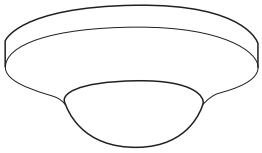
GB

Schneider Electric

KNX ARGUS Presence Basic

Operating instructions



Art. no. MTN6307..

Accessories

– Surface-mounted housing for ARGUS Presence (Art. no. MTN550619)

For your safety

DANGER
Risk of fatal injury from electrical current.
All work carried out on the unit may only be performed by skilled electricians. Observe the regulations valid in the country of use, as well as the valid KNX guidelines.

ARGUS introduction

The KNX ARGUS Presence Basic (called **ARGUS** in the following) is a KNX presence detector for interior ceiling mounting.
It detects smaller movements within a circumference of 360° and a radius of 7 m (at a mounting height of 2.5 m).

The specified ranges refer to average conditions for the recommended mounting height and are therefore guide values. The range and sensitivity can vary greatly when the temperature fluctuates.

When movement is detected, a data telegram defined by the programming is transmitted and then evaluated to control the lighting, blinds, or heating, for example.

The ARGUS presence function continuously adjusts for brightness in the room. If sufficient natural light is available, the device will switch the artificial light off even if a person is present. The overshoot time can be adjusted using the ETS. The integrated light sensor continually measures the brightness level and processes this information in the application. In addition, it is possible to measure the brightness with an external light sensor and have it evaluated.
The device is designed for use in offices, schools, public buildings or at home, for example. It is intended for ceiling mounting in a No. 60 mounting box, and can also be mounted on the ceiling in the surface-mounted housing for ARGUS Presence. The ARGUS has an integrated bus coupler and its power is supplied via KNX.

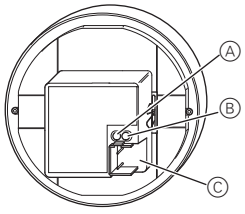
Using ARGUS with alarm systems

Movement/presence detectors are not suitable for use as components of an alarm system.

Movement/presence detectors can trigger false alarms if the installation site has been chosen unfavourably.

Movement/presence detectors switch on as soon as they detect a moving heat source. This can be a person, but also animals, trees, cars or differences in temperature in windows. In order to avoid false alarms, the chosen installation site should be such that undesired heat sources cannot be detected (see section „Selecting the installation site“).

Connections, displays and operating elements



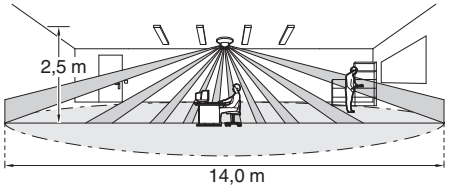
Ⓐ Programming button
Ⓑ Programming LED
Ⓒ Bus connecting terminal

Selecting the installation site

When selecting a suitable installation site, you should take a number of factors into account so that the ARGUS operates optimally.

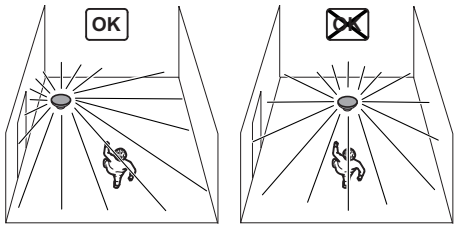
- The shorter the distance between the detected person and the ARGUS, the better smaller movements are detected.
- When a person is walking, a larger area of detection is available. The reference level for the detection is the floor.
- The mounting height has a direct effect on the range and sensitivity of the ARGUS. The optimal mounting height is 2.5 m.

The following diagram shows the ranges of the ARGUS. They are based on average temperature conditions at a mounting height of 2.5 m. The range of a movement detector can fluctuate considerably at variable temperatures.



