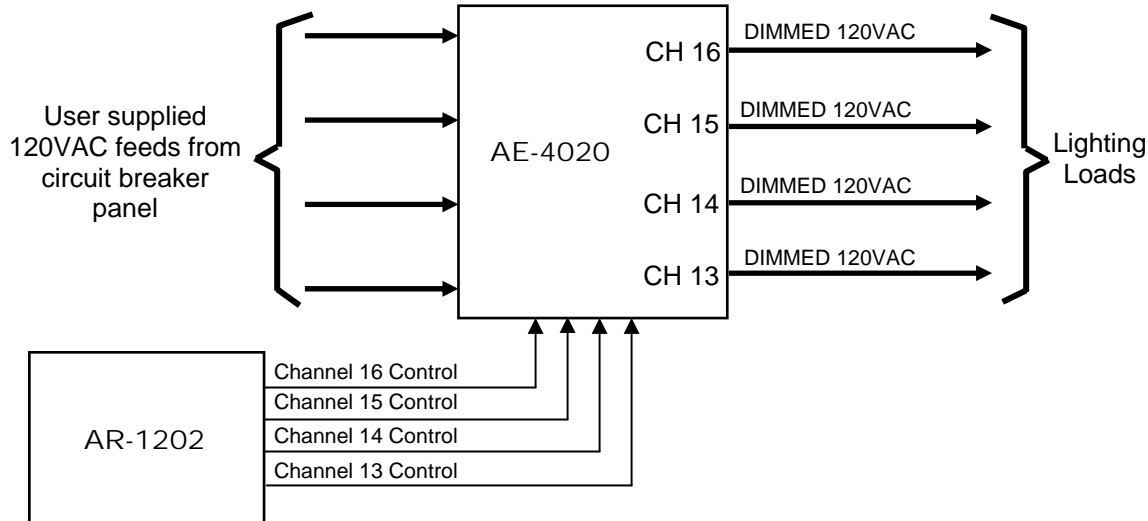


PRODUCT DESCRIPTION

The AE-4020 is a four channel add on product for the AR-1202 Architectural dimmer. It provides control for incandescent lighting fixtures and 2 wire dimmable fluorescent lighting ballasts. The AE-4020 provides four 2400 Watt channels of dimmed 120VAC. It is controlled by a interface with the AR-1202 control circuitry. The AR-1202 uses its four auxiliary channels (13 – 16) to control the AE-4020.



INSTALLATION



WARNING

MAKE CERTAIN POWER IS REMOVED
FROM THE FEED CIRCUITS
BEFORE YOU BEGIN INSTALLATION.

The unit should be wall mounted close to an AR-1202 dimmer. The unit may be "stood off" from the wall (aprox. 1") to assure clear airflow across the rear heat sink surface. A 120VAC, 20 Amp power feed must be provided for each dimming channel. A Neutral and a Safety Ground must also be provided. Each channel may control multiple lighting circuits as long as the channel load does not exceed 2400 Watts. A neutral and ground connection should be included for each channel load.

REQUIREMENTS FOR THREE PHASE OPERATION:

In order to provide zero crossing switching, the AR-1202 uses a specific phase sequence when operated with 3 phase power. The sequence convention must also be adhered to when connecting the AE-4020. The phase connected to the AR-1202 H1 power input

terminal must also be used for channels 1 and 4 of the AE-4020. The AR-1202 H2 phase must be used for AE-4020 channel 2. The AR-1202 H3 phase must be used for AE-4020 channel 3. The following table summarizes this requirement.

| POWER PHASE | AR-1202 CHANNEL | AE-4020 CHANNEL |
|-------------|-----------------|-----------------|
| H1 | 13 | 13 |
| H2 | 14 | 14 |
| H3 | 15 | 15 |
| H1 | 16 | 16 |

POWER AND LOAD CONNECTIONS

The diagram "AE-4020 CONNECTIONS" shows the power connection terminals details.

CONTROL SIGNAL CONNECTIONS

The diagram "AE-4020 CONNECTIONS" shows the control signal connection terminal details for each channel at the AE-4020. They are labeled PWM CONTROL FROM AR-1202.

These connections are normally prewired to the 12 ft. control signal cable which is supplied with the unit.

