

MODUL Q 36 IQ



DIRECTIONS FOR USE

The Nimbus Group is pleased that you have decided in favour of this high quality product. The Q 36 IQ offers a whole range of interesting operation modes. To ensure that you enjoy the full benefit of our luminaire's function and design for many years to come, installation and de-installation should only be performed by our authorised dealers or by a qualified electrician. Please keep these Directions for Use.

IQ TECHNOLOGIE

The Modul Q 36 IQ is the world's first ceiling-mounted LED luminaire with integrated presence detector and ambient light sensor function (PDLs) in ultra-slim design. It bridges the gap between a simple motion detector and an expensive, complicated to install light management system.

INDIVIDUAL LIGHTING

The Modul Q 36 IQ is the first luminaire to combine a high level of lighting comfort, versatile functionality and low energy consumption in just one super-slim model. The Modul Q 36 IQ provides individual lighting comfort which, up to now, has only been available with complicated lighting control. With IQ luminaires you can also create simple "master-slave" networks without additional control devices.

APPLICATIONS

The Modul Q 36 IQ can be used to good effect almost anywhere in a building: living areas, walk-in wardrobes, kitchenettes, storage rooms, corridors, stairwells, bathrooms and lavatories can all be fitted with this convenient luminaire – either as an original fitting or as a replacement for existing fittings. It is suitable for homes, schools, doctors' practices or offices. This intelligent and efficient luminaire gives you great energy-saving potential, especially in corridors, stairwells, etc, without compromising on safety.

7 MODES

The IQ's 7 different modes can be set individually according to the needs of the user without the need for complicated programming by simply adjusting the microswitches on the back of the luminaire. For example, the modes can be used to set various dimming conditions, time-delayed switch off or afterglow as well as various energy-saving functions.

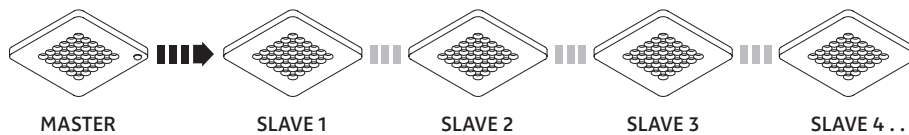
DESCRIPTION OF THE MASTER-SLAVE CONFIGURATION

The controlling luminaire (master) is programmed with the respective mode and sends mode commands to the recipient luminaire (slave), which then carries out this mode command. This means that any mode changes only need to be performed on the master luminaire. The master luminaire has two sensors, a motion sensor and an ambient light sensor. The information which is measured and analyzed in the master luminaire is passed on to the slave luminaire(s) via a separate control wire.

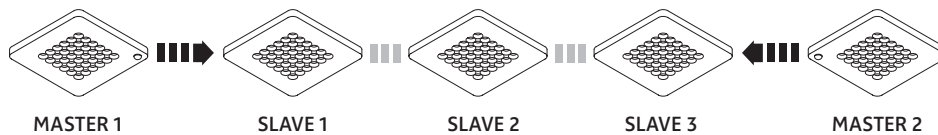
Almost any number of master luminaires can be arranged in combination with slave luminaire(s). The mode is selected on just one master luminaire, the so-called main master. The other master luminaires act as slave luminaires with extended functionality (presence detection).

VARIOUS TYPES OF ACTIVATION

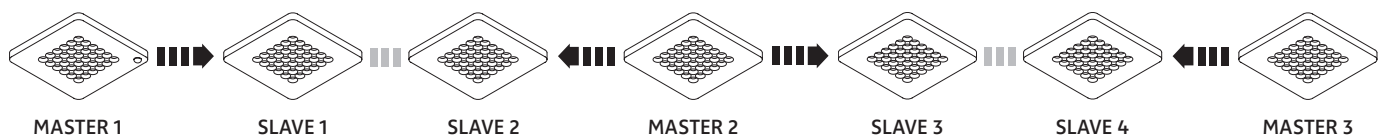
One master luminaire with a number of slaves



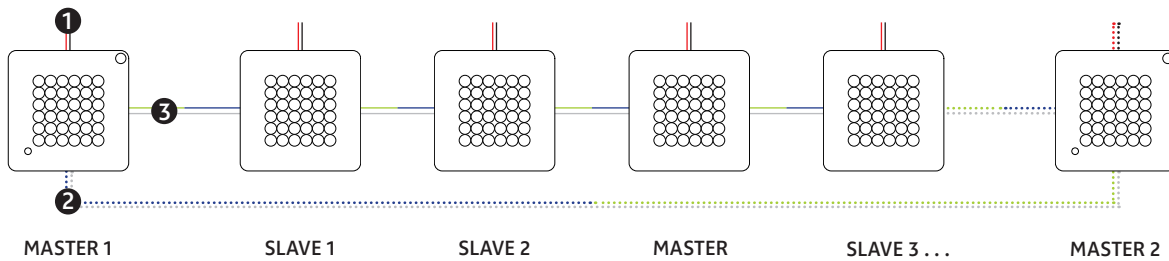
Two master luminaires with a number of slaves



