



Waldmann 

ENGINEER OF LIGHT.

ENG **Operating Manual**

Light Control **PULSE HFMD**
Vers. IV

Dear customer,

these instructions apply in addition to the Lights Operating Manual. Observe in particular the safety instructions stated in the operating manual!

The operating manual informs of additional setting options on lights with **PULSE HFMD control**. The here described functions go beyond the general operation possibilities on the light and are usually rarely required.

Please observe that the instructions may also describe functions, which are not available on each light.

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Operating panels

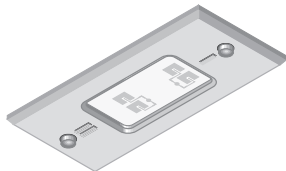
**Column operating panel
“MFT”**

Fig. 1

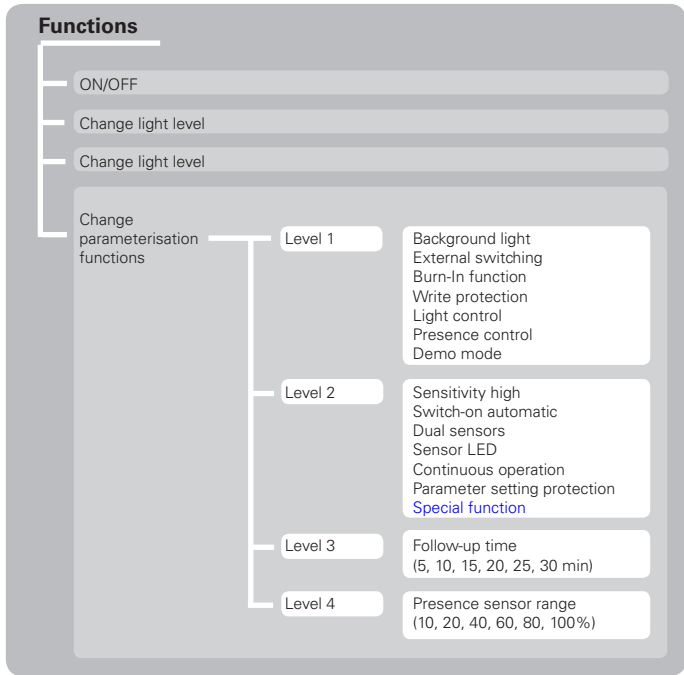


**Sensor operating unit
“PULSE HFMD”**

Fig. 2



Menu structure “PULSE HFMD - Vers. IV with MFT”



Note: The functions written in blue are not available.

General

Validity of these instructions

These instructions apply to the following lights:

- Lights equipped with Pulse HFMD from firmware vers. VFP 04.5 I

Safety instructions

Make sure to read the instructions for use before putting the light into operation!

Please make sure to observe the safety instructions of the light operation instructions!

Abbreviations and symbols:



Caution,
Take note of the accompanying documents!



Important information

HFMD High frequency movement
Sensor

MFT Multifunctional switch

LED Light Emitting Diode



LED lit permanently



LED flashing



LED light bar lit permanently



LED light bar flashing



Logo off



Logo flashing



Logo lit permanently

The manufacturer cannot be held liable for damage caused by using the unit for purposes contrary to the designated use or by ignoring safety instructions and warnings.

Operation

Fig.3 (Column operating panel)

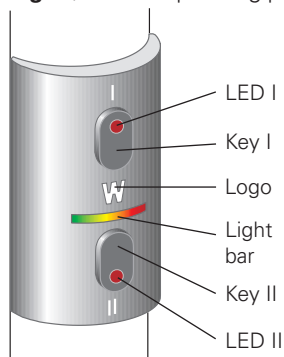
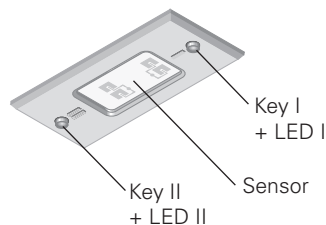


Fig. 4 (Sensor operating panel)



Operating and display elements

All operating and setting functions can be carried out from the column operating panel (Fig. 3) as well as from the sensor operating panel (Fig.4).

The functions and settings for the column operating panel are displayed via the light bar, the logo background light and the LEDs [I and II].

The functions and settings of the sensor operating panel are displayed via both LEDs.