The 8 conductor control signal cable supplying the control inputs to the AE-4020 is provided with a connector at the AR-1202 end. This cable connects directly to J7 on the circuit board which is located on the AR-1202 door. See the diagram "EXPANSION CHANNEL CONNECTIONS"

OPERATION

Each channel of an AE-4020 is protected by a 20 Amp, fast acting, magnetic circuit breaker. The breakers must be in the closed position to run the unit (RED end of rocker switch NOT visible). The breakers are not intended as ON/OFF switches and should not be used when the channels are on.

There are no operator controls or indicators in the unit. The AE-4020 operates directly as 4 channels (13 - 16) of the AR-1202 or AR-602 which it is connected to.

OWNER MAINTENANCE

There are no user serviceable parts in the AE-4020.

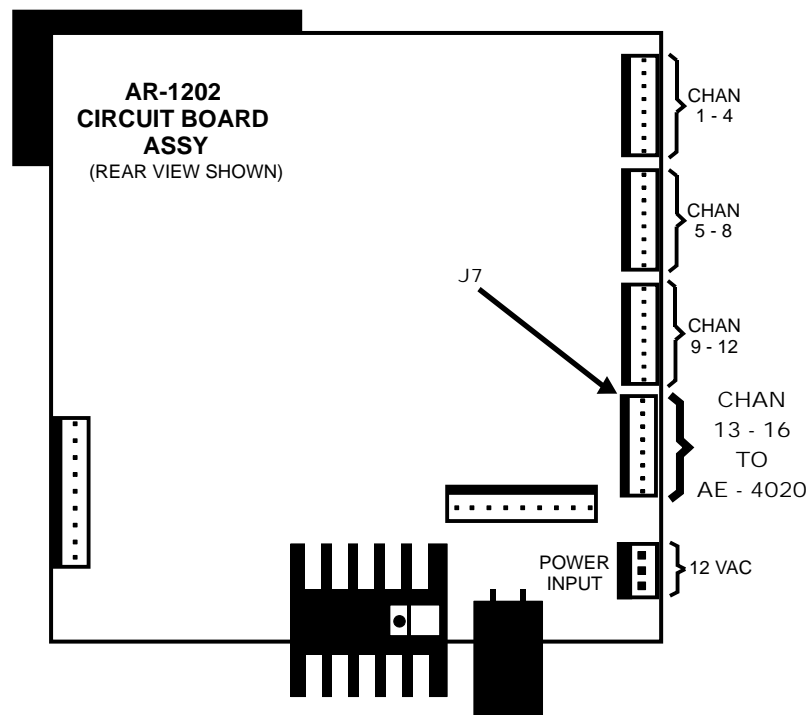
The best way to prolong the life of your unit is to keep it cool, clean, and dry. It is important that the cooling intake and exit vent holes are clean and unobstructed.

Service by other than Lightronics authorized agents may void your warranty.

