



1.0 Designated use

The **LUXOR** range is suitable for installation in single and multiple family houses, offices etc. The devices control light and light with time functions. The devices are designed for installation in the distributor and/or control cabinet. They are suitable for use in dry rooms with a normal amount of dirt.



In order to prevent any danger of fire or risk of electric shock, the unit may only be connected and installed by a qualified electrician, in compliance with national regulations.

2.0 Brief description

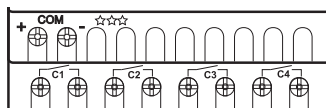
- The basic device **LUXOR 400** is mandatory in an installation where a requirement exists for functions such as panic, central ON or OFF, presence simulation, integration of an FI switch (RCD) or low voltage control. Without the basic device, upgrade devices LUXOR 402 (2-channel) or LUXOR 404 (4-channel) should be used simply as surge / switch modules with time function.
- Either key or switch can be connected to a control voltage of 230 V at inputs I 1 to I 4.
- In principle, various external wires/phases can be applied to the control inputs and the switching outputs.
- Terminals I 4 (L) and I 4 (N) are specifically intended for use of a FI switch (RCD) (with LUXOR 400, 404).
- Terminals U are specifically intended for controlling low voltage (8-48 V AC/DC) (with LUXOR 400).
- Devices LUXOR 400, 402 and 404 feature time functions for either channel C1 or C2.
- Basic device LUXOR 400 can be upgraded with up to 15 additional devices. Integration is via the COM interface.
- Pressing a key selects and activates functions such as panic, central switch ON, central switch OFF and presence simulation (switch only).
- Panic, central switch ON and OFF keys enable all individually defined switching channels to be switched on and off at one single key.
- The presence simulation function recreates daily procedures in the connected rooms. These are saved over a week and continuously updated. If the switch connected to terminal 16 is now pressed, (e.g. for absence, holiday etc.), the presence simulation function starts at the defined switching outputs for the period of activation.

3.1 Description of output terminals

Relay outputs:	LUXOR 402 (C1 and C2)	2 x 16(6) A, 250 V~
	LUXOR 400 (C1 to C4)	4 x 16(6) A, 250 V~
	LUXOR 404 (C1 to C4)	4 x 16(6) A, 250 V~

Info:

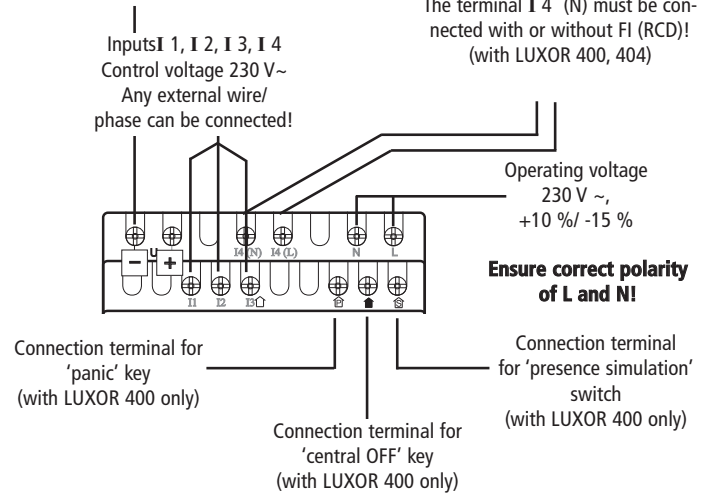
- The switching outputs to each other and against the supply voltage are floating.
- Any external wire/phase can be connected!
- The switching outputs are not suitable for switching protective low voltage!



