

# Installation Instructions

## Architectural Rotary Incandescent Dimmers

Cat. Numbers: Single Pole: AR61, AR101, AR151, AR201

Three Way: AR63, AR103

**CAUTION:** Power must be turned OFF before installing dimmer. New installations must be tested for shorts with ordinary switch prior to installing dimmer. Warranty VOID if dimmer is shorted. Only mount fins vertically. Do not connect to any other appliance. Will not operate on D.C. For incandescent and quartz lamps only - 120 volts, 60 Hz. Load cannot exceed rated dimmer load. To avoid overheating and possible damage to other equipment do not install to control a receptacle, a fluorescent lighting fixture, a motor operated appliance, or a transformer-supplied appliance.

Figure 1: Single Pole

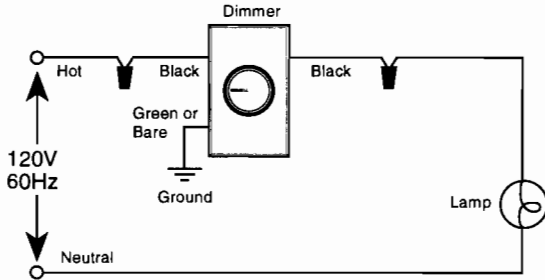
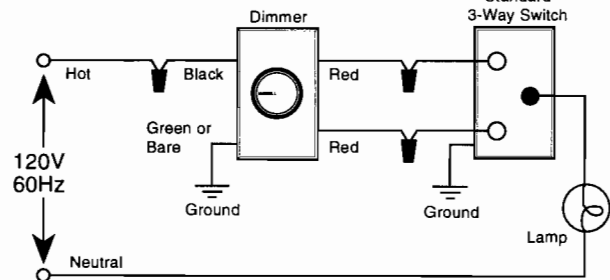


Figure 2: 3-Way



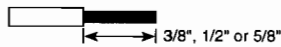
### DIMMER INSTALLATION

1. Remove dimmer from box. Faceplate must be removed as follows: place heel of hand on knob of control and fingertips on top edge of faceplate and snap back.
2. If your installation involves 2 or more dimmers side by side, refer to "Options for Ganged Installation."

3. TURN OFF POWER. Remove fuse or turn circuit breaker off. The dimmer may only be installed when power is turned off.
4. Remove switch from wallbox. Note: If a green or bare copper ground wire is not available in the wallbox, contact a licensed electrician.
5. Strip insulation of dimmer wires and the wires to which the dimmer is being connected.

For AR151, AR201

- 5/8" for No. 16 and 18 gauge
- 1/2" for No. 10, 12 and 14 gauge



For AR61, AR63, AR101, AR103

- 3/8" for No. 14, 16 and 18 gauge

6. The wire connectors are suitable for use with copper wire only. For AR151, AR201 the wire connectors supplied can be used to join the following wire combinations:

- One No. 18, 16, 14, 12 or 10 gauge with one or two No. 14 or 12 gauge.

For AR61, AR63, AR101, AR103 the wire connectors supplied can be used to join the following wire combinations:

- One No. 14 with one No. 18 or one No. 16 gauge.

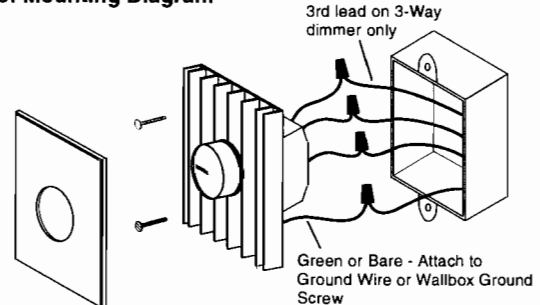
7. Wire dimmer as indicated in appropriate wiring diagram.

For AR61, AR101, AR151, or AR201 use Figure 1.

For AR63, or AR103 use Figure 2.

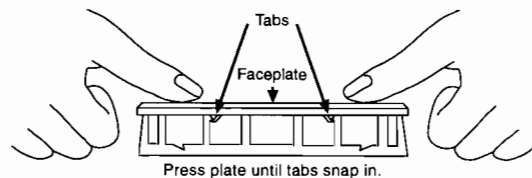
8. The "HUBBELL" inscription in knob is a light level indicator. When control is turned off, it should be in position shown in Figure 3. If it is not, remove knob from stem. Push knob back on stem as far as it will go in correct position.
9. Push wires back into the box. Mount dimmer to wallbox using 2 screws provided. Dimmer must be mounted vertically. SEE UP ARROWS ON UNIT FOR CORRECT POSITION.

Figure 3: Mounting Diagram



10. Snap on faceplate over fins. Press firmly at the top, center and bottom to make sure the tabs "snap in". Turn on power. Push control on AR61, AR63, AR101, AR103 dimmers to turn on or off. Rotate control on AR151, AR201 clockwise from off position to turn on, fully counterclockwise to turn off. Rotate control to dim up or down.

Figure 4: Snap on Faceplate



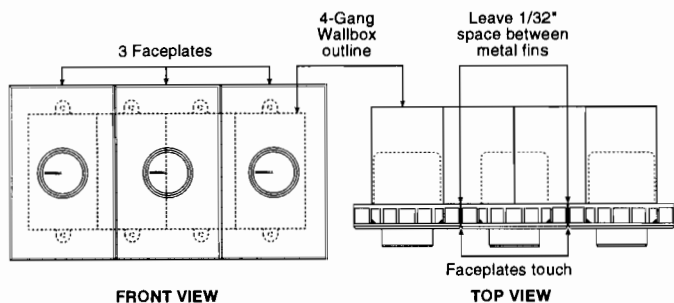
### OPTIONS FOR GANGED INSTALLATION

1. Full Wattage Installation - you can gang dimmers without breaking off fins and still operate dimmer at full wattage ratings.
2. SPACE SAVING INSTALLATION - You can break off fins to save space, but you must accept wattage deratings as shown in the Capacity Derating Chart.

