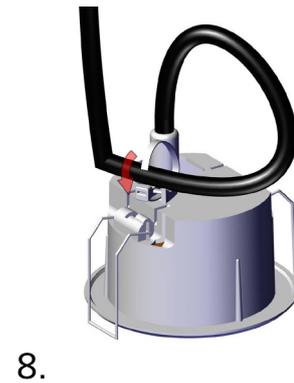
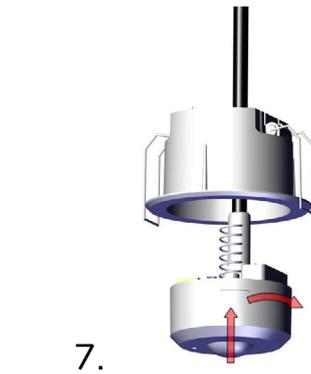
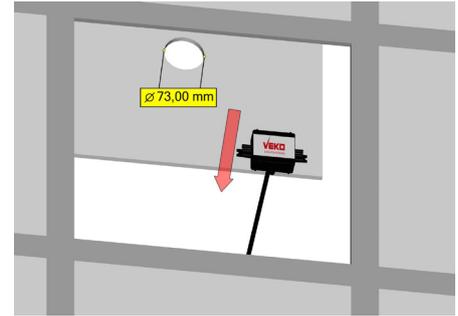
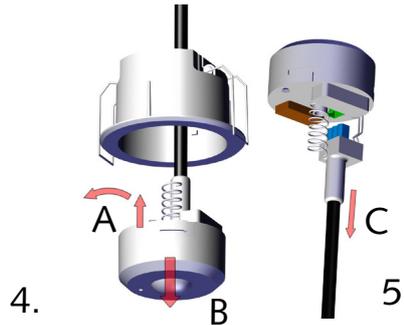
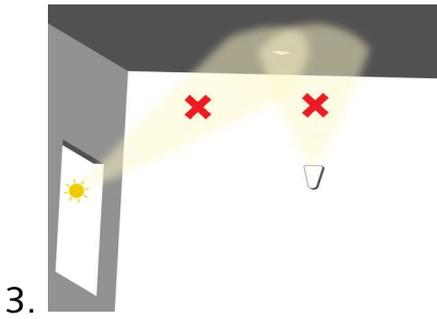
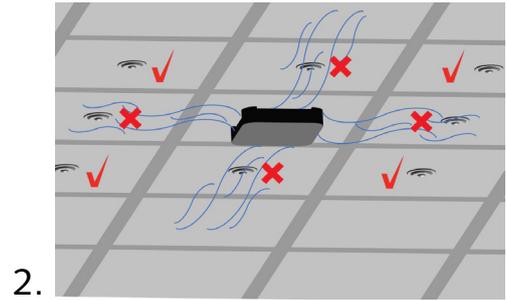
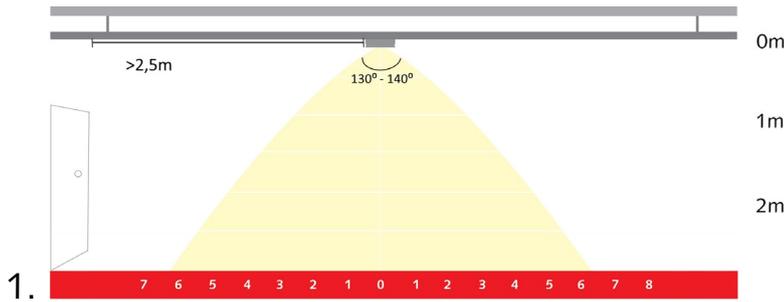


INSTALLATION AND USER MANUAL MDO-O



INTRODUCTION

The MDO-O is an intelligent presence sensor intended for switching lights. It uses motion and sound detection to detect presence.



Motion detection



Noise detection

When the MDO-O is switched off, it will switch on the lighting and sound detection at the first detection of movement. Both the motion and sound detections have their own timer that is reset upon matching detection. When one of the timers expires, the lighting is switched off.

The MDO-O also has a twilight switch that makes it possible not to switch on the lighting if the amount of daylight is above the set value.

POSITIONING

The MDO-O is suitable for ceiling mounting and is available as a flush-mounted (MD-O-I) and surface-mounted (MD-O-O) version.