Mounting height	Area of detection
2.0 m	11 m
2.5 m	14 m
3.0 m	17 m

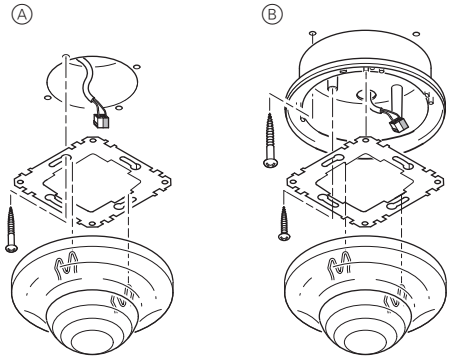
- The position of the ARGUS in regard to the direction of movement also affects detection. If possible, install the movement detector sideways to the direction of movement.



- If you wish to attach several presence detectors, install them so that the detection areas of the individual devices intersect each other.
- The ARGUS is designed for permanent installation only. Mount the ARGUS on a fixed base only to avoid faulty operation caused by the movement of the detector.
- To prevent undesired load switching, do not mount the switched luminaire directly in the detection area of the ARGUS.
- Avoid mounting the device above a luminaire (e.g. standard lamp). The heat radiation of the luminaire can influence the function of the ARGUS. Brightness can no longer be measured when there is direct light incidence. If luminaires are mounted in the ARGUS detection area, a distance of at least 3 m must be complied with when the connection load is high.

ARGUS installation

① The ARGUS is connected via a bus connecting terminal and snapped onto the retaining ring.



Ⓐ Flush-mounted installation
Ⓑ Surface-mounted installation

For flush-mounted installation, the retaining ring included with supply is fixed with two screws to a size 60 installation box. For surface mounting, the retaining ring is mounted in the surface-mounted housing which is available as an accessory.

Putting ARGUS into operation

① Press the programming button.

The programming LED lights up.

② Load the physical address and application into the device from the ETS.

The programming LED goes out.

The application has been loaded successfully, the device is ready for operation.

V6307-561-00 02/08

Technical data

Nominal voltage:	DC 24 V (+6 V / -4 V)
KNX connection:	Bus connecting terminal
Current consumption:	max. 8 mA
Angle of detection:	360°
Number of levels:	6
Number of zones:	136 with 544 switching segments
Number of movement sensors:	4
Recommended mounting height:	2 m - 5 m, optimum 2.50 m
Light sensor:	infinitely adjustable in ETS between approx. 10 and 2000 lux In general, the values measured by the sensor deviate from the lighting conditions at the main place of usage (e.g. work surface). The extent of the deviation is dependent on the installation site of the sensor, the properties of the room (reflection of the luminaires, type of paint on the walls and the surfaces) and the luminaires used.
Range:	Radius of approx. 7 m; can be set in ETS
Overshoot time:	from 1 s to 255 hours; can be set in the ETS
Display elements:	1 red programming LED
Operating elements:	1 programming button
Ambient temperature	
Operation:	-5 °C to +45 °C (at temperatures > 30 °C, movement detection is limited)
Storage:	-25 °C to +45 °C
Transport:	-25 °C to +70 °C
EC guidelines:	EMC guideline 89/336/EEC
Initialisation:	Due to the limitation of the telegram rate, a telegram cannot be generated until 20 seconds after initialisation at the earliest.
Type of protection:	IP 20

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If you have technical questions, please contact the Customer Care Center in your country.

www.schneider-electric.com

This product must be installed, connected and used in compliance with prevailing standards and/or installation regulations. As standards, specifications and designs develop from time to time, always ask for confirmation of the information given in this publication.

