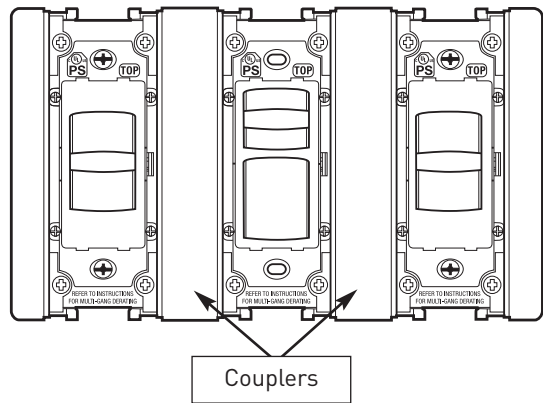
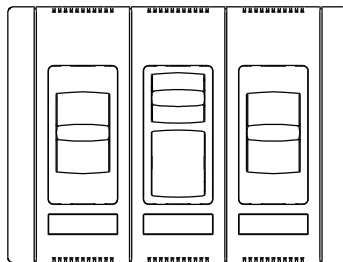


- Tighten the mounting screws, insert the label, attach the wall plate, and restore power to the circuit.
- Calibrate the Dimmer if necessary – Refer to Single Gang Installation Instructions, step #7.



MULTI GANG INSTALLATION INSTRUCTIONS FINS ARE REMOVED

NOTE: A 3 gang Installation of Narrow Dimmers is shown and described below. Any Combination of Wide and Narrow Dimmers will gang the same way.



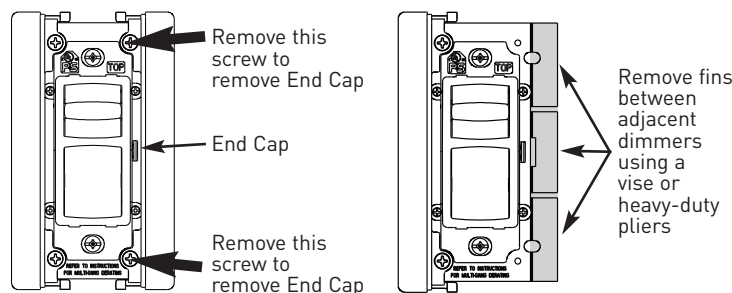
- Select the correct box size from Table 3.

Table 3 – Wall-box Gang Requirements – FINS are REMOVED

Wide Dimmers	Narrow Dimmers								
	0	1	2	3	4	5	6	6	
0	0	1	2	3	4	5	6	7	8
1	1	3	4	5	6	7	8	9	10
2	3	4	5	6	7	8	9	10	11
3	5	6	7	8	9	10	11	12	13
4	7	8	9	10	11	12	13	14	15
5	9	10	11	12	13	14	15	16	17
6	11	12	13	14	15	16	17		

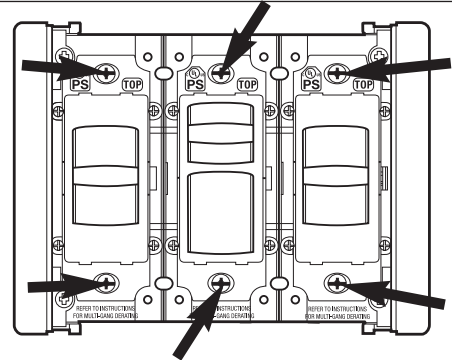
- Remove the End Cap and break the fins between adjacent dimmers (2 screws for each End Cap). Keep these screws as they will be needed at step #5.

NOTE: The End Cap and the Fins that are not between dimmers do NOT get removed.

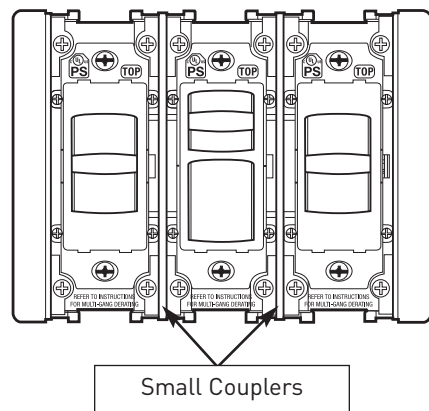


- Connect the dimmer as shown in the wiring diagram using the appropriate sized wire connectors.
- With the word "TOP" up, install dimmer in the wall box using mounting screws provided (leave mounting screws "finger tight" at this point).