Note: If a column operating panel is available, the LED display in the sensor is automatically suppressed.

In-factory setting

The lights are set in-factory so that initially they can be operated without changing the settings. To adapt the light to your individual needs, the parameterisation functions (see page 8-23) can be changed accordingly.

Restoring the in-factory setting

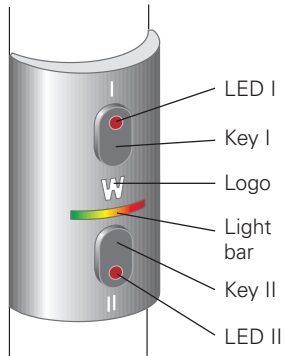
To restore the default settings, press one of the two keys [I or II] while the power supply is switched on.

The following functions are restored:

- Parameterisation functions are set to standard setting.
- All control parameters are set to standard setting.
- All control and follow-up times are set to standard setting.
- The burn-in time is deleted (function „OFF“).

Operation general

Fig. 3



Operating elements

Via the two keys [I and II] different functions can be activated, depending on which key is pressed:

- Switch-on and switch-off
- Change the light level
- Change the light level
- Change basic settings

Display

The selected light level is displayed via LED [I or II] in the pushbutton [I or II]:

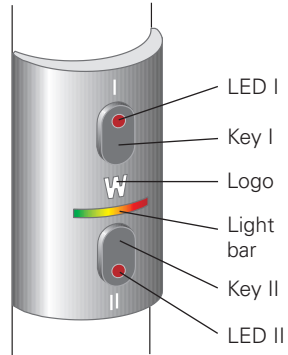
- LED I lit Level I
- LED II lit Level II

The light bar shows the set intensity.

When changing the settings, the background lit logo flashes.

Operation Main functions

Fig. 3



Switching on

Press the switch I - the light changes to light level I.

Press the switch II - the light changes to light level II.

Switching off

Briefly press the key on which the LED is lit - this will switch off the light.

Change light level

Briefly press the key on which the LED is not lit - this will switch the light to the other light level.

To change the light level

Press the switch (level I) or the switch (level II) and keep it pressed. The appertaining LED [I or II] and the logo start flashing after approx. 2 seconds. The light changes its intensity.

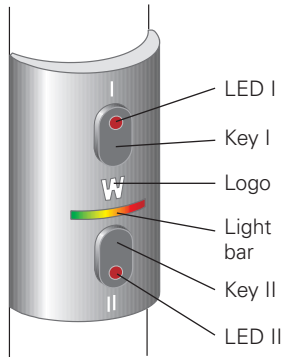
To change the dimming direction, briefly (< 1 sec) release the key and press it again.

Upon reaching the upper or lower limit, the LED and the logo flash more slowly and the intensity changes direction.

The presently reached dimming level is stored when you release the switch.

Changing basic settings - Part 1

Fig. 3



Change to parameterisation mode

Keep both switches [I and II] pressed simultaneously for 10 seconds.

- The operating panel changes to the parameterisation mode (first to setting level 1).

- The background lit logo flashes (once per second). The LEDs valid for the level are lit on the light bar:

LED 1	Level 1
LED 1+2	Level 2
LED 1+2+3	Level 3
LED 1+2+3+4	Level 4

Change setting level

If both keys [I and II] are pressed repeatedly within 5 seconds, the next level is called.

- Level 2 is reached when the logo stops flashing. LEDs 1+2 are lit on the light bar.

- Level 3 is reached when the logo starts flashing again. LEDs 1+2+3 are lit on the light bar.

- Level 4 is reached when the logo stops flashing again. LEDs 1+2+3+4 are lit on the light bar.

Change function

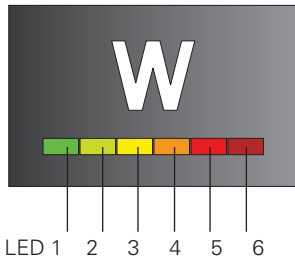
When the desired setting level is reached, the setting of the first function (x.1) is displayed on the light bar (LED 1 is lit or LED flashing dark green).

By pressing key II, it is now possible to switch between functions.