3.2 Description of input terminals

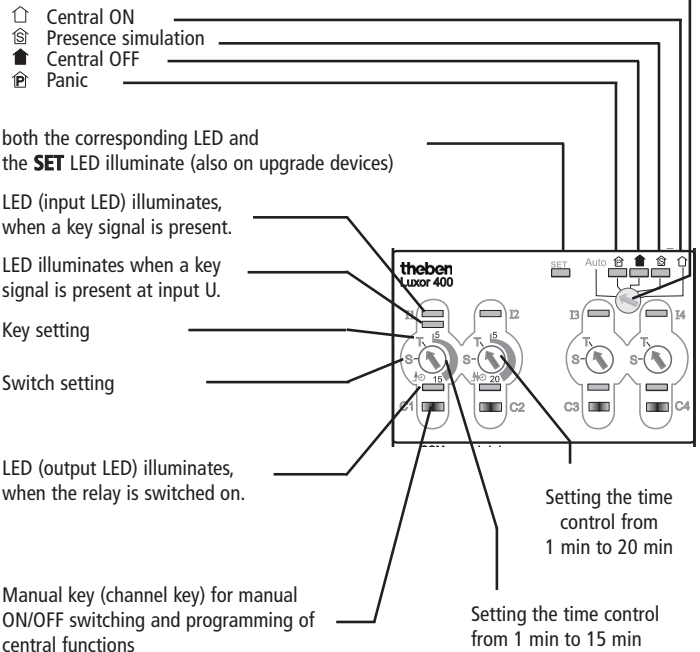
Universal voltage input
 8 V AC/ DC to 48 V AC/ DC
 (with LUXOR 400 only)

Special connection terminal I 4 (L) + I 4 (N) for FI connection
 The terminal I 4 (N) must be connected with or without FI (RCD)!
 (with LUXOR 400, 404)



3.3 Description of control level

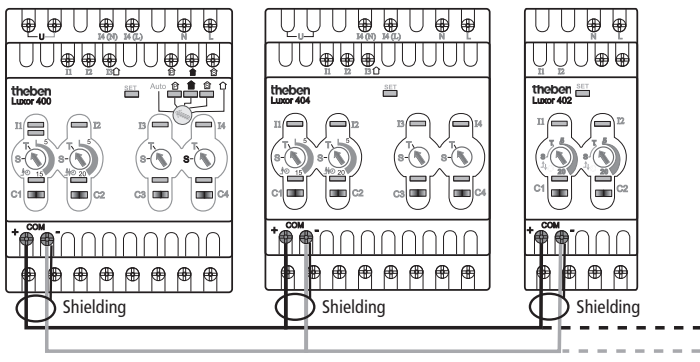
As long as central switch on **LUXOR 400** is in position:



4.0 Connecting the upgrade modules

- Use the following lines: EIB/KNX bus line type YCYM or Y(ST)Y or telecommunication line J-Y(ST)Y.
- Connect both sides of the shielding to the minus bus terminal on the COM bus.
- The COM line length may be up to 100 m.
- Always route the COM line separately from other lines (separate cable).
- Do not route the COM line parallel to 230 V lines.
- Upgrades to max. 16 devices inc. basic module.
- Ensure correct polarity!

-> If the COM connection fails, the SET LED flashes continuously.



5.0 Connection and installation

A. Connecting the inputs

- Input I 1 / **U** acts on contact **C1** (**U** only with LUXOR 400).
- Input I 2 acts on contact **C2**.
- Input I 3 acts on contact **C3** (LUXOR 400, 404).
- Input I 4 acts on contact **C4** (LUXOR 400, 404).

Important: Use keys with a total glow lamp load of < 30 mA only at input I 1! (with LUXOR 400, 404)

B. Connecting the time functions (permitted for keys only):

Select connection **I 1/C1** or **I 2/C2**.

Info to channel C1:

Secondary switching time with switch off pre-warning (1 to 15 mins.) or switching channel (LUXOR 400, 404). Controlled time with switch off pre-warning (1 to 20 mins.) or switching channel (LUXOR 402).

