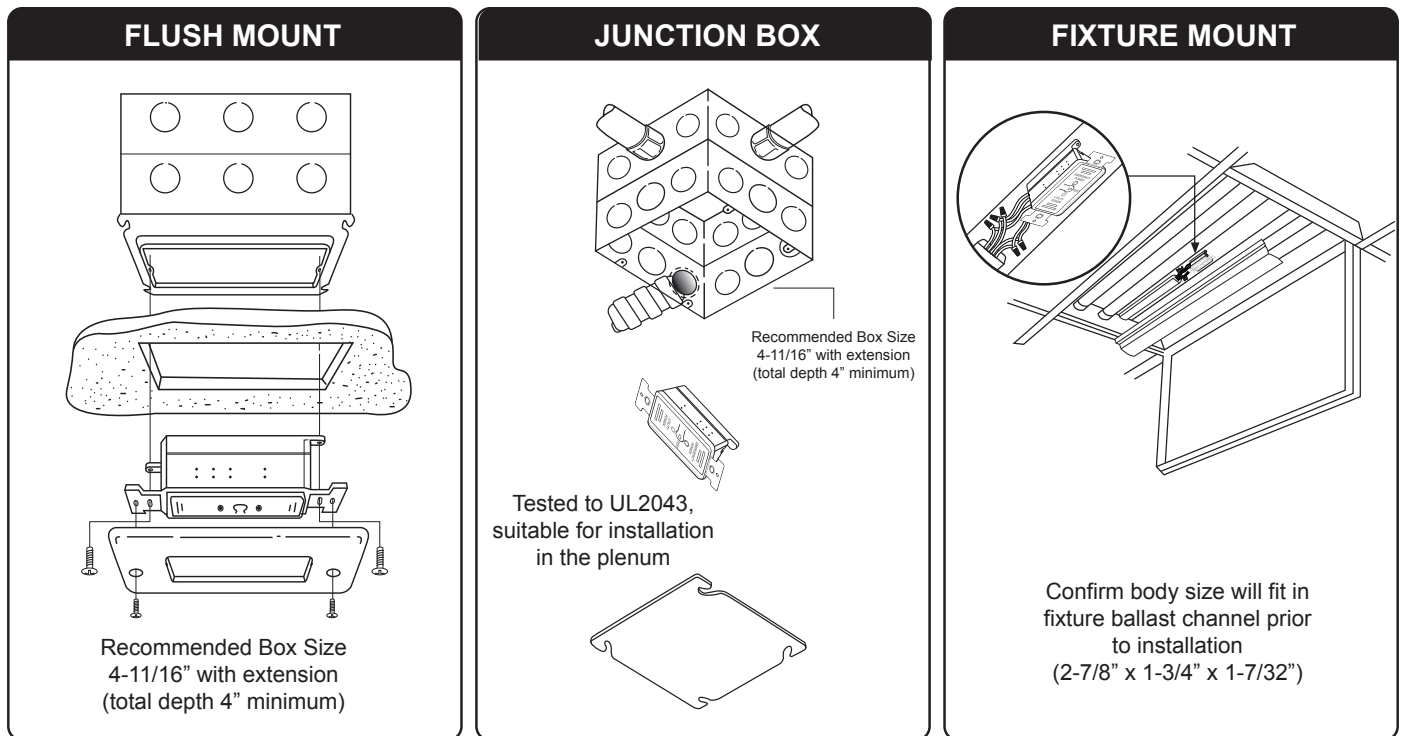
1. This product can be used with LED, ballast, tungsten, and general use loads.
2. Make sure all connections are in accordance with the National Electrical Code and local regulations.
3. To reduce the risk of electric shock, disconnect both normal and emergency power supplies before servicing.
4. This product is intended to be used to control indoor and outdoor located loads.
5. An unswitched AC power source is required (120-240VAC/277VAC).
6. Do not install near gas or electric heaters.
7. Do not attempt to service a sealed Emergency Power Control. When malfunctioning, return to Legrand
8. The use of accessory equipment is not recommended by the manufacturer and may cause unsafe condition.
9. Do not use this product for other than its intended use.
10. Servicing should be performed by qualified service personnel.
11. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

## FIRE ALARM / REMOTE TEST SWITCH

Some applications demand that emergency lighting be activated upon fire alarm, security alarm, or remote test switch activation. The AD-RRU-X-UNV is equipped with a low-voltage override input (red jumper).