- The LED valid for the level is lit or flashes on the light bar:

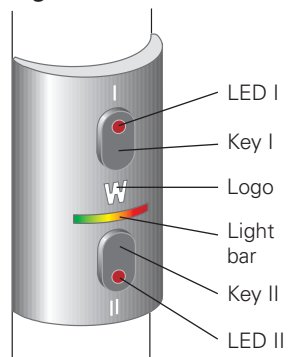
LED 1	Function x.1
LED 2	Function x.2
LED 3	Function x.3
LED 4	Function x.4
LED 5	Function x.5
LED 6	Function x.6
LED 5+6	Function x.7

Fig. 6



Changing basic settings - Part 2

Fig. 3



Change setting

The LED on the light bar indicates whether a function is active (ON) or inactive (OFF) by permanent lighting or flashing, e.g.:

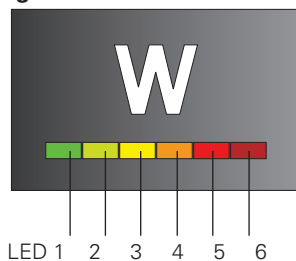
- LED permanently lit: function is active (ON)
- LED flashing: function is inactive (OFF)

The function can be activated or deactivated by using the key I.

Leave parameterisation mode

The parameterisation mode is left if no switch has been pressed for 10 seconds. The settings are stored.

Fig. 6



List of functions

Fig. 3

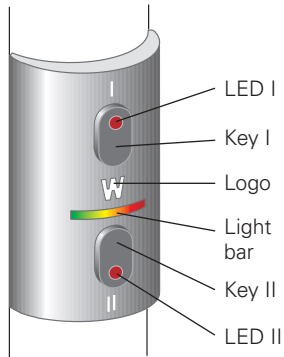
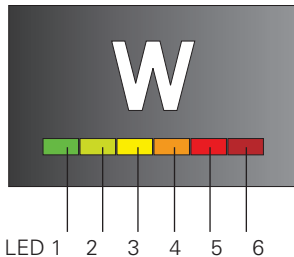


Fig. 6



The following functions can be selected:

The bold-printed values are the in-factory defaults

Level	Function	Light bar (fig. 6)	Designation
1	Function 1.1:	LED 1 (dark green):	Background light ON/OFF
1	Function 1.2:	LED 2 (light green):	External activation ON/OFF
1	Function 1.3:	LED 3 (yellow):	Burn-In function ON/OFF
1	Function 1.4:	LED 4 (orange):	Write protection ON/OFF
1	Function 1.5:	LED 5 (light red):	Light control ON/OFF
1	Function 1.6:	LED 6 (dark red):	Presence control ON/OFF
1	Function 1.7:	LED 6+5	Demo mode ON/OFF
2	Function 2.1:	LED 1 (dark green):	Sensitivity high ON/OFF
2	Function 2.2:	LED 2 (light green):	Switch-on automatic ON/OFF
2	Function 2.3:	LED 3 (yellow):	Dual sensors ON/OFF
2	Function 2.4:	LED 4 (orange):	Sensor LED ON/OFF
2	Function 2.5:	LED 5 (light red):	Continuous operation ON/OFF
2	Function 2.6:	LED 6 (dark red):	Parameter setting protection ON/OFF
2	Function 2.7:	LED 6+5	Special function ON/OFF
3	Function 3.1 - 3.6:	LED 1-6	Follow-up time 5, 10 , 15, 20, 25, 30 min
4	Function 4.1 - 4.6:	LED 1-6	Range 10, 20, 40, 60, 80 , 100 %

Note: The functions written in blue are not available. Please observe the explanations of the functions on the following pages.

Change basic settings - Change setting level

Fig. 3

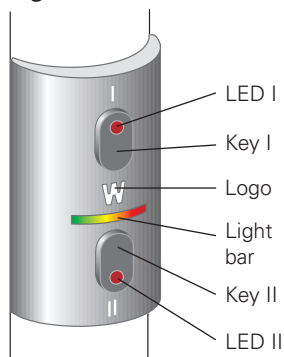
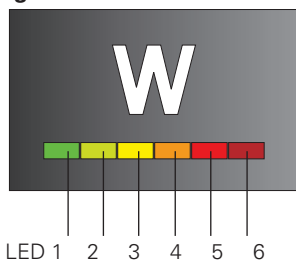







Fig. 6



	Actuation	Display
Activate setting level 1		
	Press both keys for at least 10 seconds	Logo flashes white Lightbar LED 1
Activate setting level 2		
	Press both keys again for 5 seconds *	Logo is off Lightbar LED 1+2
Activate setting level 3		
	Press both keys again for 5 seconds *	Logo flashes white Lightbar LED 1+2+3
Activate setting level 4		
	Press both keys again for 5 seconds *	Logo is off Lightbar LED 1+2+3+4
Leave parameterisation mode		
	Do not actuate any key for at least 10 seconds	Logo lit permanently

* Within 10 seconds, a change from one level to the next one is possible.

