



BEGA 24 168 Wall Luminaire with PIR Motion and Light Sensor Instruction Manual

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24 168 Wall Luminaire with PIR Motion and Light Sensor
Instruction Manual



01.22

Technical amendments reserved

24 168



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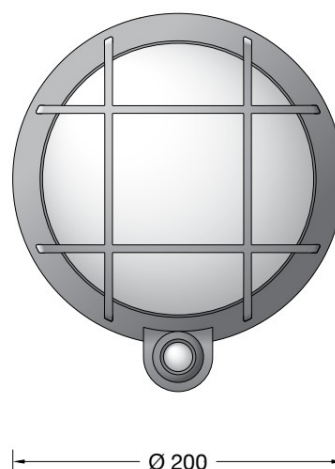
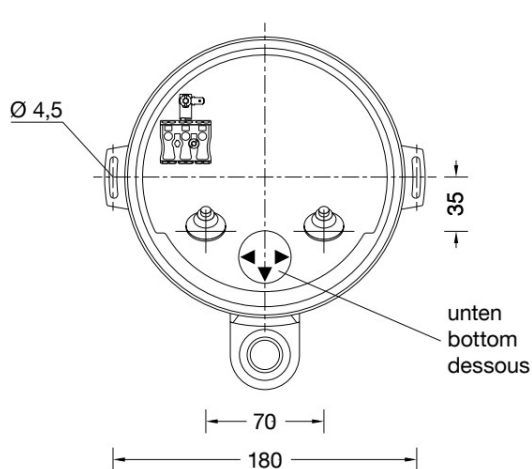
24 168 Wall Luminaire with PIR Motion and Light Sensor

Wall luminaire with PIR motion and light sensor

Location.....

Project

QR-Code.....



Instructions for use

Application

Unshielded wall luminaire with crystal glass.

The integrated passive infrared motion and light sensor responds to heat emission in the dark and therefore activates in case of human or animal movement in the vicinity of the luminaire.

Configuration is done via Bluetooth and the free BEGA Tool app.

Lamp

Module connected wattage	6.5 W
Luminaire connected wattage	9 W
Rated temperature	ta = 25 °C
Ambient temperature	ta max = 30 °C

24 168 K3

Module designation	LED-1182/830
Colour temperature	3000 K
Colour rendering index	CRI > 80
Module luminous flux	1100 lm
Luminaire luminous flux	637 lm
Luminaire luminous efficiency	70,8 lm / W

24 168 K4

Module designation	LED-1182/840
Colour temperature	4000 K
Colour rendering index	CRI > 80
Module luminous flux	1155 lm
Luminaire luminous flux	670 lm
Luminaire luminous efficiency	74,4 lm / W

Safety

The installation and operation of this luminaire are subject to national safety regulations. Installation and commissioning may only be carried out by a qualified electrician. The manufacturer accepts no liability for damage caused by improper use or installation. If subsequent modifications are made to the luminaire, the person responsible for these modifications shall be considered the manufacturer.

Product description

Luminaire made of aluminium alloy, aluminium and stainless steel BEGA Unidure® coating technology
 Crystal glass, white inside
 Silicone gasket 2 mounting holes ø 4.5 mm
 Distance apart 180 mm 2 cable entries for through-wiring of mains supply cable ø 7-12 mm
 Connection terminal 0,5 – 2,5@
 Earth conductor connection
 Passive infrared motion sensor (PIR)
 Range up to 10 m
 Horizontal opening angle 110°
 Vertical opening angle 93°

Minimum temperature difference between moving object and environment 4 °C

Object speed ideally 1 m/s

Adjustable sensitivity of the motion sensor (inertia)

Shut-down delay adjustable between 5 s and 240 min

Light sensor: adjustable value range from darkness to approaching dusk (approx. 150 lx)

Fixed pre-set time hysteresis for suppression of undesired switching operations in luminaires during rapid brightness fluctuations

Luminaire dimmable (0 to 100 %)

Adjustable basic brightness

Luminaire can be switched on and off with a non-adjustable soft start function (1 s) or directly to the set brightness value

Transmission frequency range: 2400-2483.5 MHz

Maximum transmission output: 10 mW

LED power supply unit 220-240 V x 0/50-60 Hz

DC 176-264 V

DC Start \geq 198 V

BEGA Thermal Switch®

Temporary thermal shutdown to protect temperature-sensitive components

Safety class I

Protection class IP 65

Dust-tight and protection against water jets

Impact strength IK05

Protection against mechanical impacts < 0.7 joule



– Safety mark



– Conformity mark

Weight: 1.6 kg

This product contains light sources of energy efficiency class(es) D

Overvoltage protection

The electronic components installed in the luminaire are protected against overvoltage in accordance with DIN EN 61547.