## INSTALLATION

Unique enclosure permits flush, fixture, plenum or panel mounting.



In order to install the RRU in accordance with national/local code requirements, a qualified electrician should review and understand the installation instructions. Check voltage and current requirements. Verify and lock out circuit breakers on both regular (utility) power and 24 hour emergency generator or inverter circuit. Install a self-adhesive 2" x 3" caution label in each fixture or load controlled by an AD-RRU-X-UNV cautioning that the load is supplied from 2 different power sources, normal and emergency. Review wiring diagram and connect wires, one at a time, in accordance with the numeric identification. In order to provide a safe light level, when regular power is interrupted, it is recommended that a minimum of approximately 5000 lumen are controlled by a 24 hour emergency circuit and are spaced no farther than 24' in any direction from each other in a normal 9' white ceiling environment.

No maintenance is required to keep the RRU functional. However, regular testing should be performed when the lamps or ballasts have been replaced or when remodeling has taken place.

## INITIAL TESTING, TROUBLESHOOTING, AND MAINTENANCE

In a new installation, where hundreds of devices may be used, each having as many as 14 wires to be correctly connected, it is important that a fast, convenient method is used to check connections. In order to test that the wires are connected correctly, without any inconvenience to occupants, do not turn off regular (utility) power off until you have checked each device as follows:

1. Check that regular branch circuit breaker is connected and utility power is available. Green LED should be lit. If green LED is not lit, check connections and continuity to branch circuit breaker.
2. Check that emergency branch circuit breaker is connected and emergency power is available.
3. **Normal Operation Test:** Turn dimmer or other control device to the "ON" position. Emergency lights should turn on. Reduce dimmer to ~50%, emergency lights should dim to ~50%. Turn room switch or control to the "OFF" position. Emergency lights should turn off.
4. **Emergency Operation Test:** Press and hold test button, emergency lights should illuminate at full brightness until test button is released.
5. **Maintenance:** No maintenance is required to keep the RRU functional. However, regular testing should be performed when the lamps or ballasts have been replaced or when remodeling has taken place.