A number of master luminaires with a number of slaves



CONNECTIONS

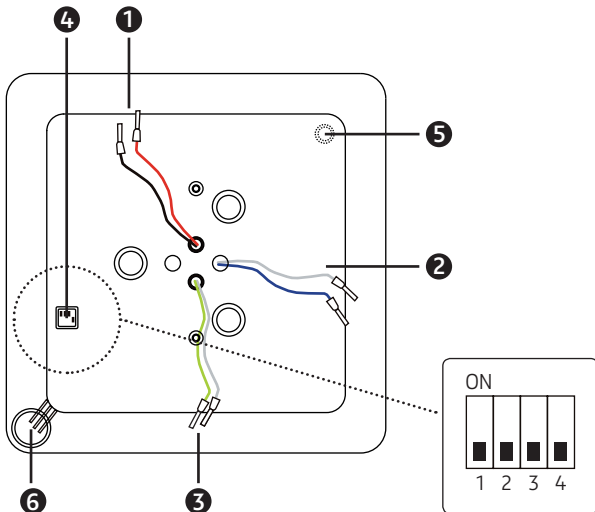


- 1 +/- 24 V DC power cable
- 2 Token ring connection
- 3 Signal/information wire

- 1. PLEASE NOTE: When connecting luminaires to one another, please make sure the communication wires are connected green (OUT) to blue (IN) and white (OUT) to white (IN).
- 2. PLEASE NOTE: Set first DIP switch, all other masters to position 4 x OFF.
- 3. PLEASE NOTE: Do not close „token ring“ until a number of masters are connected with one another.

MASTER LUMINAIRE

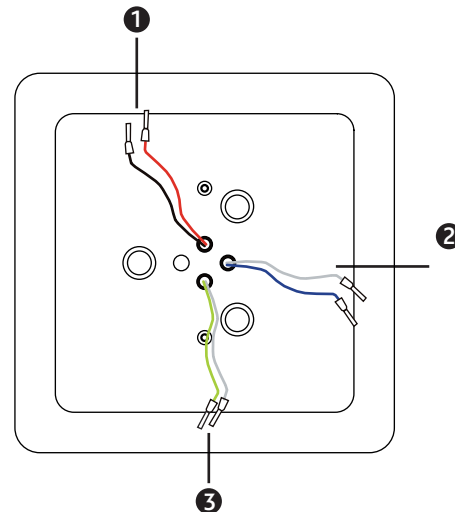
Rear view



- 1 24 V DC power cable to the converter or to the 24 V supply (red/black)
- 2 IN: Cable for token ring connection (white/blue)
- 3 OUT: Signal/information cable for slave(s) Make sure of correct polarity! (white/green)
- 4 Mode DIP switch (factory setting)
- 5 Ambient light sensor
- 6 Presence sensor: Detects human heat radiation by means of infrared technology

SLAVE LUMINAIRE

Rear view



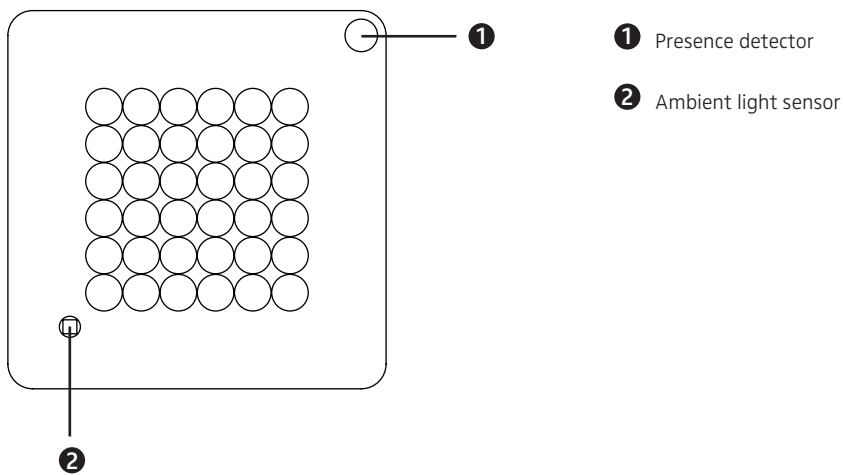
- 1 24 V DC (red/back)
- 2 IN: Signal/information cable Make sure of correct polarity! (white/green)
- 3 OUT: Signal/information cable for slave(s) Make sure of correct polarity! (white/green)

MOTION DETECTION

A presence detector and ambient light sensor have been integrated in the Modul Q 36 IQ master luminaire. Installed at a height of 2.5 metres, the detection zone of the presence system is 5.00 metres in diameter; within this range it reacts to motion. If a person enters the detection zone, the master luminaire is activated and passes the control signal to the connected slave luminaires. In modes 1, 2 or 3, Modul Q 36 IQ luminaires can be set to continue shining for varying period of time (**S**, **M** or **L**) after the person has left the detection zone. Modes 4–7 provide additional special programmes. For more information see the mode settings beginning on page 6.

