

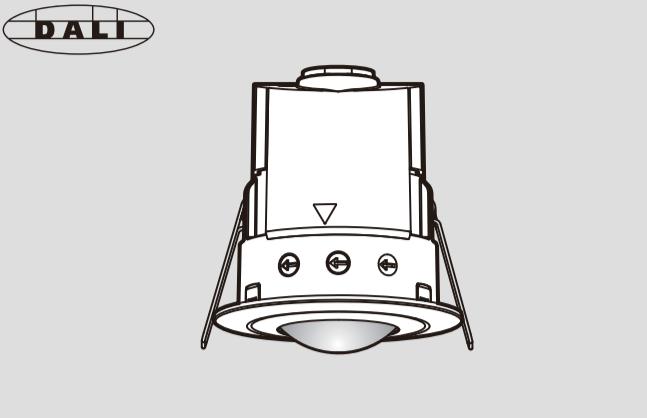


# INTERRUPEUR PHOTOÉLECTRIQUE

## Système de contrôle d'éclairage DALI

### KSL-DALI-01

#### 0775887



## MANUEL D'INSTRUCTION

### KOBAN

#### SPÉCIFICATIONS TECHNIQUES

Tension nominale	230V~ ±10% 50 / 60Hz
Sortie	Max. 50 pièces Les ballasts électroniques DALI ou les pilotes LED peuvent être connectés
Consommation électrique	Env. 0.5W
Réglage Lux	Réglable d'environ 5Lux à 2000Lux et " * " (plage d'apprentissage : 10Lux à 2000Lux)
Mode d'opération	Mode auto / semi-automatique
Charge sur l'éclairage en mode de veille	3 réglages précis : 10%, 20%, 30% et OFF (la charge est désactivée en mode de veille)
Température d'opération	0°C à +50°C
Protection de l'environnement	IP44

L'installation et le montage de l'équipement électrique doivent être effectuées par des électriciens qualifiés. Contactez un cas de défaut ou de panne.

**AVERTISSEMENT**

- Ne montez pas sur une surface conductrice.
- N'ouvez pas le boîtier fréquemment.
- Coupez l'alimentation lors de changement des sources lumineuses.
- Un courant d'appel élevé serait causé lorsque des lumières de certaines marques brûleront, ce qui endommagerait l'appareil.
- Le capteur fonctionne avec la fonction de réchauffement afin d'allumer la charge connectée et LED rouge 60 secs après la mise en tension. Il éteindra la charge après 60 secs si le niv. de lumière ambiante est sup. à la valeur Lux pré définie.

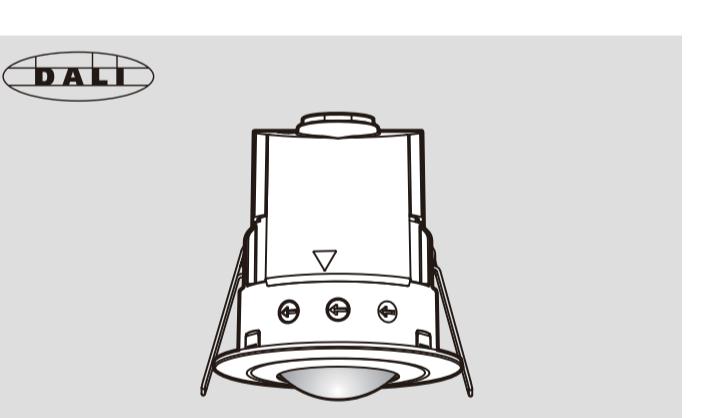
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## PHOTOELECTRIC SWITCH

### for DALI lighting control system

### KSL-DALI-01

#### 0775887



## INSTRUCTION MANUAL

### KOBAN

#### TECHNICAL SPECIFICATIONS

Rated Voltage	230V~ ±10% 50 / 60Hz
Output	Max. 50pcs DALI electronic ballasts or LED drivers can be connected
Power Consumption	Approx. 0.5W
Lux Adjustment	Adjustable from approx.5Lux to 2000Lux and " * " (learning range:10Lux to 2000Lux)
Operating Mode	Auto / Semi-auto mode
Load on illumination in standby mode	3 precise adjustments: 10%, 20%, 30% and OFF (Load is off in standby mode)
Operating Temperature	0°C to +50°C
Environmental Protection	IP44

Installation and assembly of electrical equipment must be carried out by qualified electricians. Contact a qualified electrician in the event of fault or break down.