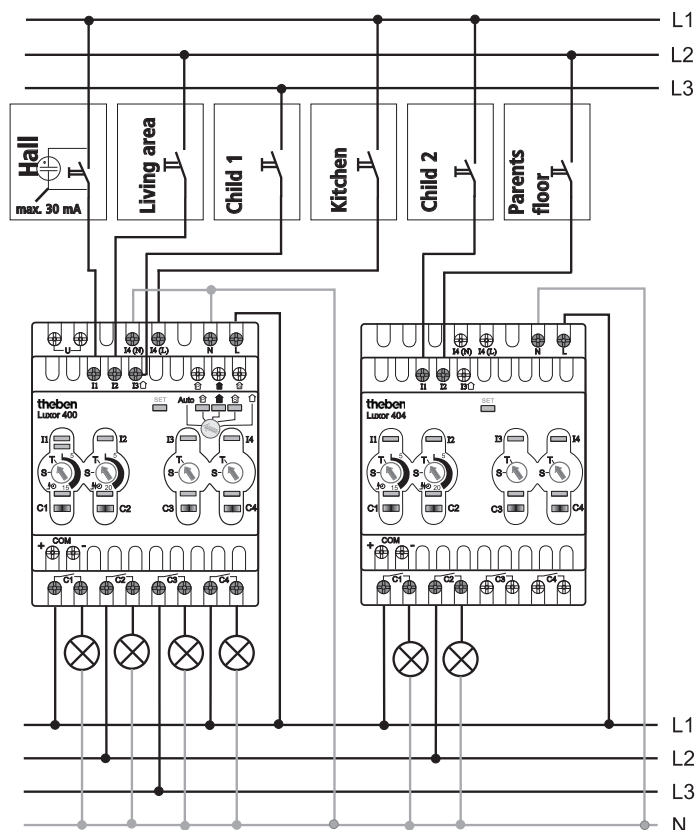
Info to channel C2:

Controlled time with switch off pre-warning (1 to 20 mins.) or switching channel.

All other device channels are switching channels that can be controlled either by switch or key at inputs I 3 and I 4.

C. Connection in room with FI switch (RCD) (with LUXOR 400, 404):

For using a FI switch in a room (e.g. bathroom), see the Figure in Section 8.



6.0 Universal voltage connection

Application only with LUXOR 400:

Example: Key control **U** (acts on **C1**) from a door intercom system

Permitted control voltage: 8 V AC/ DC to 48 V AC/ DC

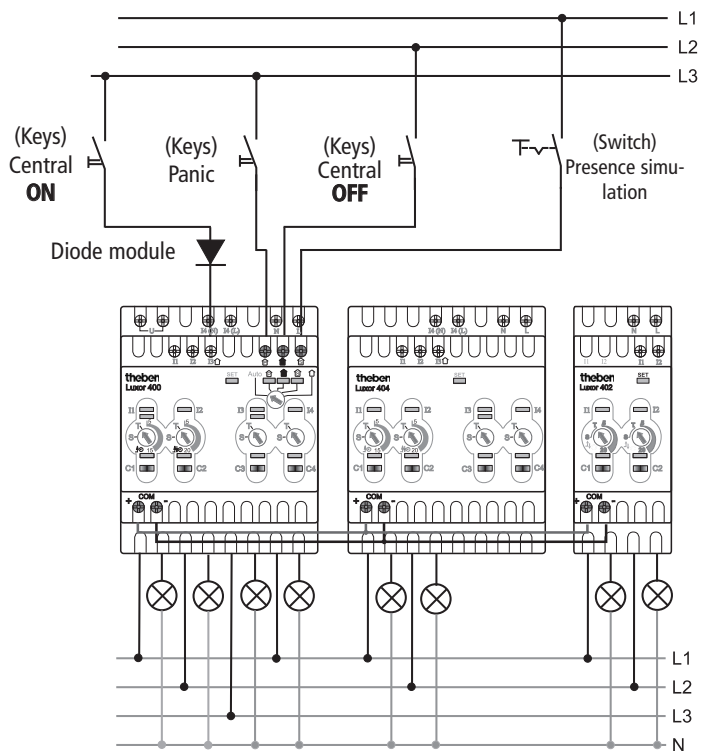
Connection: Connect the control cable only to terminals **U**.

7.0 Connecting the central functions

Connecting the presence simulation switch

Use only a switch (possibly with control light) to connect and activate the presence simulation function.

The connected central key at terminals \square , \blacktriangle or \blacklozenge acts on all output contacts that can be activated individually.