To achieve an additional protection against e. g. transients, etc. we recommend separate overvoltage protection components.

You can find them on our website at www.bega.com.

EU Declaration of Conformity

BEGA Gantenbrink-Leuchten KG hereby declares that the radio system type 24 168 complies with Directive 2014/53/EU (RED).

The complete text of the EU Declaration of Conformity is available at the following Internet address:

<https://www.bega.com/conf/de/24168>

Installation

Undo hexagon socket head screw (wrench size 3 mm) through the opening in the luminaire housing up to the stop and lift luminaire top.

Disconnect the earth conductor connection from the plug connection.

Carefully remove the plug parts of the LED connecting cable (2-pin) and the control cable (6-pin) from the plug-in devices on the control board.

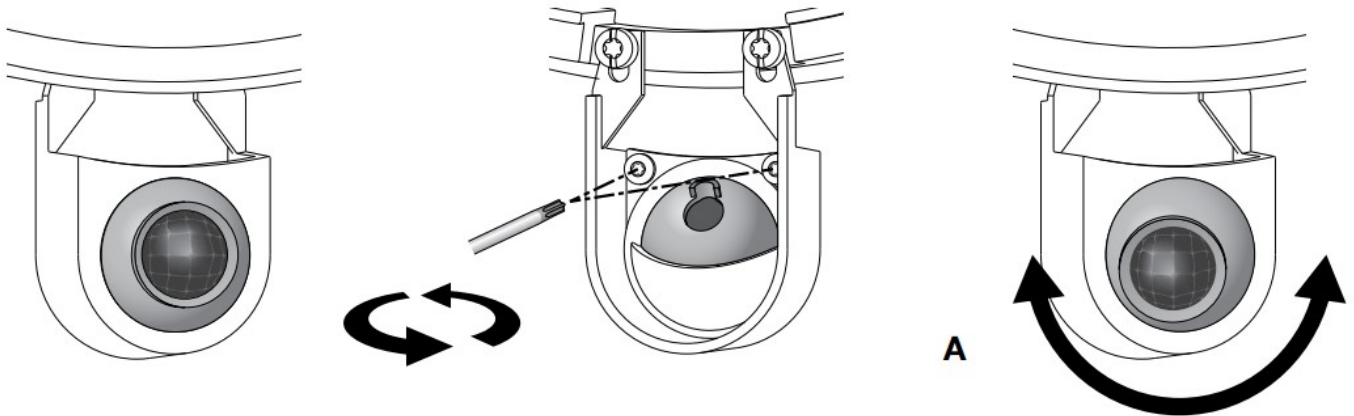
Orientation of the sensor

The sensor is factory-configured for the maximum detection area.

In order to avoid the unintentional adjustment of the sensor in public areas, the alteration of the factory setting must be made before the luminaire base is mounted.

To do so, loosen the two rear screws (Torx driver T10) slightly and rotate the sensor ball to the desired position (see Fig. A).

Tighten the mounting screws evenly.



Lead the mains supply cable through the cable entry of the luminaire base.

Notice position of use “arrow down” of the luminaire back plate.

Fix luminaire base with enclosed or any other suitable fixing material onto the mounting surface.

Make the earth conductor connection and the electrical connection.

In order to guarantee the maximum service life of the electrical components, the enclosed desiccant pouch must be placed in the luminaire.

Remove the desiccant pouch from the foil packaging and place it in the position marked by the red information label immediately before finally closing the luminaire.

Make sure that gasket is positioned correctly.

Connect the green and yellow protective earth conductor from the luminaire top to the terminal marked 1 in the luminaire base.

Push the plug parts of the LED connecting cable (2-pin) and the control cable (6-pin) securely into the plug-in devices on the control board.

Install luminaire top and tighten.

Commissioning

The power supply must be connected for the commissioning of the luminaire.

The brightness sensor will need up to 10 minutes after activation of the power supply to correctly calibrate the brightness value.

Once installed, the luminaire can be operated immediately in its factory settings; configuration via smartphone will not be required.