Fins are removed between adjacent dimmers



- Attach the Small Couplers between the Dimmers with the screws that were removed in step 2.



- Tighten the mounting screws, insert the label, attach the wall plate, and restore power to the circuit.
- Calibrate the Dimmer if necessary – Refer to Single Gang Installation Instructions, step #7.

WARRANTIES

Lifetime Warranty. The device you have purchased is warranted under normal use against defects in workmanship and materials for as long as you own the device. If the device fails due to manufacturing defect during normal use, return the device for replacement to the store where purchased or send to:

Pass & Seymour Legrand
50 Boyd Avenue
Syracuse, NY 13209

All requests for replacement must include a dated sales receipt (legible copies acceptable).

ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO A PERIOD OF TWO YEARS FROM THE DATE OF PURCHASE. YOUR SOLE AND EXCLUSIVE REMEDY AGAINST PASS & SEYMOUR LEGRAND UNDER ANY WARRANTY SHALL BE THE EQUIVALENT REPLACEMENT OF THE DEVICE. IN NO EVENT SHALL ANY WARRANTY APPLY TO ANY DEFECT ARISING OUT OF ANY ALTERATION OF THE DEVICE, IMPROPER WIRING, IMPROPER INSTALLATION, MISUSE, ABNORMAL USE OR NEGLIGENCE. IN NO EVENT SHALL PASS & SEYMOUR LEGRAND BE LIABLE FOR LOST PROFITS, INDIRECT, SPECIAL, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow limitations on how long implied warranties last and do not allow exclusion or limitation of incidental or consequential damages. Some of the above limitations or exclusions may not apply to every purchaser.

Pass & Seymour



P.O. Box 4822, Syracuse, NY 13221-4822
(800-223-4185)
www.passandseymour.com

P/N 340840 Rev. B

TITAN™ INSTALLATION INSTRUCTIONS

INCANDESCENT DIMMERS, MAGNETIC LOW VOLTAGE DIMMERS, FAN SPEED CONTROLS, DEHUMMER FAN SPEED CONTROLS, FLUORESCENT DIMMERS

Pass & Seymour



P/N 340840 Rev. B

CAUTION: To be installed by a certified electrician or other qualified person.

INCANDESCENT DIMMERS "CD" SERIES: These dimmers are for use with Incandescent and Halogen lamps.

CAUTION: To reduce the risk of overheating and possible damage to other equipment, do not install to control a receptacle, a fluorescent light, a motor-operated appliance, or a transformer supplied appliance.

- Do not use this dimmer with incandescent lamps whose power requirements exceeds maximum power (stated in Watts) of this control.
- Do not connect this dimmer to power source other than 120VAC, 60 Hz only.
- Use copper wire only.
- A 50W minimum load is required.

MAGNETIC LOW VOLTAGE DIMMERS "CDLV" SERIES: These dimmers are for use with Magnetic Low Voltage Incandescent and Halogen lamps.

CAUTION: To reduce the risk of overheating and possible damage to other equipment, do not install to control a receptacle, a fluorescent light, or a motor-operated appliance. Connect only in a 120VAC, 60Hz circuit to control the primary winding of a transformer supplied incandescent and halogen lamp. The maximum VA rating of this dimmer applies to the transformer input, not the load on the transformer secondary.

- Do not use to control a solid state electronic low voltage transformer.
- Do not use with inoperative or missing lamps. Use of this dimmer with inoperative or missing lamps can create an over current condition which may damage the transformer. Use transformers that incorporate thermal protection or a fuse at the primary windings.
- Use copper wire only.
- A 50VA minimum load is required.

