

# Meet the SmartLoop Family

#### **Wall Switch Keypad**

KTSL-WS1-B-SG /G2

A simple, battery powered wireless keypad for your entire space, providing flexible control of your system, with on/off, dimming, and scene control.



#### **Fixture Controller**

KTSL-FC1-UV-KO

Add this wireless controller to control either a single fixture or group of fixtures together on the same circuit.



#### Fixture Controller with Remote Mount Sensor

KTSL-FC1-UV-KO-PIR

All the benefits of a standard fixture controller, but with a remote mount sensor to enable occupancy/vacancy/daylight harvesting to a fixture or group of fixtures.



# Screw-In Fixture Controller with Integrated Sensor

KTSL-FC3-12V-PKO-PIR

For fixtures that utilize SmartPort sensor/receptacle technology, this controller with integrated daylight and PIR motion sensor is ideal for high bay applications, such as warehouses, gyms, and parking garages.

# Smartphone App iPhone and Android

Available through the iPhone or Android store, the Keystone SmartLoop app can program and operate your system from any smartphone.

#### Fixture Controller with Integrated Sensor

KTSL-FC2-12V-SM-PIR

For use with fixtures having a 12V AUX tap. They're ideal for individual fixture level control and sensing needs with mounting heights less than 16.'



#### **USB Time Keeper**

KTSL-TK1-USB

A module that plugs into any powered USB port to maintain and restore SmartLoop schedules to devices in case of a power outage.



# Wireless light made easy.

Wireless technology gives you the power of automation, saves on labor and materials, and makes setting up lighting control easy.

SmartLoop is powerful enough to run a space with multiple zones, but simple enough to program in minutes with your phone-perfect for warehouses, offices, schools, and auditoriums, whether new construction or retrofit.

It's the complete solution.







#### **Easy to Commission**

SmartLoop is simple to put to work. Pairing is a snap and setting up your controls can be done in minutes, directly on your smartphone.

#### **Versatile and Flexible**

From zone to individual fixture control, easily adjust spaces with the SmartLoop app, which supports up to 100 devices on a single region, with unlimited regions.

#### **Enhanced Daylighting Logic Built** in

With enhanced daylighting built into each sensor, you can easily add energy savings of 40% or more.

#### 0-10V Compatibility

SmartLoop works with 0-10V-based lighting technology, so whether you're retrofitting or designing for new installation work, SmartLoop can handle your needs.

to everyone.

#### **Safe and Secure**

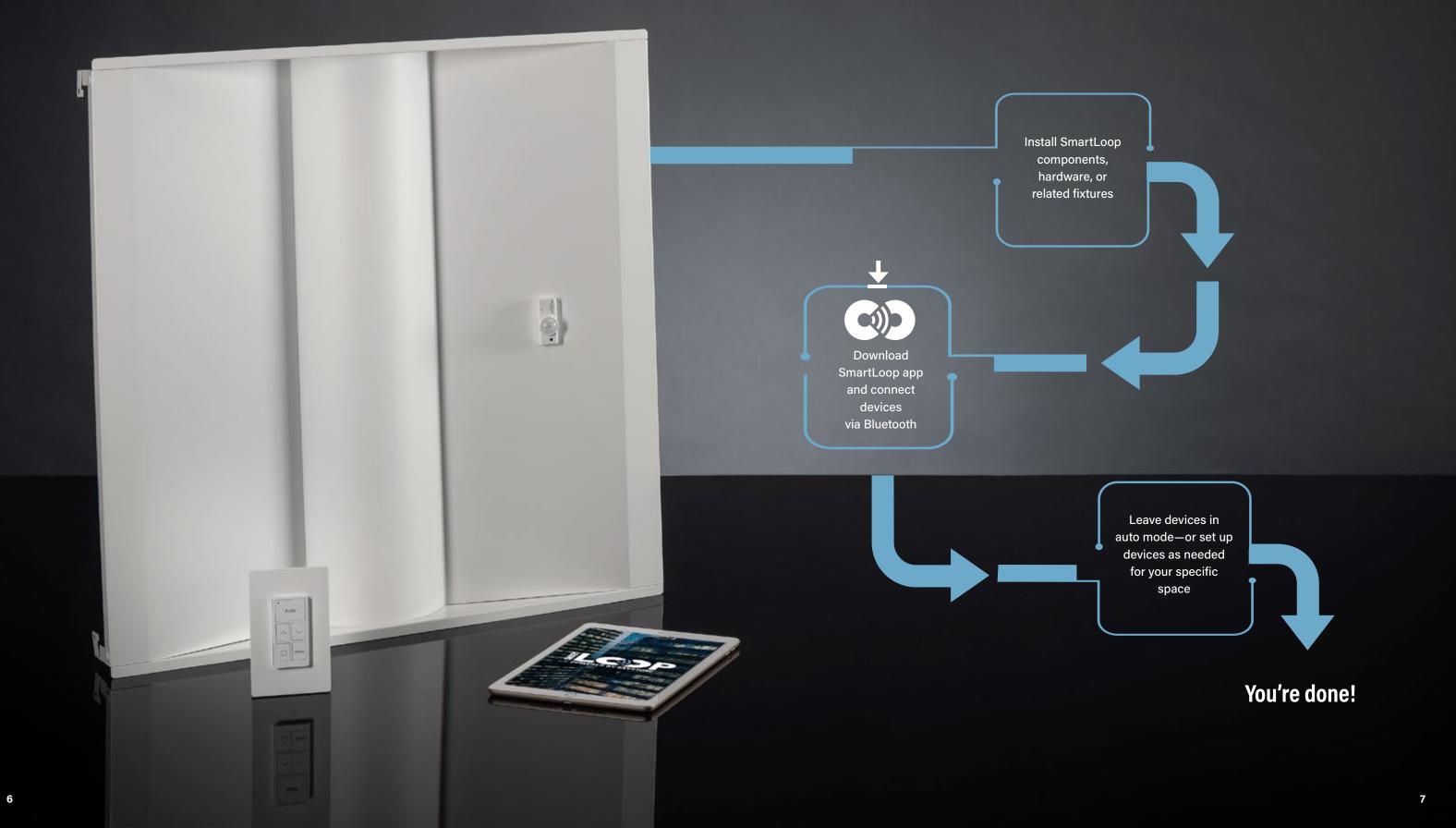
A Bluetooth mesh network with no gateway requirement means there are no company passwords or confidential information stored. Your data is safe and secure.