Change basic settings - Setting level 1

Fig. 3

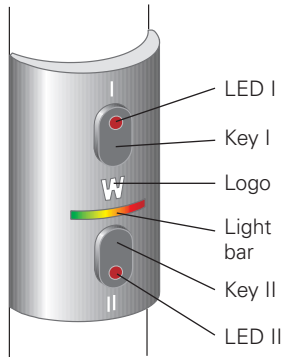
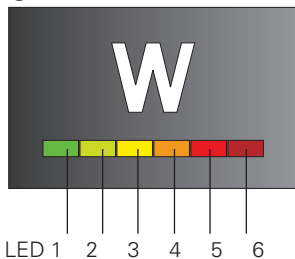






Fig. 6



	Actuation	Display
Activate setting level 1	 	Press both keys for at least 10 seconds Logo flashes white Light bar LED 1
Function 1	Background light ON/OFF 	Release both keys Logo flashes white Bar display dark green (LED 1)
Change function	from ON to OFF or vice versa 	Press key I LED changes from constant to flashing or vice versa: - constant = Function ON - flashing = Function OFF
<p>Note: To change the following functions from ON to OFF or vice versa, the following key actuations and displays, as described here, apply.</p>		
<p>Note: The functions written in blue are not available.</p>		

Change basic settings - Setting level 1 (continued)

Fig. 3

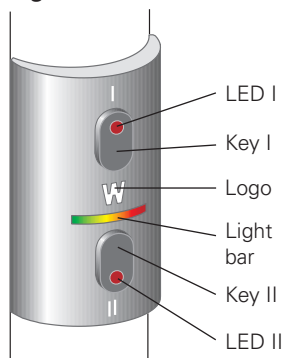
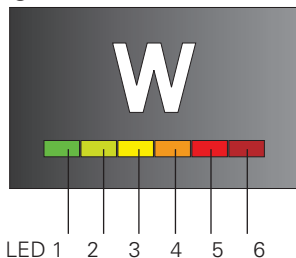


Fig. 6



	Actuation	Display
Activate function 1.2	External switching ON/OFF	
	Press key II once	Logo flashes white Bar display light green (LED 2)
Activate function 1.3	Burn-In function ON/OFF	
	Press key II twice	Logo flashes white Bar display yellow (LED 3)
Activate function 1.4	Write protection ON/OFF	
	Press key II 3 times	Logo flashes white Bar display orange (LED 4)
Activate function 1.5	Light control ON/OFF	
	Press key II 4 times	Logo flashes white Bar display lightred (LED 5)
Activate function 1.6	Presence control ON/OFF	
	Press key II 5 times	Logo flashes white Bar display dark red (LED 6)
Activate function 1.7	Demo mode ON/OFF	
	Press key II 6 times	Logo flashes white Bar display LED 6+5

Change basic settings - Setting level 2

Fig. 3

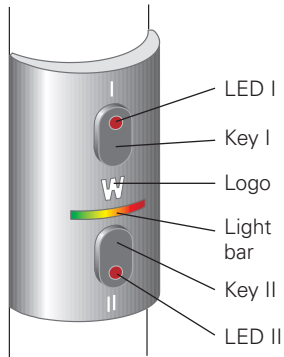
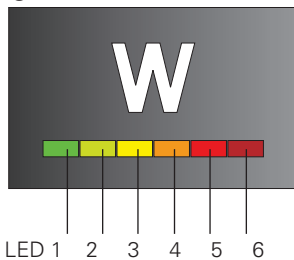