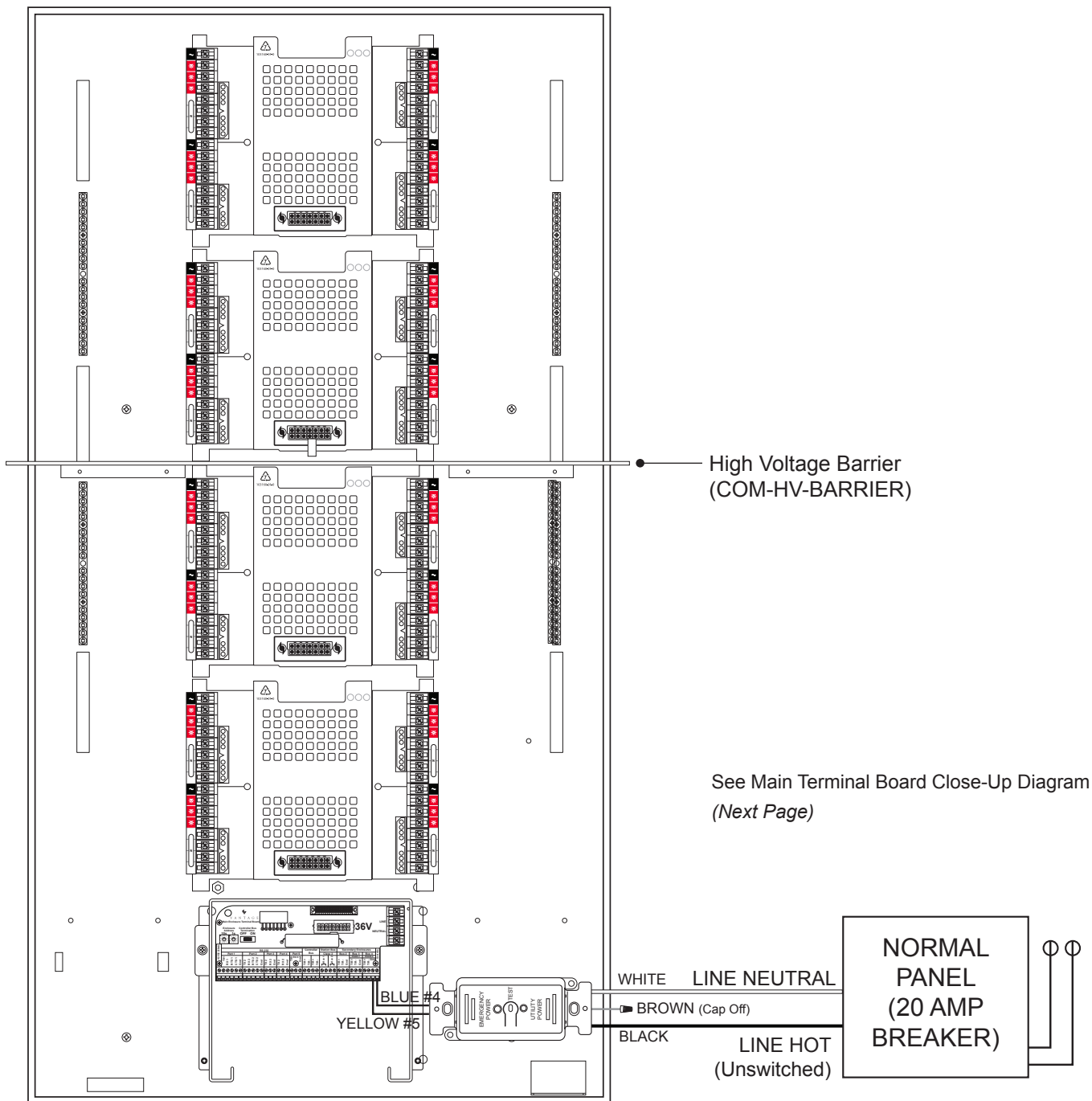


**WARNING: TURN BREAKERS OFF  
AND CHECK THAT NO POWER IS ON  
WHEN WORKING IN THE ENCLOSURE  
OR RELATED EQUIPMENT.**



## LCAP44M ENCLOSURE DIAGRAM

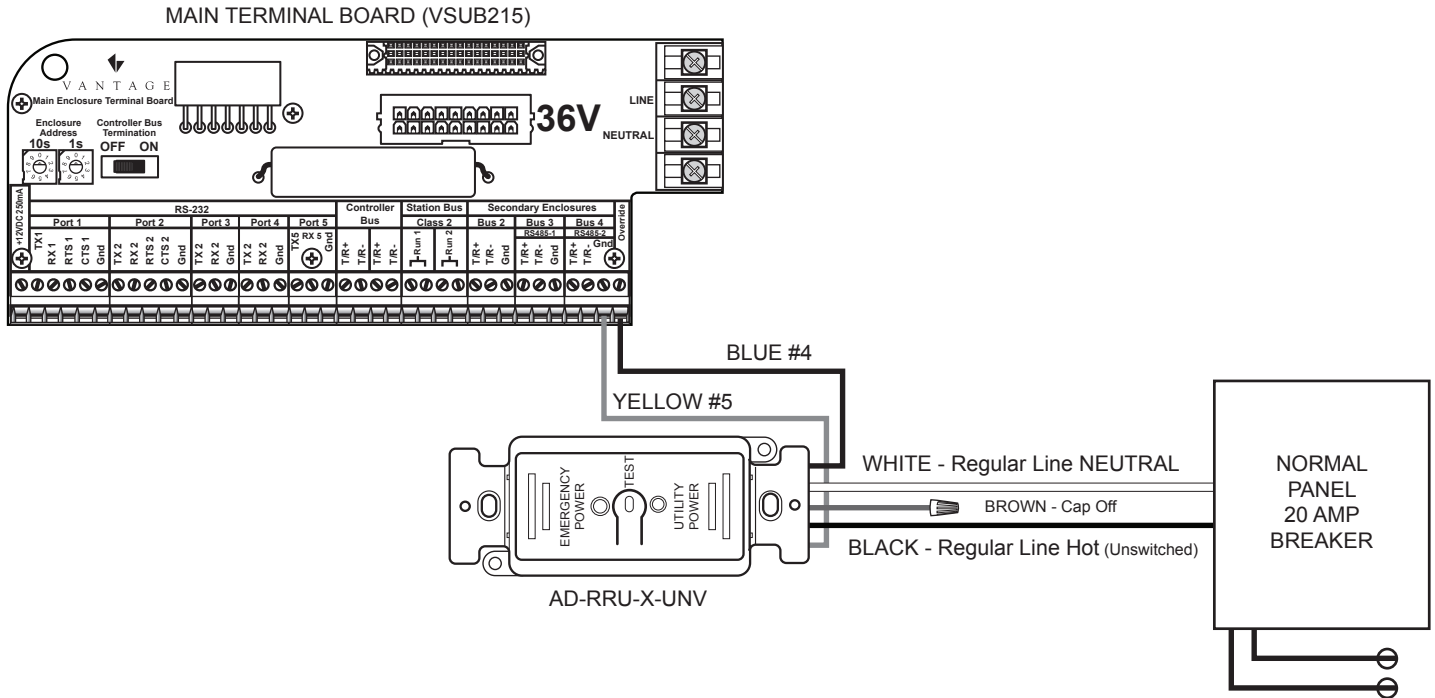
1. Mount AD-RRU-X-UNV using double-sided tape that is installed on the AD-RRU-X-UNV to secure in location shown.
2. Cut yellow and blue wires to an appropriate length, then wire the yellow wire (#5) to far right GND terminal and the blue wire (#4) to the Override terminal.
3. Black wire (#1) and WHITE wire (#2) should not be terminated .This is for the field to install to unswitched normal power.
4. Terminate the brown wire (#3)



