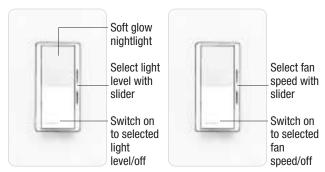


## Now the Diva family comes in a matte finish with 15 new colors to match any decor.



**Preset Dimmer**  **Preset Fan-Speed Controls** 

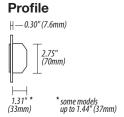
## PRODUCT FAMILY FEATURES

- Features a large paddle switch and captive linear-slide dimmer for a standard designer wallplate opening
- · Full family of products for most lighting sources
- Dimmers feature built-in soft-glow nightlight
- Uses standard single-pole and 3-way wiring for easy installation in any home
- For products with a gloss finish, see Lutron's Diva, and Claro, Lines

#### **DIMENSIONS**

#### **Front**





# SPECIFICATION SERIES STANDARD FEATURES



• RFI suppression

· Captive linear slider





- · Square Law Dimming
- · Power-failure memory
- Electrostatic discharge tested
- Precise color matching
- · Mechanical air-gap switch to disconnect load power

Lutron controls are rated at 120VAC, 60Hz unless otherwise noted.

JOB NAME	AREA CONTROLLED
LOCATION	JOB NUMBER
TITLE	PAGE NO.

# **CONTROLS AND ACCESSORIES**

#### **Preset Dimmers**



#### Fan-Speed **Controls**



#### **Switches**



# Receptacles







GFCI Receptacle

# Telephone/Cable TV Jacks



Single Telephone Jack



Cable TV Jack

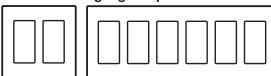
#### **Ports**



6-Port Frame

1

# **Standard Multigang Wallplates**



2-gang to 6-gang wallplates



	Description	Maximum Capacity <sup>1</sup>	Model #		Description	Maximum Capacity <sup>1</sup>	Model #
DIMMER	S			HI-POWE	R 2•4•6 <sub>™</sub> DIMM	ING MODI	JLES
	Preset Dimmers with	h <i>Nightlight</i> 600W	DVSC-600P-		To increase load capacity sources, use one DVSC-6 five dimming modules.	600P- or DVSC-603	3P- and add up to
	Single pole Single pole 3-way	1000W 600W	DVSC-000P- DVSC-10P- DVSC-603P-	five dimming modules. Cannot be used with 0-10VDC ballast  FAN-SPEED CONTROLS			
	3-way	1000W	DVSC-103P-		Quiet Controls		
	Note: The nightlight is v 3-way and 4-way switc (SC-3PS- or SC-4PS-), o	ching, use with Sati	n Colors switches		For use with one ceiling preset Fan-Speed Cor Single pole/ 3-way,		DVSCFSQ-F-
7	Electronic Low	v Voltage	_		3-speed		
	Preset Dimmers with Single pole	h Nightlight 300W	DVSCELV-300P-		Note: Does not have soft-glow nightlight. For 3-way and 4-way switching, use with Satin Colors switches (SC-3PS-or SC-4PS-), or other mechanical switches.		
	3-way	300W	DVSCELV-303P-	SWITCHE	ES <sup>3</sup>		
	Note: Requires neutral wire connection. The nightlight is visible best on the lighter colors. For 3-way and 4-way switching, use with Satin Colors switches (SC-3PS- or SC-4PS-), or other mechanical switches.				General Purpose Switching of all Sources and Motor Loads		
J	Magnetic Low				Single pole, 120/277V 3-way, 120/277V 4-way, 120/277V	15A 15A 15A	SC-1PS- SC-3PS- SC-4PS-
	Preset Dimmers with Nightlight  Single pole 600VA (450W <sup>2</sup> ) DVSCLV-600P-  Single pole 1000VA (800W <sup>2</sup> ) DVSCLV-10P-  3-way 600VA (450W <sup>2</sup> ) DVSCLV-603P-  3-way 1000VA (800W <sup>2</sup> ) DVSCLV-103P-		ACCESSORIES  Receptacles				
				-			
	Note: The nightlight is visible best on the lighter colors. For 3-way and 4-way switching, use with Satin Colors switches (SC-3PS- or SC-4PS-), or other mechanical switches.			ň	Receptacle <sup>3</sup> 15A, 125V SCR-15-		
=))	Fluorescent Di Eco-10 <sub>™</sub> (ECO-				GFCI Receptacle <sup>3</sup> 15A, 125V SCR-15-GF0		
	Preset Dimmers with		DVC0F 100D		Telephone and Cable Television Jack		
	Single pole/ 3-way 8A DVSCF-103P- Single pole/ 3-way, 277V 6A DVSCF-103P-277 Note: Use with Lutron Hi-lume or Eco-10 (ECO-Series) line				A physical barrier (partition) must exist when ganging with line-voltage products		
	voltage control Electron neutral wire connection	•			Single Telephone Jack 6-conductor, RJ11	(	SC-PJ-
	lighter colors. For 3-way Colors switches (SC-3P switches.		•		Note: Also accepts most	4-conductor plugs	
					Cable TV Jack <sup>3</sup>		
=))[	Fluorescent Dir Electronic Balla		Tu-Wire。		F-STYLE 75-Ohm, coaxial cable	e jack	SC-CJ-
	Preset Dimmers with		DIVOCETIL 5.55				
	Single pole/ 3-way  Note: Use with Lutron Ti dimming ballasts only. lighter colors. For 3-wa Colors switches (SC-3P switches.	u-Wire line voltage The nightlight is vi ay and 4-way switc	sible best on the hing, use with Satin				

