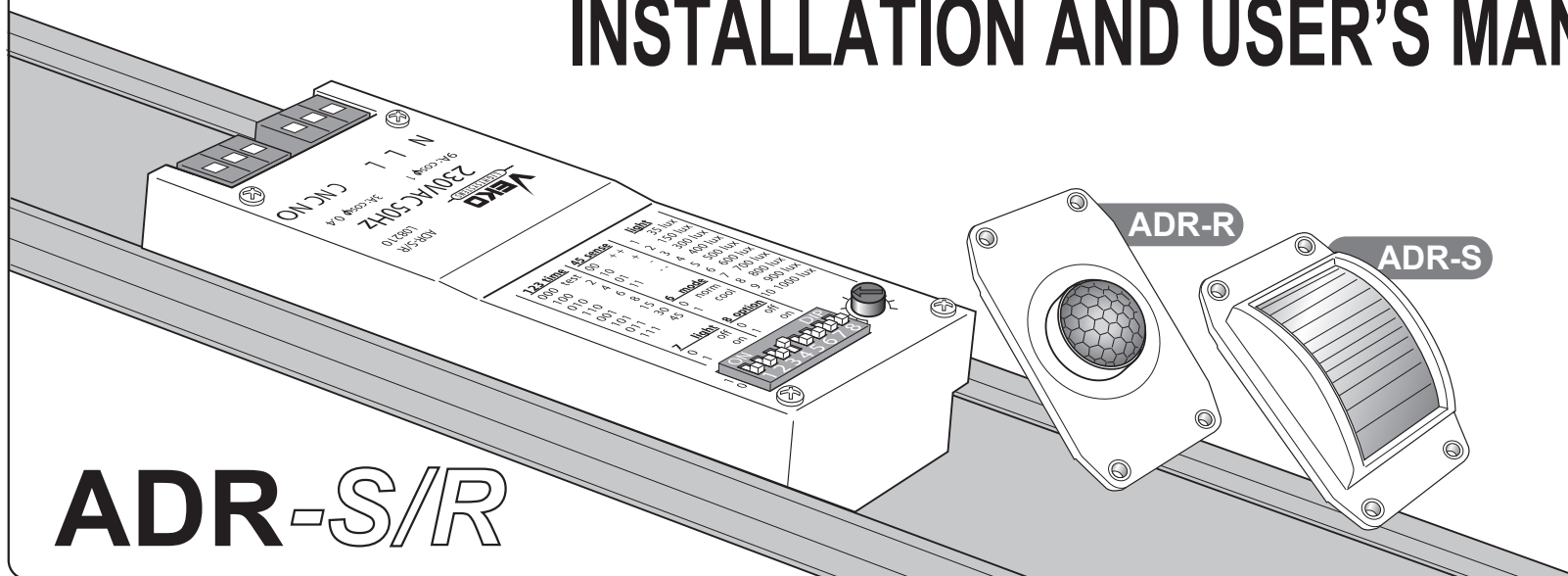


INSTALLATION AND USER'S MANUAL



Veko 2012
Schagen
Version 1



INTRODUCTION

The ADR-S/R is a motion sensor system for turning on lights. Movement is detected using a pyroelectric infrared sensor (PIR).

The PIR reacts to changes in temperature patterns. People and animals radiate heat. If they enter or move within the range of the ADR-S/R motion sensor, the heat patterns change within this range. The ADR-S/R detects this and interprets it as motion. It remains activated until the source of the heat leaves the area or stops moving.

The ADR-S/R is designed so that it does not immediately switch off when it no longer senses any motion; it uses a so-called delay switch.

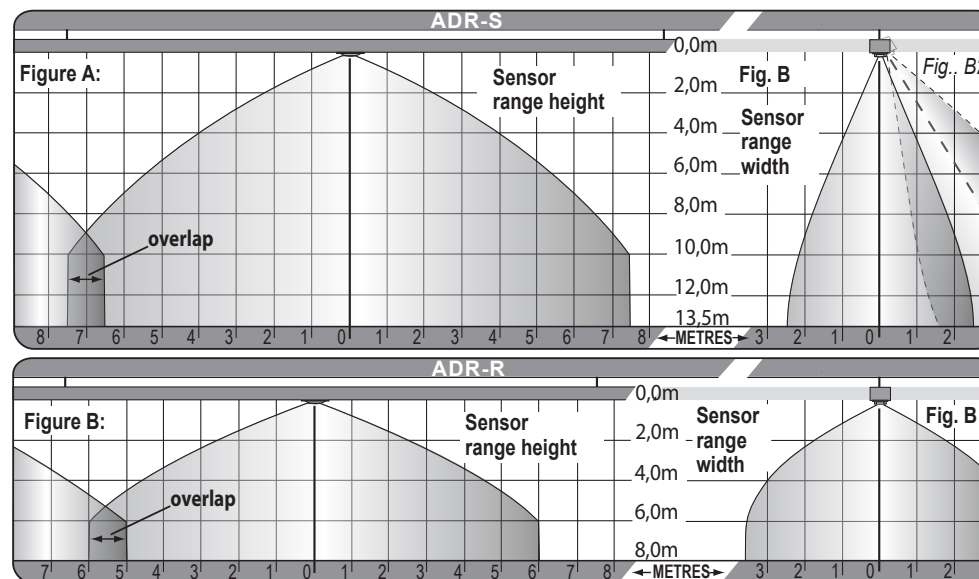
The motion sensor has a timer, which resets each time it detects movement. When the timer runs out, the lights are switched off.

The ADR-S/R is also fitted with a twilight sensor, which enables the system not to switch on the lights if the amount of daylight exceeds a certain level. This level can be set using a potentiometer.

ADR-S/R Installation manual



PLACEMENT



ADR-S/Rs are suitable for mounting on lighting rails. The standard ADR-R detection angle is 130 to 140°. The detection angle of the ADR-S is restricted in terms of its width. This means that the motion sensors will only activate if someone moves into the narrow detection range (see Fig. B) of the sensors that have been mounted in a row.

The spacing between the sensors depends on the railing height (see Fig. A). Take into account the overlap between the sensors' ranges (1m). The higher the ceiling, the less sensitive the motion sensors will be. The ADR-S/R functions optimally in the centre of the room or passage.



Caution! Ensure that the rail is level, both in the length and breadth (see Fig. B2).

Caution! The sensitivity of the motion sensor always deteriorates towards the outer edge of its range.

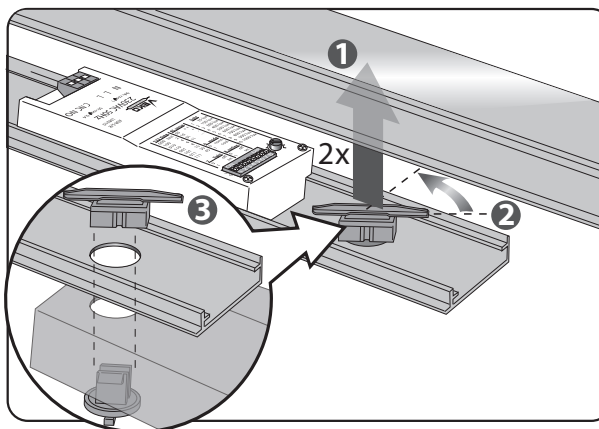
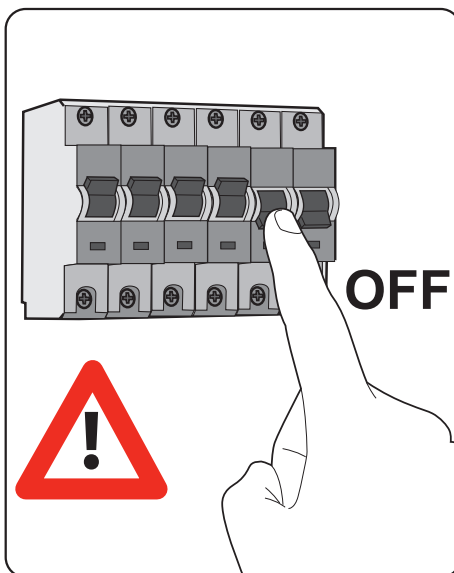
CEILING MOUNTING

ADR-S/R

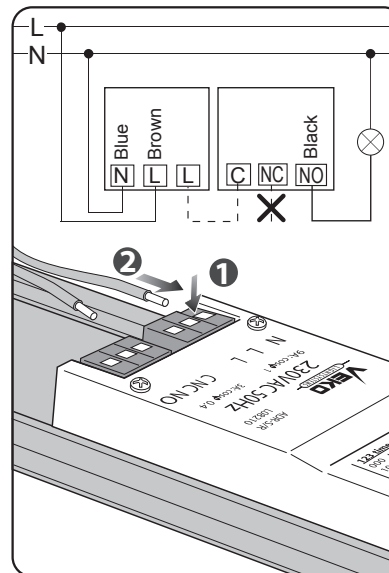
Installation manual



CONNECTION



Place the lid with the ADR in the rail (1). Turn the catch 90° clockwise (2). If there is a reflector, take the catch off and place the reflector between the catch parts. Click the catch in place (3).



Before you connect the ADR-S/R, turn the mains off!

Standard connection: Connect phase (L) to the brown wire, the switch wire (NO) to the black wire and neutral (N) to the blue wire. When the current is turned on, the lighting will always come on.

The detector's double-throw switch is potential-free. 230 V is connected through a circuit between L and C. In its standard setting, the NC connection is not used.

To enable dimming (optional), a special dimmer switch must be placed between the connection and the wiring. This optional setting is described on page 6.

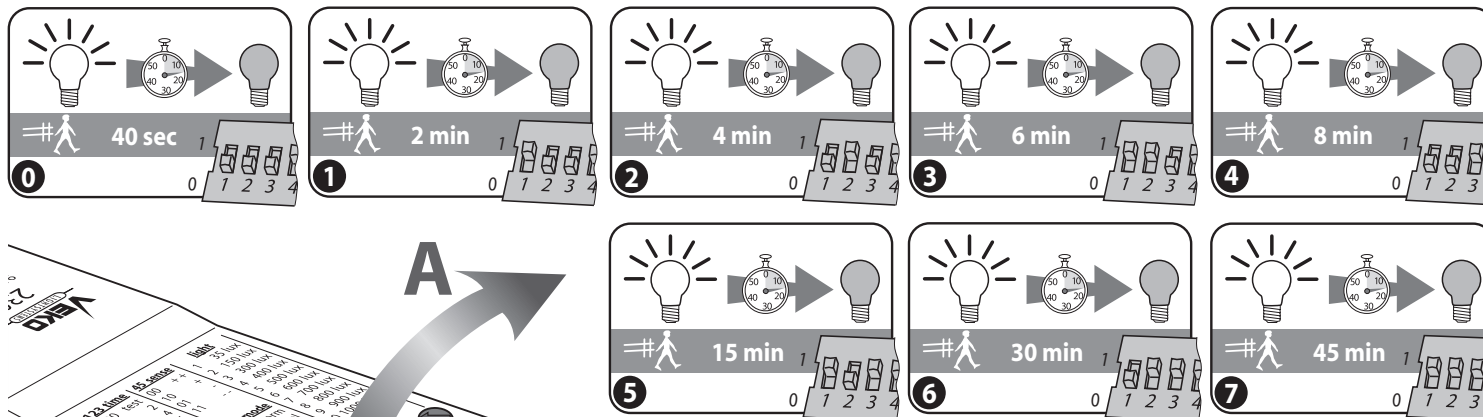
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ADR-S/R

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SETTINGS [1]



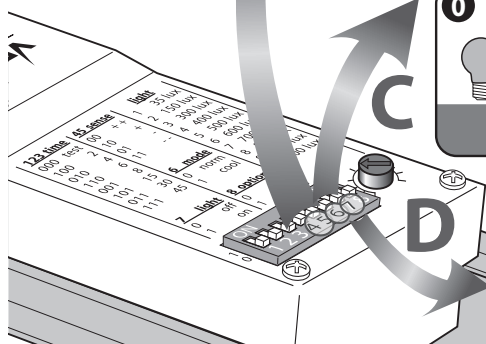
The ADR-S/R has 8 settings for the delayed-off switch for motion detection, which can be selected using switches 1 to 3. The standard setting is A3 (6 min). Setting A0 has a very short delay (only to be used to test the ADR-S/R and the installation). The optional dimmer setting described on page 6 does not affect switching or the lifespan of the bulbs.

Caution! Do not set the delay switch to less than 15 minutes for vapour lamps! Short switch times have a negative effect on the lifespan of these lamps because they are not given enough time to warm up. If the lighting remains dimmed, the switch time can be shorter (page 6).



Motion detection

Page 3



0    

1   

2  

3 

0 norm: 0-100%  

1 <15 min: 100% >15 min: 35-100%  

0  

1 norm  

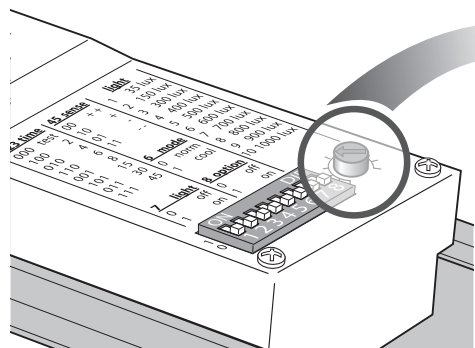
PIR sensitivity (B)
The ADR-S/R has two sensitivity settings for motion detection: switch on and continuous. The switch on sensitivity setting applies to the first detection (lighting is off). The continuous sensitivity setting applies after an initial detection and throughout the set delay time. The standard setting is B0 (normal sensitivity). Use the less sensitive settings if the lighting comes on unnecessarily or does not switch off properly.

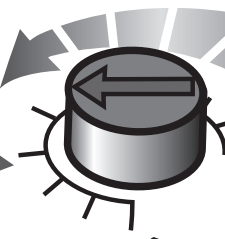
Switch on setting (C)
If the ambient temperature is low, for example, in a cold room, there is an option that allows the bulbs to first burn fully for a time (C1). The lighting will initially be switched on for 15 minutes and will then be dimmed to between 35 and 100% {ADR-SD/ADR-RD}.

Switch on setting (D)
If the light cell does not operate as desired, for example, because the detector is in an area where there is a lot of light, there is an option to deactivate the light cell (D0).

Dipswitch 8 does not have a function.

 **Degree of detection sensitivity**
Page 4



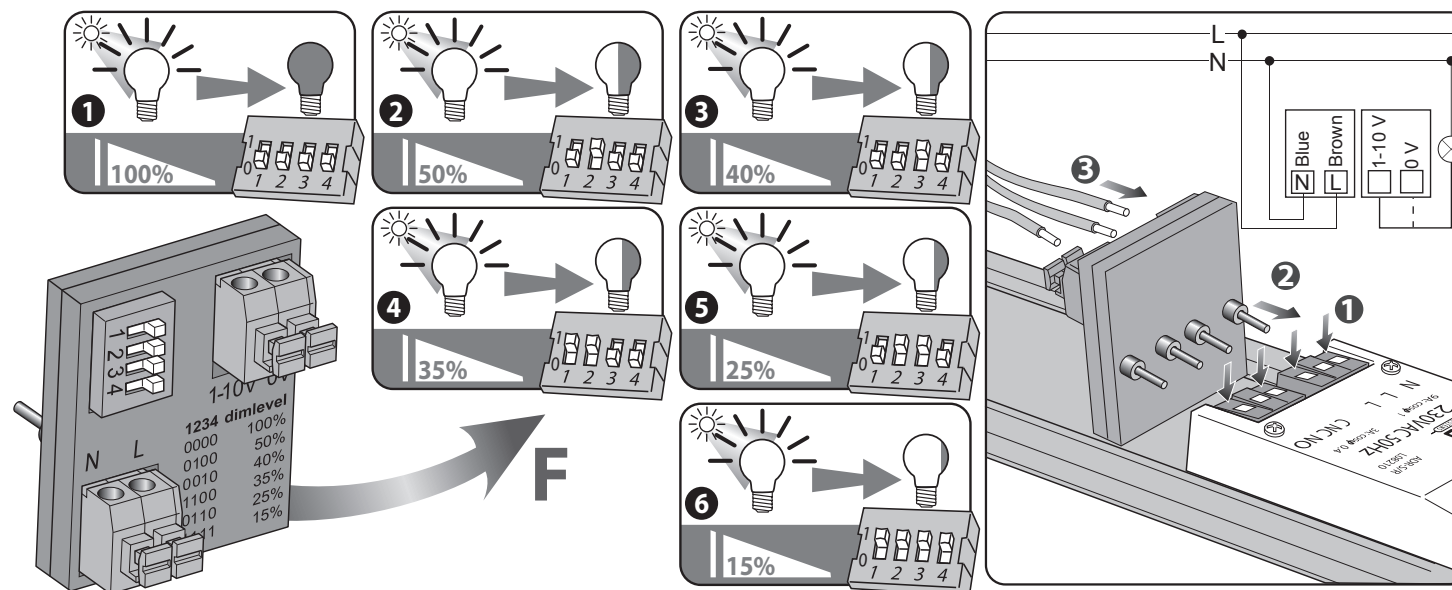
E 

 1000 lux 

 35 lux 

Twilight switch
The ADR-S/R comes with a twilight switch. This ensures that the lighting is not turned on if there is sufficient daylight in the room. If this is the case, and the daylight level drops below the set value while the room is still occupied, the lighting will turn on. If the lighting is on and the amount of daylight rises above the set value, the lighting will stay on. This prevents unnecessary switching on and off. Turn clockwise for higher twilight value and counter-clockwise for a lower twilight value. A higher twilight value means that more daylight is required to stop the lights from turning on.

 **Onset of twilight**
Page 5



Before you connect the ADR-S/R, turn the mains off!

Place the dimming-module between the connections and the wiring. Connect phase (L) to the brown wire, neutral (N) to the blue wire and the switch wire to (1-10 V).

Dimmer adjustment

The dimmer can be set using the DIP-switches on the dimmer module. There are 6 dimming levels: 100%, 50%, 40%, 35%, 25% and 15%. The DIP positions are shown here and on the dimmer module.

SAFETY

Before you connect the ADR-S/R, the current must be turned off.

Only certified electricians are permitted to work on 230V mains.

All installation instructions must be followed.

If in doubt, consult VEKO lightsystems technical services department.

Ensure that the wires are connected according to the colour coding.

Comply fully with the technical specifications of the equipment.

Do not use 'cold start' switches if the ADR-S/R is likely to switch on the lighting more than twice in a 24-hour period.

The ADR-S/R is not certified for use as an alarm system.

TROUBLESHOOTING

Fault	Possible cause	Solution
Lighting is not switching on	No current	■ check mains
	Twilight value not yet reached	■ adjust settings
	Bulb defective	■ replace
Lighting is switching on unnecessarily	Switches on after loss of current	■ wait
	Sudden change in heat patterns (e.g., printer, fan, air conditioning etc.) within detection range	■ choose a better site ■ lower sensitivity
Lighting is switching off unnecessarily	No detection within set delay time	■ choose longer delay
	Person is outside detection range	■ choose a better site ■ use more detectors ■ set the delay to longer
	The detector is higher than 12 metres	■ mount the detector lower
	No current	■ reset mains
	Switch is overridden by installation switch	■ turn switch off
Lighting on permanently	Heat patterns within detection range are constantly changing	■ choose a better site
	Never switches off with sufficient daylight	■ leave the room and wait until the delay switch time passes

TECHNICAL SPECIFICATIONS

Nominal voltage: 230 V ~ ± 10%, 50 Hz
Maximum continuous power: 9 A at cos φ = 1
Usage (switched on/off): [3 A at cos φ = 0,4]
PIR detection angle: < 0,22 W / < 4 W
Switched off time delay: All round 130° - 140°
5 sec. - 30 Min.
[motion]
Ambient temperature: 0-40 °C
(In deep-freeze mode): -25-40 °C
Appliance class: IP20/54
Lux values: Minimum 35 lux
Maximum 1,000 lux

Design subject to alterations.