**CAUTION!**

- Do not mount on conductive surface.
- Do not open the enclosure frequently.
- Turn off power when change the light sources.
- High-in-rush current would be caused when bulbs of certain brands are turned on and off.
- The sensor works with warm up function to switch on the connected load and red LED 60 sec after power is supplied, it will turn off the load after 60 sec, if the ambient light level is above the pre-set Lux value.

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**Optional accessories for surface mounting**

Pattern	Junction box	EVA washer	Wood screws Ø4x25.4mm
Item	Detector	Manual	Quantity 1 1
Quantity	1	1	2

#### 2 PRODUCT DESCRIPTION

This is a Photoelectric switch solely designed for incorporating to the DALI (Digital Addressable Lighting Interface) intelligent lighting management system to provide multi-functions such as switching on and off and dimming the light, also lighting scenery setting which can offer comfort and convenience as well as energy saving benefits.

#### 2.1 Features

- Using the spring clamps for easy and quick installation.
- Constant light control is enabled with the auto/manual dim function to provide an easy and cost effective solution for energy saving.
- The ambient Lux value can be learned as the threshold for switching on / off the loads by VR if the pre-set Lux value does not match user's requirement.
- A red LED is equipped as an indicator for Lux learning, Dim function and operating mode selection.
- With DALI outputs control lighting system in their corresponding areas, all connected devices share the same broadcast address, and there is no need to assign address to every device. (Refer to FIG.2).

#### 2.2 Dimension

KSL-DALI-01: Ø75 x 82.9mm (See FIG.1)

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**3 INSTALLATION AND WIRING**

Please disconnect power completely and read the entire instruction manual carefully before installation.

**3.1 Select a proper location**

**3.1.1 Installation tips specially for DALI dimming presence detector**

- The detector should be placed in room where it can measure both ambient light and artificial light.
- Direct light on the detector from any illumination should be avoided.
- You should be away from the detector to avoid affecting the luminous flux that reaches the detector when making Lux value setting.
- Do not install the detector directly next to a window or sun blind which can cause incorrect measurement on the natural light (Refer to FIG.2).

**3.2 Function**

**3.2.1 Delay on / off 60sec function**

Load will be switched on / off after LED turns on / off 60sec. Please refer to the followings for detailed load and LED action:

- Red LED is switched on when the ambient light level reaches the pre-set switch on Lux value, and load will turn on if LED keeps on 60sec.
- Red LED is switched off when the ambient light level is higher than the pre-set switch on value and load will turn off if LED keeps on 60sec.

**3.2.2 Brightness control function**

There are two ways to turn on the load:

**Semi-Auto:** Manual on & Auto off

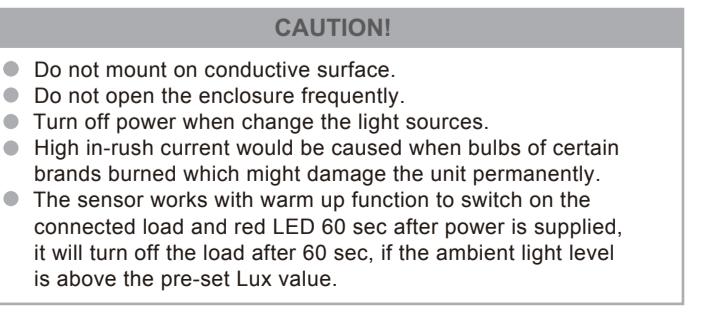
Set the knob to " \* " , the connected load only can be manually switched on by operating the connected external push button even if the ambient light level is lower than the pre-set Lux setting value, and to be automatically switched off until the ambient light level keeps be higher than the switch off Lux value for 5min or by operating the connected external push button.

**Auto:** Mode on & Off

Set the "Mode" knob to "Auto" , when the ambient light level is below pre-set Lux setting value and keeps for 60sec, the load will turn on automatically, and to be automatically switched off until the ambient light level keeps be higher than the switch off Lux value for 5min or by operating the connected external push button.

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**3.3 Wiring (See FIG.3)**



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**3.4 Installation procedure**

**3.4.1 Ceiling flush mounting**

3.4.1.1 To install detector, please drill a hole in diameter of 65mm on ceiling board and keep the power cable outside. Please strip off 6 - 8mm of cable sheathing for wiring (See FIG.4).

FIG.4

3.4.1.2 Use screwdriver to loose two screws to take down the protection cap and take out the cable clamp from it.

3.4.1.3 Break the rubber gasket, then feed cables through it (See FIG.5).

FIG.5

3.4.1.4 Please refer to illustration of FIG.3 for correct wiring and get " \* " symbol of the power box cap is aligned with the " \* " symbol of housing (See FIG.5), then screw the power box cap tightly.