NORMAL POWER

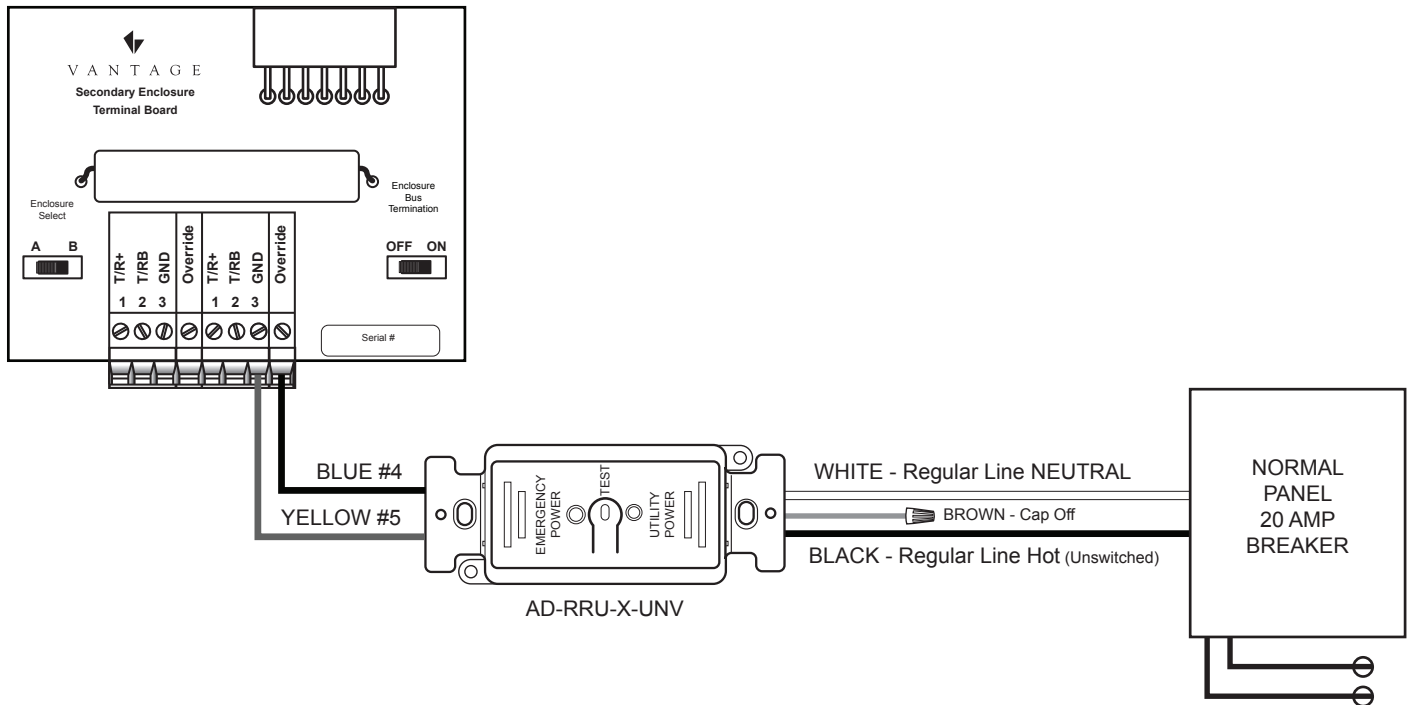
## MAIN TERMINAL BOARD WIRING CLOSE-UP DIAGRAM