Fig. 6



	Actuation	Display
Activate setting level 2	 	Press both keys once for 10 seconds and once for 5 seconds Logo is off Lightbar LED 1+2
Function 2.1	Sensitivity high ON/OFF 	Release both keys Logo is off Bar display dark green (LED 1)
Change function	from ON to OFF or vice versa   	Press key I LED changes from constant to flashing or vice versa: - constant = Function ON - flashing = Function OFF
<p>Note: To change the following functions from ON to OFF or vice versa, the following key actuations and displays, as described here, apply.</p>		
<p>Note: The functions written in blue are not available.</p>		

Change basic settings - Setting level 2 (continued)

Fig. 3

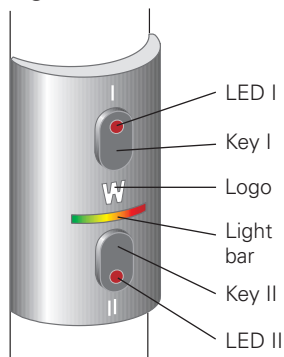
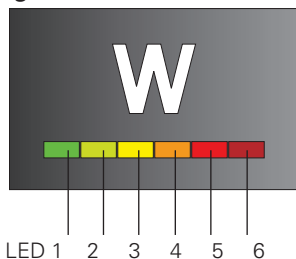


Fig. 6



	Actuation	Display
Activate function 2.2	Switch-on automatic ON/OFF	
	Press key II once	Logo is off Bar display light green (LED 2)
Activate function 2.3	Dual sensors ON/OFF	
	Press key II twice	Logo is off Bar display yellow (LED 3)
Activate function 2.4	Sensor LED ON/OFF	
	Press key II 3 times	Logo is off Bar display orange (LED 4)
Activate function 2.5	Continuous operation ON/OFF	
	Press key II 4 times	Logo is off Bar display lightred (LED 5)
Activate function 2.6	Parameter setting protection ON/OFF	
	Press key II 5 times	Logo is off Bar display dark red (LED 6)
Activate function 2.7	Special function ON/OFF	
	Press key II 6 times	Logo is off Bar display LED 6+5

Change basic settings - Setting level 3

Fig. 3

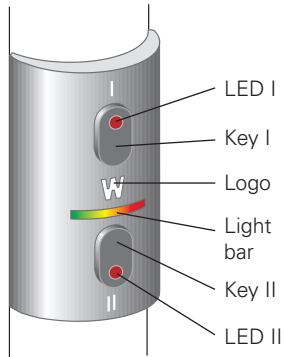
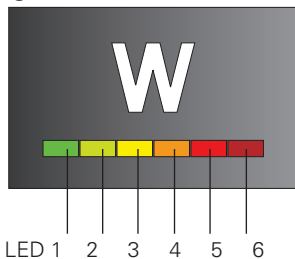


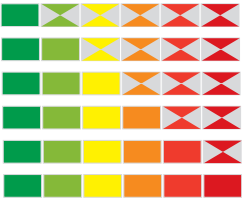


Fig. 6



		Actuation	Display
Activate setting level 3 (function 3.1 - 3.6)			
		Press both keys once for 10 seconds and twice for 5 seconds	Logo flashes white Lightbar LED 1+2+3
Change function Increase the follow-up time in stages			
		Briefly press key I	The light bar shows the newly set follow-up time. Each LED which does not flash means a follow-up time of 5 min: - Level 1 LED 1 5 min - Level 2 LED 1-2 10 min - Level 3 LED 1-3 15 min - Level 4 LED 1-4 20 min - Level 5 LED 1-5 25 min - Level 6 LED 1-6 30 min
Change function Reduce follow-up time in stages			
		Briefly press key II	The light bar shows the newly set follow-up time.

Change basic settings - Setting level 4

Fig. 3

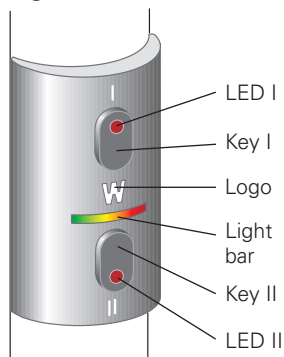
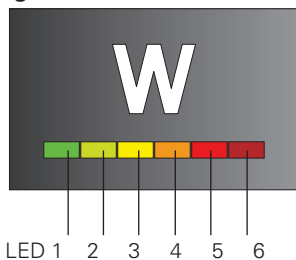


Fig. 6



Activate setting level 4 (function 4.1 - 4.6)



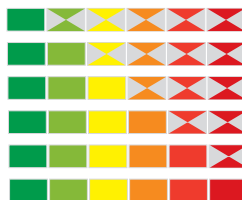
Actuation

Press both keys once for 10 seconds and three times for 5 seconds

Display

Logo is off
Lightbar LED 1+2+3+4

Change function



Increase presence range

Briefly press key I

The light bar shows the newly set presence range.