**Keystone brings the ease of wireless control** 

#### **Comfort and Flexibility**

Create comfortable, well-lit spaces with significant energy savings. With SmartLoop's intuitive controls, facility managers and tenants can easily adjust settings or reconfigure spaces without calling back an installer.

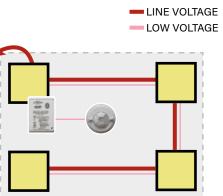
# How It Works



### **Typical Application:**

# Room Level

Easily add an occupancy/vacancy sensor to turn lights on when someone enters, and shut lights off when nobody is present.



**WINDOW** 

---ZONE



#### One space, one solution

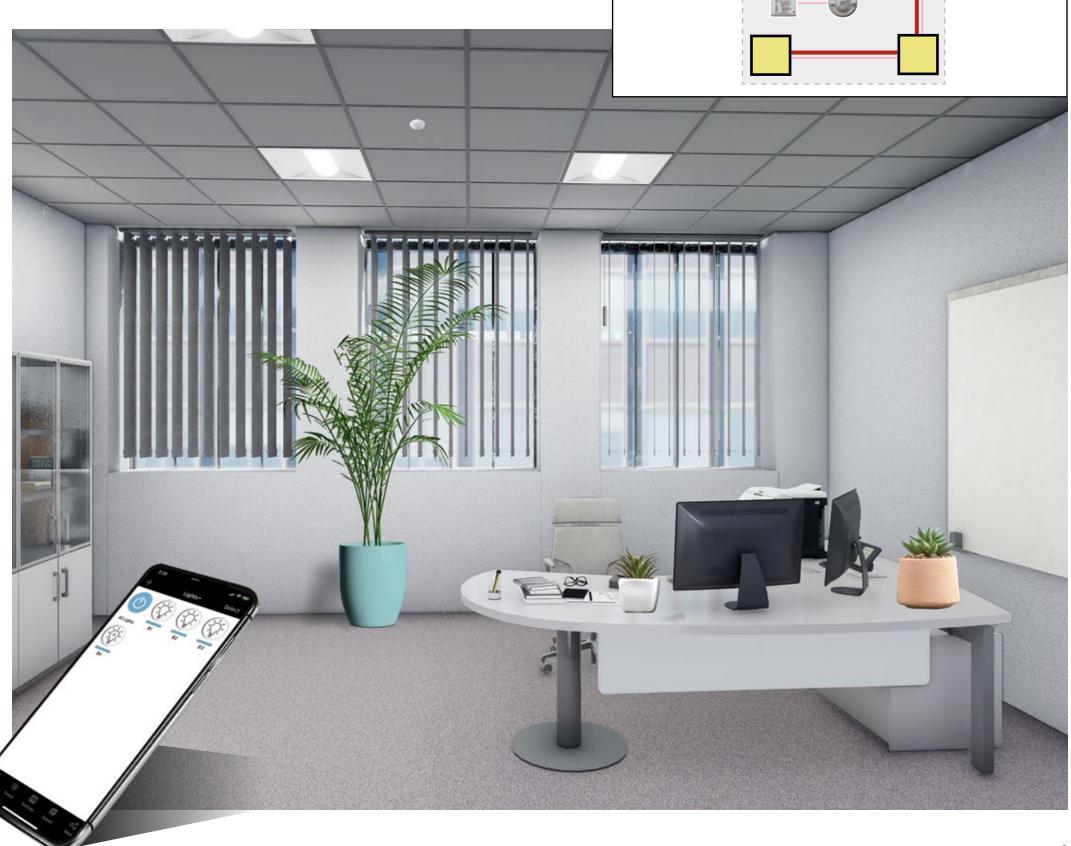
SmartLoop offers faster labor and easy operation for small spaces.
There's no pulling control wires down a wall and back to a switch. One wall control can dim and use pre-set scenes.







WIRELESS WALL SWITCH KEYPAD KTSL-WS1-B-SG /G2



# **Zone Control**

Advanced daylighting allows you to save energy and maximize available natural light.