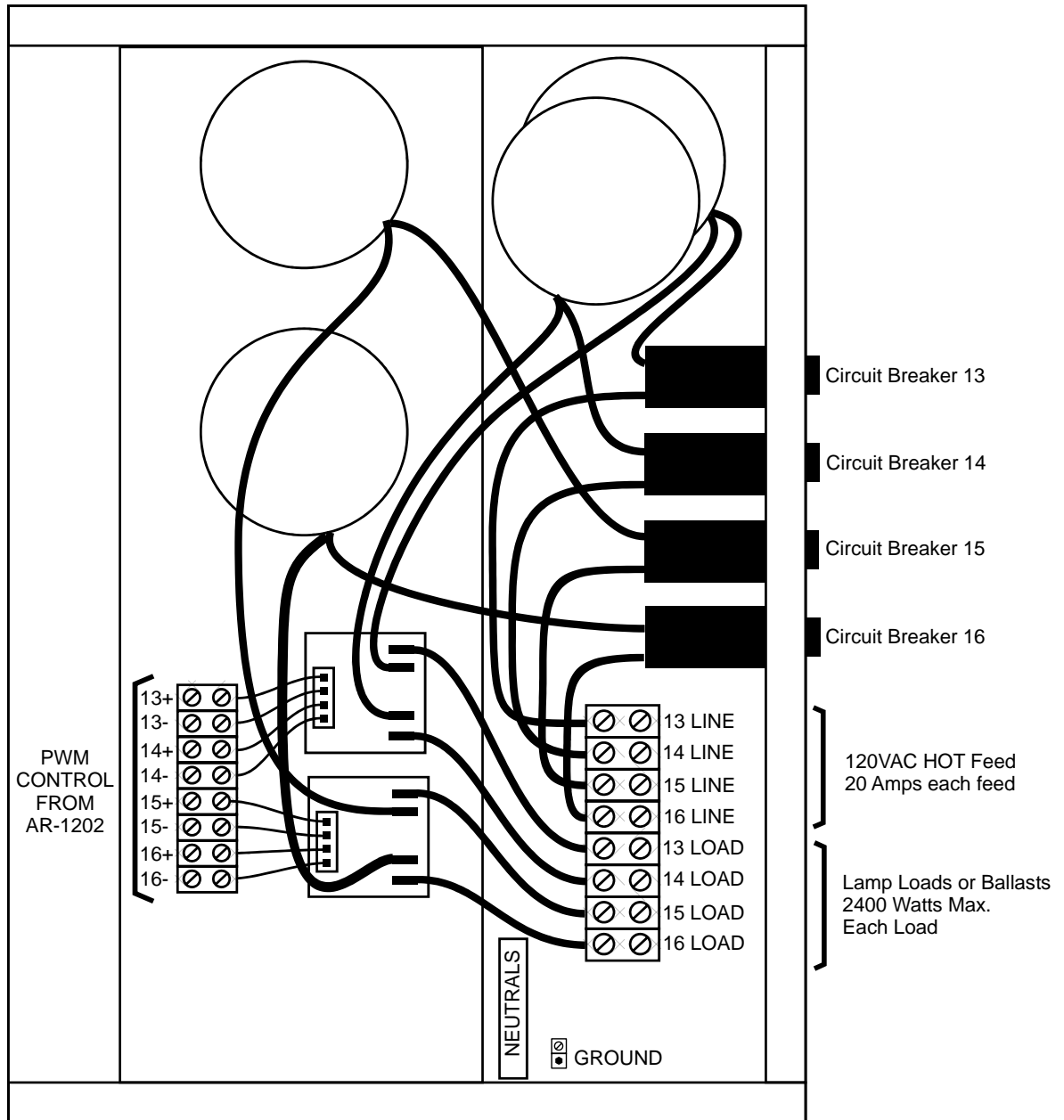
OPERATING AND MAINTENANCE ASSISTANCE

If service is required, contact the dealer from whom you purchased the equipment or contact Lightronics, Service Department, 509 Central Drive, Virginia Beach, VA 23454 TEL 757 486 3588

EXPANSION CHANNEL CONNECTIONS



AE-4020 CONNECTIONS



DIMENSIONS: 18.5"h x 15"w x 4"d
WEIGHT: 28 Pounds



All Lightronics products are warranted for a period of TWO/FIVE YEARS from the date of purchase against defects in materials and workmanship.

This warranty is subject to the following restrictions and conditions:

- A) If service is required, you may be asked to provide proof of purchase from an authorized Lightronics dealer.
- B) The FIVE YEAR WARRANTY is only valid if the warranty card is returned to Lightronics accompanied with a copy of the original receipt of purchase within 30 DAYS of the purchase date, if not then the TWO YEAR WARRANTY applies. Warranty is valid only for the original purchaser of the unit.
- C) This warranty does not apply to damage resulting from abuse, misuse, accidents, shipping, and repairs or modifications by anyone other than an authorized Lightronics service representative.
- D) This warranty is void if the serial number is removed, altered or defaced.
- E) This warranty does not cover loss or damage, direct or indirect arising from the use or inability to use this product.
- F) Lightronics reserves the right to make any changes, modifications, or updates as deemed appropriate by Lightronics to products returned for service. Such changes may be made without prior notification to the user and without incurring any responsibility or liability for modifications or changes to equipment previously supplied. Lightronics is not responsible for supplying new equipment in accordance with any earlier specifications.
- G) This warranty is the only warranty either expressed, implied, or statutory, upon which the equipment is purchased. No representatives, dealers or any of their agents are authorized to make any warranties, guarantees, or representations other than expressly stated herein.
- H) This warranty does not cover the cost of shipping products to or from Lightronics for service.
- I) Lightronics Inc. reserves the right to make changes as deemed necessary to this warranty without prior notification.