<sup>1</sup> For capacities in multigang installations see derating pg. 3.

<sup>3</sup> No derating required if ganged.



switches.

<sup>2</sup> Actual lamp wattages.



Customer Service.

	Description	n Rating				
	ACCESSORIES					
	Field Customizable Multi-Port Frame					
	6-Port Frame	Shipped with 6 blanks Shown with blanks	SC-6PF-			
		uct above: For use with Lutron connectors shown below. Also compatible with Hubble Xcelerator™ and snap-fit connectors.				
	Connectors					
	For use with 6-port frame (SC-6PF-). Ea	ch connector fills one port.				
	Phone Jack	6-conductor, RJ11, Category 3	CON-1P-C3-WH			
	Phone Jack	8-conductor, RJ45, Category 5e	CON-1P-C5E-WH			
	Phone Jack	8-conductor, RJ45, Category 6	CON-1P-C6-WH			
	Fiber Jack	MT-RJ Feed-Through	CON-1F-MTRJ-WH			
	Fiber Jack	SC Simplex	CON-1F-SC-WH			
<b>○</b> ₽	Fiber Jack	LC Non-Flush Mount	CON-1F-LC-WH			
	Fiber Jack	ST Style	CON-1F-ST-WH			
	Cable Jack	F-Style, 75-0hm Coaxial cable	CON-1C-WH			
	BNC Jack	BNC connector	CON-1B-WH			
	Connectors available in white (WH) only. For information about additional colors contact Lutron					





Description	Model #	DERATIN	G/MAXIMUI	M CAPACIT	Υ
TANDARD WALLPLATES					
1-Gang					
2-Gang	119mm) x 0.30"D (7.6mm) SC-1-		No side sections removed (Full Capacity)	One side section removed (End Units)	Two side sections removed (Middle Unit
4.75"W (121mm) x 4.69"H	(119mm) x 0.30"D (7.6mm) SC-2-	Incandeso	ent Dimmers	,	
3-Gang	ას-∠-		600W 1000W	500W 800W	400W 650W
6.56"W (167mm) x 4.69"H	(119mm) x 0.30"D (7.6mm) SC-3-		Low Voltage	1	
4-Gana	30-3	Liectronic	300W	250W	200W
8.37"W (213mm) x 4.69 0.30"D (7.6mm)	9"H (119mm) x SC-4-	Magnetic	Low Voltage		
5-Gang	30-4-		600VA (450W <sup>2</sup> )	500VA (375W <sup>2</sup> )	400VA (300W <sup>2</sup> )
10.18"W (259mm) 0.30"D (7.6mm)	x 4.69"H (119mm) x SC-5-		1000VA (800W <sup>2</sup> )	800VA (650W <sup>2</sup> )	650VA (500W <sup>2</sup> )
6-Gang	(ma) v. 4 CO2II (110mama) v.	Fluoresce	nt		
12.00"W (305mm) x 4.69"H (119mm) x 0.30"D (7.6mm) SC-6-			0 20ballasts/8A	No derating required	
		Tu-Wire <sup>3</sup>	5A	4A	3.3A
NDARD COLORS/FINIS	HES	Fan-Spee	d Controls		
Matte Finishes (Ships in 3-5 days)  Add color/finish suffix to model number to order.			1.5A	No derating req	uired
Example: DVSC-600P-SW					
VIBRATO SERIES		1 Requires 40W	minimum load.		
KW Kiwi HT Hot		2 Actual lamp w	attage.		
LL Lilac		3 Minimum cap	acity: 2 ballasts/0.25	A	
OC Ochre					
PIEDRA SERIES					
TC Terracotta					
DO D 1 Ol					

