SERVODAN niko

User guide

GB

360° presence detector, DALI/DSI, 41-350



Operation

The 360° DALI/DSI presence detector consists of an integral unit featuring control of 2 × DALI or DSI buses, PIR, light sensor and built-in IR receiver. All external units such as pushbutton and light fittings are connected directly to the presence detector which is fitted directly to the ceiling.
The presence detector can be installed and operated using the factory settings. However, for optimal light regulation, it is recommended that you adjust the presence detector settings to the conditions of the premises (light requirements).
This is done via the IR Remote, model 41-922 (accessory).

Installation

Installation:
The 360° DALI/DSI presence detector is designed for direct ceiling installation.

1. The base is fitted to the ceiling and connected as shown in connection diagram **Fig. 4**.
2. Push the detector component into the terminal block in the base and fit the securing screw (Combislot).
3. Set and test the 360° DALI/DSI presence detector as shown in **Fig. 5**.
4. Fit the detector cover.

Basic circuit diagram for division of zones, see **Fig. 7.**

DALI or DSI bus and pushbutton must be installed as a high voltage installation.

Glossary

App. Man:
Application manual, manual on and off via pushbutton, automatic off via presence detector, or light level.

App. Auto:
Application automatic, automatic on and off via presence detector, light level dependent.

Setpoint:
Desired light level (lux) at table height in zone 1
Set using Lux potentiometer or Set 1 on IR Remote.

Factor:
Light level for zone 2 in relation to zone 1
Set using Fact. 2 on IR Remote.

Off delay:
Cut-off time before the presence detector switches off the light.
Set using Time potentiometer or Time 1 on IR Remote.

Fade time:
The ramp time for the light fittings.
Fade factor must be increased if the light fittings “flicker” when adjustments are made.

Orientation lighting:
When there is insufficient daylight and the off delay elapses, the lighting is dimmed to the “Level 2” setting, and after the “Time 2” preset time, the lighting switches off completely. Unless the PIR has registered activity.

Technical data

Input:
Supply voltage.....230 V AC 50 Hz +/- 10%
Power consumption (standby)...0.3 W (without light fittings).
øL_1 L
øN.....N

Pushbutton power switch:
øL_1 .....
ø .....

Output:
DALI/DSI Bus 1 .....Load max. 30 mA or 20 light fittings.
ø —D1&2 .....0 V DC and communication
ø +D1.....+15 V DC +/- 20% and communication

DALI/DSI Bus 2 .....Load max. 30 mA or 20 light fittings.
ø —D1&2 .....0 V DC and communication
ø +D2.....+15 V DC +/- 20% and communication
DALI control .....Both outputs are DALI broadcast

Performance:
Time range .....1–60 mins
Setpoint .....50–1500 lux
Orientation lighting level.....5–100%
Orientation lighting time .....0–60 mins, infinite.
Enclosure class .....IP 20
Insulation class.....CL. I
Ambient temp. .....-5°C to +50°C

Approval:
CE in accordance with .....EN 60669-2-1

Accessories

IR Remote..... Model 41-922
IR User Remote..... Model 77-921

Settings

Factory settings:
Application ..... App. Man
Setpoint zone 1 ..... 300 lux
Setpoint hysteresis..... 50%
Orientation lighting level..... 5%
Orientation lighting time ..... 1 min.
Factor zone 2 ..... 100% of Zone 1
Off delay (Time) ..... 10 mins
LED ..... On
Fade factor DALI ..... 0 (selectable 0-15 in acc. with DALI standard)
Setting of Lux and Time .....Via IR Remote

LED indicators:
Red LED flashes when activity is detected by the presence detector.
Green LED flashes when the pushbutton power switch or the IR Remote is activated.
Blue LED is lit when test mode is selected.
Blue LED flashes when setting the setpoint, indicating over-illumination.

Manual dimming using the pushbutton:
When the dim function has been activated, the lighting must be switched off so that it can be switched on, and thus function with daylight control (according to built-in light sensor).

DALI or DSI:
Switch between DALI and DSI control using DIP switch 2 (see **Fig. 5**).