1. Cut yellow and blue wires to an appropriate length, then wire the yellow wire (#5) to far right GND terminal and the blue wire (#4) to the Override terminal.
2. Black wire (#1) and WHITE wire (#2) should not be terminated .This is for the field to install to unswitched normal power.
3. Terminate the brown wire (#3)



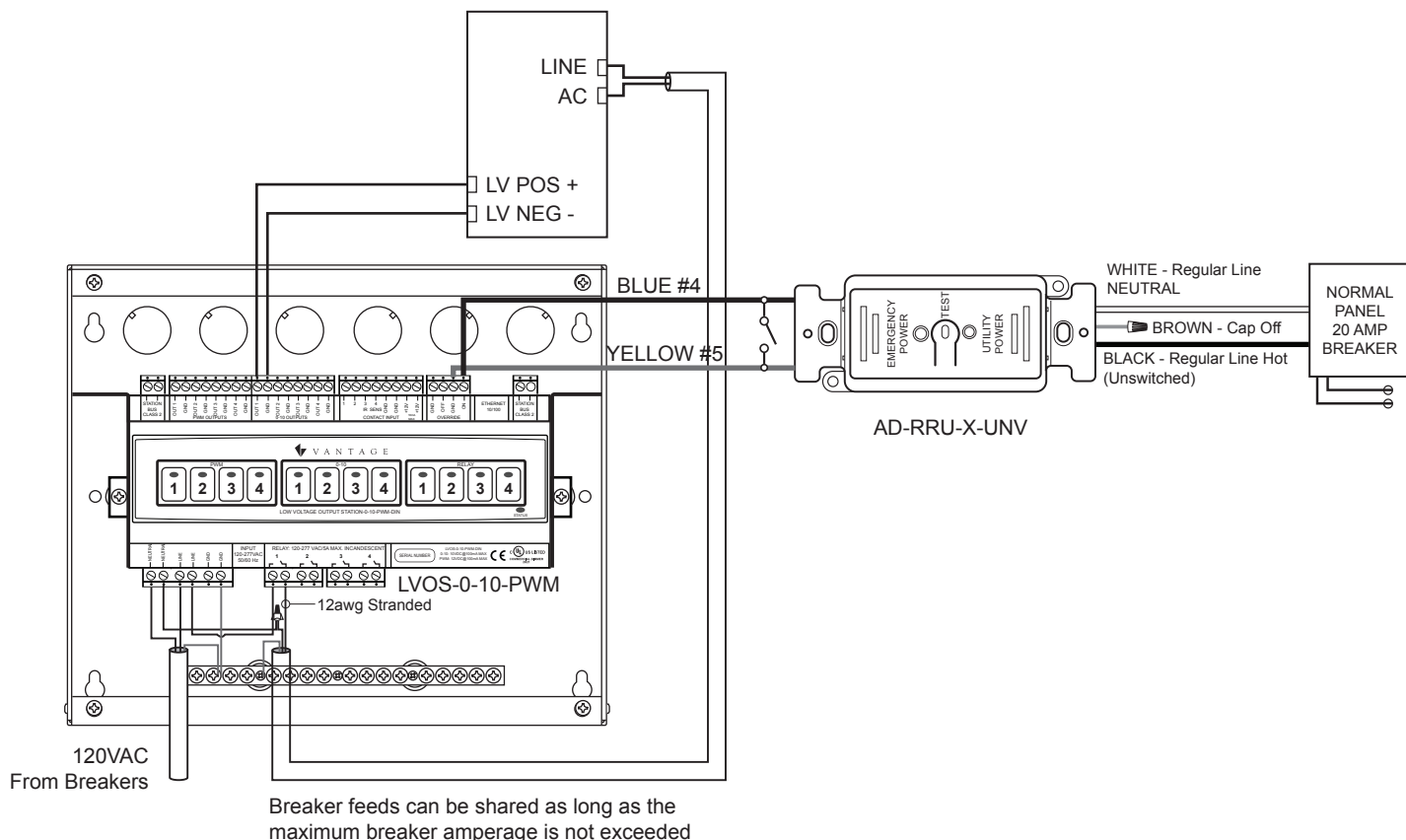
## SECONDARY TERMINAL BOARD WIRING DIAGRAM

