

# MDT Solution Proposal

## Solution proposals for Presence Detectors

### Possible applications:

Simple solutions for frequently used scenarios are described below.  
Examples are valid for 3-/4-fold detectors and MR 16.

### Used devices:

#### MDT Presence Detectors

SCN-x360x3.0x/ SCN-P360x4.0x/ SCN-P360E3.03

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## Solution example 1: Night light

☑ from series .03

In night mode, the main light should no longer be switched on when the room is entered but only the night light in the presence detector (white LED).

To implement this scenario, a number of settings need to be made.

In the menu “LED” you have to configure the parameter “LED white (night light)” as follows:

If the white LED (night light) is active, the brightness value is not evaluated.

LED white (night light) active at night over external object "Switching" ▼

Brightness on night 100% ▼

The setting causes object 93 (LED White - Switching) to appear.

The brightness of the white LED can be adjusted continuously between 0 - 100%.

Settings in the menu for the light channel (here in the example for light channel 1):

- Object type for output - light to "Switching".
- "Output objects for Day/Night" has to be set to “separate objects”.

This causes object 1 output (night) to be displayed:

Object type for output - light Switching ▼

Output objects for Day/Night  one common object  separate objects

After switching from Day mode to Night mode and after motion detection, object 1 - Output (Night) is now sending.

Object 1 will now be connected to object 93 via a group address.

Number *	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type
0	Light channel 1 - Output 1 (Day)	Switching	Output Day	4/0/1	1 bit	C	R	-	T	-	switch
1	Light channel 1 - Output (Night)	Switching	Output Night	4/0/0	1 bit	C	R	-	T	-	switch
3	Light channel 1 - Input	External push button short			1 bit	C	-	W	-	-	switch
4	Light channel 1 - Input	External push button long			1 bit	C	-	W	-	-	switch
5	Light channel 1 - Input	External motion (Slave)			1 bit	C	-	W	-	-	switch
6	Light channel 1 - Input	Status of actuator channel			1 bit	C	-	W	-	-	switch
7	Light channel 1 - Input	Lock motion detection			1 bit	C	-	W	-	-	enable
8	Light channel 1 - Input	Forced guidance			2 bit	C	-	W	-	-	switch con...
11	Light channel 1 - Input	Switch dark			1 bit	C	-	W	-	-	switch
13	Light channel 1 - Input	Follow-up time 10-65000s			2 bytes	C	-	W	-	-	time (s)
90	Day/Night	Day = 1 / Night = 0	Day/Night switchover	5/0/0	1 bit	C	-	W	T	U	boolean
93	LED white	Switching	Neue Gruppenadresse	4/0/0	1 bit	C	-	W	-	-	switch

## Solution example 2: Switching off despite presence

from series .02

When the room is entered and the detector detects presence, the lighting group switches on. However, the light should be switched off for the period of presence and switched back on automatically when the room is entered again.

To implement this scenario, the parameter "**Fallback for external push button long**" has to be set in the **general settings** as follows:

Fallback for external push button long (Manual => Auto)	after presence and follow-up time
Manual mode follow-up time at ON by Day	3 min
Manual mode follow-up time at OFF by Day	3 min
Manual mode follow-up time at ON by Night	3 min
Manual mode follow-up time at OFF by Night	3 min

The follow-up time can be set as desired. Now connect object 4 - external push-button long (for light channel 1) to the push-button which is to **switch-Off** the light. After the button has been pressed (sending an **Off**-command), the light remains "**Off**" (manual mode, Off) for as long as the detector detects presence and then for the set follow-up time for the external button. The detector then changes to "Auto mode, Ready" and the next presence detection switches the light back on.

### Solution example 3: Switching on despite brightness threshold

☑ from series .02

When the room is entered and the detector detects presence but the light is not switched on because the set brightness threshold is not exceeded. However, the light should be switched-On for the duration of presence and switched-Off again automatically on leaving the room.

To implement this scenario, the "**Fallback for external push button long**" parameter has to be set in the **general settings** as follows:

Fallback for external push button long (Manual => Auto)	after presence and follow-up time ▼
Manual mode follow-up time at ON by Day	3 min ▼
Manual mode follow-up time at OFF by Day	3 min ▼
Manual mode follow-up time at ON by Night	3 min ▼
Manual mode follow-up time at OFF by Night	3 min ▼

The follow-up time can be set as desired. Now connect object 4 - external push-button long (for light channel 1) to the push-button which is to **switch-On** the light.

After the button has been pressed (sending an **On**-command), the light now remains "On" (manual mode, ON state) as long as the detector detects presence and then for the set delay time for the external push-button. The light is then switched off and the light channel changes to the "Auto mode, ready" state.

## Solution example 4: Blackboard light via 2 switching groups

☑ from series .01

To ensure that lighting in a classroom is switched according to requirements, a presence detector is used for classroom lighting. However, because school and conference rooms often require a second blackboard light, a second lighting group is used here. However, this blackboard lighting needs to be switched on only on demand and automatically switched off again when the teacher/lecturer leaves the blackboard area. In smaller rooms, only one detector is required for this implementation. In larger rooms, it may be useful to use a second detector as a slave.

The first presence detector for the blackboard light has to be parameterized as follows:

**Selection of light groups:** 2 light groups

### Light group 1:

**Operating mode:** fully automatic  
**Active sensors:** 1234  
**Other parameters:** according to usage

### Light group 2:

**Operating mode:** half automatic  
**Active sensors:** 1234  
**Other parameters:** according to usage

The output objects of the respective switching groups need to be connected to the switching objects of the respective lighting group.

The "external input" object of the 2nd lighting group now needs to be connected to the push-button for requesting board lighting. The push-button only needs to send an ON signal to the object.