Function App. Man

Manual, Factory settings.

Function description:
Ceiling lighting

Two zone DALI or DSI daylight control is switched on and off via a pushbutton.
The two zones are connected to their own DALI or DSI bus in zones 1 + 2.
The light can be switched on when light is needed according to the preset parameter.
As long as the presence detector registers activity, the lighting will be adjusted according to the preset parameters.
As daylight increases, lighting in the room starts to dim until the preset minimum light level is achieved.
If there is sufficient incident daylight, the lighting switches off.
The light switches off automatically after a preset period, when the presence detector does not register activity within the detection area.

Dimming of lighting
A long press of the pushbutton enables the lighting to be adjusted up/down.

Manual override using IR Remote.

Function App. Auto

You must use an IR Remote (accessory) to select App. Auto.

Function description:
Ceiling lighting

When a presence detector registers activity and light is required, the lighting comes on automatically in two zones, DALI or DSI daylight control.
The two zones are connected to their own DALI or DSI bus in zones 1 + 2.
As long as the presence detector registers activity, the lighting will be daylight-controlled according to the preset parameters.
As daylight increases, lighting in the room starts to dim until the preset minimum light level is achieved. If there is sufficient incident daylight, the lighting switches off.
The light switches off automatically after a preset period, when the presence detector does not register activity within the detection area.

Manual switching off of lighting
If a pushbutton is used, a short press will switch off the light.
After a blackout period of approx. 10 secs the PIR is ready again for auto switch on.

Dimming of lighting
A long press of the pushbutton enables the lighting to be adjusted up/down.

Manual override using IR Remote.

Remote control

Setting/Functions via the IR Remote (accessory):
The IR Remote provides options for manual on/off and dim, for selecting another application, carrying out a test and also other parameters.

On and Off:
The lighting in zones 1 and 2 is manually switched on and off at the same time regardless of light level.

Dim up and Dim down:
The lighting in zones 1 and 2 is manually adjusted at the same time.

Automatic:
Control functions according to the application selected.

Test:
Walk test, testing detection area by activating built-in presence detector; the light sensor does not work.
Automatically reverts to operating mode after 5 minutes.

Smartscape Automation Ph: 07 3357 1922 info@ssqld.com.au www.ssqld.com.au

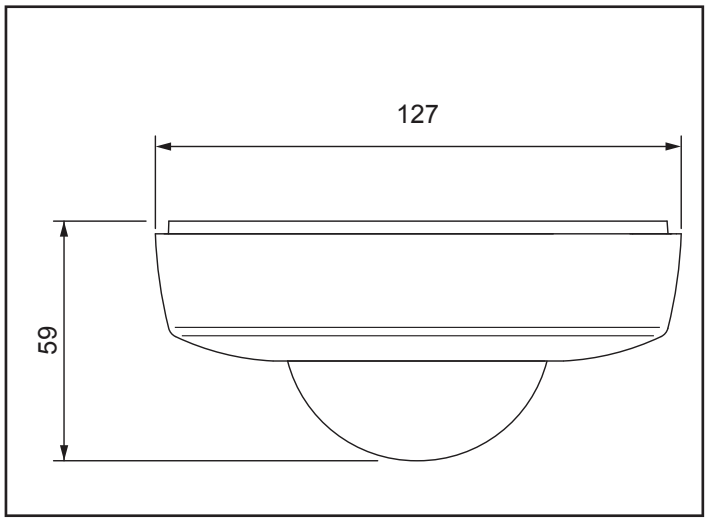
Parameters:
Select between **Man** and **Auto** applications.
Reset parameters to factory settings.
Setting desired light level in zone 1 via **Set 1** (50–1500 lux in steps of 50 lux).
Setting luminance conditions in zone 2 in relation to zone 1 via **Fact. 2** (10–200% in steps of 5%.)
Setting of off delay for zone 1 via **Time 1** (1–60 mins in steps of 1 min. and 10 mins)
Setting of fade time in the light fittings via **Fade** (0–15 steps in steps of 1.)
Switch off LED indication **LED On/Off**.