SECONDARY TERMINAL BOARD (VSUB218)



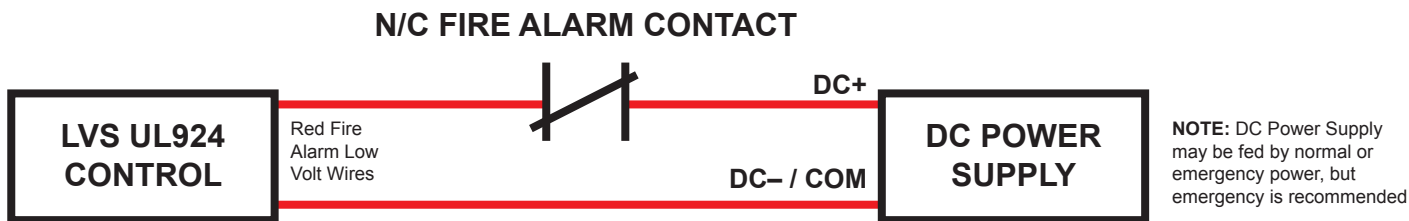
## LVOS-0-10-PWM STATION DIAGRAM

The station supports two Override modes, ON and OFF. When either switch is closed ALL loads are ON or OFF depending on which override loop is closed. However, the ON override takes precedence over the OFF override if both switches are closed. Exmample below is all loads ON.



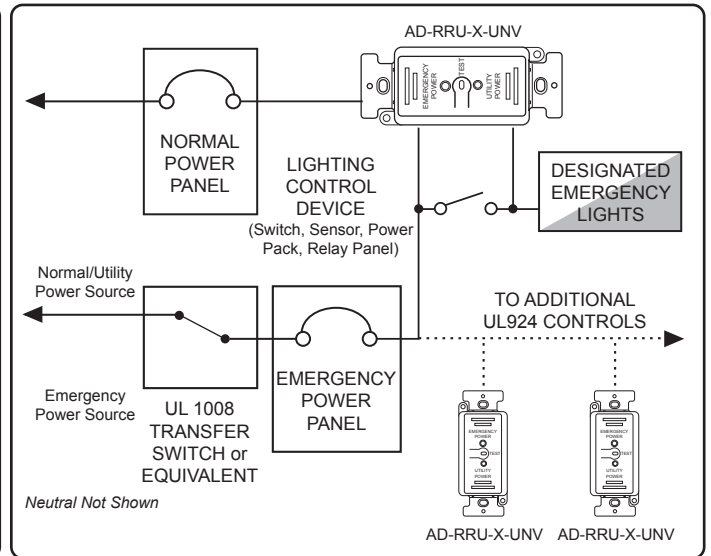
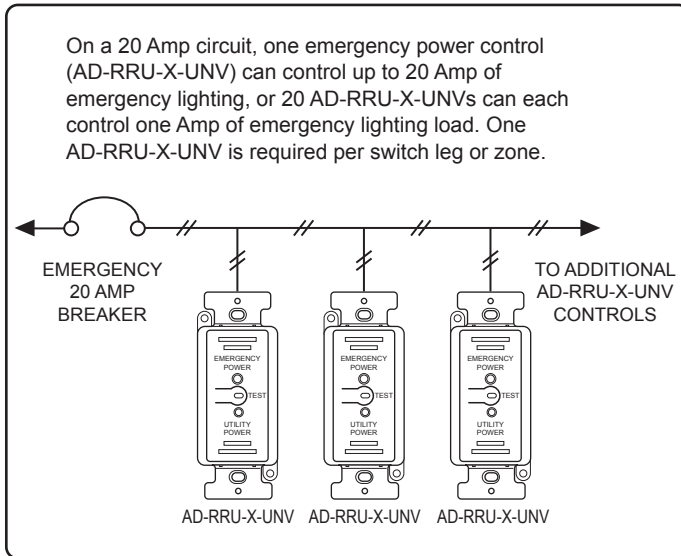
## N/C FIRE ALARM CONTACT DIAGRAM

The fire alarm input can be connected to a N/C fire alarm contact rated 100mA, 24VDC or greater (closed during fire event, open during normal conditions) and a 10V-30VDC power supply rated 1W or greater.