V6307-561-00 02/08

Presence 1333/1.0

● General

Application 1333/1.0 has been developed for the KNX presence detector. In the following the device will be referred to as the presence detector.
The distinctive feature of the presence detector function is the integrated sensor, which measures brightness continuously. This function is able to measure and evaluate changes in the external brightness (daylight) even when artificial lighting is switched on. Even when people are present, the presence detector function switches off the lighting when the external brightness is sufficient (above the brightness threshold set) for working and safe use of the rooms without additional artificial lighting. This feature reduces energy consumption. The presence detector will not switch the lighting on until it detects movement in front of the device when the ambient brightness is too low. If movement is no longer detected in the activated state, the integrated staircase timer will switch the lighting back off.
In contrast to this, the movement block will only switch off when there is no more movement in front of the device - in other words, independently of the brightness. The switch-on condition is however the same as with the presence detector block.
The ETS application includes two independent presence or movement blocks, each with four output objects.

The technical data for the presence detector may be found in the description of the device.

Note:
All the settings described refer to ETS version 3, but you can use all the settings and functions with ETS version 2 as well.
The application files (vd2 and vd3) are configured in such a way that the application loading time is considerably reduced. When you convert an ETS 2 project to ETS 3, you lose this time saving. If you are working with ETS 3, use the vd3 files.
Total possible addresses and connections:
254 addresses; 255 connections

Note:
If you switch back to the preset values in either ETS 2 or ETS 3 (by clicking "Standard"), all the values that you have changed so far will be deleted. Any group addresses which have been parameterised will be lost.

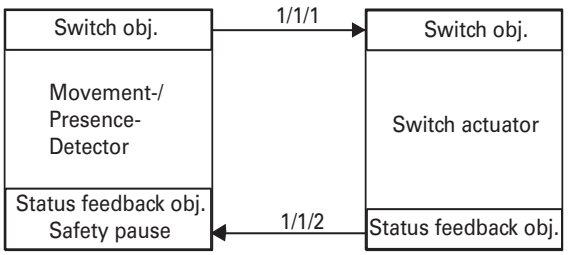
Note:
Because various functions depend on other functions, these dependent functions are only visible and selectable in the ETS when the preceding function has been enabled. If you de-select functions or parameters, group addresses that have already been connected may be removed.

● Getting started quickly

When you insert the application in the ETS or click on the "Standard" button, the ETS application will switch automatically to minimum configuration.

In minimum configuration, it is possible to put the presence detector into operation. For some application cases, the minimum configuration is even adequate for practical use. We also recommend opening minimum configuration as a way of familiarising yourself with the application software for the presence detector. Here all of the extended or more complex parameters are disabled. In "Block configuration" only the first "Movement/presence" block is enabled for use. In the "Telegrams" tab only output object 1 is enabled. This is a 1 bit output object. At the start of movement this object sends a 1 telegram and when the internal staircase timer has elapsed it sends a 0 telegram. Each parameter can always be tuned to its individual requirements. The brightness threshold and the staircase timer always need to be adjusted to suit requirements. Check the "Brightness" and "Times" tabs.

In this way the corresponding objects are connected to a KNX switch actuator.



To familiarise yourself with the extended and more complex parameters see the following pages.

● General functions

The common safety pause

When lights installed in the area of detection of the presence detector are switched, optical feedback can occur. The temperature difference between the luminaires or the change in the infrared spectrum can be interpreted as a movement by passive infrared movement or presence detectors (optical feedback).

The application has a common safety pause system - in other words, a safety pause triggered by the presence detector will affect all blocks in the application. As specified in a parameter the safety pause can be triggered at the status feedback object (safety pause) when there is an OFF telegram or when there is an OFF and ON telegram.
The status feedback object of the switching/dimming actuator must be connected to the feedback safety pause object of the presence detector.
Once a safety pause has been started, signals from the movement sensor will no longer be evaluated for this period of time. An elapsed staircase timer cannot be started by a movement during an active safety pause and an ongoing staircase timer cannot be retriggered by a movement.
An ongoing staircase timer is not affected by a safety pause being activated. In other words, the staircase timer will run through in the usual way.

Note:
Optical feedback can only be avoided by selecting the right installation location for the presence detector and the lighting. The safety pause system and the safety pause object of the application cannot compensate for all planning mistakes.