For further information about the IR Remote see the installation and user manual for IR Remote model 41-922.

If the 360° DALI/DSI presence detector is in “edit mode” (unlock), then the IR buttons **On** and **Off** do not work.

Operation & maintenance

Contact a qualified electrician in the event of a fault or breakdown.



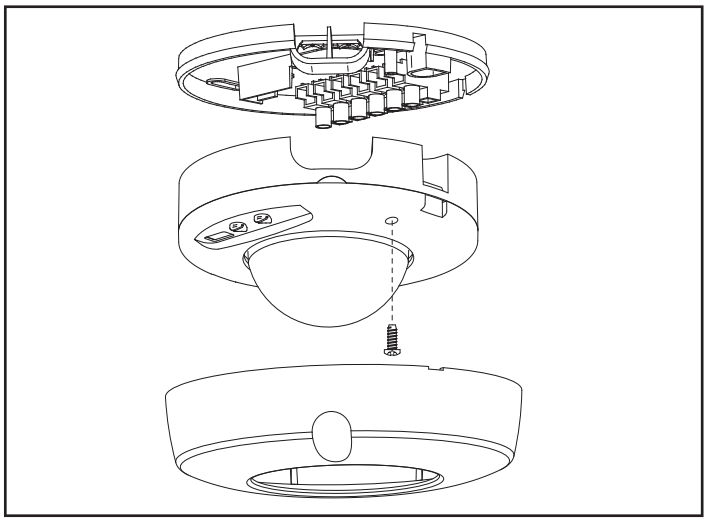


Fig. 1

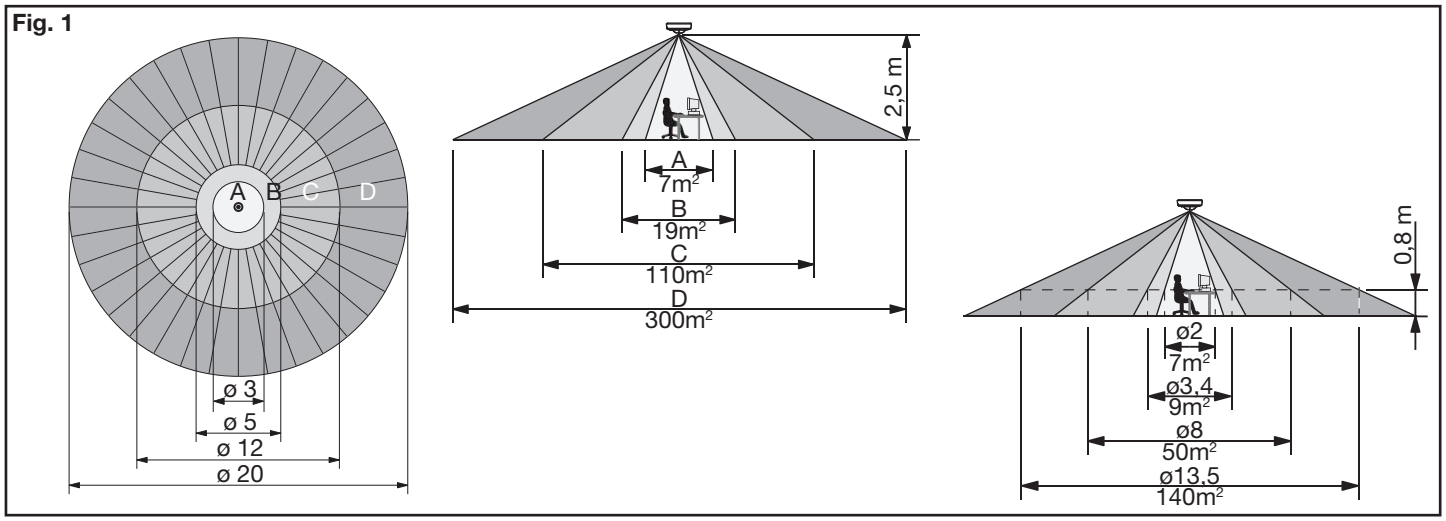


Fig. 2

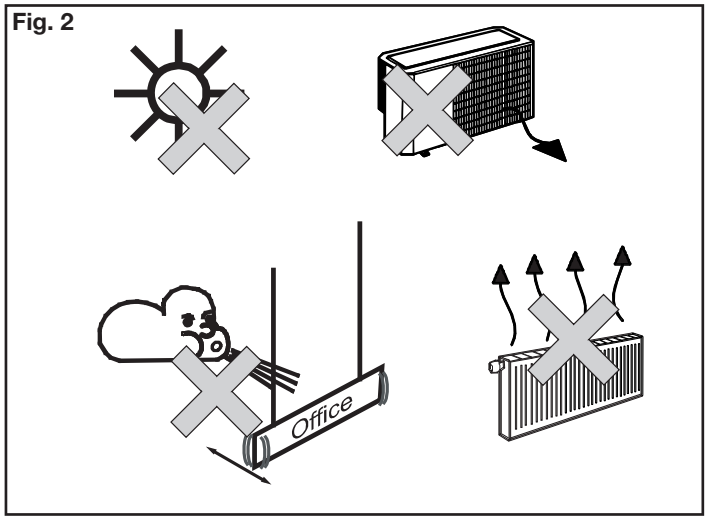
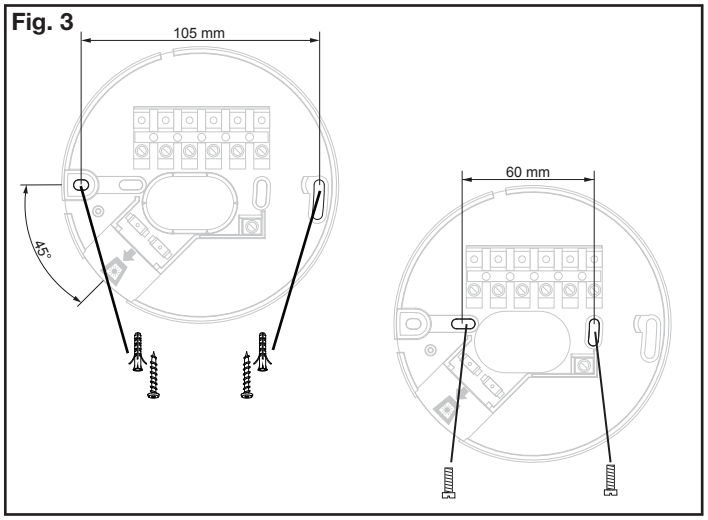