LINE VOLTAGE

LOW VOLTAGE

**WINDOW** 

---ZONE



#### Flexibility is standard

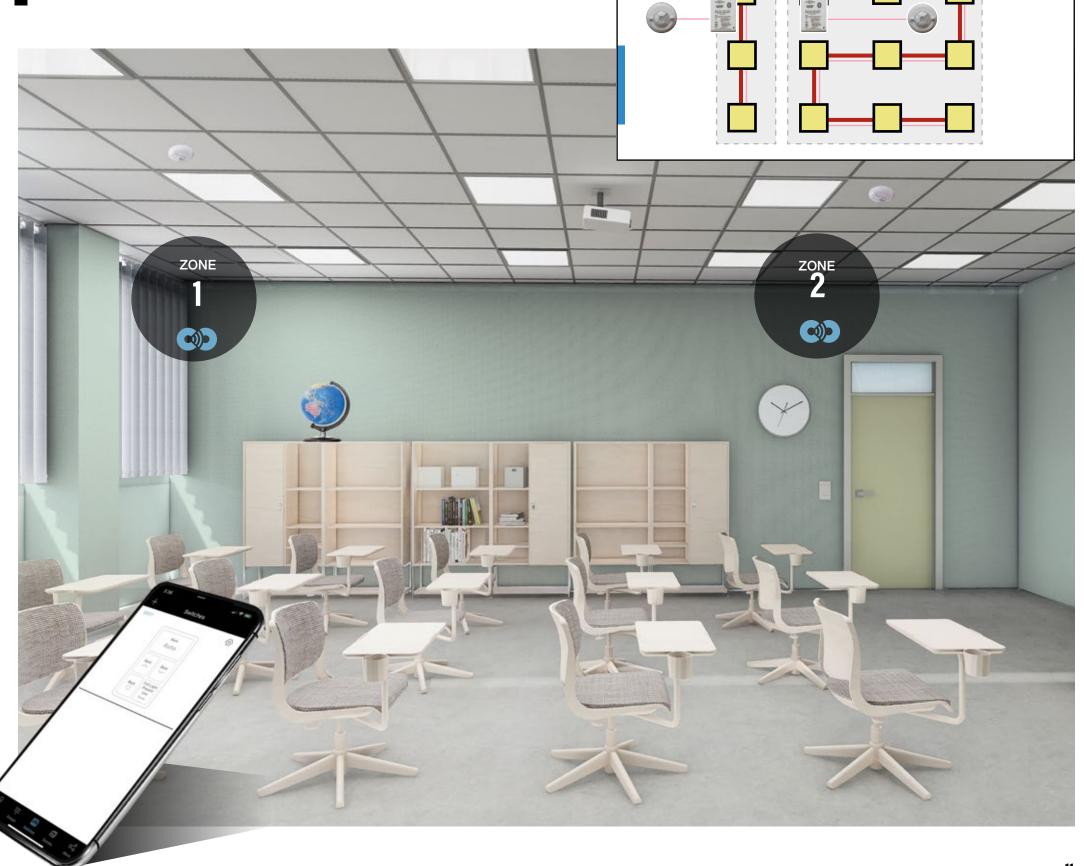
Save energy and set up scenes for optimal use. SmartLoop reduces labor and eliminates wiring mistakes with its simple, wireless programming. And it shapes your space for your needs with the single touch of a button, whether it's adjusting lighting throughout your space to making the most of natural light—or darkening the space for a presentation. SmartLoop handles it all.



FIXTURE CONTROLLER WITH REMOTE MOUNT SENSOR KTSL-FC1-UV-KO-PIR



WIRELESS WALL SWITCH KEYPAD KTSL-WS1-B-SG /G2



**Typical Application:** 

Individual Fixture Control

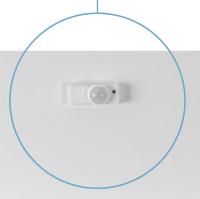


# Powerful, customized operation

No new wiring needed: Simply install integrated fixtures and a wireless keypad to create the control you want. No pulling control wires, either.

You can optimize energy efficiency by connecting individual fixtures in unique groups. And if you need to change your setup, SmartLoop is ready to adjust—quickly and easily.

FIXTURE CONTROLLER
WITH INTEGRATED SENSOR
KTSL-FC2-12V-SM-PIR





LINE VOLTAGE

# **Typical Application:**

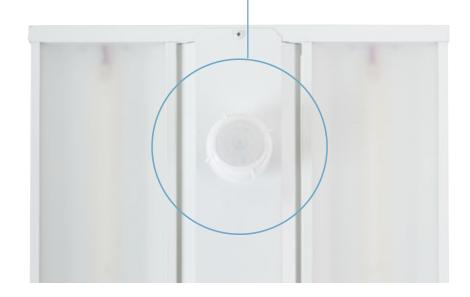
# High Bays

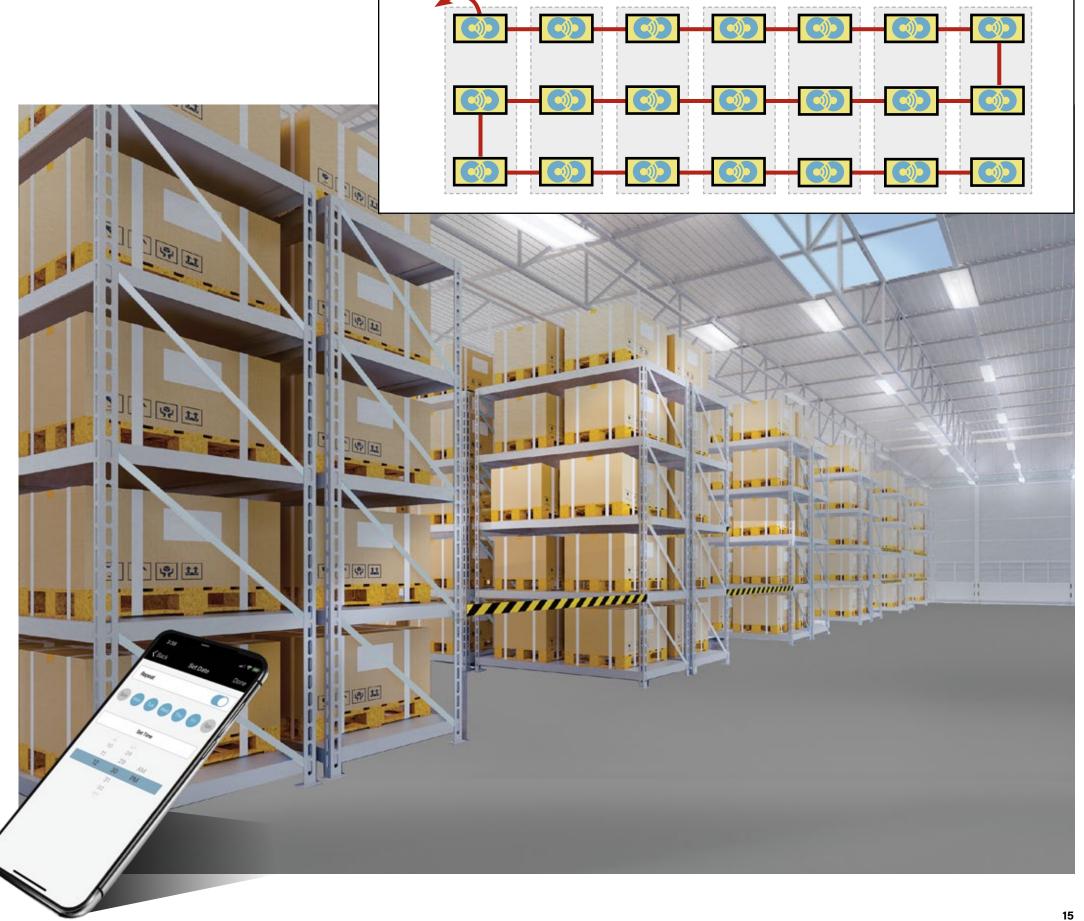


#### Out of sight, out of mind

Warehouse high bays can be trouble to set up—and even more trouble to adjust. With its powerful wireless controllers, SmartLoop installs easily—just screw in compatible Keystone products—and commissions quickly, eliminating the need to climb on a scissor lift to set up. The SmartLoop app makes it easy to quickly set up schedules to turn lights on and off to meet your needs.