8.0 Connecting terminals for FI switch (RCD)

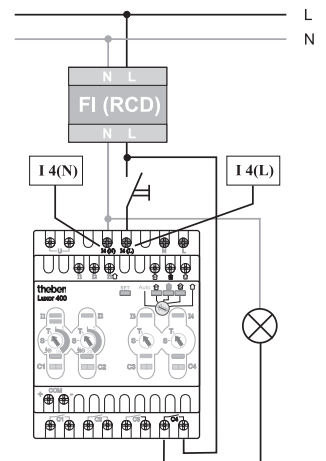
Application:

in wet rooms, e.g. a bathroom

Caution!

Connect the FI switch (RCD) only at terminals **I 4 (L)**.

The terminal **I 4 (N)** must be connected with or without FI (RCD)!



9.0 Setting the secon. switching time (staircase light)

Time function (with LUXOR 400, 404)

If the key at input **I 1** is pressed, the connected light is activated for the set time from channel **C1**. Before the set time lapses, the light flashes as a pre-warning.

A. Setting the time (e.g. 7 mins.):

- > Rotate the selector switch clockwise to the desired time between 1 min. and 15 mins.

B. Restarting the set time:

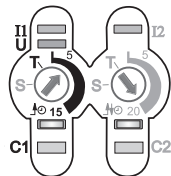
- > Press the key again.

C. Setting the light to continuous:

- > Press the key for longer than 3 sec.

D. Switching off the continuous function:

- > Press the key again.



10.0 Setting the controlled time (path light)

Time function (with LUXOR 400, 402, 404)

If the key at input **I 2** is pressed (**I 1** or **I 2** with LUXOR 402), the connected light will be activated for the set time from channel **C2** (**C1** or **C2** with LUXOR 402). Before the set time lapses, the light flashes as a pre-warning.

A. Setting the time (e.g. 20 mins.):

- > Rotate the selector switch clockwise to the desired time between 1 min. and 20 mins.

B. Switching off the light immediately:

- > Briefly press any key before the pre-warning.

C. Restarting the set time:

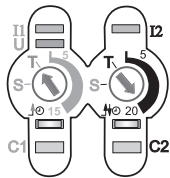
- > Briefly press any key during the pre-warning.

D. Setting the light to continuous:

- > Press the key for longer than 3 sec.

E. Switching off the continuous function:

- > Press the key again.



11.0 Activating/deactivating the switch-off pre-warning

The integrated switch-off pre-warning can be switched off at any time, as it can reduce the service life of the lamps.

Deactivating switch-off pre-warning:

- > Rotate the selector switch clockwise to the desired time between 1 min. and 15 mins.
- > Press the manual key for longer than 3 sec. until the input LED lights up.
- > Briefly press the manual key until the output LED goes out.

Activating switch-off pre-warning:

- > Briefly press the manual key until the output LED lights up.

Saving a switch-off pre-warning:

- > Press the manual key again for 3 sec. until the LEDs go out.

Do not save change:

- > If you do not press a key for approx. 70 sec., no change is saved.

12.0 Selecting switch or key function

Please note: At an input, only keys **or** switches may be used.

Example:

I 1 = switch, **I 2** = key, **I 3** = key, **I 4** = switch

Connection with key:

Rotate the selector switch into position **T** = key.

Connection with switch:

Rotate the selector switch into position **S** = switch.

13.0 Description of central functions

What happens if:

A. The key for the central 'panic' function has been pressed?

- > The central function can only be cleared by the 'panic' key.

B. The switch for 'presence simulation' has been switched on?

- > Presence simulation can only be cleared by this switch.
- > Presence simulation can be cancelled by the central ON, central OFF or 'panic' key.
- > Pressing the 'panic' key again re-activates presence simulation.

C. The central OFF function key has been pressed?

- > Can be switched back on from each room.

Note: Should a switch be used in a central switching room, this switch must be put into the **OFF** Pos for about 2 seconds after canceling the central function. All the other keys/switches can then be operated as usual again.

D. The central ON function key has been pressed?

- > Can be switched back off from each room.

14.0. Setting the central functions





The central functions include panic, central ON, central OFF and presence simulation. The panic function takes priority over the others.

14.1. Setting the panic function



Info (with LUXOR 400):

Only those switching channels whose control LED illuminate in programming  are also switched on when the panic key is activated.