- Level 1 LED 1 10 %
- Level 2 LED 1-2 20 %
- Level 3 LED 1-3 40 %
- Level 4 LED 1-4 60 %
- **Level 5 LED 1-5 80 %**
- Level 6 LED 1-6 100 %

Change function

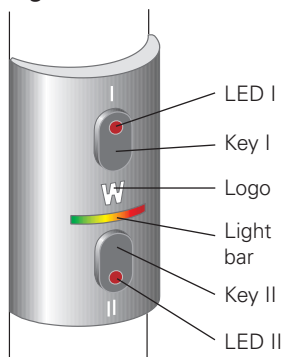
Reduce presence range

Briefly press key II

The light bar shows the newly set presence range.

Explanation of the functions (part 1)

Fig. 3



Function 1.1

Background light

Function to switch the logo background light on and off.

The function is basically set to "ON". The background lighting of the logo is always active as soon as the light is connected to the power supply.

When you change the function, the logo lights only with the light switched on.

The function can be changed on
 switchable lights XXX /2
 dimmable lights XXX /D
 lights with sensors XXX /P

For lights without the column operating panel MFT, the function is not available.

Function 1.2

External switching

Function to operate the light via external switching elements.

The default setting of the function is „OFF“. When power is supplied from an external place, the light remains switched off.

If the function is active, the light switches to the level which was set last as soon as the power supply is switched on (e.g. via a switched power outlet).

The function can be changed on
 switchable lights XXX /2
 dimmable lights XXX /D
 lights with sensors XXX /P

Function 1.3

Burn-in function

Function for burning in the lamps

By default, the function is set ex works to "OFF". When the burn-in function is activated, the following functions are disabled:

- Light control
- Presence function
- Dimming function

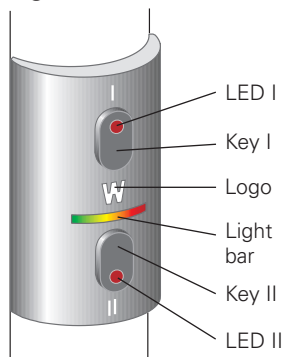
After 100 operating hours, the function is automatically set to "OFF" again, i.e., the light can now be operated without restrictions.

The function can be changed on
 lights with sensors XXX /P

Note: The functions written in blue are not available.

Explanation of the functions (part 2)

Fig. 3



Function 1.4

Write protection

Function for admission or avoidance of setting variations.

The default setting of the function is „OFF“; i.e., the set levels can be overwritten at any time.

The levels cannot be changed if the write protection is active.

The function can be changed on lights with sensors XXX **/P**

Function 1.5

Light control

Function for the automatic readjustment of the set brightness in case the ambient brightness changes.

The default setting of this function is “ON”; i.e., the light control is active.

The light is dimmable with the light control switched off.

The function can be changed on lights with sensors XXX **/P**

Function 1.6

Presencecontrol

Function to detect the presence of persons.

The default setting of this function is “ON”; i.e., the presence control is active.

If the function is switched on, the light automatically switches off, if for a certain time no presence is detected.

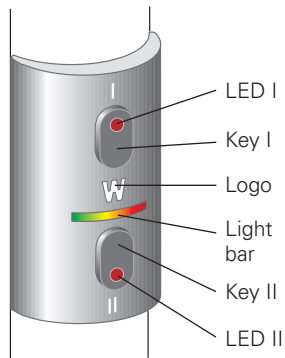
If the presence control is switched off, the light functions as a light with light control or as dimmable light.

The function can be changed on lights with sensors XXX **/P**

Note: The functions written in blue are not available.

Explanation of the functions (part 3)

Fig. 3



Function 1.7

Demo mode

Function to demonstrate and to test the light functions.

The default setting of this function is "OFF"; i.e., the demo mode is inactive.

All control times are working in the seconds range if the demo mode is switched on.