**Desert Stone** 

Limestone

Sea Glass

Blue Mist

Midnight

Stone

DS

ST

LS

SG BT

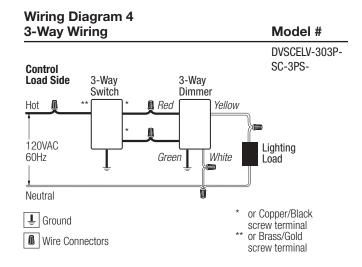
MN

**LUSTRA SERIES** 

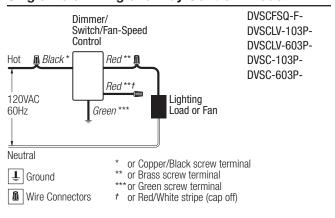
CLASSICO SERIES

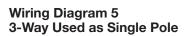


#### Wiring Diagram 1 Single-Pole Wiring Model # DVSC-600P-Dimmer/ Switch/Fan-Speed DVSC-10P-DVSCLV-600P-Control DVSCLV-10P-Black or Red \* 1 Hot **Black** SC-1PS-Lighting 120VAC Green \*\* Load or Fan 60Hz Neutral **⋢** Ground \* or Brass screw terminal Wire Connectors \*\* or Green screw terminal

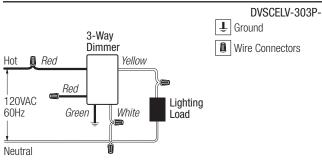


# Wiring Diagram 2 Single-Pole Wiring of 3-Way Control Model #





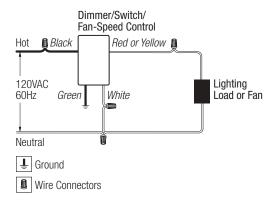
Model #



#### Wiring Diagram 3 Single-Pole Wiring

Model #

DVSCELV-300P-





#### Wiring Diagram 6 3-Way Wiring

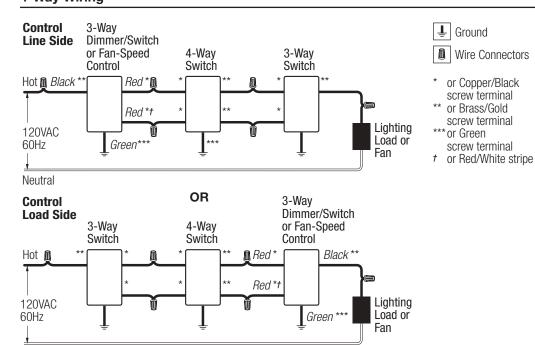
#### Fan-Speed Control or 3-Way Control Fan-Speed Control Control **⊥** Ground 3-Way **Line Side Load Side** 3-Way or 3-Way Dimmer/Switch Switch Dimmer/Switch Wire Connectors Switch Black \* Hot Black Hot n Red or Brass/Gold screw terminal Red\*1 Red\*t or Copper/Black 120VAC 120VAC screw terminal Green \*\*\* Green \*\*\* 60Hz OR 60Hz \* or Green screw Lighting Lighting terminal Load Load or Red/White stripe or Fan or Fan Neutral Neutral