1. Resetting central switch to Pos. . The **SET** LED on the basic and any connected upgrade devices must illuminate.

Delivered status: All channels are activated (all LEDs illuminate).

Function:

- Each time a manual key is pressed, the corresponding LED illuminates and extinguishes alternately.
- If an LED is illuminated, this channel is activated for the panic function.
- If an LED is not illuminated, this channel is not activated for the panic function.

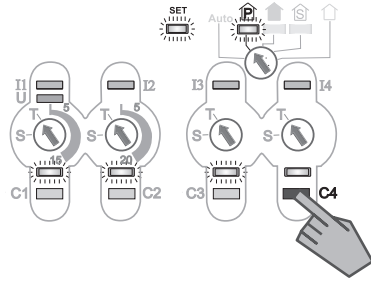
Example:

C1, C2, C3 switch ON.

C4 does not switch on if the 'panic' key is activated.

End programming:

2. Resetting central switch to Pos. **Auto**.



14.4. Setting presence simulation

Function (with LUXOR 400):

The presence simulation function recreates daily procedures of the selected switching outputs. These are saved over a week and continuously updated.

If the switch connected to terminal is now pressed, (e.g. for absence, holiday etc.), the presence simulation function starts at the defined switching outputs for the period of activation. The light is switched on and off in line with the day's events.

Behaviour on day of initial start-up:

A basic simulation is already stored. The presence simulation function can therefore be activated on the day of installation.

Info: Only those switching channels whose control LED illuminate in programming position are also switched on when the switch is activated.

1. Set central switch to Pos. . The **SET** LED on the basic and any connected upgrade devices must illuminate.

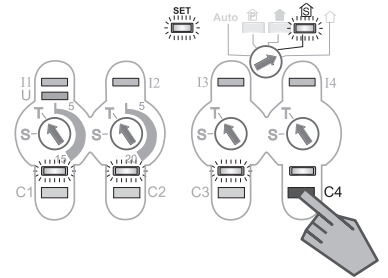
Delivered status: All channels are activated (all LEDs illuminate).

Function:

- Each time a manual key is pressed, the corresponding LED illuminates and extinguishes alternately.
- If an LED is illuminated, this channel is activated during presence simulation.
- If an LED is not illuminated, this channel is **not** activated for presence simulation.

Example (see Fig.)

C1, C2, C3 switch ON.
C4 does not switch on if presence simulation is activated.



Ending programming:

2. Resetting central switch to Pos. **Auto**.

14.2 Setting central OFF

Info (with LUXOR 400): Only those switching channels whose control LED illuminate in programming position also switch off when the central OFF is activated.

1. Resetting central switch to Pos. . The **SET** LED on the basic and any connected upgrade devices must illuminate.

Delivered status: All channels are activated (all LEDs illuminate).

Function:

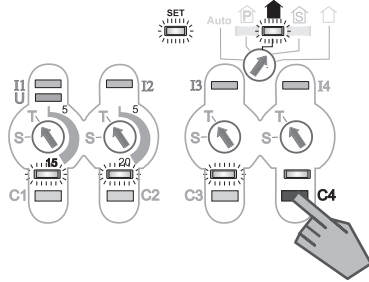
- Each time a manual key is pressed, the corresponding LED illuminates and extinguishes alternately.
- If an LED is illuminated, this channel is activated for the central function.
- If an LED is not illuminated, this channel is **not** activated for the central function.

Example (see Fig.)

C1, C2, C3 switch OFF.
C4 does not switch OFF when Central OFF is activated.

Ending programming:

2. Resetting central switch to Pos. **Auto**.



14.3 Setting central ON

Info (with LUXOR 400): Only those switching channels whose control LED illuminate in programming position also switch on when the central ON is activated.

1. Resetting central switch to Pos. . The **SET** LED on the basic and any connected upgrade devices must illuminate.

Delivered status: All channels are activated (all LEDs illuminate).