SCREW-IN FIXTURE CONTROLLER WITH INTEGRATED SENSOR KTSL-FC3-12V-PKO-PIR





LINE VOLTAGE 💮 HIGH BAY INTEGRATED --- ZONE SENSOR

# Simple Setup

Pairing, commissioning, and operating is as easy as using the SmartLoop app.



# Setup with SmartLoop takes just a few minutes

Download the app and use the generated QR code to get started.

Want to let SmartLoop optimize your space? With Auto mode, sensors automatically read light levels and determine how to best illuminate it.

# **Add Lights**



### **Create Groups**



# **Add Keypads**



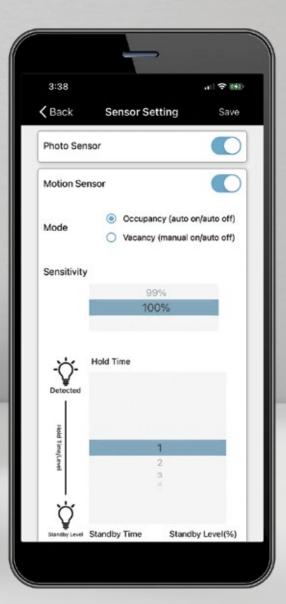
# Additional Functionality



# Easily fine tune the smallest details

SmartLoop provides a full suite of features to customize your lighting needs for any space. Need a specific lighting level or set schedule?
Looking to create an advanced layout? With SmartLoop, lighting is at your command.

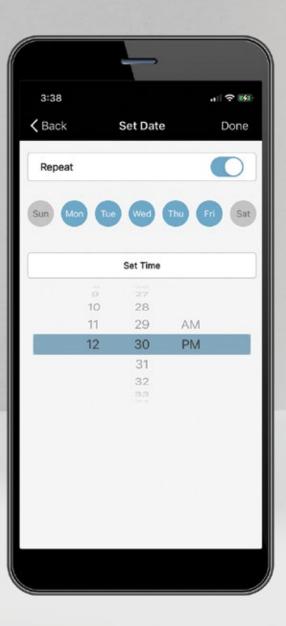
### **Adjust Sensor Settings**



### **Create Scenes**



#### **Create Schedules**



# Integrated Fixtures

#### Lighting control is built right in

With SmartLoop, scheduling, light sensing, and motion sensing can all be controlled wirelessly, meaning lower electricity costs and greater ROI.

Center Basket Troffer 1x4, 2x2, 2x4

Micro Strip 2', 4', 8'

Curved Wrap

Back-lit Panel 2x2, 2x4







# **SmartLoop Integrated Fixture Options**



#### **Center Basket Troffer**

POWER 、	∕-COLOR .
$\sim$	
`SELECT~	`SELECT~

CATALOG NUMBER	NOMINAL SIZE	SELECTABLE WATTAGE	SELECTABLE CCT	LUMENS	EFFICACY	INPUT VOLTAGE	DIMMABLE	DLC	CRI
			3500K	4375	125 lm/W				
		35W	4000K	4410	126 lm/W	1			
			5000K	4445	127 lm/W	1			
			3500K	3900	130 lm/W	1			
KT-CBLED35PS-14B-8CSA-VDIM /FC2	1'x4'	30W	4000K	3930	131 lm/W	120-277V	0-10V	Yes	>80
			5000K	3960	132 lm/W	1			
			3500K	3192	133 lm/W	1			
		24W	4000K	3216	134 lm/W	1			
			5000K	3240	135 lm/W	1			
			3500K	3072	128 lm/W				
		24W	4000K	3096	129 lm/W	1			
			5000K	3120	130 lm/W	1			
			3500K	2412	134 lm/W	1			
KT-CBLED24PS-22B-8CSA-VDIM /FC2	2'x2'	18W	4000K	2430	135 lm/W	120-277V	0-10V	Yes	>80
			5000K	2448	136 lm/W	1			
			3500K	2055	137 lm/W	1			
		15W	4000K	2070	138 lm/W	1			
			5000K	2085	139 lm/W	1			
			3500K	4480	128 lm/W				
		35W	4000K	4515	129 lm/W	1			
			5000K	4550	130 lm/W	1			
			3500K	3930	131 lm/W	120-277V			
KT-CBLED35PS-22B-8CSA-VDIM /FC2	2'x2'	30W	4000K	3960	132 lm/W		0-10V	Yes	>80
			5000K	3990	133 lm/W				
		24W	3500K	3216	134 lm/W				
			4000K	3240	135 lm/W	1			
			5000K	3264	136 lm/W	1			
			3500K	3840	128 lm/W				
		30W	4000K	3870	129 lm/W	1			
			5000K	3900	130 lm/W	1			
			3500K	3350	134 lm/W	1			
KT-CBLED30PS-24B-8CSA-VDIM /FC2	2'x4'	25W	4000K	3375	135 lm/W	120-277V	0-10V	Yes	>80
			5000K	3400	136 lm/W	]			
			3500K	2740	137 lm/W	]			
		20W	4000K	2760	138 lm/W				
			5000K	2780	139 lm/W	1			
			3500K	5760	128 lm/W				
		45W	4000K	5805	129 lm/W				
			5000K	5850	130 lm/W	]			
KT-CBLED45PS-24B-8CSA-VDIM /FC2			3500K	4978	131 lm/W	]			
	2'x4'	38W	4000K	5016	132 lm/W	120-277V	0-10V	Yes	>80
			5000K	5054	133 lm/W	]			
			3500K	4110	137 lm/W	W			
		30W	4000K	4140	138 lm/W				
			5000K	4170	139 lm/W	<u> </u>			