#### Model #

DVSC-603P-DVSC-103P-DVSCLV-603P-DVSCLV-103P-DVSCFSQ-F-SC-3PS-

# Wiring Diagram 7 4-Way Wiring

Neutral



#### Model #

DVSC-603P-DVSC-103P-DVSCLV-603P-DVSCLV-103P-DVSCFSQ-F-SC-3PS-SC-4PS-

Wire Connectors

or Copper/Black

screw terminal

or Brass/Gold

screw terminal

screw terminal

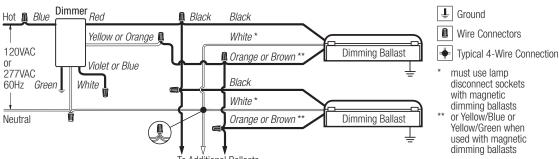


Wiring Diagram 9 3-Way Wiring

#### Wiring Diagram 8 Single-Pole Wiring of a 3-Way Control

#### Model #

DVSCF-103P-DVSCF-103P-277

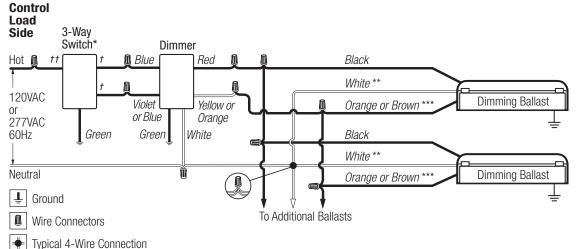


must use lamp disconnect sockets with magnetic dimming ballasts or Yellow/Blue or

Yellow/Green when used with magnetic dimming ballasts To Additional Ballasts

#### Model #

DVSCF-103P-DVSCF-103P-277 SC-3PS-



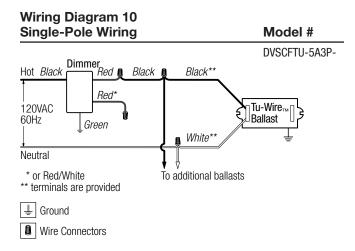
\* 3-Way switch must be wired on line side of dimmer

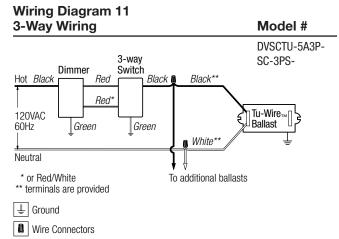
must use lamp disconnect sockets with magnetic dimming ballasts

\*\*\* or Yellow/Blue or Yellow/Green when used with magnetic dimming ballasts

t or Copper/Black screw terminal

tt or Brass/Gold screw terminal





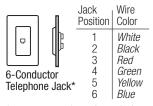


# Wiring Diagram 12 Cable TV Jack Wiring Model # SC-CJ 75-0hm Cable TV Jack

## Wiring Diagram 13 Telephone Jack Wiring

Model #

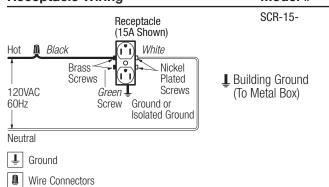
SC-PJ-



<sup>\*</sup>accepts most 4-conductor jacks

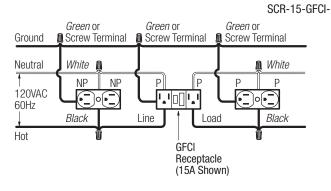
# Wiring Diagram 14 Receptacle Wiring

Model #



# Wiring Diagram 15 GFCI Receptacle Wiring

Model #



P-Protected NP-Not Protected

Wire Connectors



# DIVA SATIN COLORS CONTROLS AND ACCESSORIES

#### PART 1 - GENERAL

#### 1.01 SUMMARY

- A. Scope: Provide, install and test all switches, dimmers and related devices as specified herein for the areas indicated on the drawings, specifications, and load schedules.
- B. Related Sections: Section 16580 (Ballasts), Section 16570 (Dimming Systems).

#### 1.02 REFERENCES

A. UL 20, UL 1472, CSA, NOM, ISO 9001

#### 1.03 System Description and Operation

- A. Permanently installed, wallbox mounted switches and dimmers
- B. Permanently installed, wallbox mounted fan-speed controls
- C. Permanently installed, wallbox mounted receptacles
- D. Permanently installed, wallbox mounted data, voice and cable jacks
- E. Screwless, seamless wallplates

#### 1.04 SUBMITTALS

A. Submit manufacturer's standard catalog data giving all application, wiring, and installation information on basic components and wallplate kits. Provide test data and/or samples as required to demonstrate conformance with PART 2 of this specification.

#### 1.05 QUALITY ASSURANCE

- A. Manufacturer shall have a minimum of 10 years continuous experience in manufacturing wallbox dimming products.
- B. Dimmers, switches and Fan-speed controls shall be UL listed, CSA and NOM approved specifically for each required load (i.e., tungsten, electronic and magnetic low voltage transformer and fluorescent). Manufacturer shall provide file card or certificate upon request. Universal load-type dimmers shall not be acceptable.
- C. Manufacturer shall maintain ISO 9001 certification and provide a copy of the certificate upon request.