Function:

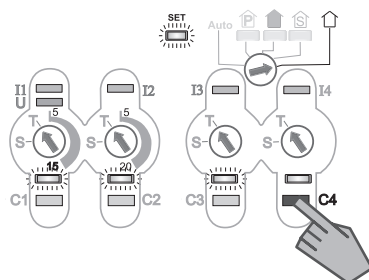
- Each time a manual key is pressed, the corresponding LED illuminates and extinguishes alternately.
- If an LED is illuminated, this channel is activated for the central function.
- If an LED is not illuminated, this channel is **not** activated for the central function.

Example (see Fig.)

C1, C2, C3 switch ON.
C4 does not switch ON when Central ON is activated.

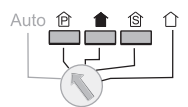
Ending programming:

2. Resetting central switch to Pos. **Auto**.



15.0 Changing programming

You would like to adjust/change the assignment of the participating channels for the central function (with LUXOR 400):



1. Set the central switch to the required position - panic , central OFF , presence simulation or central ON . The **SET** LED and control LEDs of the current user channels illuminate.

Channel should **no longer** participate in a central function:

Example: Presence simulation, see Fig. 1 below.

2. Briefly press the manual key for the channel to be changed until the control LED has gone out (see Fig.1, channel C3).

Channel can now participate in a central function:

3. Press the manual key for the channel to be changed until the control LED lights up (see Fig. 2, channel C3).

Ending programming:

4. Reset central switch back to Pos. **Auto**.

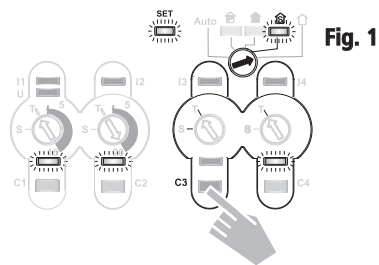


Fig. 1

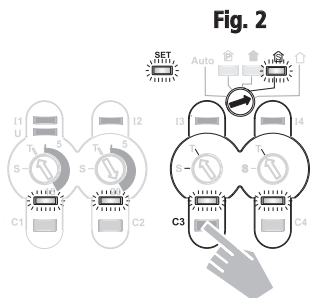


Fig. 2

17.0 Function in timer module LUXOR 414

Info:

- LUXOR modules 400, 402, 404 can be taught in to all 8 channels of the timer module.
- Teach-in works in the same way as teach-in for the central functions (see Operating Manual LUXOR 414 Section 13).

Switching for switch/astronomical times

With a percentage value >0 channel ON is always switched, with a percentage value of 0, channel OFF.

- Astronomical time/nighttime interruption (idle period)

(see Table)

	Astro - evenings	Nighttime interruption	Nighttime interruption	Astro - evenings	Explanation
	Sunset	Start	End	Sunrise	
Times	16:10	20:00	6:00	8:10	Winter
Switching	ON	OFF	ON	OFF	Normal sequence
Times	21:30	20:00	6:00	4:50	Summer
Switching	-	OFF	-	OFF	remains OFF
Times	19:30	20:00	6:00	5:55	evenings only
Switching	ON	OFF	-	OFF	ON
Times	20:30	20:00	6:00	6:55	mornings only
Switching	-	OFF	ON	OFF	ON

- Switching time

With normal switching times, the nighttime interruption (idle time) has no function. The switching time is always used.

- If both the time and the sensor are taught-in on a channel, the nighttime interruption (i.e. idle time) acts on the dimming function rather than the astronomical time. Astronomical times are always used.

- when selector switch is set to staircase light (time function)

There is no reaction to the timer.

Central functions

- Panic function

If this function is active during a timer command, the timer command is not used until the function is terminated.


- Presence simulation (AWS)

If this function is active during a timer command, the does not react to the AWS taught-in channel.