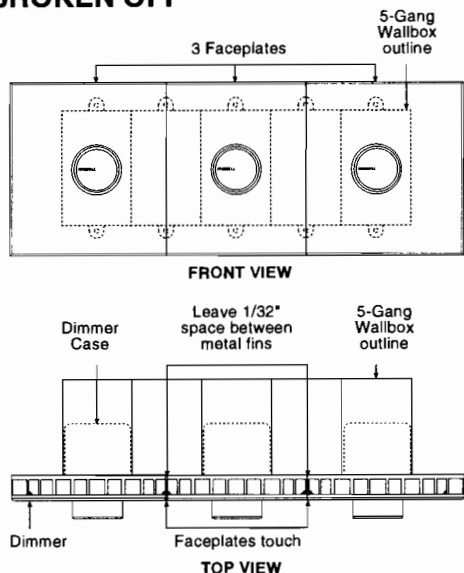
Capacity Derating Chart for Incandescent and Quartz Only

Cat. No.	Watts	Amps	Max. No of Watts (1 Fin Broken Off)	Max. No. of Watts (2 Fins Broken Off)
AR61	600	5	600	500
AR63	600	5	600	500
AR101	1000	8.3	900	700
AR103	1000	8.3	900	700
AR151	1500	12.5	1250	1000
AR201	2000	16.7	1800	1500

## GANGING THREE DIMMERS NO FINS BROKEN OFF



## GANGING THREE DIMMERS FINS BROKEN OFF



### NOTE:

Leave 1/32" gap between metal fins. This will allow you to easily snap on the faceplates.

## WALLBOX SIZES NEEDED FOR MOUNTING DIMMERS

### Typical Combinations

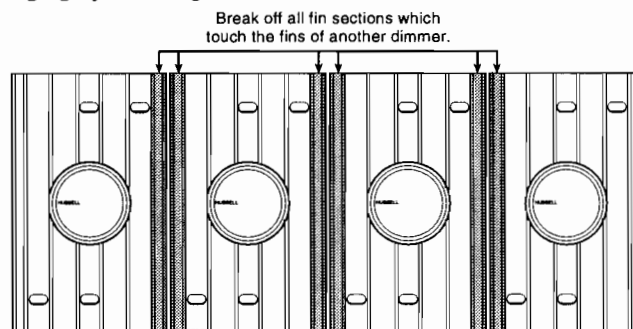
No. of Units with Fin Sections Broken Off		Wallbox Sizes Required	No. of Units with No Fin Sections Broken Off	
600/1000W	1500/2000W		600/1000W	1500/2000W
1	OR 1	1 GANG	1	OR 1
2		2 GANG	No Combination	
3	OR 2	3 GANG	1	+ 1
1	+			
4		4 GANG	3	OR 2
2	+			
5	OR 3	5 GANG	2	+ 1
1	+			
3	+			

### NOTES:

An even number of 600/1000W dimmers can be ganged without breaking off fin sections. It is recommended that one 600/1000W dimmer be exchanged for a 1500/2000W dimmer thereby giving an odd number of 600/1000W dimmers plus 1-1500/2000W dimmer.

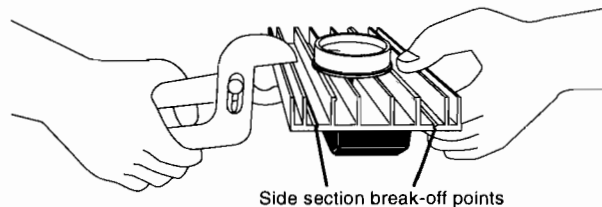
When ganging any even combination of 600/1000W and 1500/2000W dimmers without breaking off fin sections, be sure there is a 600/1000W dimmer on the extreme left and a 1500/2000W dimmer on the extreme right or vice versa.

### Ganging by Breaking Off Fin Sections



## BREAKING OFF FIN SECTIONS

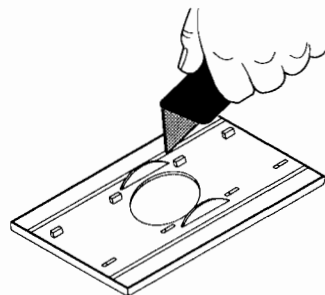
1. Pull off plastic faceplate.
2. Use pliers to break off metal fins.
3. Bend fins down as far as you can and then bend back to original position. Fins will break off easily.



## CUTTING PLASTIC FACEPLATE

Faceplates snap over fins. When fins have been broken off, faceplates may be cut to fit over reduced fin area. Use razor sharp knife to cut through plastic faceplate.

1. Place on firm flat surface, face down. Lay clean soft cloth between faceplate and surface to avoid scratching finish.
2. Score groove several times with a knife. Use vertical side of groove to keep knife on straight course.
3. Then press down firmly and cut through faceplate.
4. Bend section back and forth to break it off.
5. Rough edges are easily smoothed. Place fine grained sandpaper on flat surface. Rub edge of faceplate over sandpaper a few times. Hold faceplate steady as you rub to keep edge true.



Wiring Device Division