Communication objects

You can select the following communication objects:

General:

Function	Object name	Type	Prio	Flags	Behaviour
Safety pause	Status feedback object	1 bit	Low	WC	Receive

Parameter

Note:
The parameter settings include various functions which depend on other functions. Depending on the parameter setting, some functions or objects may or may not be displayed in the ETS.

General	
Parameter	**Setting**
Safety pause via status feedback object	Disabled
	For OFF telegram
	For ON and OFF telegram
Safety pause (1 - 20) seconds	1 - 20; preconfiguration: **2**

● General brightness evaluation

The current brightness can be determined by the internal brightness sensor, by an external communication object or by both dependencies. The relationship between internal and external values can be parameterised while doing this.

Communication objects

You can select the following communication objects:

General:

Function	Object name	Type	Prio	Flags	Behaviour
External sensor	Actual value input	2 byte	Low	WCT +	Transmit/ receive/ update

Parameter

General	
Parameter	**Setting**
Actual value (brightness)	**From internal sensor**
	From object, actual value input
	From internal sensor and object
Taking the separately measured lux value (0% - 100%) into account	0% - 100%, in 5% steps; preconfiguration **50%**

The brightness value determined applies to all presence/movement blocks. This value can be transmitted cyclically to the bus.

Note:
Should the situation in the room change due to different furniture, floor coverings or ceiling, for example - in other words, when reflective surfaces in the room change - take a new lux measurement. The presence detector will then need to be reprogrammed.

Communication objects

You can select the following communication objects:

General:

Function	Object name	Type	Prio	Flags	Behaviour
Transmit	Resulting actual value	2 byte	Low	CT	Transmit

Parameter

Note:
The parameter settings include various functions which depend on other functions. Depending on the parameter setting, some functions or objects may or may not be displayed in the ETS.

General	
Parameter	**Setting**
Send actual value cyclically, installation site	Enabled
	Disabled
Time base, send lux value	1 s
	1 min
	1 hr
Time factor, send lux value (1 - 255)	1-255; preconfiguration **30**

● Presence / movement block

Basic function of a presence block

A staircase timer is "integrated" into a presence block. When the ambient brightness is too low **and** a movement is detected, the presence block sends an ON telegram on the bus. When movement is no longer detected, the staircase timer starts. An OFF telegram is transmitted to the bus after a parameterised time.
Should the brightness rise beyond a specific threshold, a parameterised time period will be started and when it has elapsed an OFF telegram will also be transmitted.

Basic function of a movement block

A staircase timer is "integrated" into a movement block as is the case with a presence block. When the ambient brightness is too low **and** a movement is detected, the movement block transmits an ON telegram to the bus. When no further movement is detected the staircase timer starts. An OFF telegram is transmitted to the bus after a parameterised time. In contrast to the presence block, brightness is measured **only** at the moment when the first movement is detected. If further movement is detected, an OFF telegram is **not** transmitted, irrespective of brightness changes. The staircase timer starts only when movement is no longer detected, and an OFF telegram is transmitted after the parameterised time period.

Block configuration

Up to two movement/presence blocks are available. In the default setting, block 1 is enabled.

Parameter

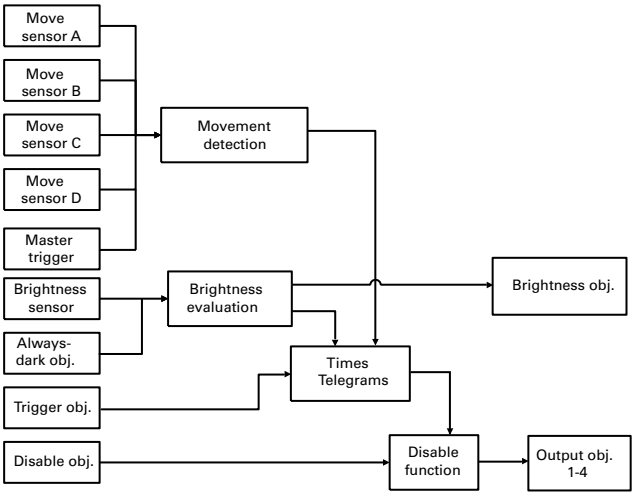
Block configuration	
Parameter	**Setting**
Movement/presence block X	Enabled
	Disabled