The factory settings are as follows:

Mode: PIR and light

PIR sensitivity: 100 % (high sensitivity)

Shut-down delay: 5 minutes

Brightness threshold: 40 (approx. 50 lx)

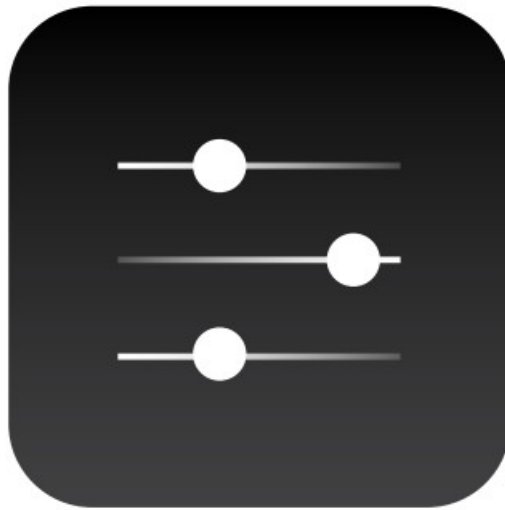
Dimming level luminaire: 100 %

Basic brightness: 20 %

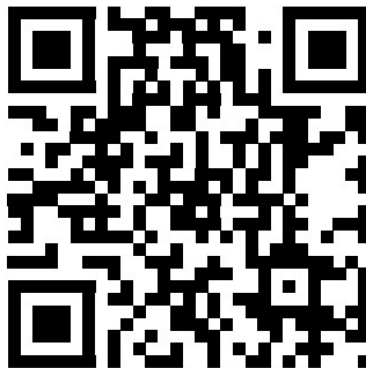
Softstart (1s): active

Alternatively, the integrated PIR motion and light sensor can be configured via smartphone using the free BEGA Tool app.

The default values can be reinstated at any time via the BEGA Tool app.



Download app



bega.com/bega-tool-ios



bega.com/bega-tool-android

Download the app for Android or iOS.

Create a project and add the luminaire as your starting point.

The individual QR code required for commissioning is enclosed with the luminaire.

Please retain the other enclosed QR codes in your on-site documentation (e.g. Instructions for use at top of Page 1).

You will also find an additional QR code on the LED module in the luminaire.

The luminaire can only be controlled with the smartphone that was used to configure the sensor.

The “Share access” function in the BEGA Tool app grants other smartphones configuration and control rights. The luminaire can be reset to factory settings in the app, if required. Follow the in-app instructions.

Please note:

The integrated light sensor operates with a time delay to prevent responses to short-term brightness fluctuations in the environment of the luminaire.

The time delay is around 1 to 3 minutes.

A manual darkening of the sensor will therefore not result in an immediate response.

Once commissioned successfully, you can choose between three operating modes and one manual control mode.

Operating modes:

- PIR motion and light sensor
- PIR motion sensor only
- Light sensor only

Manual switching:

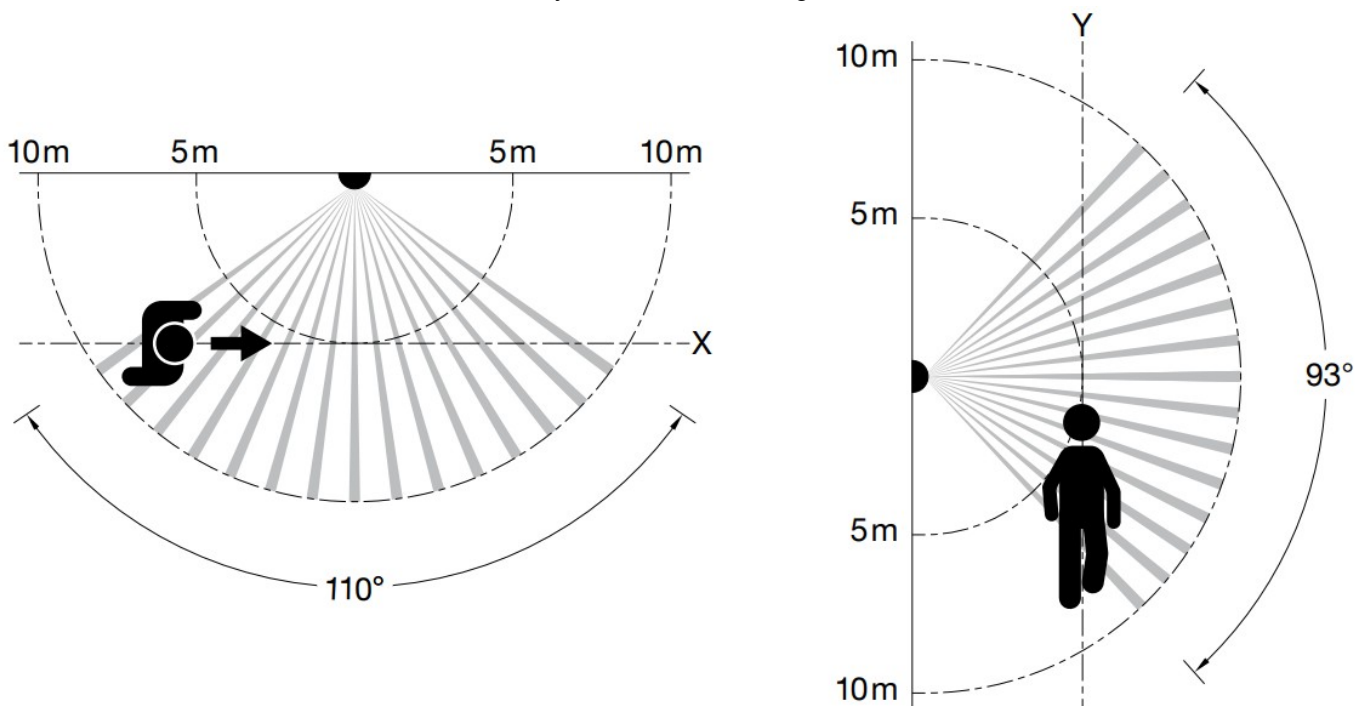
- Sensor deactivation and manual control of the luminaire (on/off)

