

AURO

Functional Description

Auro is all a motion detector should be: intelligent, fast, and almost invisible.



Auro is a miniature KNX motion detector, which connects directly to the bus without additional interface. Auro is the most compact full KNX motion detector on the market, with a diameter of 52mm. The inside fitting diameter is 43mm, with an installation depth of only 39mm.

Auro is very discrete, not only because of the very compact dimensions, but also by its extra flat design, with an elevation of only 1mm.

The detection range of Auro is set for residential applications. Horizontal reach is 360°, while the vertical reach attains 90°. If installed at a height of 2.5m, Auro has a detection range with a diameter of 5m. Maximum height is 5 m.

Auro contains a built-in light and temperature sensor. The incorporated led illumination enables Auro to light up with every movement.

Auro has an extensive application that can be programmed via ETS and is powered via KNX.

Master/slave functionality

In situations where different motion detectors control the same lighting fixture, for example in an entry hall, it is possible to install one of the motion detectors as the master, and the other as the slave. The slave motion detectors will then communicate every detected movement to the master device via a 1 bit trigger object. The master in turn then controls the lighting fixture.

Day/Night object

The motion detector can be informed that it is day or night through a 1-bit external day/night-object (via external clock). Depending on the object, the motion detector can then dim the light to different levels, activate different scenes, switch on the light for different periods of time, or handle different lighting thresholds in the case of light-dependent switching.

Light-dependent Switching

The motion detector can use an internal light sensor to switch a device on or off, depending on the degree of light available in the room. This means that the light will only be switched on if the degree of light measured is below a previously set lighting threshold. This threshold can be set differently for day or night using the day/night object.

The lighting threshold can also be set via an external 2-byte group address. In this manner, the lighting threshold can for example be set using a touch screen.

There is also a 1-bit group address available, which is steered by the motion detector if the measured lighting level is below the lighting threshold.

Switching, Dimming and Scenes

The motion detector can switch a lighting fixture on or off, dim the light, or control scenes.

In case the light is dimmed, a different dimming value can be set for switching on or off. Different dimming values can be set for day or night. The motion detector can then for example set the lighting level at 80% during the day and at 30% during the night. When switching off, a dimming value of 10% for example can be set so that there is a permanent minimum lighting in the room.

If both a switched and a dimmed lighting fixture are operated, then the motion detector can simultaneously operate a 1-bit switch object and a 1-byte dim object.

When operating scenes, the motion detector can call up different scenes, also depending on the time of day or night. When the lights are switched off, the motion detector can send a scene, but there is also the option of sending a 0 on a 1-bit all-off object.



Time setting also via external time value

The motion detector will activate the lighting fixture for a defined period of time. This time value can be different for day or night. For example, the motion detector can operate the light for two minutes during daytime, and for 5 minutes in the night.

This time value can also be set externally via a 2-byte group address. In this manner, the time value can for example be set using a touch screen.

Minimum time elapse between off and on

It is possible to set the motion detector to observe a minimum time elapse between switching off and re-activating the lights. This avoids the situation where switching off a lighting fixture is considered as a detection, and it also extends the life cycle of the lighting fixture.



Block object

The motion detector can be blocked using a 1-bit blocking object. In this way, the motion detector can be blocked if the lighting fixture is operated by a switch.

It is also possible to set up a time period during which the motion detector remains locked after the blocking object is disabled.

This avoids the situation that, when the light fixture is switched off, and thus also the blocking object, the lighting fixture is switched on by the motion detector.

Ventilation object

Independently from the lighting, the motion detector can also steer the ventilation of the room via a 1-bit group address.

The operation of the ventilation is independent of the measured degree of lighting and also independent of the blocking object.

It is possible to establish a time elapse period during which the ventilation is further activated after the lighting has been switched off.

This time elapse can be set in relation to the output of the motion detector, but also in relation to an external 1-bit status object. This enables the ventilation to follow the lighting, even if this is externally steered by for instance a switch.

Feedback via motion object

A 1-bit motion-object is available which can be steered by every detection, independent of the lighting levels and independent of the blocking object.

This means that the motion detection can for instance be visualized on a touch screen, or the detection can be used for security applications.

Feedback via led

An internal led light can be activated when motion is detected. Thus, the motion detector can be tested at installation, without it having to activate a lighting fixture. The led is activated during detection and is independent of the lighting level and independent of the blocking object.

The led can also be activated via a 1-bit group address. Thus, the led has a signalling function, or can be linked to the lighting switch-object.

Broadcast of measured lux value

The measured lux value can be broadcast in cycle via a 2-byte group address.

The lux value is only broadcast if the feedback led is not activated.

Broadcast of measured temperature

The motion detector contains a built-in temperature sensor. The measured temperature can be broadcast via a 2-byte group address.

Although the position of a motion detector is not ideal for measuring temperature, the measurement can give an indication of temperature in a room without having to install a separate temperature sensor.

Temperature measurement can be compensated by defining a compensation value.

Heat alarm

The motion detector can send out a heat alarm via a 1-bit group address. The alarm is sent out when the measured temperature surpasses a threshold. In this manner possible danger can be detected when the temperature for example exceeds 45°C.