Movement detection

The device has a detection angle of 360°.
Via the ETS it is possible to parameterise all four sensors at the same time; sensitivity and range for all four sensors will be changed to the same degree.

Block diagram of presence/movement block

A block diagram clarifies the relationships between the individual dependencies:



Movement evaluation

As has already been stated above, the four movement sensors input into movement detection.
The master trigger object is brightness-dependent and with an ON telegram simulates a movement; an OFF telegram is ignored.
The trigger object is brightness-independent and also simulates a movement for an ON telegram. Whether the trigger object can switch the lighting off early when there is an OFF telegram can be parameterised.

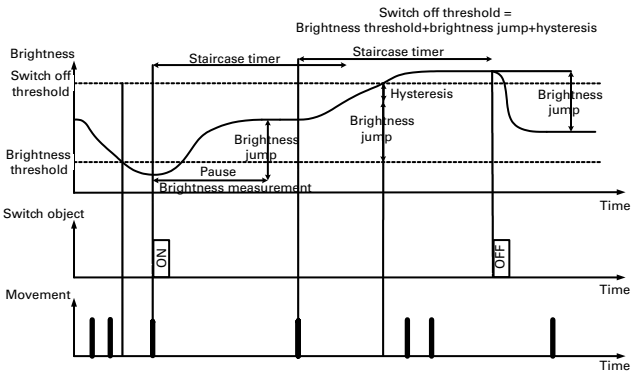
Parameter

Note:
The parameter settings include various functions which depend on other functions. Depending on the parameter setting, some functions or objects may or may not be displayed in the ETS.

Block X, general - movement sensors	
Parameter	**Setting**
Sensitivity (for all sensors)	**High**
	Medium
	Low
Range (for all sensors)	10% - 100% (in 10% steps) preconfiguration: **100%**

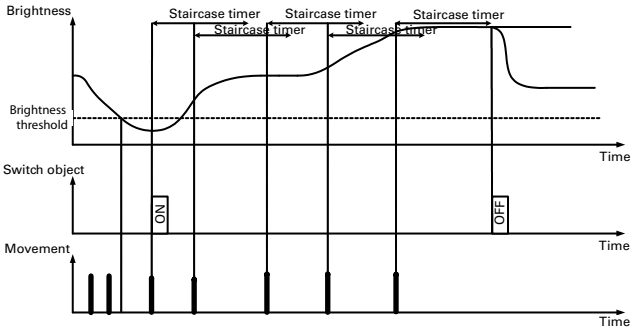
● Brightness evaluation

Brightness evaluation of a presence detector



Once a movement has been detected below the set brightness threshold and the action carried out at the start of movement (here: transmitting an ON telegram), the brightness lock no longer has an effect. This means that a new movement can retrigger the staircase time. However, should the ambient brightness increase during this time to exceed the set brightness threshold + measured brightness jump + a hysteresis (with regard to the brightness threshold), an ongoing staircase timer period will not be retriggered. At the end of the staircase timer period an OFF telegram can be transmitted, depending on the parameterisation. A further option when the OFF threshold is exceeded is not to allow the remaining staircase timer period to elapse but instead to start a defined remaining running time.

Brightness evaluation of a movement detector:



Where this differs from the presence detector is that the movement detector changes to non-brightness-dependent mode once the start of movement action (sending an ON telegram) has been carried out. Here freshly detected movements can retrigger the staircase timer. Unlike the presence detector, the movement detector cannot process the brightness jump and there is not even any setting of a hysteresis.