FAN SPEED CONTROLS "CDSC" SERIES: These controls are for use with Fan or Blower units. Use only with Fan or Blower units marked "Suitable for Use with Solid State Fan Speed Controls". **Set multi-speed fans to their highest setting before installing this control.**

- Do not use this control with Fan or Blower units that exceed the maximum power (stated in Amps) of this control.
- Do not connect this control to power source other than 120VAC, 60 Hz only.
- Use copper wire only.
- A 0.25 Amp minimum load is required.

DEHUMMER FAN SPEED CONTROLS "CDDH" SERIES: These controls are for use with a single ceiling paddle fan only.

- Do not use this control with a ceiling paddle fan that exceeds the maximum power (stated in Amps) of this control.
- Do not connect this control to power source other than 120VAC, 60 Hz only.
- Use copper wire only.

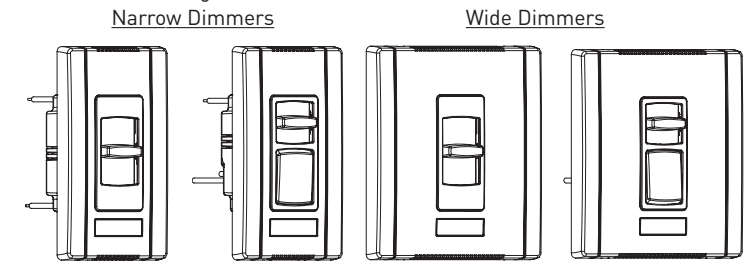
FLUORESCENT DIMMERS "CDFB" SERIES: These dimmers control dimmable ballasts:

- Use copper wire only.
- A 0.25 Amp minimum load is required.
- These dimmers are compatible with the following ballasts:

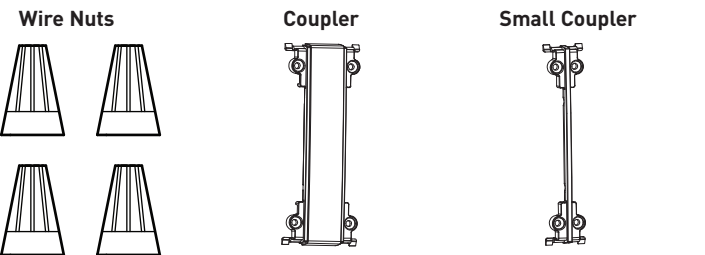
Compatible P&S Cat #	Voltage	Ballast Manufacturer	Model
CDFB5 CDFB8 CDFB53P CDFB83P CDFB10 CDFB16 CDFB103P CDFB163P	120VAC 60 HZ	Advance	REZ-132-SC, REZ-2S32-SC, REZ-3S32-SC, REZ-154, REZ-2S54, REZ-1Q18-M2, REZ-2Q18-M2, REZ-1T42-M2, REZ-2T42-M3, REZ-1TTS40/REZ-1TTS40-SC, REZ-2TTS40/REZ-2TTS40-SC, IEZ-2S24-D, REB-2S26-M1-LS-DIM/REB-2S26-M1-BS-DIM
		Lutron	2W-T426-120-1-S, 2W-T426-120-2-S, 2W-T432-120-1-S, 2W-T432-120-2-S, 2W-T832-120-1-S, 2W-T832-120-2-S
		Sylvania/Osram	QTP1x32T8/UNV DIM, QTP2x32T8/UNV DIM, QTP3x32T8/UNV DIM, QTP4x32T8/UNV DIM
CDFB7-277 CDFB10-277 CDFB73P-277 CDFB103P-277	277VAC 60 HZ	Advance	VEZ-132-SC, VEZ-2S32-SC, VEZ-3S32-SC, VEZ-154, VEZ-2S54, VEZ-1Q18-M2, VEZ-2Q18-M2, VEZ-1T42-M2, VEZ-2T42-M3, VEZ-1TTS40/VEZ-1TTS40-SC, VEZ-2TTS40/VEZ-2TTS40-SC, IEZ-2S24-D
		Sylvania/Osram	QTP1x32T8/UNV DIM, QTP2x32T8/UNV DIM, QTP3x32T8/UNV DIM, QTP4x32T8/UNV DIM

PACKAGE CONTENTS

One of the following Dimmers:



Cat no.:	Cat no.:	Cat no.:	Cat no.:
CD700	CD703P	CD1600	CD1603P
CD1100	CD1103P	CD2000	CD2003P
CDLV700	CDLV703P	CDLV1600	CDLV1603P
CDLV1100	CDLV1103P	CDLV1600	CDLV1603P
CDFB5	CDFB53P	CDFB10	CDFB103P
CDFB8	CDFB83P	CDFB16	CDFB163P
CDSC6		CDFB7-277	CDFB73P-277
CDDH16		CDFB10-277	CDFB103P-277
		CDSC12	



WARNING: To prevent severe shock or electrocution, always turn power OFF at the service panel before installing this dimmer, working on the circuit, or changing a lamp.

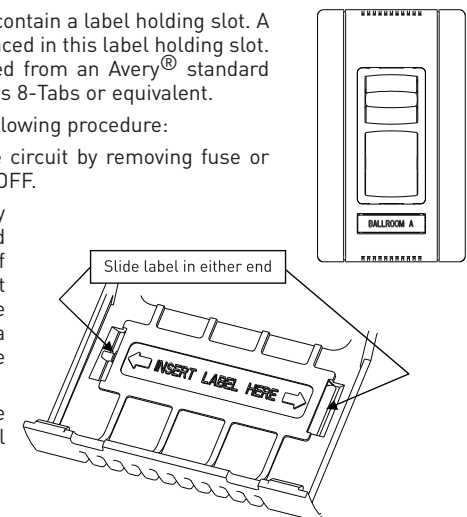
- To be installed by a certified electrician or other qualified person.

WALL PLATE LABELING SYSTEM

These dimmer wall plates contain a label holding slot. A 0.33" x 1.5" label can be placed in this label holding slot. These labels can be printed from an Avery® standard template: Divider tab inserts 8-Tabs or equivalent.

Install the label with the following procedure:

- Disconnect power to the circuit by removing fuse or turning circuit breakers OFF.
- Remove the wall plate by placing a small flat head screwdriver into one of the four slots located at the top and bottom of the wall plate. Gently twist a half turn until the plate pops off.
- Slide the label in from the back side of the wall plate (as shown at right).



WIRING INFORMATION

IMPORTANT NOTES Read the following before installation:

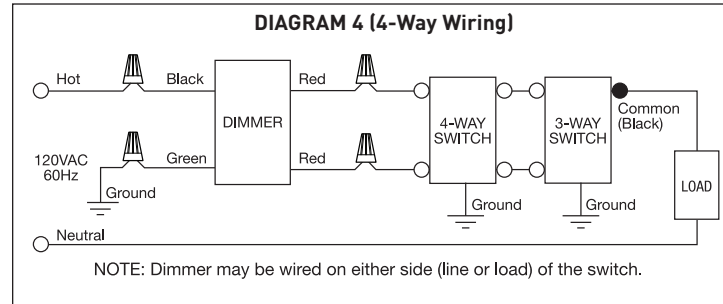
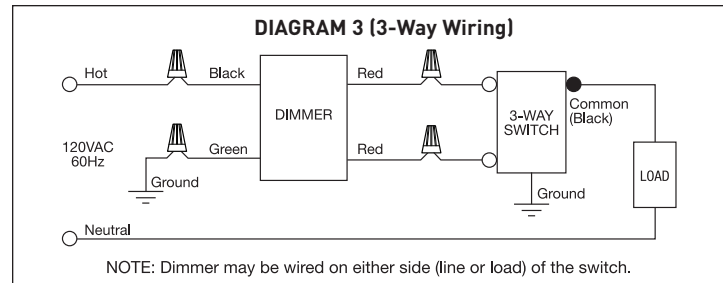
- Requirements for wire strip length and wire connections.