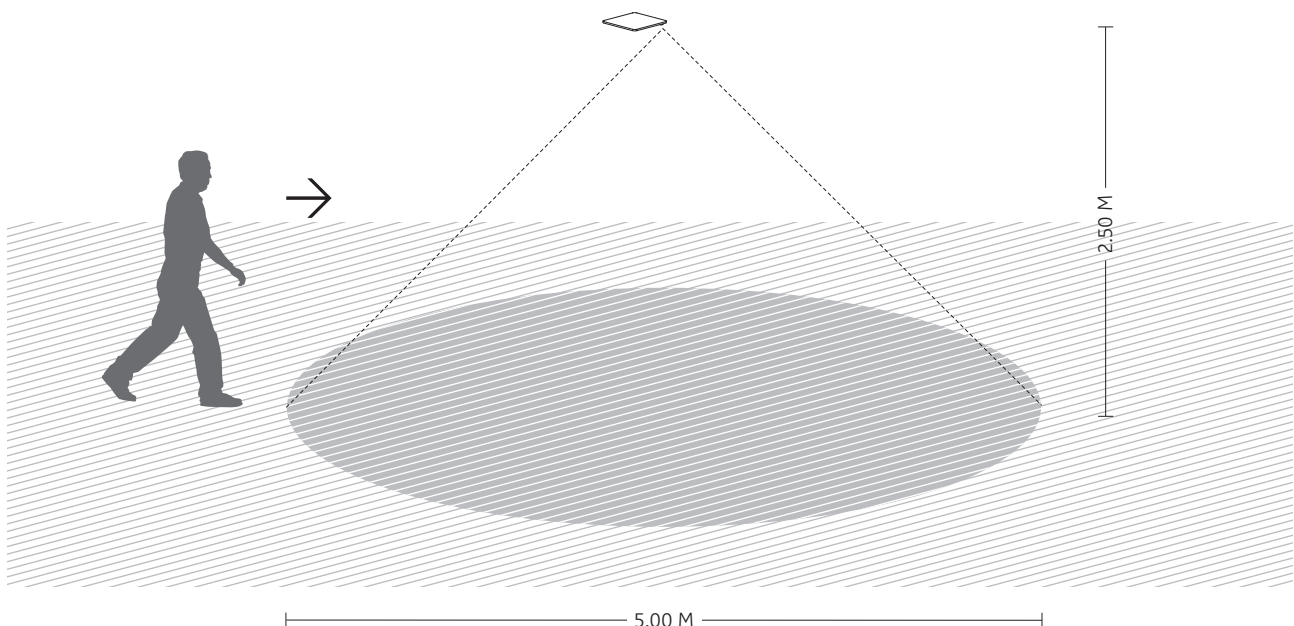
MASTER LUMINAIRE

Front view



DETECTION ZONE

Person approaches detection zone of master luminaire



CONVERTER

The Modul Q 36 IQ luminaire (master and slave) consumes 0.35 W to maintain its IQ functions when on standby. To make sure that the IQ microcontroller, the sensor system and the motion detector function properly, please make sure when choosing a converter that it supplies the required 24 V DC at all times.

The most suitable converters are those with no minimum load requirement. We particularly recommend the following converters tested and sold by Nimbus:

Power output up to	Dimensions: l × b × h	Application	Item no.
24 V Nimbus converter, switchable			
10 W	∅ 58 × 19 mm*	for operating one Modul Q 36 IQ luminaire	006-624
12 W	∅ 55 × 24 mm*	for operating one Modul Q 36 IQ luminaire	003-902
25 W	167 × 42 × 31 mm	for operating a maximum of two Modul Q 36 IQ luminaires	006-809
35 W	185 × 43 × 30 mm	for operating one Modul Q 36 IQ luminaire	007-507
60 W	254 × 45 × 35 mm	for operating a maximum of six Modul Q 36 IQ luminaires	007-145
75 W	220 × 47 × 44 mm	for operating a maximum of eight Modul Q 36 IQ luminaires	005-563
100 W	270 × 63 × 40,5 mm	for operating a maximum of eleven Modul Q 36 IQ luminaires	007-356
130 W	245 × 61 × 49 mm	for operating a maximum of fourteen Modul Q 36 IQ luminaires	006-365
150 W	270 × 63 × 40,5 mm	for operating a maximum of sixteen Modul Q 36 IQ luminaires	007-357
	*for use in in-wall junction box		

MODUL Q 36 IQ

MODE SETTINGS

MODES 1–7

DESCRIPTION

MODE **1****COMFORT MODE**

The IQ master luminaire and the connected IQ slave luminaires switch themselves on by means of the integrated motion detection. When the person leaves the detection zone, the luminaire remains switched on for the time selected in the programme. There is a choice of three pre-set times.

MODE **2****CARE MODE**

The IQ master luminaire and the connected IQ slave luminaires are dimmed to a basic lighting level of 16 %. When motion is detected, both brighten up to 100 %. When the person leaves the detection zone, the luminaire does not switch itself off straight away but continues to shine before it dims down to 16 %. The afterglow period can be selected from three possible settings.

MODE **3****GOODBYE MODE**

The IQ master luminaire and the connected IQ slave luminaires switch themselves on when motion is detected. The luminaires dim down in stages over a period of time set by the user before they switch themselves off. This period can be selected from three possible settings.

MODE **4****COMFORT EFFICIENCY MODE**

The IQ master luminaire and the connected IQ slave luminaires switch themselves on when motion is detected. The maximum brightness of the luminaires is limited to 50 % or 66 %. In this mode, the luminaires only consume half or 1/3 of the usual energy. When the person leaves the detection zone, the luminaire slowly switches itself off after 20 seconds (soft dim).

MODE **5****NIGHTLIGHT OR ACCOMMODATION MODE**

The IQ master luminaire and the connected IQ slave luminaires switch themselves on by means of the integrated motion detector. The IQ master luminaire controls the luminaire's brightness by means of the integrated ambient light sensor. In bright conditions during the day, brightness is set at 100 %. After two minutes without movement, the luminaire switches itself off. In dark conditions during the evening/night, the brightness is set at 33 %. After 20 seconds without movement the luminaire switches itself off automatically. Any connected IQ slave luminaires are controlled in the same way.

MODE **6****EFFICIENCY MODE/PDLS**

The motion and ambient light sensors of the IQ master luminaire are activated in this mode. The IQ master luminaire and the connected IQ slave luminaires switch themselves on by means of the integrated motion detector and the brightness is automatically controlled according to the level of ambient brightness. When the person leaves the detection zone, the luminaire slowly switches itself off after 15 minutes. In Efficiency Mode, the PDLS control system ensures ideal lighting while maximizing energy saving.

MODE **7****EASY LIGHT MODE**

The presence and ambient light sensor is deactivated, the luminaire can only be switched on and off using the light switch. The luminaire's maximum brightness can be set to 100 % or 66 %.

MODUL Q 36 IQ

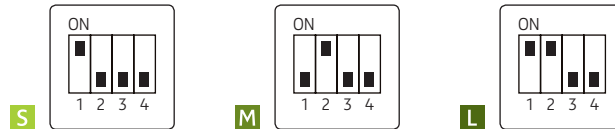
MODE SETTINGS

MODES 1-7

DIP SWITCH POSITION (MASTER LUMINAIRE)

AFTERGLOW PERIOD

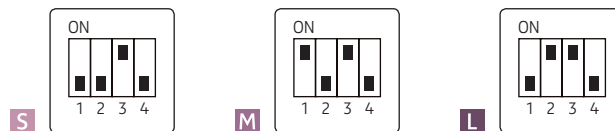
MODE **1**



- S** 10 SECS
- M** 3 MINS
- L** 15 MINS

COMFORT MODE

MODE **2**



- S** 10 SECS
- M** 3 MINS
- L** 15 MINS

CARE MODE

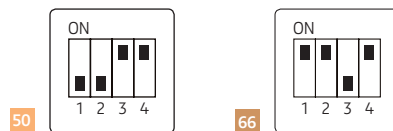
MODE **3**



- S** 10 SECS/3 MINS
- M** 3 MINS/5 MINS
- L** 5 MINS/15 MINS

GOODBYE MODE

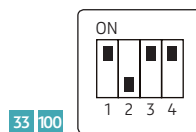
MODE **4**



- 50** 50 %/20 SECS
- 66** 6 %/20 SECS

COMFORT EFFICIENCY MODE

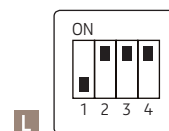
MODE **5**



- 33** 33 %/20 SECS
- 100** 100 %/2 MINS

NIGHTLIGHT OR ACCOMMODATION MODE

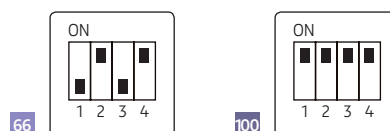
MODE **6**



- L** 15 MINS

EFFICIENCY MODE /PDLs

MODE **7**



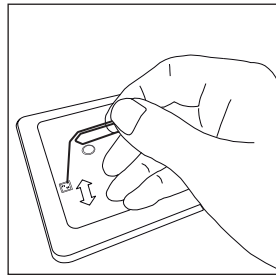
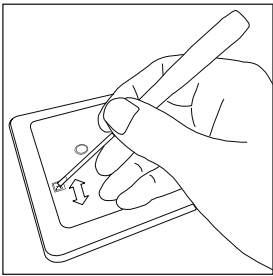
- 66** 66 %
- 100** 100 %

EASY LIGHT MODE

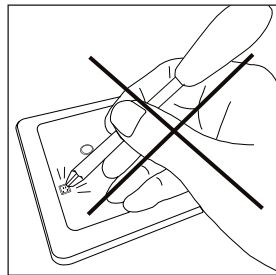
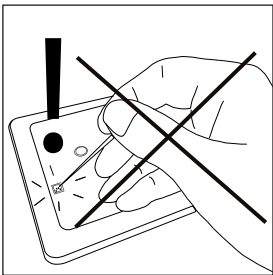
NOTES ON CHANGING THE MODE SETTING

The Modul 36 IQ's 7 different modes can be set by simply adjusting the microswitches on the back of the luminaire. Please use a fine-edged tool such as a voltage tester screwdriver for performing adjustments. If you do not have a suitable tool handy, a bent paperclip will also do the job. There is a square opening on the back of the housing. This contains a small module with 4 sliding switches. Please note that the word „ON“ must be at the top. When you change the position of the sliding switches, the programming of the luminaire changes. Please see the summary sheet for the positions of the sliding switches and the associated modes. To effect a mode change, the luminaire(s) must be switched off and switched back on again. PLEASE NOTE: Please exercise great care when adjusting the switches. It is especially important to avoid exerting too much pressure and using tools which are either too sharp or too blunt.

IMPORTANT: Please note that improper handling may damage the luminaire!

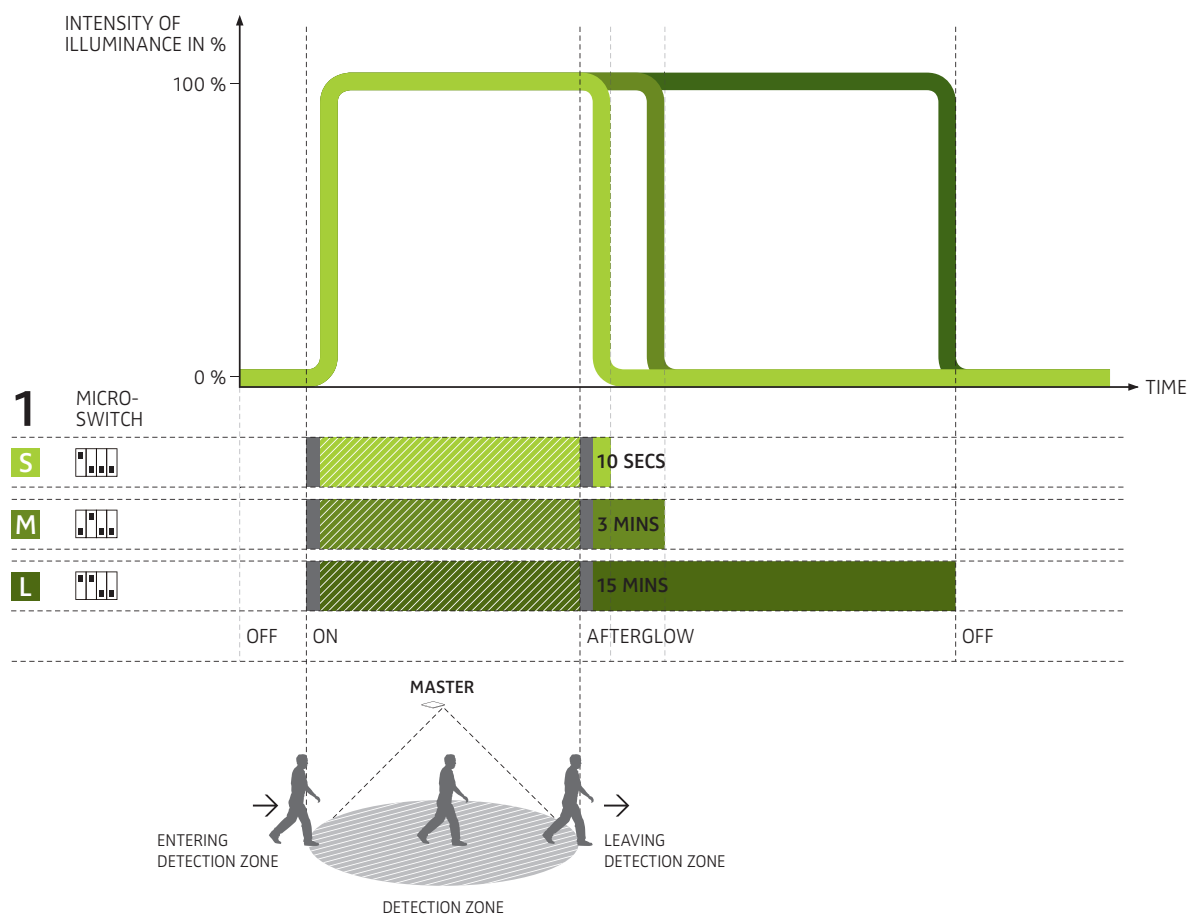


RIGHT

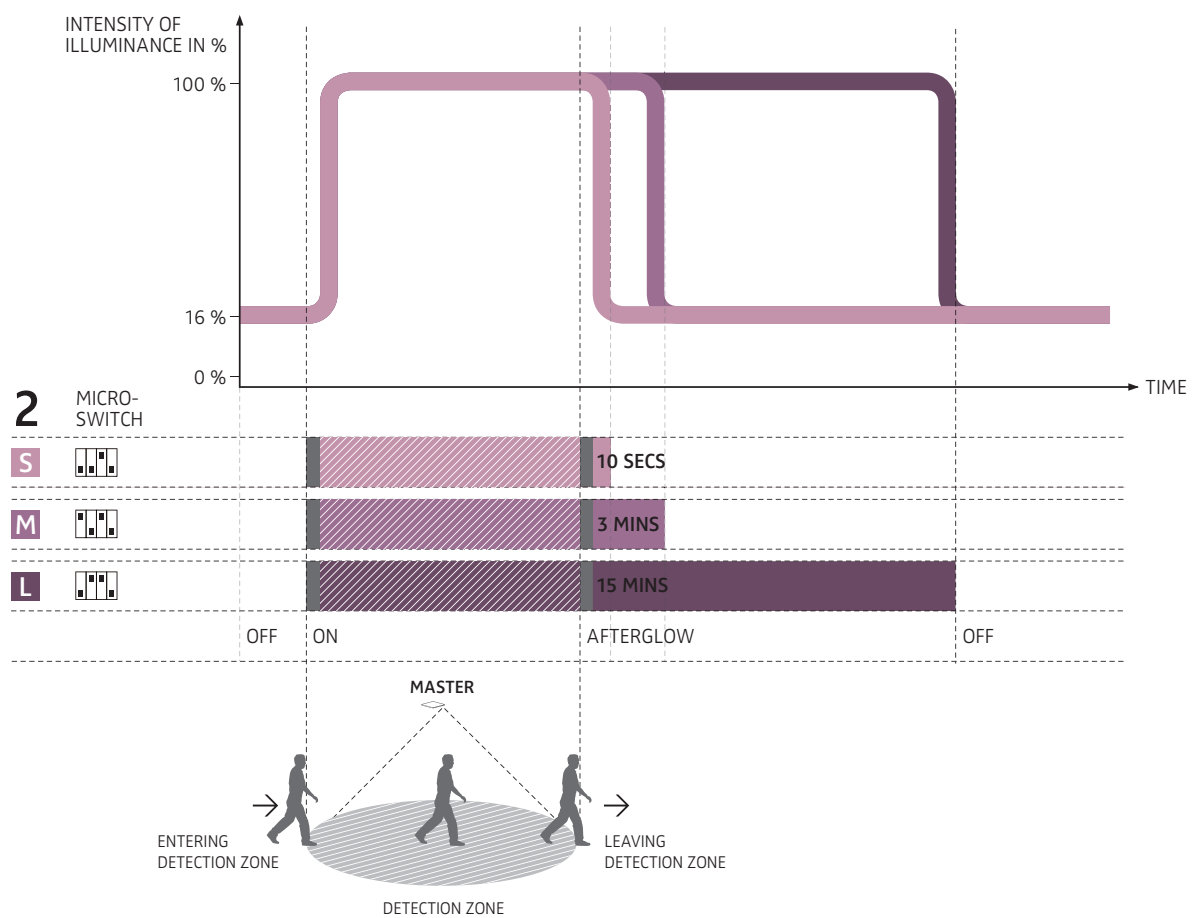


WRONG

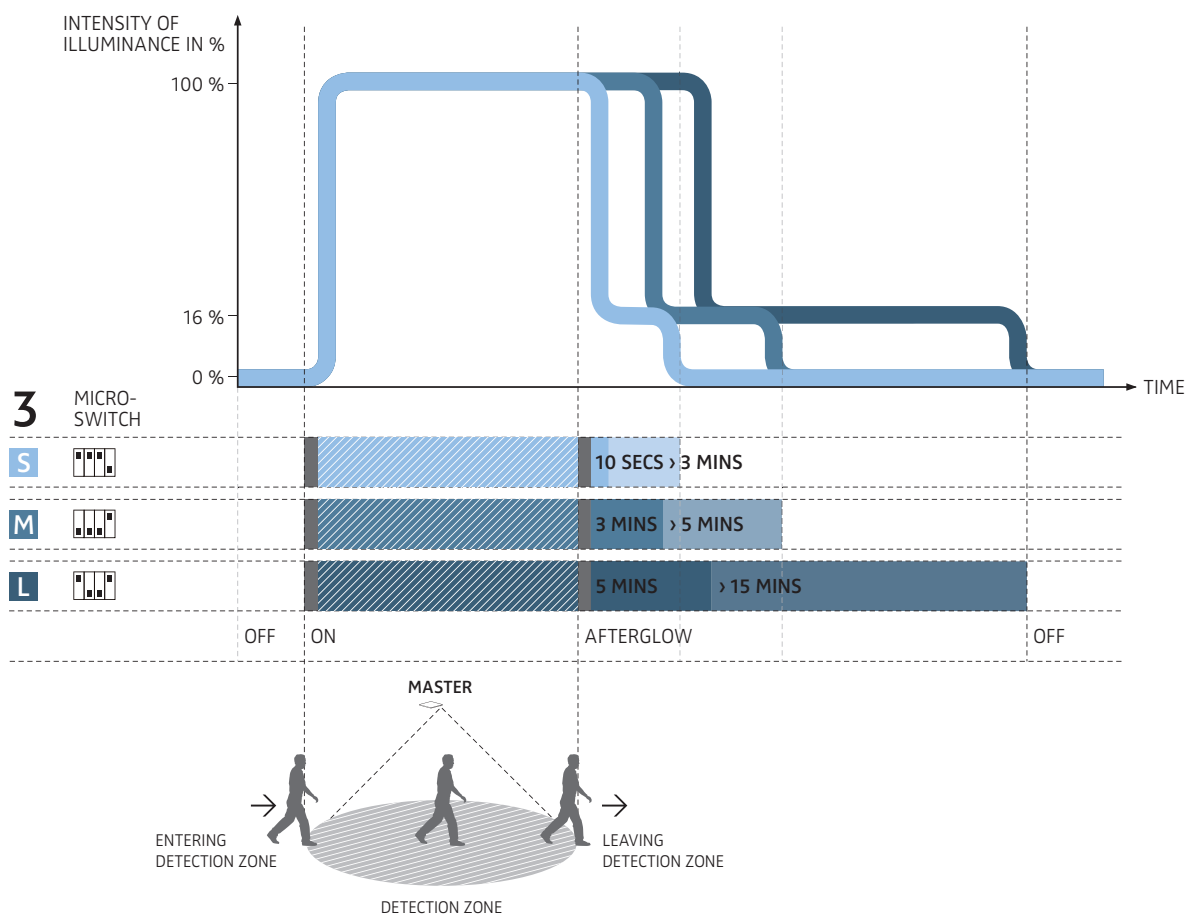
MODE 1



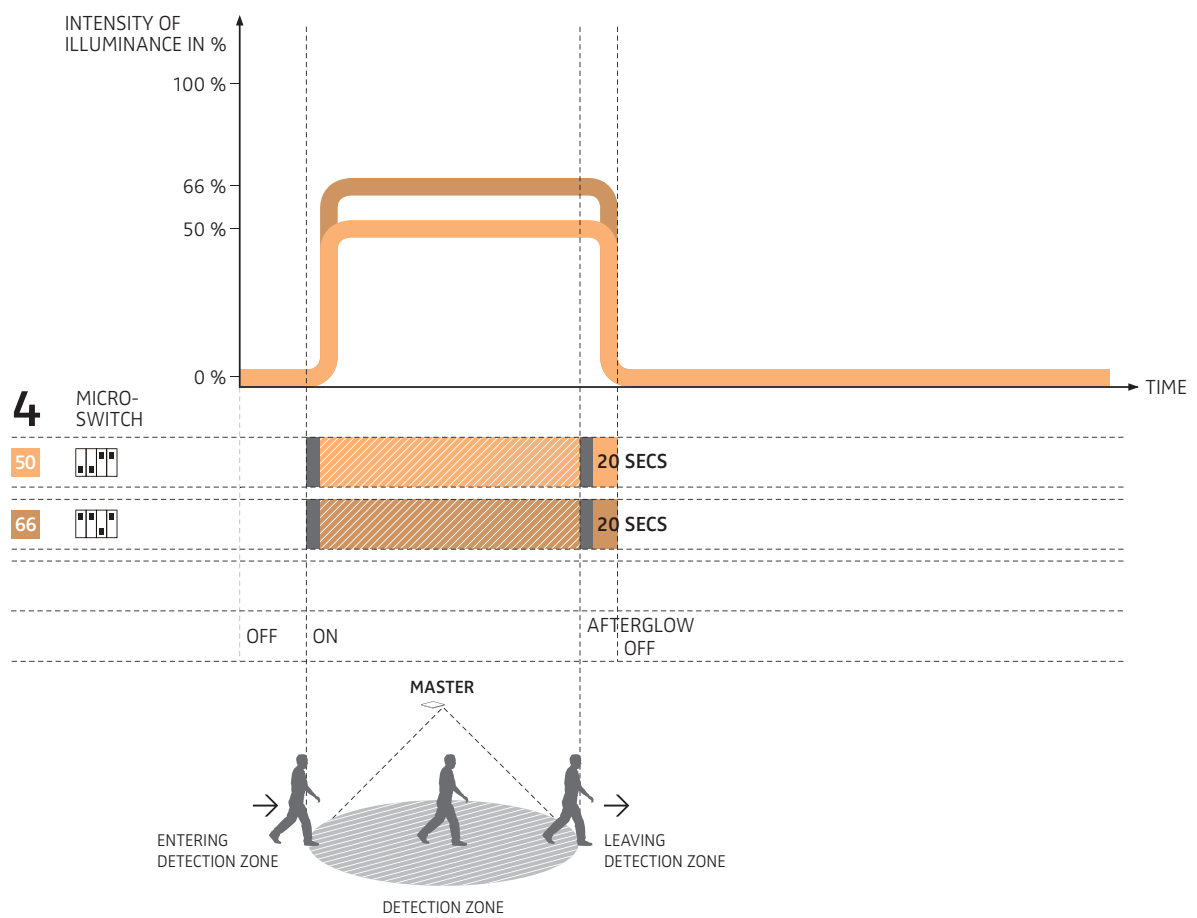
MODE 2



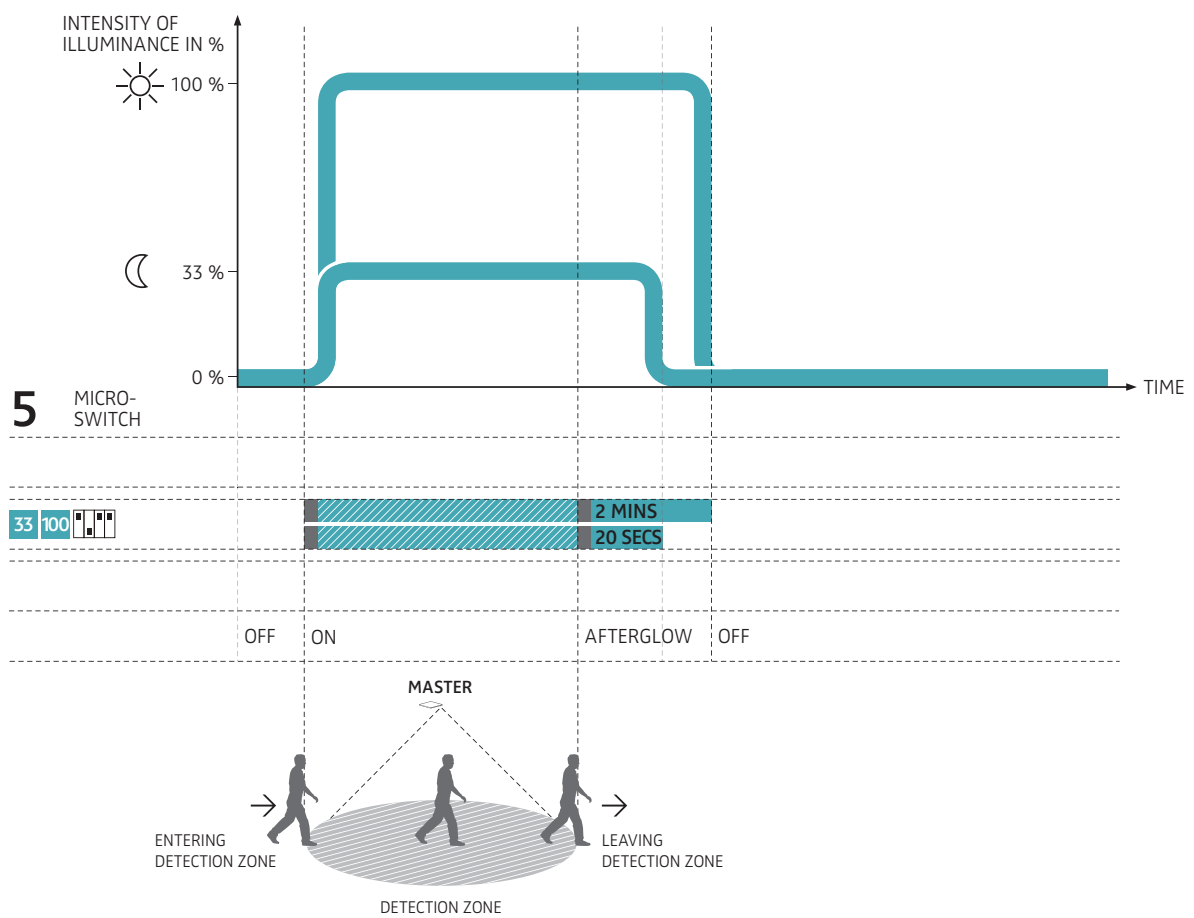
MODE 3