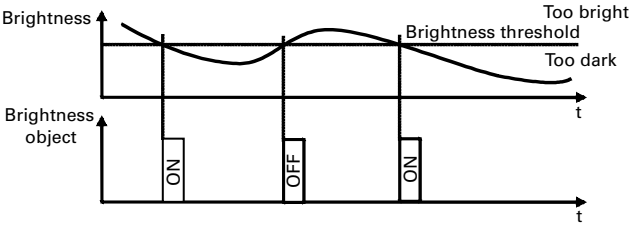
Brightness

The brightness threshold can be parameterised separately for each of the two movement/presence blocks. Each block has its own "Brightness" tab. A staircase timer be started (depending on parameterisation of the device) and an ON telegram transmitted to the bus only after the value is below the parameterised brightness threshold and the presence detector detects a movement. The brightness threshold can be set between 10 and 2000 lux.

Via the "Brightness" tab and the "Reaction with adequate brightness despite movement" parameter you can specify whether the selected block functions as a presence detector or a movement detector. If you select "Presence detector" in the ETS, the hysteresis will also need to be specified as a percentage and the pause for brightness measurement set. This setting is disabled if "Movement detector" has been selected.

Brightness object 1 bit

The brightness object sends a 1 bit value to the bus. If the parameterised brightness threshold is not reached, an ON telegram can be transmitted. If the parameterised brightness threshold is exceeded, an OFF telegram can be transmitted. Inverted transmission can also be set.



Always-dark object

In the case of an enabled "always-dark object", darkness can be simulated internally in the presence detector depending on the object value.

Communication objects

You can select the following communication objects:

Block X, general brightness:

Function	Object name	Type	Prio	Flags	Behaviour
Block X	Brightness object	1 bit	Low	CT	Transmit
Block X	Always-dark object	1 bit	Low	WC	Receive

Note:
The parameter settings include various functions which depend on other functions. Depending on the parameter setting, some functions or objects may or may not be displayed in the ETS.

Parameter

Block X, general brightness	
Parameter	**Setting**
Movement detection is	**Brightness-dependent**
	Independent of brightness
Overwrite brightness threshold during download	**Enabled**
	Disabled
Brightness threshold (10 - 2000 lux) see "General" tab	10 - 2000 lux; preconfiguration: **130**
Reaction when brightness sufficient despite movement	**Like presence detector**
	Like movement detector
Hysteresis (10% - 50%)	10 - 50%; preconfiguration: **25**
Pause for measuring the brightness (1 - 120) seconds	1 - 120 seconds; preconfiguration: **4**
Brightness object 1 bit	**Do not send**
	Transmit
	Transmit inverted
Always-dark object (= not brightness-dependent)	**Disabled**
	Enabled

● Operating modes

Normal mode

In this operating mode the presence detector has trigger objects (master trigger object, trigger object). Telegrams cannot be sent cyclically and this means a master-slave system cannot be set up. In the default setting, the presence detector transmits an ON telegram at the start of movement and transmits an OFF telegram when the movement time (staircase timer) has expired.

Communication objects

You can select the following communication objects:

Block X, general:

Function	Object name	Type	Prio	Flags	Behaviour
Block X	Master trigger object	1 bit	Low	WC	Receive
Block X	Trigger object	1 bit	Low	WC	Receive

● Telegrams

For each presence/movement block the "Action at start of movement" can be set:

– "Send immediately"
– "Do not send"

The behaviour after the "End of movement time" can also be set:

– "Send after staircase timer/remaining time has elapsed"
– "Do not send"

Four output objects are available for each of the two presence/movement blocks and they can be enabled via the application software. A transmission pause between the individual output objects can be set for each block.

Note:
Two presence/movement blocks and four output objects per presence detector means that eight switching/value objects in all are available.

Parameter

Note:
The parameter settings include various functions which depend on other functions. Depending on the parameter setting, some functions or objects may or may not be displayed in the ETS.