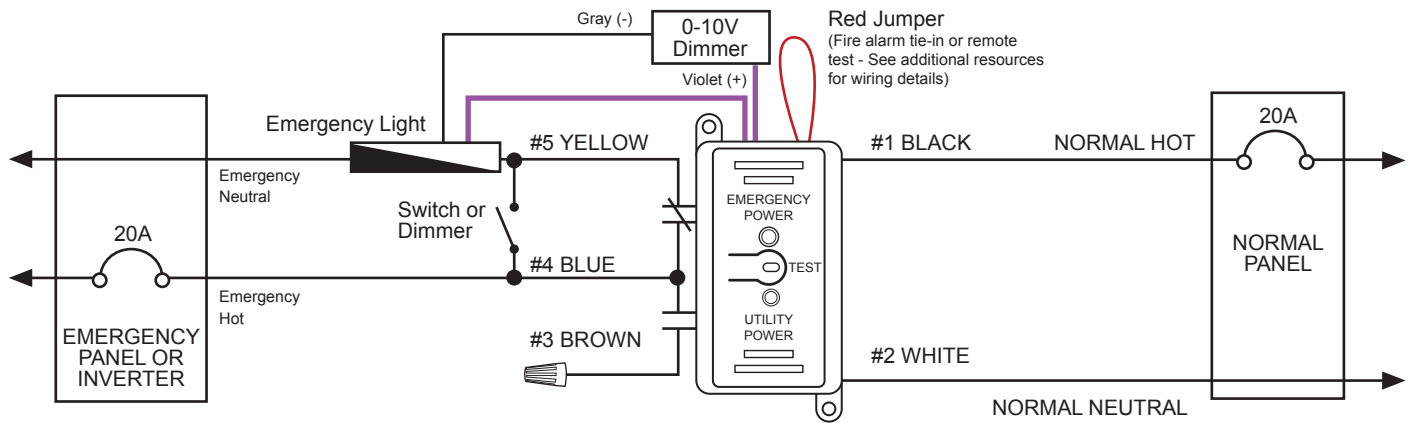


AD-RRU-X-UNV has a fire alarm input with a low-voltage wire red loop. Red loop can be cut and connected as shown above. Red wires are polarity independent.