16.0 Function expansion in the room

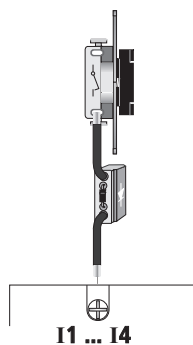
Detailed wiring diagram (keys only):

Key ① shows 'normal switching'

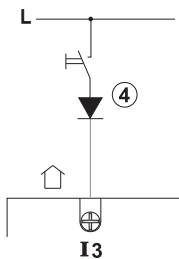
Key ② shows panic function 

Key ③ shows central OFF function 

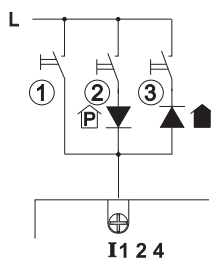
Key ④ shows central ON function 



I1 ... I4



I3



I1 2 4

Example: Panic key should be relocated to another room if room usage changes.

Info: Installing a diode module (Order no. 907 0 367) permits the panic key function to be simply relocated to another room, should room usage change. Several diode modules can be used in order to trigger or clear panic switching from several rooms.

Solution:

Connect the diode module in series to the key in which the central OFF and central ON switching are to be triggered.

Example:

Diode, see ② = panic

Diode, see ③ = central OFF

Diode, see ④ = central ON

18.0 Function in comb. with sensor mod. LUXOR 411_412

Info:

- LUXOR modules 400, 402, 404 can be taught in to the twilight channel of the sensor module.
- Teach-in works in the same way as teach-in for the central functions (see Operating Manual LUXOR 411, Section 10).

• Light channels

- when selector switch is set to S/T

If the light channel is a standard switching channel, channel ON is switched when the twilight threshold is underrun (evening) and channel OFF is switched when it is overrun (mornings) (with an 80 sec. delay).

Relationship between twilight, idle time and output status (see Table)

Twilight	Idle period % value (LUXOR 414)	Sensor	Channel (LUXOR 400, 402, 404)
getting dark	0 % was present	is disabled	unchanged
getting dark	>0 % was present	is enabled	ON
it is dark	0 % approaching	being disabled	OFF
it is dark	>0 % approaching	being enabled	ON
getting bright	0 % was present	remains disabled	unchanged
getting bright	>0 % was present	remains enabled	OFF
it is bright	0 % approaching	being disabled	unchanged
it is bright	>0 % approaching	being enabled	unchanged

- when selector switch is set to staircase light (time function)

There is no reaction to the sensor.

• Central functions

If the 'panic' function or 'presence simulation' is active on a channel, LUXOR 400 does not react to this sensor command.

19.0 If a device is faulty...

If the basic device LUXOR 400 is faulty,

the function of the connected upgrade devices is not restricted. However, the central functions can no longer be used.

If the upgrade device LUXOR 402/404 is faulty,

the function of the connected upgrade devices and that of the basic device are not restricted. Only the central functions ☺, ☛ and ☜, ☝ can be used with restriction.

Despatching the faulty device:

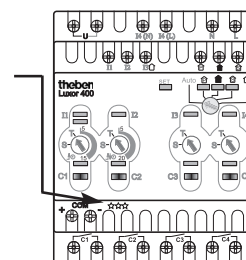
Send the packaged faulty device with a brief description of the fault to our Service Department.

20.0 Technical data

Operating voltage:	230 V~, + 10 % / - 15 %
Mains frequency:	50 Hz
Power consumption:	approx. 4 VA
Switching outputs:	16(6) A/250 V~
Key / switch connecting cable:	230 V phase-independent
2-wire connection for COM:	Any cross-section / max. length 100 m
Cable length switches and keys:	up to 100 m
Glow lamp load to I 1:	max. 30 mA
Time functions C1 (400, 404):	1... 15 min. with/without switch-off pre-warning / switching and continuous function after
Time functions C2 (400, 404):	1... 20 min. with/without switch-off pre-warning / switch-off and continuous function
C1 and C2 (402):	
Permitted ambient temperature:	-10 °C ... +50 °C
Protection class:	Control unit II in accordance with EN 60730-1 for designated installation
Degree of protection:	Control units: IP 20 in accordance with EN 60529
Mode of operation:	RS Type 1 B
Rated impulse withstand voltage in accordance with 60730-1 Tab. 20.1	Installation category III 4 kV

Please note

The 3 stars on the top of LUXOR devices 400, 402, 404 denote 3rd generation devices. This means that only these devices can be controlled using LUXOR 411 (sensor module) and LUXOR 414 (timer module).



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