WIRE NUT USAGE CHART

Wire Combinations	Strip Lengths	Color
1#14 & 1#16; 1#14 & 2#18; 2,3#16; 1#16 & 1-3#18; 3-5#18; 2#18	1/2" Except 9/16" For #16 & #18 AWG	Orange
1#10 & 1#14; 1#12 & 1#14 2, 3#14; 2#14 & 1,2#16; 2#14 & 2,3#18; 1#14 & 1-4#16; 1#14 & 1-4#18	1/2" Except 5/8" For #16 AWG	Yellow
1#10 & 1,2#12; 1#10 & 1-3#14; 2,3#12; 1#12 & 1-3#14; 1#12 & 3#16; 3,4#14	7/16" Except 1/2" For #16	Red
1#14 & 1,2#16; 1#14 & 1,2#16; 2,3#16; 2-5#18	7/16" For #14 & #16 1/2" For #18	Ivory

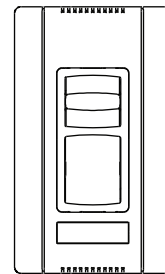
Use Only Copper Wire With This Device.

- Use a separate neutral wire for each phase of a multiphase system containing a dimmer, and for high power single phase applications where flickering is present.
- All dimmers can be damaged by improper wiring. Check for short circuits prior to installing the dimmer.
 - Procedure for short circuit check:
 - Disconnect power to the circuit by removing fuse or turning circuit breakers OFF.
 - Install a switch instead of the dimmer. Turn the switch to the "on" position.
 - Turn power ON. If the circuit breaker trips, a short is present. If the light fails to turn ON and OFF with the switch, the wiring may be incorrect.
 - Correct wiring, if necessary and retest.
 - Install the dimmer only after the light operates properly with the switch.
- Protect from dirt and dust. The dimmer can be damaged from contaminants encountered during the construction process. If lighting is required prior to the construction process completion, then a switch should be temporarily installed in place of the dimmer. The dimmer should not be installed until the construction process is complete.
- **Any dimmer damaged by improper installation is not covered under warranty.**
- It is normal for the dimmer to feel warm during operation.
- Cleaning Instructions: Wipe dimmer with a damp, clean cloth. DO NOT clean the dimmer with chemicals or cleaning solutions.

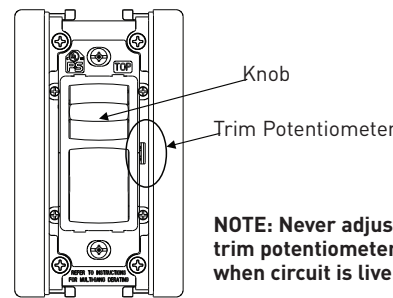


SINGLE GANG INSTALLATION INSTRUCTIONS

1. Disconnect power to circuit by removing fuse or turn circuit breakers OFF before installing.
2. **For existing installations:** Remove wall plate and switch mounting screws, pull existing switch from wall box. **For new installations:** Install a 1-gang wall-box.
3. Disconnect existing switch from circuit.
 - 3-way installation:** Identify the "COMMON" wire (wire connected to the terminal marked common or odd colored terminal). For "new" installation identify wire connected to power source or to the load.
4. Connect dimmer as shown in the wire diagram with appropriate sized wire connectors (see Table 1).
5. Install dimmer in wall box, with the word "TOP" up, using mounting screws provided.
6. Insert the label, attach the wall plate and restore power to the circuit.
7. Dimmer Set-up Adjustments:



- Incandescent Dimmer:** The Full ON voltage can be reduced to save energy by reducing the Full ON light level. To change the Full ON light level, slide the dimmer knob up to its full brightness. DISCONNECT POWER FROM CIRCUIT, and remove the wall plate. Use a small insulated, screwdriver to adjust the trim potentiometer. Turn down to decrease the Full ON light level.
- Magnetic Low Voltage Dimmer:** The minimum light level may need adjustment for variations in low voltage transformers. To change the minimum light level, slide the dimmer knob down to the lowest brightness. DISCONNECT POWER FROM CIRCUIT, and remove the wall plate. Use a small insulated, screwdriver to adjust the trim potentiometer. Turn down to decrease the minimum light level.
- Fan Speed Controls:** The minimum fan speed level may need adjustment for variations in fans. To change the minimum fan speed, slide the knob down to the lowest level. DISCONNECT POWER FROM CIRCUIT, and remove the wall plate. Use a small insulated, screwdriver to adjust the trim potentiometer. Turn down to decrease the fan speed. Make certain that the fan does not "stall" in any of the ON positions as overheating of the fan may occur. DO NOT USE THE FAN PULL CHAIN TO CHANGE SPEEDS AFTER THIS CONTROL IS INSTALLED. THE FAN PULL CHAIN NEEDS TO REMAIN AT THE MAXIMUM SPEED.
- Dehummer Fan Speed Controls:** No adjustments required. Make certain that the fan does not "stall" in any of the ON positions as overheating of the fan may occur. DO NOT USE THE FAN PULL CHAIN TO CHANGE SPEEDS AFTER THIS CONTROL IS INSTALLED. THE FAN PULL CHAIN NEEDS TO REMAIN AT THE MAXIMUM SPEED.
- Fluorescent Dimmer:** The minimum light level may need adjustment for variations in ballasts. To change the minimum light level, slide the dimmer knob down to the lowest brightness. DISCONNECT POWER FROM CIRCUIT, and remove the wall plate. Use a small insulated, screwdriver to adjust the trim potentiometer. Turn up to increase the minimum light level.