Block X, general telegrams

Parameter	Setting
Action at start of movement	**Send immediately**
	Do not send
When movement time elapsed	**Send after staircase timer/ remaining time has elapsed**
	Do not send
Output object X (1 - 4)	**Enabled**
	Disabled
Pause between two telegrams (3 - 255) x 100 ms	3 - 255; preconfiguration: **5**

Output for switching/value object X

For each output object you can select between a 1 bit, 1 byte (0% - 100%), 1 byte (0 - 255) and 2 byte object. The telegram values should be parameterised for the start of movement and for the end of the movement time. Here an object can transmit its current value or a defined value to the bus.

Note:
The current value can be transmitted by a time switch, for example. During the night a lower byte value is transmitted to the output object of the presence detector than in daytime hours.

Communication objects

You can select the following communication objects:

Block X general - telegrams - output for switching/ value object X:

Function	Object name	Type	Prio	Flags	Behaviour
Block X	Switch object X	1 bit	Low	WCT	Transmit/ receive
Block X	Value object X	1 byte	Low	WCT	Transmit/ receive
Block X	Value object X	2 byte	Low	WCT	Transmit/ receive

Parameter

Note:
The parameter settings shown below are **dependent** on the object settings (1 bit, 1 byte or 2 bytes). Depending on the parameterisation some parameters will not be displayed!
The parameter settings include various functions which depend on other functions. Depending on the parameter setting, some functions or objects may or may not be displayed in the ETS.

Block X general telegrams output switching/value object X

Parameter	Setting
Object	**1 bit**
	1 byte 0% - 100%
	1 byte 0 - 255
	2 byte
At start of movement	**Transmits defined value**
	Transmits its value
Value or object value	ON telegram
	OFF telegram
	0% - 100%
	0 - 255
	Change value 0 - 65535 to floating point
	Change value -32768 - 32767 to floating point
	Floating point
	Value 0 - 65535
	Value -32768 - 32767
When movement time elapsed	**Transmits defined value**
	Transmits its value
Value or object value	ON telegram
	OFF telegram
	0% - 100%
	0 - 255
	Change value 0 - 65535 to floating point
	Change value -32768 - 32767 to floating point
	Floating point
	Value 0 - 65535
	Value -32768 - 32767

Note regarding 2 byte parameter settings:
Depending on the setting of the object type value there will be new parameters; depending on the parameterisation the values can be input immediately or are determined via sign x basic value x factor.

● Staircase timer

The staircase timer can be parameterised via a time base x factor.

The "Times" tab has some parameter displays and selectable objects which are **dependent** on the operating mode set.

Self-adjusting staircase timer

The presence detector is equipped with a "Self-adjusting staircase timer". When the "Self-adjusting staircase timer" is enabled, the presence detector can start a brief overshoot time when someone is in the room for a short time. If they remain in the room longer, a long overshoot time is started.
The parameters "Time base", "Minimum time factor", "Time factor for learning step", "Maximum time factor" and "Sensitivity of the learning step" are available for the "Self-adjusting staircase timer." If there is only a brief movement in front of the presence detector, the overshoot time (until switch-off) will be close to the "Minimum time factor" x "Time basis". If movements last longer, a "Time factor for learning step" will be added to the staircase timer up to the maximum, depending on what learning sensitivity has been set. Once the time set on the staircase timer has elapsed, a restart takes place with "Minimum time factor".

Communication objects

Operating mode: Normal mode

You can select the following communication objects:

Block X, general times:

Function	Object name	Type	Prio	Flags	Behaviour
Block X	Time factor, staircase timer	1 byte	Low	WC	Transmit

Parameter
Operating mode: Normal mode

Note:
The parameter settings include various functions which depend on other functions. Depending on the parameter setting, some functions or objects may or may not be displayed in the ETS.

