#### LOW VOLTAGE CONTROLLER WITH DIMMING for Multi-Function Luminaires LVCD/LVCDS SERIES

#### **PRODUCT FEATURES:**

- » Allows for low-voltage control of Kenall luminaires via patient hand-held device, bed side rail controls, or wall control such as Kenall MPWS series.
- » Adds bi-directional dimming to all connected luminaire lighting functions
- » Specifiable input/output configurations
- » Four-function control: designed to operate up to three separate LED loads plus LED night light
- » Solid-state design for improved reliability and response time over typical relay-based low-voltage controllers

#### SPECIFICATIONS

ELECTRICAL: Low-voltage 12VDC input, powered by an isolated auxiliary supply from luminaire's integral constant-current LED driver. 1.2W maximum. Controller does not provide line voltage switching. When ordered in conjunction with an LED night light (option codes NLW, NLA), this controller also provides power to the night light LED module via on-board DC-DC driver circuit.

OPERATION: Works in conjunction with luminaire's dim-to-dark 0-10V drivers to provide 100%/0% output control of up to three (3) LED lamp functions based on momentary close input signals from external control devices. Dimming of LED light sources in between 100% and 0% output is via sustained close of connected low-voltage switches. When ordered in conjunction with an LED night light option, subsequent short presses from the corresponding signal input will cycle the night light output level between 12%, 50%, 100% and 0%.

CONTROL MODE CONFIGURATION: Kenall's LVC is factory programmed to operate in each lighting function independently from each other. Please use the included Configuration guides for further description of these Modes as well as for specification of the desired input/output assignment.

INSTALLATION: The LVC will arrive installed within the Kenall luminaire as specified per the selected Configuration. The contractor will be responsible for connecting the low voltage wiring (Class 2) to the LVC in accordance with the applicable electrical code(s). A low voltage wiring diagram will be supplied with the fixture and will match the specified Configuration.

PATENT: U.S. Patent Nos. 9,320,117, 9,951,723, 9,814,118 and 10,149,368.

LISTINGS: UL/cUL Recognized Component per UL8750.



## PROJECT INFORMATION

Job Name Fixture Type.

Catalog Number

Approved by \_



www.kenall.com | P: 800-4-Kenall | F: 262-891-9701 | 10200 55th Street Kenosha, Wisconsin 53144, USA A brand of Liegrand This product complies with the Buy American Act: manufactured in the United States with more than 50% of the component cost of US origin. It may be covered by patents found at www.kenall.com/patents.Content of specification sheets is subject to change; please consult www.kenall.com for current product details. ©2019 Kenall Mfg.Co.

## LOW VOLTAGE CONTROLLER WITH DIMMING

for Multi-Function Luminaires LVCD/LVCDS SERIES

# **Individual Mode**

Individual Mode allows for the control of up to three (3) LED lamping functions plus an integral LED night light (if ordered) via independent low-voltage, momentary-close switches. See Table 1 for input and output mapping. See Figures 1 and 2 for graphical representation of input and output mapping examples.

Lighting Output Level and Switching Sequence							
Switch Input	First Toggle (Short Press)	Subsequent Sustained Cl	Second Toggle (Short Press)				
1	Load A 100%	Load A Dimming S	Load A 0%				
2	Load B 100%	Load B Dimming Sweeps High $\rightarrow$ Low $\rightarrow$ High		Load B 0%			
3	Load C 100%	Load C Dimming Sweeps High $\rightarrow$ Low $\rightarrow$ High		Load C 0%			
Switch Input	First Toggle	Second Toggle	Third Toggle	Fourth Toggle			
4	Night Light 12%	Night Light 50%	Night Light 100%	Night Light 0%			

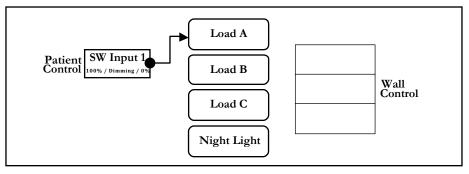


Figure 1: Individual Load, Single Button Patient Control and No Wall Control

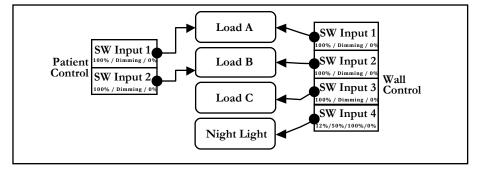


Figure 2: Individual Load, Two–Button Patient Control and Four Button Wall Control



### LOW VOLTAGE CONTROLLER WITH DIMMING

for Multi-Function Luminaires LVCD/LVCDS SERIES

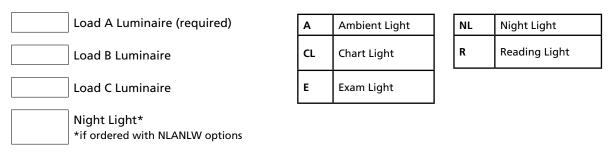
## **Configuration Guide**

This LVC Configuration Guide should be used to properly configure the operating mode and wiring of the LVC with respect to the luminaire's operational functions. See the table below for luminaire description codes.



# **Control Specification**

Select Loads and Control Mode [Input luminaire codes]



## **Standard LVC Configurations**

Please match up the following Configuration Number (F-xxxx) associated with the desired Control Specification from above. Then, please add this Configuration Number to the end of the luminaire catalog description.

CONFIGURATION	INPUT / OUTPUT CONFIGURATION			
NUMBER	[SW1]	[SW2]	[SW3]	[SW4]
F-8021	А	-	-	-
F-8022	R	-	-	-
F-8023	А	E	-	-
F-8024	А	R	-	-
F-8025	R	А	-	-
F-8026	R	E	А	-
F-8027	А	R	E	-
F-8028	R	А	E	-
F-8029	А	E	R	-
NOTE: For custom configurations, consult factory.				

#### Description: [SW1] / [SW2] / [SW3] / [SW4]

CONFIGURATION	INPUT / OUTPUT CONFIGURATION			
NUMBER	[SW1]	[SW2]	[SW3]	[SW4]
F-8045	А	-	-	NL
F-8046	R	-	-	NL
F-8047	А	E	-	NL
F-8048	А	R	-	NL
F-8049	R	А	-	NL
F-8050	R	E	А	NL
F-8051	А	R	E	NL
F-8052	R	А	E	NL
F-8053	А	E	R	NL
NOTE: For custom configurations, consult factory.				

Signature:	
Name:	Date:

PO#: \_\_\_\_\_ Fixture Type: \_\_\_\_

Configuration Number:

\*\*By signing this, the signee gives approval of the above configuration for the LVC driver. The order will not be processed unless signed.



www.kenall.com | P: 800-4-Kenall | F: 262-891-9701 | 10200 55th Street Kenosha, Wisconsin 53144, USA A brand of 🛱 legrand This product complies with the Buy American Act: manufactured in the United States with more than 50% of the component cost of US origin. It may be covered by patents found at www.kenall.com/patents.Content of specification sheets is subject to change; please consult www.kenall.com for current product details. @2019 Kenall Mfg.Co.