# **SmartLoop Integrated Fixture Options**





CATALOG NUMBER	NOMINAL SIZE	SELECTABLE Wattage	SELECTABLE CCT	LUMENS	EFFICACY	INPUT Voltage	DIMMABLE	DLC	CRI
			3500K	4400	110 lm/W				
		40W	4000K	4500	113 lm/W				
			5000K	4450	111 lm/W				
			3500K	3400	111 lm/W				
KT-BPLED40PS-22B-8CSA-VDIM /FC2	2'x2'	30W	4000K	3500	117 lm/W	120-277V	0-10V	Yes	>80
			5000K	3450	115 lm/W				
			3500K	2400	111 lm/W				
		20W	4000K	2500	125 lm/W				
			5000K	2450	123 lm/W				
			3500K	5850	117 lm/W				
		50W	4000K	6200	124 lm/W				
			5000K	5900	118 lm/W				
			3500K	4850	121 lm/W				
KT-BPLED50PS-24B-8CSA-VDIM /FC2	2'x4'	40W	4000K	5200	120 lm/W	120-277V	0-10V	Yes	>80
			5000K	4900	123 lm/W				
			3500K	3850	128 lm/W				
		20W	4000K	4200	140 lm/W				
			5000K	3900	130 lm/W				







CATALOG NUMBER	NOMINAL SIZE	SELECTABLE WATTAGE	SELECTABLE CCT	LUMENS	EFFICACY	INPUT VOLTAGE	DIMMABLE	DLC	CRI
			3500K	5984	136 lm/W				
		44W	4000K	6072	138 lm/W				
			5000K	6116	139 lm/W				
			3500K	4004	143 lm/W				
KT-CWLED44PS-4-8CSA-VDIM /FC2	4ft	28W	4000K	4032	144 lm/W	120-277V	0-10V	Yes	>80
			5000K	4060	145 lm/W				
			3500K	2628	146 lm/W				
		18W	4000K	2646	147 lm/W				
			5000K	2664	148 lm/W				

# **SmartLoop Integrated Fixture Options**

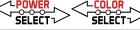




CATALOG NUMBER	NOMINAL SIZE	SELECTABLE WATTAGE	SELECTABLE CCT	LUMENS	EFFICACY	INPUT Voltage	DIMMABLE	DLC	CRI
			3500K	3250	130 lm/W				
		25W	4000K	3275	131 lm/W				
			5000K	3300	132 lm/W				
			3500K	2720	136 lm/W				
KT-MSLED25PS-2-8CSA-VDIM /FC2	2ft	20W	4000K	2740	137 lm/W	120-277V	0-10V	Yes	>80
			5000K	2760	138 lm/W				
			3500K	2085	139 lm/W				
		15W	4000K	2100	140 lm/W				
			5000K	2115	141 lm/W				
			3500K	5808	132 lm/W				
		44W	4000K	5852	133 lm/W				
			5000K	5896	134lm/W				
			3500K	3892	139 lm/W				
KT-MSLED44PS-4-8CSA-VDIM /FC2	4ft	28W	4000K	3920	140 lm/W	120-277V	0-10V	Yes	>80
			5000K	3948	141 lm/W	]			
			3500K	2556	142 lm/W				
		18W	4000K	2574	143 lm/W				
			5000K	2592	144 lm/W				
			3500K	11880	132 lm/W				
		90W	4000K	11970	133 lm/W				
			5000K	12060	134 lm/W				
KT-MSLED90PS-8-8CSA-VDIM /FC2			3500K	10125	135 lm/W				
	8ft	75W	4000K	10200	136 lm/W	120-277V	0-10V	Yes	>80
			5000K	10275	137 lm/W				
			3500K	7668	142 lm/W				
		54W	4000K	7722	143 lm/W	1			
			5000K	7776	144 lm/W	]			

# **SmartLoop Integrated Fixture Options**





	aonot mon	<b>O.</b> J.	LCIP	JELECT P					
CATALOG NUMBER	NOMINAL SIZE	SELECTABLE WATTAGE	SELECTABLE CCT	LUMENS	EFFICACY	INPUT VOLTAGE	DIMMABLE	DLC	CRI
			3500K	4375	125 lm/W				
		35W	4000K	4410	126 lm/W	1			
			5000K	4445	124 lm/W	1			
			3500K	3840	128 lm/W	1			
KT-RKIT35PS-14DB-8CSA-VDIM /FC2	1'x4'	30W	4000K	3870	129 lm/W	120-277V	0-10V	Yes	>80
			5000K	3900	130 lm/W	1			
			3500K	3144	131 lm/W	1			
		24W	4000K	3168	132 lm/W	1			
			5000K	3192	133 lm/W	1			
			3500K	3,000	125 lm/W				
		24W	4000K	3,024	126 lm/W	1			
			5000K	3,048	127 lm/W	1			
			3500K	2,358	131 lm/W	1			
KT-RKIT24PS-22DB-8CSA-VDIM /FC2	2'x2'	18W	4000K	2,376	132 lm/W	120-277V	0-10V	Yes	>80
			5000K	2,394	133 lm/W	1			
		15W	3500K	2,010	134 lm/W				
			4000K	2,025	135 lm/W				
			5000K	2,040	136 lm/W	1			
			3500K	4,375	125 lm/W				
		35W	4000K	4,410	126 lm/W	1			
			5000K	4,445	127 lm/W				
			3500K	3,840	128 lm/W				
KT-RKIT35PS-22DB-8CSA-VDIM /FC2	2'x2'	30W	4000K	3,870	129 lm/W	120-277V	0-10V	Yes	>80
			5000K	3,900	130 lm/W				
			3500K	3,144	131 lm/W				
		24W	4000K	3,168	132 lm/W				
			5000K	3,192	133 lm/W				
			3500K	3,840	128 lm/W				
		30W	4000K	3,870	129 lm/W				
			5000K	3,900	130 lm/W				
			3500K	3,350	134 lm/W				
KT-RKIT30PS-24DB-8CSA-VDIM /FC2	2'x4'	25W	4000K	3,375	135 lm/W	120-277V	0-10V	Yes	>80
			5000K	3,400	136 lm/W				
			3500K	2,740	137 lm/W	_			
		20W	4000K	2,760	138 lm/W	]			
			5000K	2,780	139 lm/W				

