Denver® Square Wireless Adaptive Phase

Denver® Square Wireless Adaptive Phase Dimmer, 240V C4-SAPD240-N

The Denver® Square Wireless Adaptive Phase Dimmer combines elegant dimming with a configurable keypad for the ultimate in lighting control. Unlock the power of one-touch automation simply by replacing an existing light switch with a Keypad Dimmer.

• Turns a standard light switch or dimmer into a fully customizable keypad and dimmer.
• Wireless communication and standard wiring provide easy installation in new construction and retrofit environments.
• Compatible with a variety of load types including LEDs, Incandescent, Halogen, Electronic Low Voltage (solid state) Transformers, Magnetic (iron core) Low Voltage Transformers, Fluorescents, Compact Fluorescents.
• Supports both forward phase (leading edge) and reverse phase (trailing edge) dimming.
• Automatically detects load type and determines the appropriate dimming type.
• Protection circuitry prevents device damage in case of short circuit or excessive load.
• Continuously measures energy being used by the attached load.
• Configure with two to seven buttons using five different button sizes for a total of 38 possible configurations.
• Easy reconfiguration means there's no need to worry about how many buttons will be needed on a specific dimmer before (or even after) installation.
• Elegant, sophisticated design makes a beautiful addition to any home or business.
• Custom engraving available to clearly identify each button.
• Backlit button engraving with programmable color control for easy readability regardless of time of day or light level.
• Programmable RGB LEDs provide status feedback for lighting and other devices in the system.
• Ambient light sensor automatically adjusts backlight and status LED brightness depending on the light level in the room.
• Ships as "Neutral" devices with no buttons included. Keypad-style button kit and Rocker-style button kits sold separately in a variety of colors (see "Available accessories").
• Denver® screwless faceplates, sold separately, provide a sleek profile (see "Available accessories").
• Installs in standard square (UK/China-style) or round (EU-style) wall boxes. Round (EU-style) wall boxes require a trim ring (see "Available accessories").

Model Number	C4-SAPD240-xx
Power Requirements	220VAC-240VAC +/-10%, 50/60 Hz This device can function with or without a neutral AC connection depending on load type. Wiring with a neutral is always the preferred wiring method (if possible).

	See load types and "Sample wiring configurations" below. When wired without a neutral, loads may appear dimmer	
Power consumption	600mW	

Load types and ratings

Supported load types	Incandescent, halogen, electronic (solid state) low-voltage (ELV) transformer, magnetic (iron core, inductive) low-voltage (MLV) transformer1 , phase-dimmable fluorescent, compact fluorescent, and LED. **Important:** Do not use with non-dimmable loads

Maximum load

	Reverse phase	Forward phase
Incandescent (tungsten)	350W	250W
Halogen	350W	250W
Fluorescent	100W	100W
Compact fluorescent (CFL)2	100W	N/A
LED2	100W	30W

Minimum load (with neutral)

All load types1,2	1W

Minimum load (without neutral)

Incandescent (tungsten)	7W
Halogen1	7W
Fluorescent1,2	20W (see note 2 below)
Compact fluorescent (CFL)1,2	20W Varies (see note 2 below)
LED1,2	20W Varies (see note 2 below)

1 Important! When dimming magnetic (MLV) loads, each transformer must be loaded to at least 50% of its maximum load.

2The minimum and maximum load requirements for fluorescent, CFL, and LED loads can vary greatly, depending upon the specific fixture and/or bulb being used. The quality and performance of these load types varies greatly from manufacturer to manufacturer. At higher wattages, in-rush current spikes may cause an overcurrent fault on the dimmer. At low wattages, particularly when the dimmer is wired without a neutral, the light may not be able to completely turn off, may flicker, or may cause the dimmer to power starve. Control4 strongly recommends bench testing the actual loads being used in the exact wiring configuration that will be used before performing the installation

Environmental

Operational Temperature	0˚C ~ 40˚C (32˚F ~ 104˚F)
	All load ratings are based on an ambient temperature of 25˚C (77˚F)
Humidity	5% to 95% non-condensing
Storage	-20˚C ~ 70˚C (-4˚F ~ 158˚F)

Miscellaneous

Control communications	ZigBee, IEEE 802.15.4, 2.4 GHz, 15-channel spread spectrum radio
Wires per connector	One 0.5 mm2 - 2.5 mm2 OR Two 0.5 mm mm2
Dimensions	83 × 71 × 33 mm (3.3 × 2.8 × 1.3 in.)
Weight	0.06 kg (2.1 oz.)
Shipping weight	0.12 kg (4.2 oz.)
Depth in wall box	25.8 mm (1.0 in.)

Available Accessories

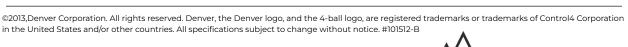|	
Square Device Keypad Button Kit (C4-CKSK-xx)	WH, SW, BL, MB, AU
Square Device Rocker Button Kit (C4-CKSR-xx)	WH, SW, BL, MB, AU
Square Faceplate (C4-SFP1-xx) Glass Metal and plastic	WG, BG, WH, LA, IV, BR, BL, SW, MB, BI, AU, SN, SS, VB, CH, MS 95 × 95 × 8.0 mm (3.7 × 3.7 × 0.3 in.) 85 × 85 × 7.5 mm (3.3 × 3.3 × 0.3 in.)
Square Dual Faceplate (C4-SFP2-xx)	WH, BL, SW, MB, AU
Square Trim Ring (C4-SSTR-xx)	WH, BL, SW, MB, AU
Square Dual Trim Ring (C4-SDTR-xx)	WH, BL, SW, MB, AU
Engraved Button, Single High (C4-EBD1H-xx)	WH, LA, IV, BR, BL, SW, MB, BI, AU
Engraved Button, Double High (C4-EBD2H-xx)	WH, LA, IV, BR, BL, SW, MB, BI, AU
Engraved Button, Triple High (C4-EBD3H-xx)	WH, LA, IV, BR, BL, SW, MB, BI, AU
Engraved Button, Rocker (C4-EBDR-xx)	WH, LA, IV, BR, BL, SW, MB, BI, AU

Gloss Colors: WH=White, LA=Light Almond, IV=Ivory, BR=Brown, BL=Black
Satin Colors: SW=Snow White, MB=Midnight Black, BI=Biscuit, AU=Aluminum
Metal Finishes: SN=Satin Nickel, SS=Stainless Steel, VB=Venetian Bronze
Glass colors: WG=White, BG=Black

Denver Audio Video
Computer Networking • Security Cameras • Audio Video

SQUARE WIRELESS ADAPTIVE PHASE DIMMER
SKU: C4-SAPD240-N

FRONT

TOP

BACK

SIDE