MULTIPLE GANGING OF DIMMERS

Any combination of dimmer models may be ganged together. Using a vise or heavy-duty pliers, remove the fins on either or both sides of the heat sink, as necessary. Dimmers can be ganged without removing fins by proper selection and placement of outlet boxes (see Table 2 and Table 3). When Dimmers are ganged, De-rate the maximum load according to the following De-Rating Table 1:

Table 1 – Derating for Multi-Gang Installations

	Dimmer Catalog #	1-Gang Installation	Fins are NOT Removed		Fins are Removed	
			2-Gang Installation	3- or more Gang Installation	2-Gang Installation	3- or more Gang Installation
Narrow Dimmers	CD700	700W	700W	700W	700W	700W
	CDLV700	700VA	700VA	700VA	700VA	700VA
	CD703P	700W	700W	700W	700W	700W
	CDLV703P	700VA	700VA	700VA	700VA	700VA
	CD1100	1100W	1100W	1000W	1000W	900W
	CDLV1100	1100VA	1100VA	1000VA	1000VA	850VA
	CD1103P	1100W	1100W	1000W	1000W	950W
	CDLV1103P	1100VA	1100VA	1000VA	1000VA	850VA
	CDFB5	5A	5A	5A	5A	5A
	CDFB8	8A	8A	8A	7.7A	6.3A
	CDFB53P	5A	5A	5A	5A	5A
	CDFB83P	8A	8A	8A	7.7A	6.3A
CDSC6	6A	6A	6A	6A	6A	
CDDH16	1.6A	1.6A	1.6A	1.6A	1.6A	
Wide Dimmers	CD1600	1600W	1600W	1600W	1600W	1550W
	CDLV1600	1600VA	1600VA	1600VA	1600VA	1550VA
	CD1603P	1600W	1600W	1600W	1600W	1550W
	CDLV1603P	1600VA	1600VA	1600VA	1600VA	1550VA
	CD2000	2000W	2000W	2000W	NO FINS TO REMOVE	
	CD2003P	2000W	2000W	2000W	NO FINS TO REMOVE	
	CDFB10	10A	10A	10A	10A	10A
	CDFB16	16A	16A	16A	NO FINS TO REMOVE	
	CDFB7-277	7A	7A	7A	7A	7A
	CDFB10-277	10A	10A	10A	10A	10A
	CDSC12	12A	12A	12A	12A	12A
	CDFB103P	10A	10A	10A	10A	10A
	CDFB163P	16A	16A	16A	NO FINS TO REMOVE	
	CDFB73P-277	7A	7A	7A	7A	7A
	CDFB103P-277	10A	10A	10A	10A	10A

MULTI GANG INSTALLATION INSTRUCTIONS FINS ARE NOT REMOVED

NOTE: A 3-gang Installation of Narrow Dimmers is shown and described below. Any Combination of Wide and Narrow Dimmers will gang the same way.