### **Wall Switch Keypad**



#### **Features & Benefits**

- Commissioned via SmartLoop mobile app for iPhone and Android
- Designed for installation in standard wallboxes
- Operates on 2 x CR2032 batteries
- 5 buttons allow for dimming, toggling power, automatic sensor/preset level operation, and scene activation
- Utilizes Bluetooth mesh technology for reliable and secure wireless communication
- Indicator LED communicates device status
- Easily commissioned to control groups or individual luminaires

#### **Electrical Specifications**

CATALOG NUMBER	INPUT POWER	BATTERY LIFETIME	RF TRANSMIT POWER	WIRELESS FREQUENCY	WIRELESS RANGE (OPEN AIR)	WIRELESS PROTOCOL
KTSL-WS1-B-SG /G2	2 x CR2032 batteries*	5 Years	8dBm	2.4GHz	90m	Bluetooth 4.2

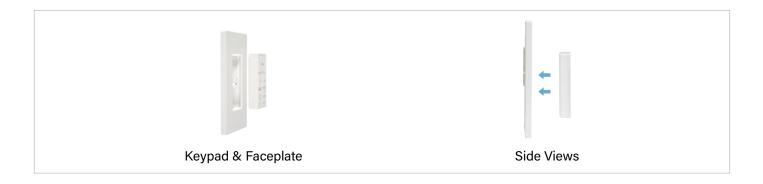
<sup>\*</sup>Batteries not included

#### **Environmental Specifications**

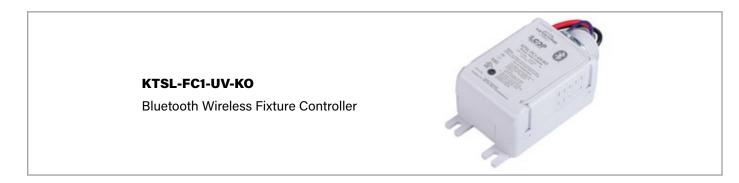
OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY	MOISTURE AND DUST RATING		
- 10°C/14°F to 45°C/113°F	0°C/32°F to 30°C/86°F	5-90%	IP20		

#### **EMC Compliance**

• FCC: Part 15.247



#### **Fixture Controller**



#### **Features & Benefits**

- Use of a relay, 0-10V dimming, and a 1/2" knockout enable compatibility with many standard industry fixtures
- Commissioned via SmartLoop mobile app for iPhone and Android
- Controlled via SmartLoop mobile app, keypad, and sensors
- UL2043 certified for plenum installations
- Utilizes Bluetooth mesh technology for reliable and secure wireless communication
- Intelligent relay control software reduces wear to extend relay life
- Power outage recovery defaults to automatic ON state
- Indicator LED communicates device status

#### **Electrical Specifications**

CATALOG NUMBER	INPUT POWER	STANDBY POWER	MAX LOAD Current	RF Transmit Power	TURN-ON DELAY TIME	MAX 0 -10V Sinking Current	WIRELESS Frequency	WIRELESS Range (Open Air)	WIRELESS Protocol
KTSL-FC1-UV-K0	120 -277VAC, 50-60Hz	<1W	3.0A	8dBm	< 0.5s	10mA	2.4GHz	100m	Bluetooth 4.2

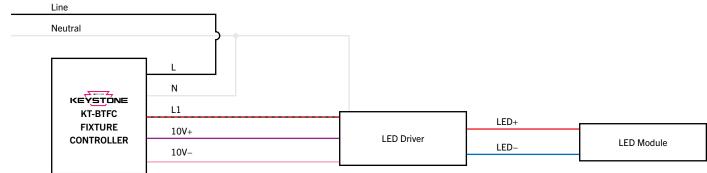
#### **Environmental Specifications**

OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY	LIFETIME RATING	MOISTURE AND DUST RATING
– 40°C/– 40°F to 45°C/113°F	– 40°C/– 40°F to 85°C/185°F	5-90%	50,000 Hours	IP20

#### **Safety and EMC Compliance**

- UL/cUL: UL8750, UL2043
- FCC: Part 15.247

#### **Wiring Diagram**



27

#### **Fixture Controller with Remote Mount Sensor**

# KTSL-FC1-UV-KO-PIR Bluetooth Wireless Fixture Controller

and Sensor



#### **Features & Benefits**

- Use of a relay, 0–10V dimming, and a 1/2" knockout enable compatibility with many standard industry fixtures
- Commissioned via SmartLoop mobile app for iPhone and Android
- Class 2 daylight and PIR motion sensor is remote mountable via 1" trade size knockout
- Controlled via SmartLoop mobile app, keypad, and sensors
- Fixture controller and sensor connect via a convenient RJ-12 cable
- Utilizes Bluetooth mesh technology for reliable and secure wireless communication
- Intelligent relay control software reduces wear to extend relay life
- Power outage recovery defaults to automatic ON state
- Indicator LED communicates device status
- UL2043 certified for plenum installations
- Lens cover accessory with breakaway tabs included for specialized reception pattern needs

#### **Electrical Specifications**

CATALOG NUMBER	INPUT POWER	STANDBY Power	MAX LOAD Current	RF Transmit Power	TURN-ON Delay time	MAX 0 -10V Sinking Current	WIRELESS FREQUENCY	WIRELESS Range (Open Air)	WIRELESS PROTOCOL
KTSL-FC1-UV-KO-PIR	120 -277VAC, 50-60Hz	<1W	3.0A	8dBm	< 0.5s	10mA	2.4GHz	100m	Bluetooth 4.2