For both variants, the detection angle of the motion sensor at a ceiling height of 2.5 metres is between 6-7 metres. When used at higher heights, the sensitivity of the motion detection will be lower.

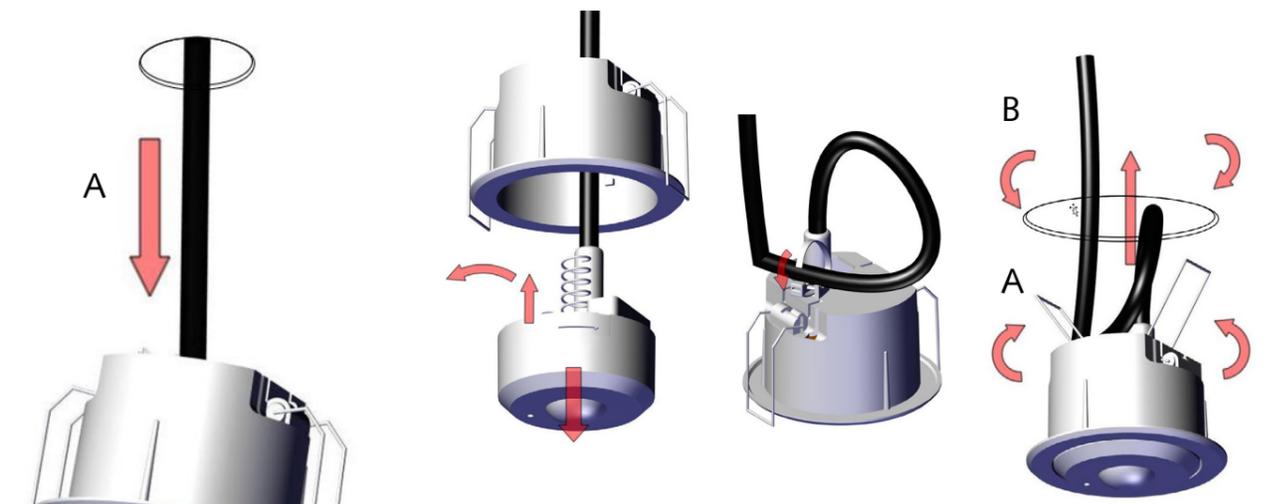
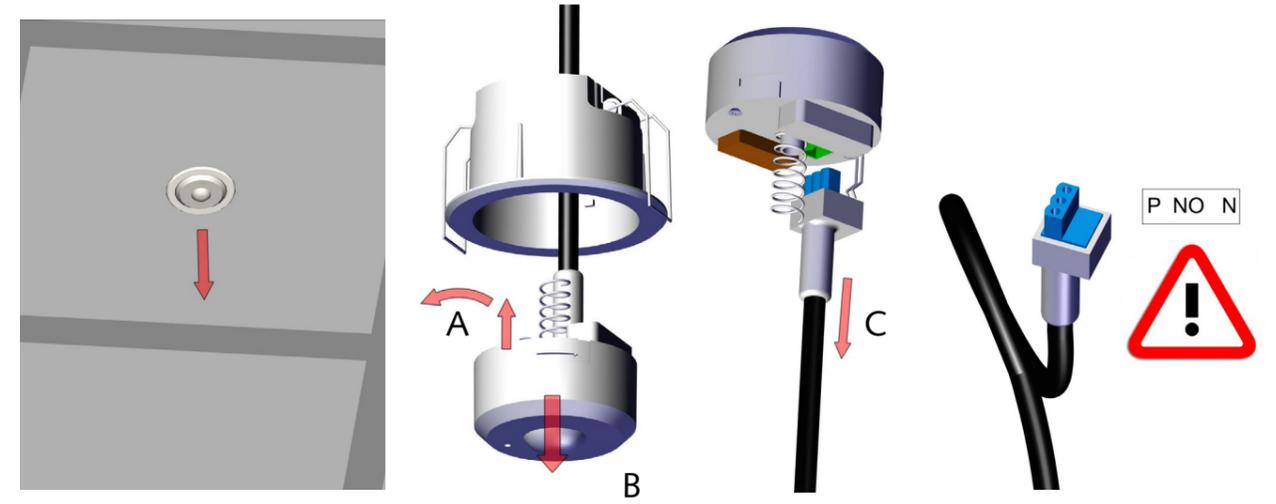
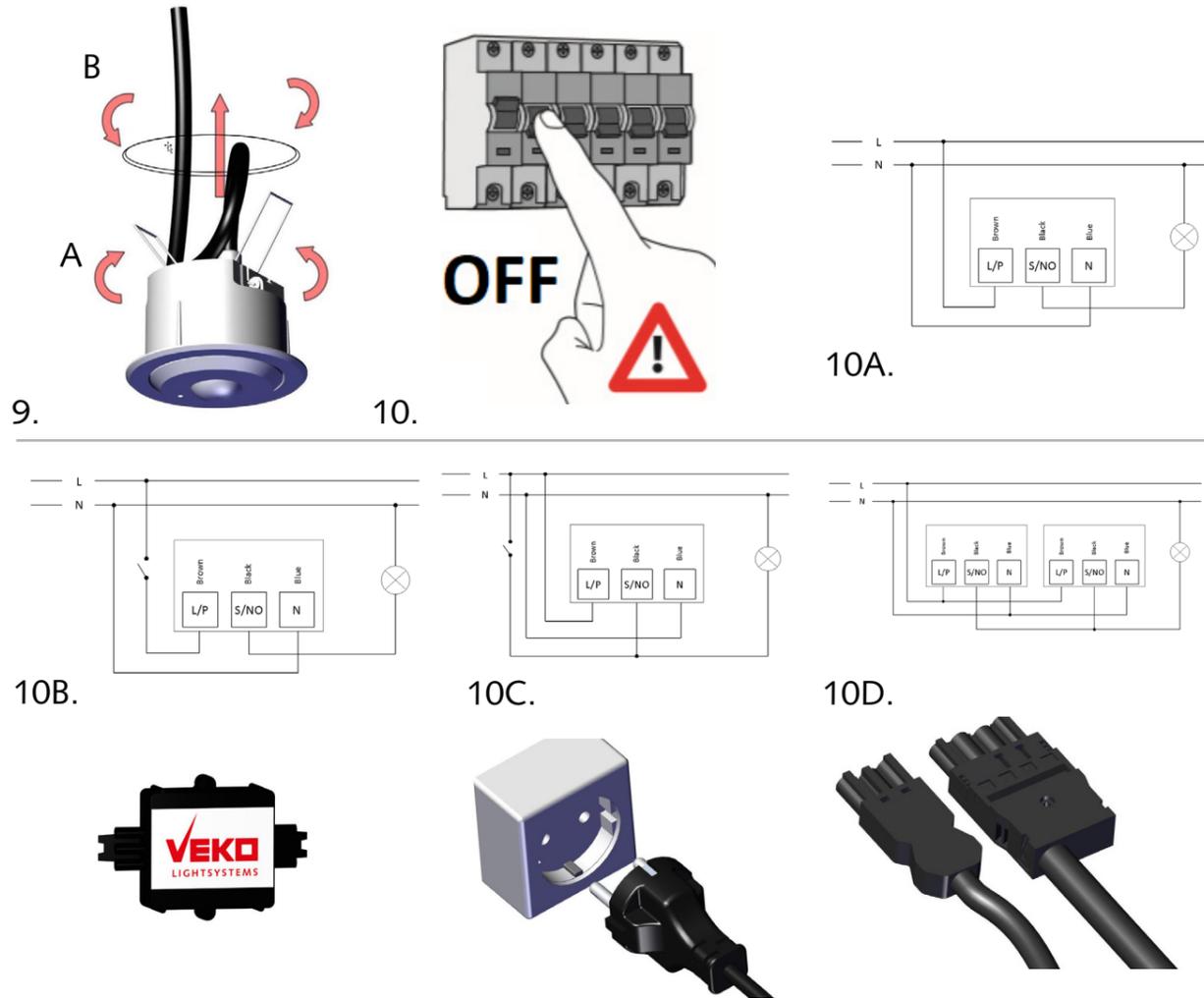
Please note! At the edge of the detection range, the sensitivity of the motion sensor is less accurate. For optimum performance the MDO-O should be placed in the centre of the room. The following factors have a negative influence on the sensor's operation:

- Direct airflow from e.g. hot air heating or air-conditioning.
- Direct radiation (lamps, reflection of sunlight, etc.).
- Positioning of the sensor within 2.5 metres of the entrance to the room.