## SINGLE LINE DRAWINGS

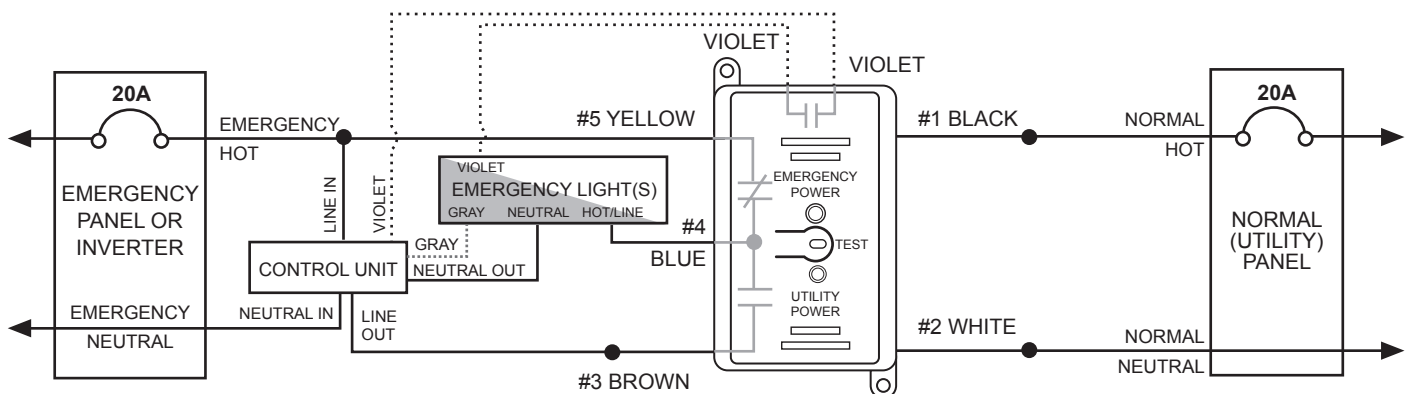


## TYPICAL WIRING DIAGRAM

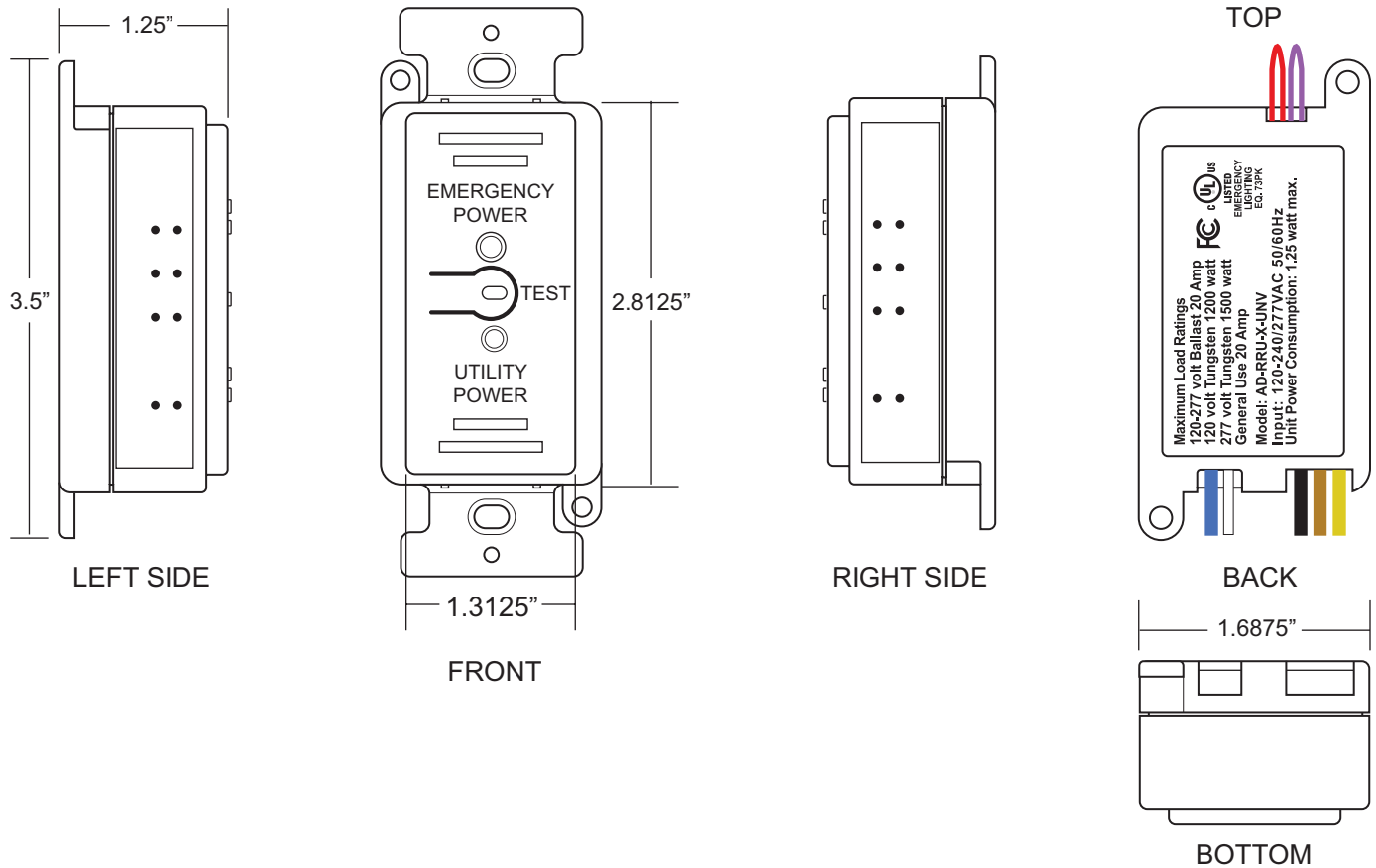


**NOTE:** Emergency Light is also called N/E Light or Normal/Emergency Light by specifiers

## WIRING DIAGRAM



MULTI-VIEW LINE DRAWING



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