Fig. 3



SERVODAN niko

Fig. 4

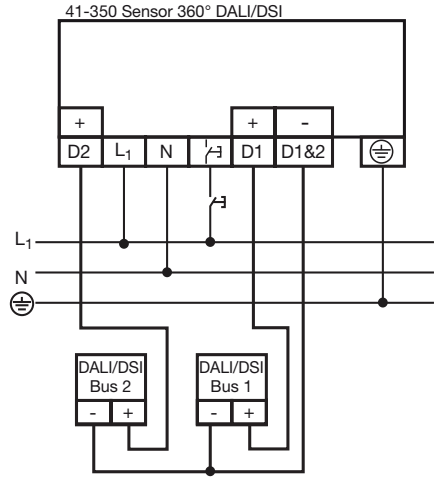


Fig. 5

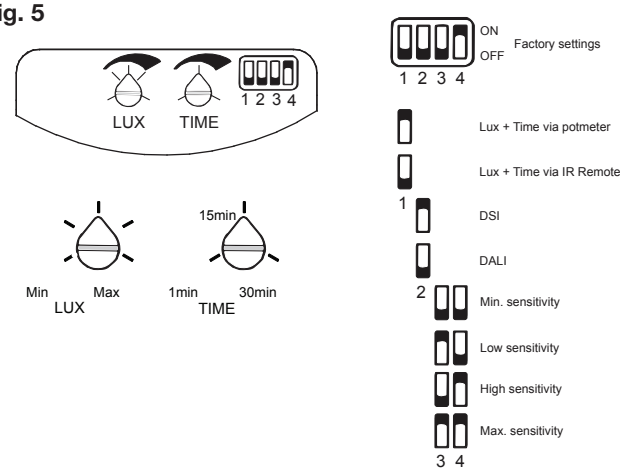
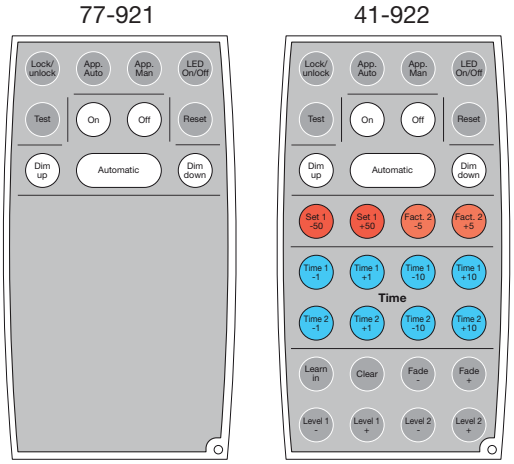
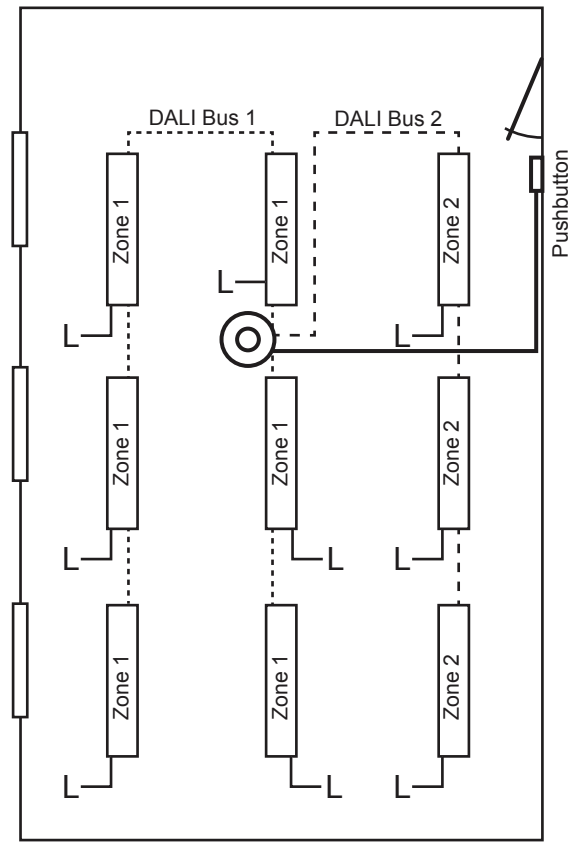


Fig. 6



Tilbehør
Accessory
Zubehör
Accessoire

Fig. 7



smartscape automation

Specialists in Lighting Control & Building Automation

For further information please contact us on:
Ph : 07 3357 1922
Fax : 07 3357 9189
Email : lightingcontrol@ssqld.com.au
Web : www.ssqld.com.au

Advarsel: Indbygning og montering af elektriske apparater må kun foretages af aut. elinstallatør. Ved fejl eller driftforstyrelser kontakt den aut. elinstallatør.
! Ret til ændringer forbeholdes !

Warning: Installation and assembly of electrical equipment must be carried out by qualified electricians. Contact a qualified electrician in the event of fault or breakdown. **!**
Reserving the right to make changes !

Achtung: Einbau und Montage elektrischer Geräte dürfen nur durch Elektrofachkräfte erfolgen. Wenden Sie sich bei Störungen bzw. Ausfall an einen Elektrofachkraft. **!**
Änderungen vorbehalten !

Avertissement: L'installation et le montage d'appareils électriques doivent exclusivement être exécutés par un électricien agréé. En cas de défaut ou de perturbation du fonctionnement, contacter un installateur électricien agréé. **! Sous réserve de modifications !**