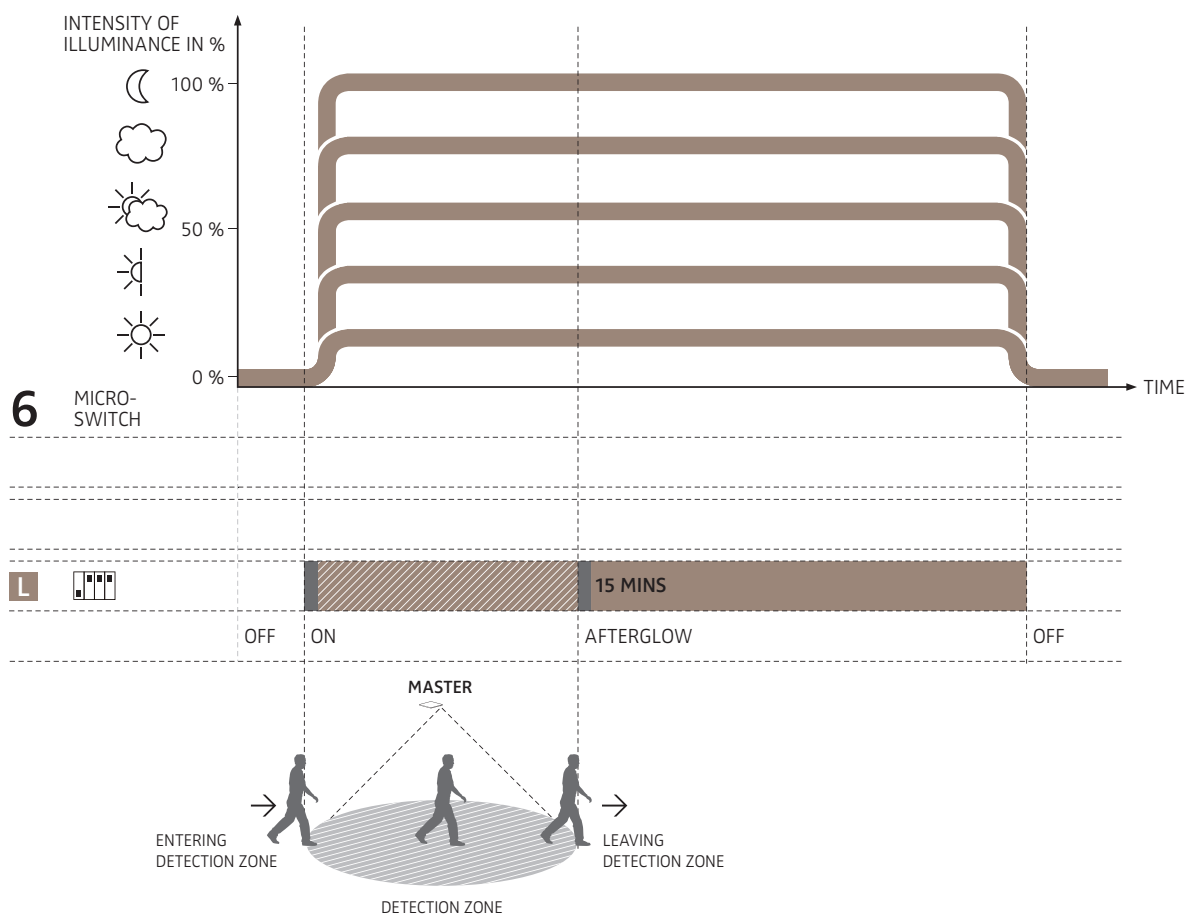
MODE 4



MODE 5



MODE 6



MODE 7