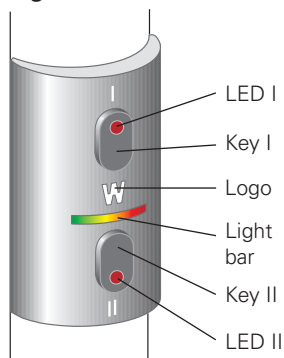
Note: This mode is left automatically 10 minutes after the last key was pressed.

The function can be changed on lights with sensors **XXX /P**

Note: The functions written in blue are not available.

Explanation of the functions (part 4)

Fig. 3



**Function 2.1
Sensitivity high**

Function to change the sensitivity of the presence control.

The function is basically set to „ON“; i.e., the presence sensor has a normal sensitivity (100%). Small movements are also detected within the detection range of the sensor.

The presence sensor works with reduced sensibility (approx. 50%) if the function is set to “OFF”. Small movements within the detection range of the sensor are not detected anymore.

The function can be changed on lights with sensors **XXX /P**

**Function 2.2
Switch-on automatic**

Function to admit or to suppress automatic switch-on with insufficient light or in case of presence (semi-automatic).

The default setting of this function is “ON”; i.e., the light is automatically switched on in case of presence or insufficient light.

The light has to be switched on manually even in case presence was detected if the switch-on automatic is inactive.

The function can be changed on lights with sensors **XXX /P**

**Function 2.3
Dual sensors**

Function for the adjustment of the operating mode when used with an additional presence sensor (optional accessories).

The default setting of this function is “OFF”; i.e., the switch-on automatic works when a presence is detected by one of the two sensors.

Both sensors must detect a presence to turn on the light if this function is active.

The function can be changed on lights with sensors **XXX /P**

Note: The functions written in blue are not available.

Explanation of the functions (part 5)

Fig. 3

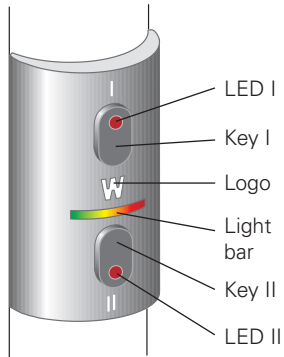
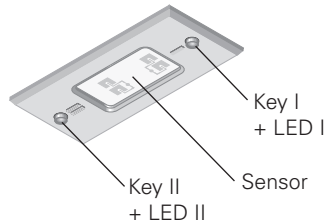


Fig. 4



Function 2.4

Sensor LED

Function to switch both LEDs in the sensor operating panel on and off (see fig. 4).

The function is normally switched "OFF"; that is, the LEDs in the light head are switched off.

For lights without the column operating panel, the function is switched to "ON".

If the function is switched on, the LEDs in the light head light in addition to the light bar display.

The function can be changed on lights with sensors XXX /P

Function 2.5

Continuous operation

Setting function for continuous operation.

The default setting of the function is "OFF".

The light operates continuously if the function is switched on. Even if no presence is detected, the light lights at the lowest level.

The function can be changed on lights with sensors XXX /P

Function 2.6

Parameter setting protection

Function for activating the parameter setting protection (required for final inspection)

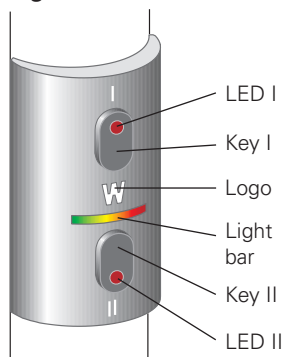
By default, the function is set to "OFF".

When the function is switched on, a factory reset will not overwrite the set parameters. The parameter setting of the electronic ballast units will be carried out.

The function can be changed on lights with sensors XXX /P

Explanation of the functions (part 6)

Fig. 3



Function 2.7

Special function

The special function is not available.

The function cannot be changed.

Function 3.1 - 3.6

Follow-up time

Function to adjust the time after which the light is to be switched off if no presence is detected.

The default setting of the follow-up time is 10 min.

6 different follow-up times from 5 to 30 min can be set.

The function can be changed on lights with sensors XXX /P

Function 4.1 - 4.6

Presence range

Function to set the detection range of the presence sensor.

The default setting for the range of the presence sensor is 80%.

6 different stages from 10% to 100% can be set.

The function can be changed on lights with sensors XXX /P

Note: The functions written in blue are not available.

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