#### 1.06 WARRANTY

A. All devices shall be covered by a minimum one-year warranty.

#### **PART 2 - EQUIPMENT**

# 2.01 ACCEPTABLE MANUFACTURERS

- A. Lutron Electronics Co., Inc.
- B. Unless otherwise noted, all basic components (dimmer, fan-speed control, switch, receptacle, telephone jack and cable TV jack) and wallplate kits shall be provided by one manufacturer.

#### 2.02 EQUIPMENT

- A. Controls Lutron Diva Satin Colors Style
  - 1. Performance
    - Dimmers shall provide full-range, continuously variable control of light intensity.
    - b. Controls shall fit a decorator wallplate opening with a paddle switch aesthetically compatible to other decorator-style, mechanical switches used in the building. Controls shall have a small, and discrete slider, located to the right of the paddle switch. The paddle switch shall act as a preset, turning the control on to the level set by the slider, or off. Controls shall have a matte finish.

- c. When on, the slider shall change the light level/fan speed. When off, the slider shall preselect the light level/fan speed that the control will turn on to. Paddle switch shall turn lights/fan on to the preselected level, or off.
- Paddle switch and slider shall be captured internal to the control
- a-Way controls shall be capable of multi-location on and mechanical air-gap off using standard 3-way and 4-way switches. Multi-location switches shall be Satin Colors decorator style with a matte finish.
- f. Dimmer shall be backlit with soft glow locator light.
- g. Within rated capacity, dimmers shall be available for direct control of incandescent, magnetic low voltage, electronic low voltage, and fluorescent. Matching fan-speed controls shall also be available.
- h. Controls shall be capable of operating at the rated capacity; this includes modified capacities for ganging configurations which require the removal of fins. Operation at rated capacity shall be possible across the full ambient temperature range, without shortening design lifetime.
- To ensure a precise color match between all plastic parts, color variation of any matte finish control shall not exceed a delta E of 1, CIE L\*a\*b\* color units, as defined in ASTM E 308-99.
- j. Dimmer shall provide smooth and continuous Square Law dimming curve, for the full slider travel, on their rated load per The IESNA Lighting Handbook, 9th edition, p. 27-4.
- k. Controls shall meet the applicable requirements of UL 20 and UL 1472 referring to the inclusion of a visible, accessible air-gap off switch and the limited short circuit test.
- Controls shall meet ANSI/IEEE Std. C62.41-1980, tested to withstand voltage surges of up to 6000V and current surges of up to 200A without damage.
- m. Dimmers shall be designed to reduce interference with radio, audio, and video equipment.
- n. Controls shall incorporate power-failure memory. Should power be interrupted and subsequently returned, the lights or fans will come back on to the same levels set prior to the power interruption. Restoration to some other default level is not acceptable.
- Controls shall not be susceptible to damage or loss of memory due to static discharge.
- Controls shall operate in an ambient temperature range of 0°C (32°F) to 40°C (104°F).
- q. 3-Way controls shall wire using conventional 3-way and 4-way wire runs.
- r. Contractors shall install all backboxes with a minimum wallbox depth of 2.5 inches.

#### 2. Incandescent Dimmers

- a. Provide single-pole and 3-way incandescent dimmers in 600 Watts and 1000 Watts capacities.
- b. Dimmer shall operate in either 3-way switch location.
- 3. Electronic (Solid-State) Low Voltage (ELV) Transformer Dimmers
  - a. Provide ELV dimmers for direct control of up to 300 watts of electronic low voltage load.
  - Dimmers shall contain circuitry specifically designed to control the input of electronic (solid state) low voltage transformers. Dimmers using standard phase control shall not be acceptable.





- c. Dimmers shall have a resettable overload protection that automatically shuts off when dimmer capacity is exceeded. Protection methods that are non-resettable or require the device to be removed from the wall shall not be acceptable.
- d. Dimmers shall be designed to withstand a short, per UL 1472 section 5.10, between load hot and either neutral or ground without damage to the dimmer.
- e. Dimmers shall have a high-end of no less than 90% of line voltage.
- 4. Magnetic Low Voltage (MLV) Transformer Dimmers
  - a. Provide MLV dimmers for direct control of up to 1000 volt amps of electronic low voltage load.
  - Dimmers shall contain circuitry specifically designed to control and provide a symmetrical AC waveform to the input of magnetic low voltage transformers per UL1472 section 5.11.
  - c. Dimmers shall not cause a magnetic low voltage transformer to operate above the transformers rated operating current or temperature.
  - Dimmer shall be capable of operating in either 3-way switch location.
- 5. Fluorescent Dimming Ballast Dimmers
  - Provide Fluorescent dimmers for direct control of fluorescent dimming ballasts up to the manufacturers specified rating.
  - Dimmers shall be designed to operate the following ballasts.
     Dimmers and ballasts shall be produced by the same manufacturer to ensure proper ballast/control compatibility:
    - 1) Hi-lume<sub>®</sub> Architectural Dimming Ballasts (1% 3-wire)
    - 2) Hi-lume<sub>®</sub> Compact<sub>™</sub> Lamp Dimming Ballasts (5% 3-wire)
    - 3) Eco-10™ Lighting Management Dimming Ballasts (10% 3-wire)
    - Tu-Wire<sup>™</sup> High Performance Dimming Ballasts (5% 2-wire)
- 6. Remote dimming modules for high power loads
  - a. Where lighting loads exceed the full rated capacity of single dimmers, provide a Diva Satin Colors incandescent dimmer driving high power modules. High power module and dimmer shall be from the same manufacturer to ensure compatibility.
  - b. High power modules shall be remotely mounted.
  - c. High power module shall be rated and UL listed for control of incandescent, magnetic low voltage, electronic low voltage, fluorescent, and neon/cold cathode loads in increments of 2,000 Watts up to 30,000 Watts.
- 7. Fan-Speed Controls:
  - a. Fan-speed controls shall be UL Listed, CSA and NOM approved, Lutron Diva Satin Colors style.
  - b. Quiet fan-speed model shall provide three speed settings with paddle providing preset on and off.
  - c. Quiet fan-speed control shall provide single-pole/3-way control of one paddle fan (1.5A max.).
- B. Accessories Lutron Satin Colors Style
  - 1. Switch Components Lutron Satin Colors Style
    - a. Switches shall provide on/off control of any 120/277 VAC load up to 15A. Switches shall be UL Listed as general-use AC switches, Lutron Satin Colors style.
    - Switches shall be available in single-pole, 3-way and 4-way configurations.

- 2. Receptacle Components Lutron Satin Colors Style
  - a. All receptacles shall be UL Listed, CSA and NOM approved.
  - Receptacles shall be two pole, three wire ground and rated for 15A at 125VAC. All receptacles shall be NEMA configuration type 5-15R.
  - c. Ground-fault interrupter receptacles shall be Lutron Satin Colors style with two-pole, three-wire ground and rated 15A at 125VAC Configuration shall be of the duplex type with rectangular NEMA WD-6 design. Receptacles shall have a 5 milliampere ground-fault trip level with "test" and "reset" buttons.
- 3. Telephone Jack and Cable TV Jack Components Lutron Satin Colors Style
  - a. Contractor shall provide an appropriate barrier (partition) to isolate jack from high-voltage wiring when ganged with a dimmer, fan-speed control, switch, or receptacle. This complies with NEC Articles 800-3 and 820-13.
  - Telephone jack shall be designed to mate with standard
     or 6-conductor modular jacks, and be compatible with
     4, or 6 conductor lines. Telephone jacks shall meet
     FCC Part 68, paragraph F standards to ensure compatibility with U.S. telephone systems.
  - Cable TV jacks shall be the coaxial type, designed for use with standard 75-0hm cables.
- C. Wallplates Lutron Satin Colors Style
  - Wallplates shall be manufactured from durable polycarbonate plastic with matte finish, and shall attach to the basic components without using exposed hardware or screws.
  - Multigang wallplates shall provide a continuous, seamless cover for up to six-ganged decorator-style control and accessory combinations with no exposed hardware or screws.
  - Multigang wallplates shall include an adapter plate for proper device alignment and wallplate attachment.
  - Control, accessory and wallplate profiles shall not exceed .30 inches from wall surface to faceplate front surface.
  - To ensure a precise color match between all plastic parts, color variation of any matte finish control or wallplate shall not exceed a delta E of 1, CIE L\*a\*b\* color units, as defined in ASTM E 308-99.
  - Visible parts of dimmers, switches, standard receptacles, cable jacks or any wallplate shall exhibit ultraviolet stability when tested with multiple actinic light sources as defined in ASTM D4674-89.

#### 2.03 Source Quality Control

A. All dimming controls shall be 100% function tested at the time of manufacture. Statistical sampling plan shall not be acceptable.