#### **Sensor Specifications**

SENSOR WIRES	SENSOR DETECTION HEIGHT	SENSOR DETECTION ANGLE	DAYLIGHT HARVESTING RANGE
Class 2	40' max	120°	100-1000 lux

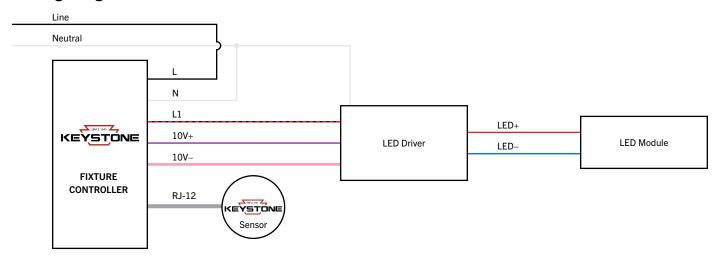
#### **Environmental Specifications**

- 40°C/- 40°F to 45°C/113°F	- 40°C/- 40°F to 85°C/185°F	5-90%	50,000 Hours	IP20
OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY	LIFETIME RATING	MOISTURE AND DUST RATING

#### **Safety and EMC Compliance**

- UL/cUL: UL8750, UL2043
- FCC: Part 15.247

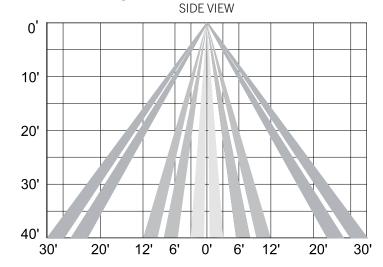
#### **Wiring Diagram**

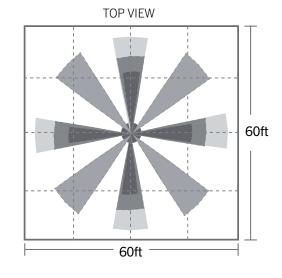


#### **Wire/Cable Specifications**

NAME	FUNCTION	COLOR	GAUGE	ТҮРЕ	LENGTH	STRIP LENGTH
L	Input Hot	Black			13.58"	0.35"
N	Neutral	White	18AWG	Solid	13.58"	0.35"
LI	Switched Hot Out	Red/Black			13.58"	0.35"
10V+	Dimming Level	Purple	224140	Ctwandad	7.28"	0.39"
10V-	Low Voltage Common	Pink	22AWG	Stranded	7.28"	0.39"
RJ-12	Sensor Control	Gray	6x 28AWG	Stranded	60"	N/A

#### **Lens Coverage**





29

Fixture Controller and Sensor connect easily with included RJ-12 Cable

# **Integrated Fixture Controller**

#### KTSL-FC2-12V-SM-PIR

Bluetooth Wireless Integrated Fixture Controller



#### **Features & Benefits**

- Small form factor for unobtrusive installation
- 0-10V control wires for integration with most commercially available fixtures
- 12Vdc input (use driver with 12V aux power)
- Installs via 3/8" drilled hole on fixture sheet metal. Simply drill, route the wires and threaded collar through, and tighten nut to lock into place
- Dim-to-off LED driver required for full functionality
- Commissioned via SmartLoop mobile app for iPhone and Android
- Controlled via SmartLoop mobile app, keypad, and sensors
- Utilizes Bluetooth mesh technology for reliable and secure wireless communication
- Power outage recovery defaults to automatic ON state
- Indicator LED communicates device status
- UL2043 certified for plenum installations
- Suitable for dry and damp locations

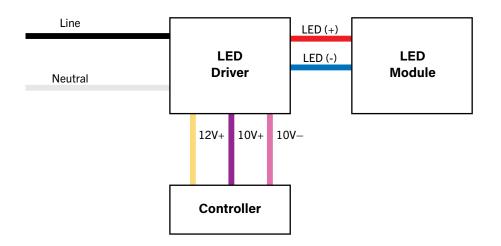
#### **Electrical Specifications**

CATALOG NUMBER	INPUT POWER	POWER CONSUMPTION	RF Transmit Power	MAX 0-10V Sinking Current	WIRELESS Frequency	WIRELESS RANGE (OPEN AIR) TIME	MAX SENSOR Detection Height	SENSOR DETECTION ANGLE	DAYLIGHT Harvesting Time	WIRELESS PROTOCOL
KTSL-FC2-12V-SM-PIR	10-15VDC	0.2W	8dBm	10mA	2.4GHz	100m	16 ft	120°	100-1000 lux	Bluetooth 4.2

#### **Environmental Specifications**

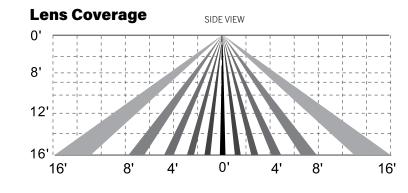
OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY	LIFETIME RATING	MOISTURE AND DUST RATING
- 20°C/- 4°F to 60°C/140°F	- 40°C/- 40°F to 85°C/185°F	5–95%	>100,000 Hours	Suitable for dry and damp locations

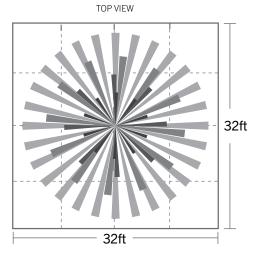
#### **Wiring Diagram**



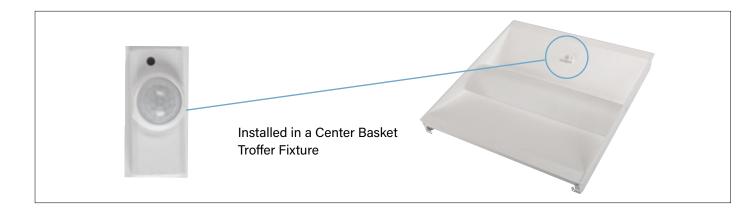
#### **Wire Specifications**

NAME	FUNCTION	COLOR	GAUGE	ТҮРЕ	LENGTH	STRIP LENGTH
+12V	Aux Power	Yellow			15.35"	0.39"
10V+	Dimming Level	Purple	22AWG	Stranded		
10V-	Low Voltage Common	Pink				