SETTINGS

Switch-on method

By default, the MDO-O switches on when movement is detected. It then determines, by means of motion and sound detection, when it should be switched off again.



INSTALLATION ON CEILING

Unscrew the sensor unit from the holder and screw the holder to the ceiling. Check that the connection connector is fitted properly and place the detector in the holder. Turn clockwise until the bayonet fitting is tight. Mount the cover on the holder and turn it clockwise until the bayonet fitting is tight.

CONNECTING

Switch off the mains voltage before installation! Standard connection: Connect the phase (L) to the brown wire, the switch wire (S) to the black wire and the neutral (N) to the blue wire. In pictures B and C, the connection sequence is the same as in picture A. When the voltage is switched on at the MDO-O, the lighting is always switched on as a result.

 Do not use option B if inductive lighting is switched on (e.g. conventional ballasts).

Do not use 'cold start' ballasts if the MDO-O will switch the lighting more than twice a day.

SAFETY

- Before mounting the MDO-O, the mains voltage must be switched off.
- Work on the 230 V mains supply may only be carried out by qualified electricians.
- All installation instructions are to be observed.
- When connecting the wiring, observe the correct colours and all technical specifications of the equipment.
- Observe the correct colours and all technical specifications of the equipment when connecting the wiring.
- The MDO-O is not certified for alarm purposes.

TECHNICAL SPECIFICATIONS

Nominal voltage	230 V ~ ± 10%, 50 Hz
Maximum nominal current	6 A bij cos = 1 / [2 A at cos = 0,4]
Own consumption [switched off/on]	< 1 W / < 4 W
PIR detection angle	Around 130° - 140°
Turn-off delays	10 secs. - 45 mins. (motion) 2 mins. - 12 mins. (sound)
Ambient temperature	0 - 40 °C
Protection class	IP20
Factory setting	15 mins. (motion) / 6 mins. (sound)

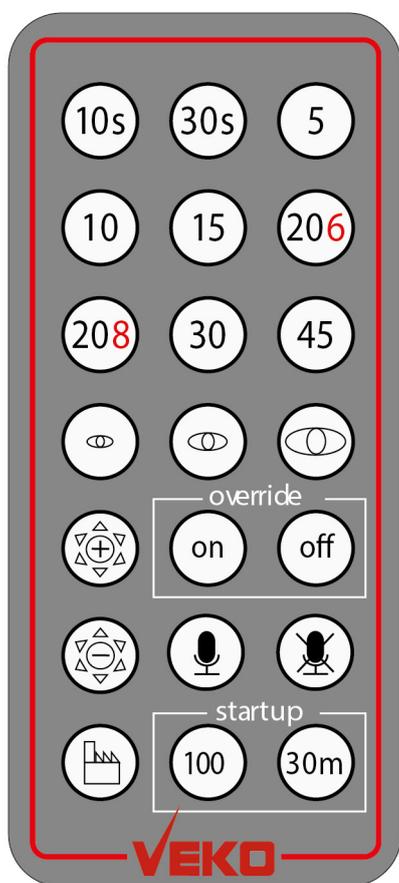
Subject to design changes.

RENOVATION

Dismantle the holder from the ceiling. Unscrew the sensor unit from the holder.

Note! Measure on the plug whether the phase and neutral correspond to the indication on the sensor unit. If this does not match, adjust the wiring in the plug. Check that the connection connector is properly fitted and place the detector in the holder. Turn it clockwise until the bayonet closure closes properly. Mount the detector back in the ceiling.

INSTALLATION AND USER MANUAL MDO-O



	10 sec	--	off
	30 sec	--	off
	5 min	2 min	on
	10 min	4 min	on
	15 min	6 min	on
	20 min	6 min	on
	20 min	8 min	on
	30 min	10 min	on
	45 min	12 min	on

Degree of detection sensitivity

- Low
- Standard
- Maximum (factory setting; full reading)

- Light permanently on
- Light permanently off (after 5 hours, the override expires)

- On (microphone on) Sound (indicated by red LED in detector)
- Off

No function

Dusk falling

The light threshold can be set in 10 steps; above this value, the light does not need to be switched on. The factory setting is the highest value. Use the remote “-” to lower the value.

All user-specified settings are disabled.