3.4.1.5 Close up the two spring clips of detector and insert detector into the drilled hole on ceiling (See FIG.6).

FIG.6

3.4.1.6 Restore the power supply.

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**4 OPERATION AND FUNCTION**

**4.1 Mode, Lux and STBY% knobs**

Knob	Function	Knob setting
Mode	Set the operating mode	Auto mode or Semi-auto mode settable.
Lux	Set the light value for constant lighting control function	Range : Adjustable from approx. 5 to 2000 Lux. (learn) : The actual ambient light level (10 ~ 2000 Lux) can be read in.
STBY%	Set lighting illumination in standby mode	3 precise adjustments: 10%, 20%, and OFF (Load is off in standby mode)

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**4.2 Lux learning function with knob**

**Learning procedure:**

- 4.2.1 Adjust the knob to " \* " when the ambient light level matches the desired value (See FIG.8-A).
- 4.2.2 When the knob is set to " \* " originally, it should be adjusted to other position more than 1sec, then goes back to " \* " (See FIG.8-B).
- 4.2.3 Then the load is off, red LED starts to flash slowly indicating entering into learning mode. Learning will be completed within 25 seconds. Afterwards, the red LED and load will keep on 5sec or red LED flashes quickly for 5sec and load is off to confirm successful learning (See FIG.8-C).
- 4.2.4 After learning procedure, the detector returns to AUTO mode with red LED and load being off.

FIG.8-C

**NOTE**

- When the actual light level is out of the range 10 ~ 2000Lux, photoelectric switch will learn 25sec, then the red LED flashes quickly for 5sec. When the actual light level is below 10Lux, Lux value is set to 10Lux, or is above 2000Lux, Lux value is set to 2000Lux.
- Installer should be away from the photoelectric switch to avoid affecting the luminous flux that reaches it when learning Lux value.

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**5 TROUBLE SHOOTING**

When KSL-DALI-01 works abnormally, please check assumptive problems and suggested solutions in below table that will hopefully solve your problem.

Problem	Possible cause	Suggested solution
Load does not turn on	1. No power is supplied. 2. Incorrect wiring. 3. Incorrect Lux knob setting. 4. Malfunctioned load.	1. Switch on the power. 2. Connect the load referring to the wiring diagrams (See FIG.3). 3. Set Lux knob to "2000" and check if the load will be on. 4. Replace the load with a new one.
LED turns on but load does not turn on	1. Load is switched on after LED turns on 60sec. 2. Incorrect wiring. 3. Malfunction load.	1. Wait approx. 60sec after LED is ON. 2. Refer to the wiring diagrams (See FIG.3) and connect wiring correspondingly. 3. Replace the load with a new one.
Dimmer function is invalid.	1. Incorrect wiring. 2. Malfunctioned DALI electronic ballast or LED driver.	1. Connect the load referring to the wiring diagrams (See FIG.3). 2. Replace with a new DALI electronic ballast or LED driver.

**GARANTÍA/GUARANTEE/GARANTIE**

3 años/anos/years/années

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**5 DÉPANNAGE**

Si KSL-DALI-01 fonctionne normalement, veuillez vérifier les problèmes hypothétiques et les solutions suggérées dans le tableau ci-dessous. Ils sont supposés à résoudre votre problème.

Problème	Cause possible	Solution suggérée
La charge ne s'allume pas	1. Aucune alimentation n'est fournie. 2. Câblage incorrect. 3. Réglage incorrect du bouton Lux. 4. mauvais fonctionnement de la charge.	1. Allumez l'alimentation. 2. Connectez la charge en vous référant aux schémas de câblage (voir FIGURE 3). 3. Réglez le bouton Lux sur " * ". 4. Remplacez la charge par une nouvelle.
La LED s'allume mais la charge ne s'allume pas	1. Attendez environ 60 secs après que la LED soit allumée. 2. Référez-vous au schéma de câblage (voir FIGURE 3) et connectez le câble en conséquence. 3. Remplacez la charge par une nouvelle.	1. Attendez environ 60 secs après que la LED soit allumée. 2. Référez-vous au schéma de câblage (voir FIGURE 3) et connectez le câble en conséquence. 3. Remplacez la charge par une nouvelle.
La fonction gradateur est invalide.	1. Câblage incorrect. 2. Ballast ou conducteur LED DALI électronique est défectueux.	1. Connectez la charge en vous référant aux schémas de câblage (voir FIGURE 3). 2. Remplacez le ballast ou nouveau conducteur LED.

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