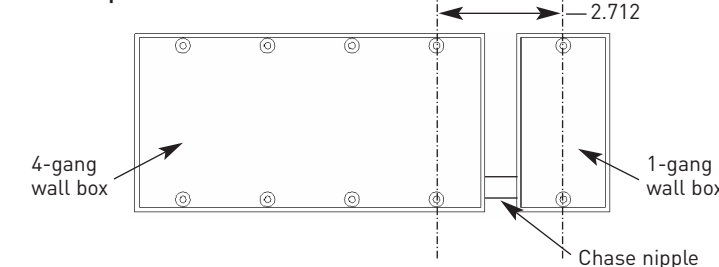
1. Select the correct box size from Table 2.

Table 2 – Wall-box Gang Requirements – FINS ARE NOT REMOVED

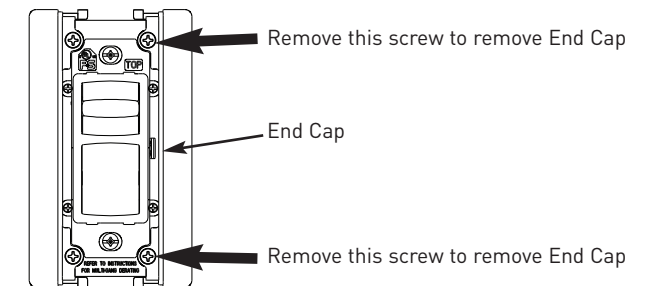
Wide Dimmers	Narrow Dimmers						
	0	1	2	3	4	5	6
0	0	1	1+1*	4	4+1*	7	7+1*
1	1	3	5	6	8	9	11
2	4	5	7	8	10	11	13
3	6	8	9	11	12	14	15
4	9	10	12	13	15	16	-
5	11	13	14	16	-	-	-
6	14	15	-	-	-	-	-

*Wall Box Requirements for Ganging an Even Number of Narrow Dimmers.

4+1 set up shown below:

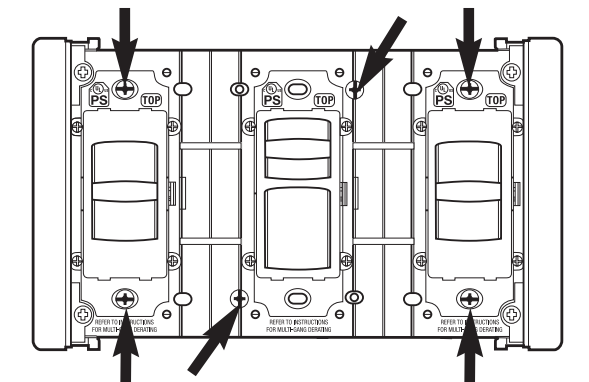


2. Remove the End Cap between adjacent dimmers (2 screws for each End Cap). Keep these screws as they will be needed at step #5.



NOTE: The End Cap that is not between dimmers does not get removed.

3. Connect the dimmer as shown in the wiring diagram using the appropriate sized wire connectors.
4. With the word "TOP" up, install dimmer in the wall box using mounting screws provided (leave mounting screws "finger tight" at this point).
5. Attach the Couplers between the Dimmers with the screws that were removed in step 2.



WIRING DIAGRAMS

Table 1

Dimmer Catalog #	Diagram #
CD700, CD1100, CDLV700, CDLV1100, CD1600, CDLV1600, CD2000, CDFB5, CDFB8, CDFB10, CDFB16, CDFB7-277, CDFB10-277, CDDH16, CDSC6, CDSC12	1
For Single Pole Installation of: CD703P, CD1103P, CDLV703P, CDLV1103P, CD1603P, CDLV1603P, CD2003P, CDFB53P, CDFB83P, CDFB103P, CDFB163P, CDFB73P-277, CDFB103P-277	2
For 3-Way Installation of: CD703P, CD1103P, CDLV703P, CDLV1103P, CD1603P, CDLV1603P, CD2003P, CDFB53P, CDFB83P, CDFB103P, CDFB163P, CDFB73P-277, CDFB103P-277	3
For 4-Way Installation of: CD703P, CD1103P, CDLV703P, CDLV1103P, CD1603P, CDLV1603P, CD2003P, CDFB53P, CDFB83P, CDFB103P, CDFB163P, CDFB73P-277, CDFB103P-277	4