Range / Detection area

The specifications for the range and detection area of the PIR motion sensor are reference values. The detection area is up to 110° horizontally and 93° vertically, with a depth of max. 10 m depending on the direction of motion (see sketch).

Too minor temperature difference between the moving object and the ambient temperature can influence the detection range.

Local conditions and external heat sources may affect both the range and the detection area.



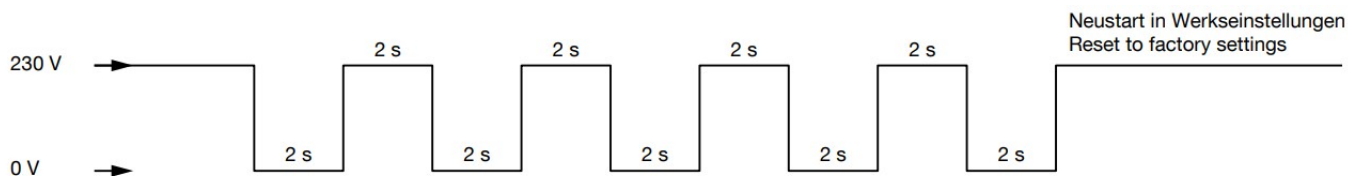
Reset to factory settings

The luminaire must be switched off five times within 30 seconds for at least 2 seconds each time to manually reset it to factory settings (see sketch).

The luminaire can furthermore be reset to the factory settings via the BEGA Tool app.

The reset is confirmed with five flashes of the luminaire.

The smartphone will be disconnected.



Replacing the LED module

The designation of the LED module is noted on a label in the luminaire.

The light colour and light output of BEGA replacement modules correspond to those of the modules originally fitted.

The module can be replaced by qualified persons using standard tools.

Disconnect the system and open the luminaire.

Please follow the installation instructions for the LED module.

Inspect and, if necessary, replace the luminaire gaskets.

Defective glass must be replaced.

Close the luminaire.

Please note:

After replacing the LED module, the PIR motion and light sensor of the luminaire must be reconfigured (see section Commissioning).

To do so, you must use the QR code enclosed with the replacement module. Please paste the additional enclosed QR codes over the QR codes in documentation provided by the customer.

Cleaning · Maintenance

Clean luminaire regularly with solvent-free cleansers from dirt and deposits.

Do not use high pressure cleaners.

Spares

Spare glass	11 003 511
LED power supply unit	DEV-0261/24V
Control board BT	61 001 895
PIR Light sensor	61 001 916
LED module 3000 K	LED-1182/830
LED module 4000 K	LED-1182/840
Gasket glass	83 000 557 .1
Gasket housing	83 002 168 B1

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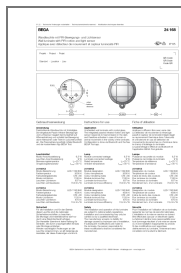
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Documents / Resources



[BEGA 24 168 Wall Luminaire with PIR Motion and Light Sensor](#) [pdf] Instruction Manual 24168K3, 24168K4, 24 168 Wall Luminaire with PIR Motion and Light Sensor, 24 168 Wall Luminaire, Wall Luminaire with PIR Motion and Light Sensor, Luminaire with PIR Motion and Light Sensor, Wall Luminaire, Luminaire

References

- BEGA [BEGA Tool - Apps on Google Play](#)
- BEGA [BEGA Tool on the App Store](#)
- BEGA [BEGA · Das gute Licht.](#)
- BEGA bega.com/conf/de/24168