31



#### **Screw-in Fixture Controllers**

### KTSL-FC3-12V-PKO-PIR **Bluetooth Mesh Wireless** Screw-in Fixture Controller with Integrated Sensor

#### KTSL-FC4-12V-PKO

**Bluetooth Mesh Wireless** Screw-In Fixture Controller



#### **Features & Benefits**

- For use with Smart Port Gen 2 compatible Keystone products
- Commissioned via SmartLoop mobile app for iPhone and Android
- Controlled via SmartLoop mobile app, keypad, and sensors
- Utilizes Bluetooth mesh technology for reliable and secure wireless communication
- Power outage recovery defaults to automatic ON state
- Indicator LED communicates device status

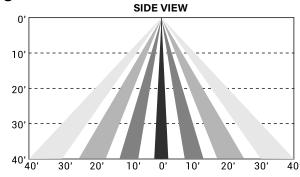
#### **Motion and Daylight**

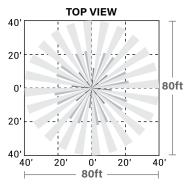
CATALOG NUMBER	INPUT POWER	STANDBY POWER	RF Transmit Power	MAX 0-10V Sinking Current	WIRELESS FREQUENCY	WIRELESS RANGE (OPEN AIR)	MAX SENSOR DETECTION HEIGHT	SENSOR DETECTION ANGLE	DAYLIGHT Harvesting Time	WIRELESS PROTOCOL
KTSL-FC3-12V-PK0-PIR	10-15VDC	0.2W	8dBm	10mA	2.4GHz	100m	40' max	90°	0-2000 lux	Bluetooth 4.2

#### **RF Only**

CATALOG NUMBER	INPUT POWER	STANDBY POWER	RF Transmit Power	MAX 0-10V Sinking Current	WIRELESS FREQUENCY	WIRELESS RANGE (OPEN AIR)	MAX SENSOR DETECTION HEIGHT	SENSOR DETECTION ANGLE	DAYLIGHT Harvesting Time	WIRELESS PROTOCOL
KTSL-FC4-12V-PK0	10-15VDC	0.2W	8dBm	10mA	2.4GHz	100m	N/A	N/A	N/A	Bluetooth 4.2

#### **Lens Coverage**





#### **Fixture Controller and Sensor**

#### KTSL-HBFC1-UV-KO-PIR

Bluetooth Mesh Wireless Fixture Controller and Sensor



#### **Features & Benefits**

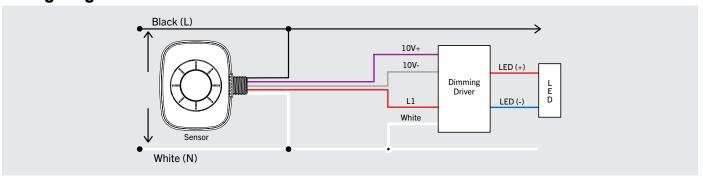
- Use of a relay, 0-10V dimming, and a 1/2" knockout enable compatibility with many standard industry
- Commissioned via SmartLoop mobile app for iPhone and Android
- Controlled via SmartLoop mobile app, keypad, and sensors
- Integrated daylight and PIR motion sensor

- Utilizes Bluetooth mesh technology for reliable and secure wireless communication
- Intelligent relay control software reduces wear to extend relay life
- Power outage recovery defaults to automatic ON state
- Indicator LED communicates device status

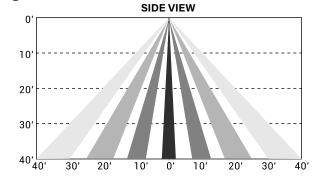
#### **Electrical Specifications**

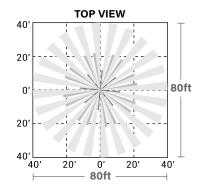
CATALOG NUMBER	INPUT POWER	STANDBY Power	MAX LOAD Current	RF TRANSMIT POWER	TURN-ON DELAY TIME	MAX 0 -10V Sinking Current	WIRELESS FREQUENCY	WIRELESS RANGE (OPEN AIR)	WIRELESS PROTOCOL
KTSL-HBFC1-UV-KO-PIR	120 -277VAC, 50-60Hz	<1W	5.0A	8dBm	< 0.5s	50mA	2.4GHz	100m	Bluetooth 4.2

#### **Wiring Diagram**



#### **Lens Coverage**





# **USB Time Keeper**

#### KTSL-TK1-USB

Bluetooth Wireless Backup Time Keeper



#### **Features & Benefits**

- Commissioned via SmartLoop mobile app for iPhone and Android
- Internal CR1220 battery backup to retain time during a power outage
- Appears as a keypad in the SmartLoop app, giving the user an additional virtual keypad
- Utilizes Bluetooth mesh technology for reliable and secure wireless communication
- Indicator LED communicates device status
- Powered by any standard USB-A charging port

#### **Electrical Specifications**

CATALOG NUMBER	INPUT POWER	STANDBY POWER	RF Transmit Power	BATTERY LIFETIME	WIRELESS FREQUENCY	WIRELESS RANGE (OPEN AIR)	WIRELESS PROTOCOL
KTSL-TK1-USB	5V USB, internal CR1220 battery backup for retaining time	0.25W (when plugged into USB power)	8dBm	10 Years	2.4GHz	100m	Bluetooth 4.2

#### **Environmental Specifications**

OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY	LIFETIME RATING	MOISTURE AND DUST RATING	
- 40°C/- 40°F to 45°C/113°F	- 40°C/- 40°F to 85°C/185°F	5-90%	>50,000 hrs	IP20	

#### **EMC Compliance**

FCC: Part 15.247





# **Download the App**

Quickly download the SmartLoop App for your iPhone or Android smartphone by scanning this QR code.