Block X, general times	
Parameter	**Setting**
Master triggering is (brightness-dependent)	**Enabled**
	Disabled
Via movement/master trigger object, time is	**Retriggerable**
	Not retriggerable
Master trigger object includes the safety pause	**Enabled**
	Disabled
Triggering is (not brightness-dependent)	**Enabled**
	Disabled

Block X, general times	
Parameter	**Setting**
Switch off staircase timer via trigger object	**Enabled**
	Disabled
Via trigger object, time is	**Retriggerable**
	Not retriggerable
Trigger object includes the safety pause	**Enabled**
	Disabled
Overwriting staircase timer during download	**Enabled**
	Disabled
Self-adjusting staircase timer (always retriggerable)	**Disabled**
	Enabled
The following parameters are only visible when "Self-adjusting staircase timer" is "disabled".	
Time factor staircase timer object	**Disabled**
	Enabled
Time base for staircase timer	**1 min**
	1 s
	1 hr
Time factor for staircase timer (1 - 255)	1 - 255; preconfiguration: **25**
The following parameters are only visible when "Self-adjusting staircase timer" is "enabled".	
Time base for staircase timer	**1 min**
	1 s
	1 hr
Minimum time factor (1 - 255) Staircase timer	1 - 255; preconfiguration: **5**
Time factor for learning step (1 - 255) Staircase timer	1 - 255; preconfiguration: **1**
Maximum time factor (1 - 255) Staircase timer	1 - 255; preconfiguration: **25**
Sensitivity of learning step	1 - 5; preconfiguration: **4** 1 = slow 5 = sensitive
On reaching the switch-off threshold	**Staircase timer elapsed**
	Remaining running time elapsed
Time base, remaining running time	**1 min**
	1 s
	1 hr
Time factor, remaining running time (1 - 255)	1 - 255; preconfiguration: **4**

● Disable function

The presence detector can be disabled with the aid of the disable object; here the activation time point can be download / bus voltage recovery or reception of a disable telegram. The activation telegram for the disable function can be an ON telegram or an OFF telegram. At the start of disablement (if enabled via parameter) a telegram can be sent via the corresponding output object. When the disable function is disabled, the current status of the presence detector is restored (an ongoing staircase timer is not stopped/start of movement actions or action when movement time elapses is transmitted).

Communication objects

You can select the following communication objects:

Block X, general:

Function	Object name	Type	Prio	Flags	Behaviour
Block X	Disable object	1 bit	Low	WC	Receive

Parameter

Block X, general	
Parameter	**Setting**
Disable function	**Disabled**
	Enabled

Block X, general - disable function	
Parameter	**Setting**
Activation time for disable function	**Active during telegram reception**
	After download / bus voltage recovery
Block	**For object value "1"**
	For object value "0"
Behaviour at the start of Telegrams block on output object 1-4 tab	**Do not send a telegram**
	Transmit telegram

Block X general telegrams output switching/value object X	
Parameter	**Setting**
At start of block	**OFF telegram**
	ON telegram
	1 byte 0% - 100%
	1 byte 0 - 255
	2 byte floating point or value

● Changing specific parameters via the bus

The following parameter can be modified via the bus:

– "Time factor, staircase timer"

Note:
Following bus voltage failure and recovery the modified value will be retained.

Communication objects

You can select the following communication object:

Block X, general times:

Function	Object name	Type	Prio	Flags	Behaviour
Block X	Time factor, staircase timer	1 byte	Low	WC	Receive

Parameter

Block X, general times	
Parameter	**Setting**
Time factor staircase timer object	**Disabled**
	Enabled

● Behaviour on application/recovery of the bus voltage

Behaviour on application/recovery of the bus voltage

The actual value input (external sensor) can transmit read requests depending on the parameterisation. The operating mode status feedback message and the brightness object can be transmitted depending on the parameterisation.

Behaviour when bus voltage fails

No reaction

● Own notes: