INTERRA

ITR410-002 - WIDE RANGE CEILING MOUNT PASSIVE INFRARED SENSOR

Product Manual





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1.) PRODUCT DESCRIPTION

ITR410-002 Ceiling Mount Passive Infrared & Lux Sensor is able to sense motion, temperature, and lighting intensity. Designed to be ceiling mounted the Passive Infrared Sensor is able to detect a presence at up to 24meters away, making it ideal for lighting and security applications. Database uploads to the product are done with ETS3.0 and later versions. The device is manufactured in accordance with electromagnetic compatibility (EMC), electrical safety and environmental conditions. For a tailored detection solution the Passive Infrared Sensor detection area can be partitioned via ETS software, enabling custom detection zones to be created.



1.1.) TECHNICAL INFORMATION

Device	ITR410-002
Power Supply	EIB Power Supply
Current Consumption	10 mA (static)
	15 mA (dynamic)
Power Consumption****	150 mW (bekleme)
	450 mW (çalışma)
Inputs	2x Dry Contact Inputs
Type of Protection	IP 20
Temperature Range	Operation (– 5°C45 °C)
	Storage (- 25°C60 °C)
Maximum Air Humidity	<90 RH
Flammability	Non-flammable Product
Color	Light Grey and White
Dimensions	63 x 46.6 (DxH)
Certificaton	KNX Certified
Configuration	Configuration with ETS



1.2.) PRODUCT FUNCTIONS

- The multi-function motion sensor can report movement status, temperature, Lux or dry contacts status to KNX system.
- > The 24M Sensor detect range can be up to 22 meters, recommended assembly height is 2.5 m.
- > The multi-function motion sensor supports constant brightness output.
- It can controls for Switch control, Absolute dimming control, Shutter control, Alarm control, Percentage control, Sequence control, Scene control, String control, Logic combination control.
- With function of constant brightness: keep the lux in the constant value, will dim the lights to the corresponding intensity according to the surrounding brightness.
- The logic validity can be set by dry contact or external telegram, enable end-user to enable or disable the preset logics.
- The work mode include single mode and Master & Slave mode. One master sensor can be used in conjunction with multiple slave sensors, When slave sensor detects the movement, will send the data to master sensor, then the master sensor will control the targets.



1.3.) PRODUCT DIMENSIONS

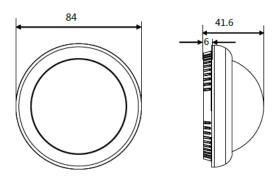


Fig 1: Front and Side Appearances and Measures of the Device.

The numerical values showing the dimensions above are in mm.

1.4.) CONNECTION DIAGRAM AND PROGRAMMING

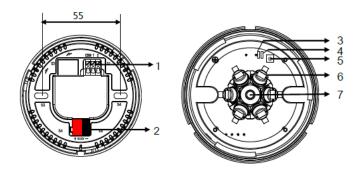


Fig 2: KNX Connector, Programming LED ve Button.

1.	Dry contact, from left are Com, dry contact 1, dry contact 2.
2.	KNX/EIB interface.
3.	Programming LED (VE7): For indicating normal mode (LED Off) or addressing mode (LED On); it is automatically Off once the physical address has been modified. or idle mode (LED Off).
4.	Working LED (VE8): detect any movement LED will ON. The LED state can be set.
5.	Programlama button.
6.	IR detectors: each detector has specified number that could be set enable or disable individually for different zone detect. The specified number are S1, S2, S3, S4, S5, S6.
7.	LUX sensor.

Table 1 : Connection Diagram and Descriptions



1.5.) Passive Infrared Sensing Ranges

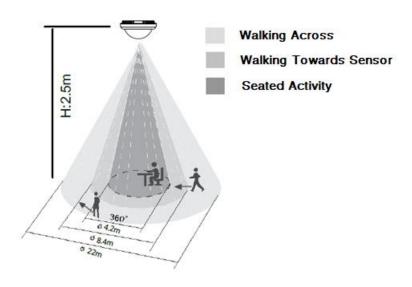


Fig 3: Passive Infrared Sensor Detection Diagram.

Mounting Height	Seated Activity & Very Slight Movement	Walking Across with Small Steps	Walking Across
2.5m	4.2m	8.4m	22m
3m	4.6m	9.6m	23.2m
4m	5.2m	10.6m	24.8m
5m	6.7m	11.5m	27.6m

Table 1 : Passive Infrared Sensor Detection Ranges.

The above table shows the detection distances of the ITR410-002 Wide Range Passive Infrared Sensor according to the height at which it is installed. As the height level of the installation increases, the distance that the sensor can detect increases. The position and height where the sensor is to be placed are important in this respect.



2.) MOUNTING

ITR410-002 installation steps of the Wide Range Ceiling Mount Passive Infrared Sensor are described below.

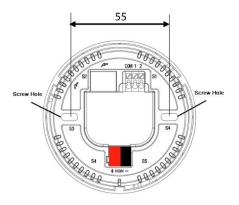


Fig 4: Screw Holes Used in Mounting the Device

Mounting of the Screw

The sensor can be mounted with screws to thick walls, wooden ceiling or special. When attaching the sensor with the screw, the tightening torque should not exceed 0.3Nm.



3. ETS PARAMETERS AND OBJECTS

3.1. GENERAL PARAMETER PAGE

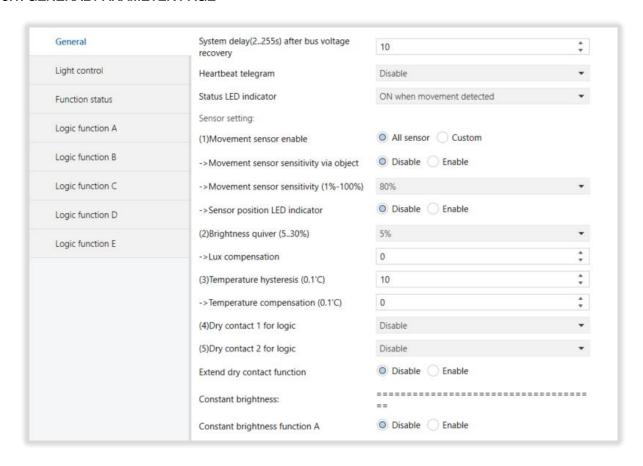


Fig 5: General Parameter Page

3.1.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
System delay(2255s) after bus voltage recovery	This parameter, is used for set the delay time for the device after power on.	2 10 255
Heartbeat telegram	This parameter, is used to send cyclically heartbeat telegrams. If the value is 0, the device will send 0 cyclically. If the value is 1, the device will send cyclically. Also, if the value is 0/1, the device will send alternately 0 and 1 value cyclically.	Disable Send value 0 cyclically Send value 1 cyclically Send value 0/1 inverted cyclically
Telegram is sent time interval (165535s)*1	This parameter, allows sending the telegram cyclically after time out.	1 5 65535s
Status LED indicator	This parameter, is used to configure the LED indicator.	Always is OFF



	Always is OFF: The status of the LED indicator is always OFF.	ON when movement detected
	ON when movement detected: The status of the LED indicator is ON when a motion is detected.	ON when received '1' else OFF
	ON when received '1' / '0', else is OFF: When one of '1' / '0 value is taken, the status of the LED indicator is ON,	ON when received '0' else OFF
	otherwise it is OFF. ON when logic A / B / C / D is lock / unlock: The LED	ON when logic A is lock, else OFF
	indicator status is ON when A / B / C / D / E logic is locked / unlocked, otherwise OFF.	ON when logic A is unlock, else OFF
		ON when logic B is lock, else OFF
		ON when logic B is unlock, else OFF
		ON when logic C is lock, else OFF
		ON when logic C is unlock, else OFF
	lo C	ON when logic D is lock, else OFF
		ON when logic D is unlock, else OFF
		ON when logic E is lock, else OFF
		ON when logic E is unlock, else OFF
(1) Movement sensor enable	This parameter, is used to set the number of motion sensors.	All sensor Custom
All sensor:		
-> Movement sensor sensitivity via object	This parameter, is used to enable or disable the change of motion sensor sensitivity via the bus line.	Disabled Enabled
-> Movement sensor sensitivity (1%100%)	This parameter, is used to set the sensitivity value of the motion sensor.	-> 1% 80% 100%



Custom:		
-> Sensor 1	-> This parameter, is used to activate or deactivate the sensor 1.	-> - Disable - Enable
> Sensor 1 sensitivity(1%100%)		> 1% 80% 100%
	> This parameter, is used to set the sensitivity value of sensor 1.	•
	-> This parameter, is used to activate or deactivate the sensor 6.	
-> Sensor 6	> This parameter, is used to set the sensitivity value of	-> - Disable - Enable
> Sensor 6 sensitivity(1%100%)	sensor 1.	> 1% 80% 100%
-> Movement sensor enable via object.	-> This parameter, is used to activate or deactivate the motion sensor via the bus line.	-> - Disable - Enable
-> Movement sensor sensitivity via object.	-> This parameter, is used to enable or disable changing the sensitivity of the motion sensor via the bus line.	-> - Disable - Enable
-> Sensor position LED indicator	This parameter, is used to enable or disable the sensor	Disable
	position LED display.	Enable
(2) Brightness quiver (530%)	This parameter, is used to adjust the brightness vibration.	5%, 10%, 15%, 20% 25%, 30%
	If the brightness change remains in the adjustment range while in the effective brightness range, the status does not change. If the brightness within the effective range is between the setting range threshold_1 * (1-n%) and threshold_2 * (1 + n%), the state will change because there is a change in the value greater than the range. If the brightness is not within the effective range, only the brightness changes to be effective within the threshold.	
-> Lux compensation	This parameter, is used to compensate the Lux value.	-200 0 +200
(3) Temperature hysteresis (0.1'C)	This parameter, is used to set the temperature hysteresis value.	1 10 50
-> Temperature compensation 0.1'C	This parameter, is used to compensate the temperature value. When the presence detector detects the temperature error, you can set the temperature compensation. Value '0' means no compensation.	-100 0 100
Dry contact 1 for logic	This parameter, is used to set the operating mode of dry	Disable
	contact 1.	Mechanical switch
		Electronic switch



Mechanical switch:	Mechanical switch mode:	-> - Unchanged
-> Status when closing the contact	This parameter, is used to set the state when contact 1	- Toggle
	is closed.	-Constant to true('1')
		-Constant to false('0')
	This parameter, is used to set the state when contact 1	-> - Unchanged
-> Status when opening the contact	is opened.	- Toggle
		-Constant to true('1')
		-Constant to false('0')
Electronic switch:		
-> Button value when voltage	This parameter, is used to set the button status after	-> - Last value
recovery	voltage recovery.	- Value is true('1')
	This parameter is used to set the button status when the	- Value is false('0')
-> Status button when short button	This parameter, is used to set the button status when the button is pressed short.	
-> Status button when short button operation		-> - Invalid
		- Toggle
		- Constant to true("1")
	This parameter, is used to set the button status when the button is pressed long.	- Constant to false("0")
-> Status button when long button		-> - Invalid
operation		- Toggle
	This parameter, is used to set the long press time.	- Constant to true("1")
		- Constant to false("0")
>> Long button time after 0.1s(0.220s)		>>2 10 200ms
Dry contact 2 for logic	This parameter, is used to set the dry contact 2 operating	Disable
	mode.	Mechanical switch
		Electronic switch
Extend dry contact function	This parameter, is used to enable or disable the dry	Disable
	contact function.	Enable
Constant brightness function A	This parameter, is used to enable or disable the constant	Disabled
	brightness function A.	Enabled
Constant brightness function B	This parameter, is used to enable or disable the constant	Disabled
	brightness function B.	Enabled



3.2. CONSTANT BRIGHTNESS A/B

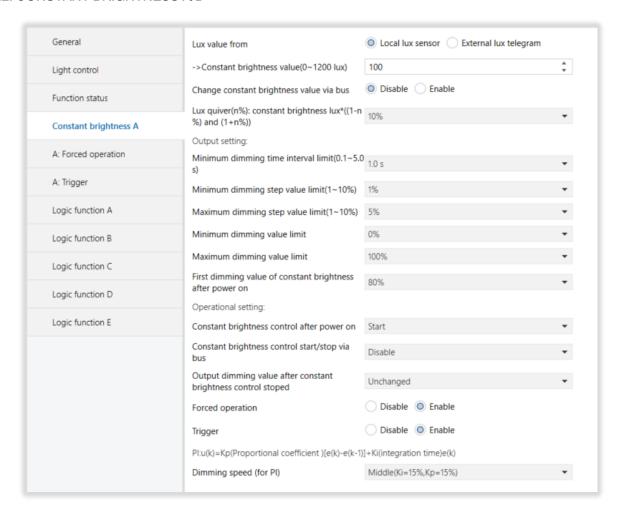


Fig 6: Constant Brightness A Parameter Page

3.2.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
LUX value from	This parameter, is used for set the lux value. Local lux sensor: The lux value is depend on the local lux sensor. External lux telegram: The lux value is depend on the external lux telegram.	Local lux sensor External lux telegram
-> Constant brightness value (0-1200 lux)	This parameter, is used to set the constant brightness value.	0 100 1200
Change constant brightness value via bus	This parameter, is used to enable or disable the change constant brightness value via bus.	Enable Disable



Lux quiver(n%): constant brightness	This parameter, is used to set the lux quiver.	5%
lux*((1-n%) and (1+n%))	If the brightness change remains in the adjustment	10%
	range while in the effective brightness range, the	15%
	status does not change. If the brightness within the	20%
	effective range is between the setting range threshold_ $1*(1-n\%)$ and threshold_ $2*(1+n\%)$, the	
	situation will change because there is a change in	25%
	the value greater than the range. If the brightness is not within the effective range, only the brightness changes to be effective within the threshold.	30%
Minimum dimming time interval limit (0.1~5.0s)	This parameter, is used for dimming according to the specified range level.	0.1 1 5.0s
Minimum dimming step value limit (1~10%)	This parameter, is used to set the minimum dimming step value limit.	110%
Maximum dimming step value limit (1~10%)	This parameter, is used to set the maximum dimming step value limit.	1510%
Minimum dimming value limit	This parameter, is used to set the minimum dimming value.	0 100%
Maximum dimming value limit	This parameter, is used to set the maximum dimming value.	0100%
First dimming value of constant	This parameter, is used to set the first dimming value	0 80 100%
brightness after power on	for constant brightness when power on.	Last dimming value
Constant brightness control after	This parameter, is used to set the parameter for	Stop
power on	constant brightness control when power on.	Start
		Recovery
Constant brightness control	This parameter, is used to set the constant	Enable('1'-Start/'0'-Stop)
start/stop via bus	brightness control.	Enable('1'-Stop/'0'-Start)
	Enable('1'-Start/'0'-Stop): If receive the telegram	Disable
	value '1', the constant brightness will be started, if receive the telegram value '0', the constant brightness will be stopped.	Jisasis
	Enable('1'-Stop/'0'-Start): If receive the telegram value '0', the constant brightness will be started, if receive the telegram value '1', the constant brightness will be stopped.	
	Disable: Constant brightness control will be disabled.	
Output dimming value after constant	This parameter, is used to set the output dimming	Unchanged
brightness control stopped	value when constant brightness control stopped.	0100%



Forced operation	This parameter, is used to enable or disable the	Enable
	forced operation.	Disable
Trigger	This parameter, is used to enable or disable the	Enable
	trigger operation.	Disable
Dimming speed (for PI)	This parameter, is used to set the dimming speed	Defined
	(for PI control).	Lowest(Ki=1%,Kp=1%)
		Lower(Ki=5%,Kp=5%)
		Low(Ki=10%, Kp=10%)
		Middle(Ki=15%,Kp=15%)
		Fast(Ki=30%,Kp=30%)
		Faster(Kp=60%,Ki=60%)
		Fastest(Kp=100%,Ki=100%

3.3. A/B FORCED OPERATION

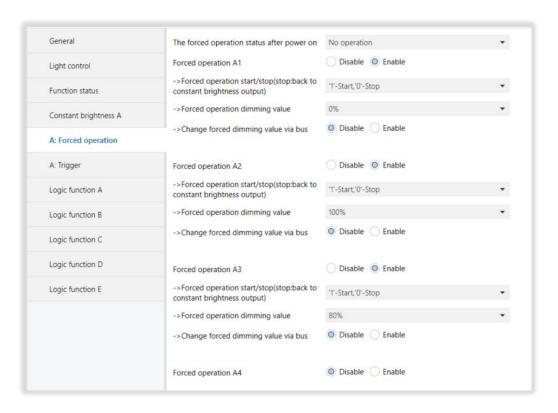


Fig 9: "A" Forced Operation Parameter Page



3.3.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
The forced operation status after power on	This parameter, is used to set the forced operation status when after power on.	No operation Last forced operation To forced operation A1 To forced operation A2 To forced operation A3 To forced operation A4
Forced operation A1	This parameter, is used to enable or disable for forced operation A1.	Enable Disable
-> Forced operation start/stop (stop: back to constant brightness output)	This parameter, is used to set for forced operation. '1'-Start, '0'-Stop: If receive telegram value 1 will start, if receive telegram value 0 will stop and back to constant brightness output. '0'-Start, '1'-Stop: If receive telegram value 0 will start, if receive telegram value 1 will stop and back to constant brightness output. '1/0'-Start: If receive telegram value 1 or 0 will start. '1/0'-Stop: If receive telegram value 1 or 0 will stop and back to constant brightness output.	'1'-Start, '0'-Stop '0'-Start, '1'-Stop '1/0'-Start '1/0'-Stop
-> Forced operation dimming value	This parameter, is used to set the dimming value for forced operation.	0100%
Change forced dimming value via bus	This parameter, is used to enable or disable the changing forced dimming value via bus.	Enable Disable
Forced operation A2	This parameter, is used to enable or disable for forced operation A2.	Enable Disable
-> Forced operation start/stop (stop: back to constant brightness output)	This parameter, is used to set for forced operation. '1'-Start, '0'-Stop: If receive telegram value 1 will start, if receive telegram value 0 will stop and back to constant brightness output. '0'-Start, '1'-Stop: If receive telegram value 0 will start, if receive telegram value 1 will stop and back to constant brightness output. '1/0'-Start: If receive telegram value 1 or 0 will start. '1/0'-Stop: If receive telegram value 1 or 0 will stop and back to constant brightness output.	'1'-Start, '0'-Stop '0'-Start, '1'-Stop '1/0'-Start '1/0'-Stop
-> Forced operation dimming value	This parameter, is used to set the dimming value for forced operation.	0100%
Change forced dimming value via bus	This parameter, is used to enable or disable for changing forced dimming value via bus.	Enable Disable



Forced operation A3	This parameter, is used to enable or disable for forced operation A3.	Enable Disable
-> Forced operation start/stop (stop: back to constant brightness output)	This parameter, is used to set for forced operation. '1'-Start, '0'-Stop: If receive telegram value 1 will start, if receive telegram value 0 will stop and back to constant brightness output. '0'-Start, '1'-Stop: If receive telegram value 0 will start, if receive telegram value 1 will stop and back to constant brightness output. '1/0'-Start: If receive telegram value 1 or 0 will start. '1/0'-Stop: If receive telegram value 1 or 0 will stop and back to constant brightness output.	'1'-Start, '0'-Stop '0'-Start, '1'-Stop '1/0'-Start '1/0'-Stop
-> Forced operation dimming value	This parameter, is used to set the dimming value for forced operation.	0 80 100%
Change forced dimming value via bus	This parameter, is used to enable or disable for changing forced dimming value via bus.	Enable Disable
Forced operation A4	This parameter, is used to enable or disable for forced operation A4.	Enable Disable
-> Forced operation start/stop (stop: back to constant brightness output)	This parameter, is used to set for forced operation. '1'-Start, '0'-Stop: If receive telegram value 1 will start, if receive telegram value 0 will stop and back to constant brightness output. '0'-Start, '1'-Stop: If receive telegram value 0 will start, if receive telegram value 1 will stop and back to constant brightness output. '1/0'-Start: If receive telegram value 1 or 0 will start. '1/0'-Stop: If receive telegram value 1 or 0 will stop and back to constant brightness output.	'1'-Start, '0'-Stop '0'-Start, '1'-Stop '1/0'-Start '1/0'-Stop
-> Forced operation dimming value	This parameter, is used to set the dimming value for forced operation.	050100%
Change forced dimming value via bus	This parameter, is used to enable or disable for changing forced dimming value via bus.	Enable Disable



3.4. A/B: TRIGGER

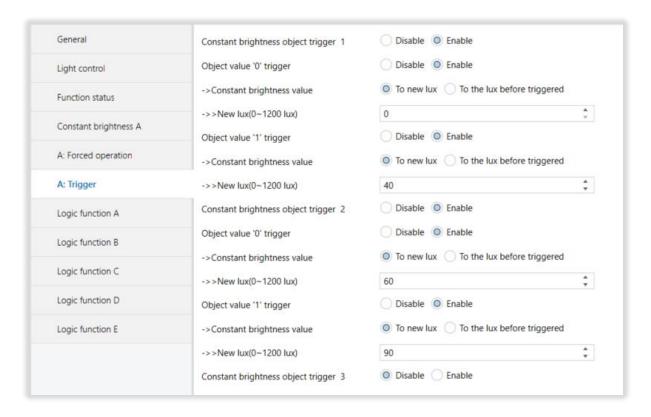


Fig 10: A Trigger Parameter Page

3.4.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Constant brightness object trigger 1	This parameter, is used to enable or disable for constant brightness object trigger 1.	Enable Disable
Object value '0' trigger	This parameter, is used to enable or disable object value '0' trigger.	Enable Disable
-> Constant brightness value	This parameter, is used to set the constant brightness value.	To new lux To the lux before triggered
->> New lux (0~1200 lux)	This parameter, is used to set a new lux value.	0 1200
Object value '1' trigger	This parameter, is used to enable or disable the "Object value '1' trigger" parameter.	Enable Disable
-> Constant brightness value	This parameter, is used to set the constant brightness value.	To new lux To the lux before triggered



->> New lux (0~1200 lux)	This parameter, is used to set a new lux value.	0 40 1200
Constant brightness object trigger 2	This parameter, is used to enable or disable for constant brightness object trigger 2.	Enable Disable
Object value '0' trigger	This parameter, is used to enable or disable object value '0' trigger.	Enable Disable
-> Constant brightness value	This parameter, is used to set the constant brightness value.	To new lux To the lux before triggered
->> New lux (0~1200 lux)	This parameter, is used to set a new lux value.	0 60 1200
Object value '1' trigger	This parameter, is used to enable or disable the "Object value '1' trigger" parameter.	Enable Disable
-> Constant brightness value	This parameter, is used to set the constant brightness value.	To new lux To the lux before triggered
->> New lux (0~1200 lux)	This parameter, is used to set a new lux value.	0 90 1200
Constant brightness object trigger 3	This parameter, is used to enable or disable for constant brightness object trigger 3.	Enable Disable
Object value '0' trigger	This parameter, is used to enable or disable object value '0' trigger.	Enable Disable
-> Constant brightness value	This parameter, is used to set the constant brightness value.	To new lux To the lux before triggered
->> New lux (0~1200 lux)	This parameter, is used to set a new lux value.	0 120 1200
Object value '1' trigger	This parameter, is used to enable or disable the "Object value '1' trigger" parameter.	Enable Disable
-> Constant brightness value	This parameter, is used to set the constant brightness value.	To new lux To the lux before triggered
->> New lux (0~1200 lux)	This parameter, is used to set a new lux value.	0 150 1200



3.5. LIGHT CONTROL

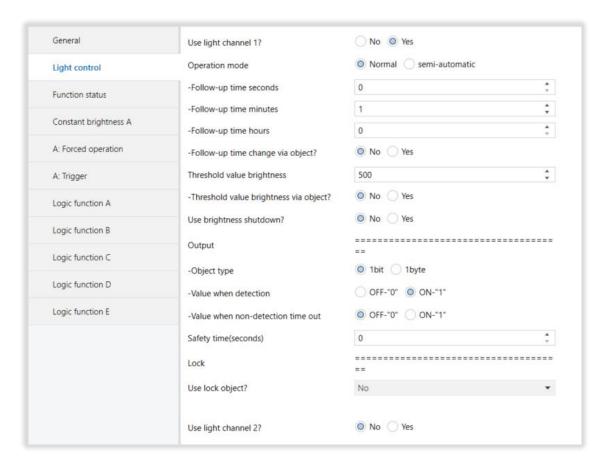


Fig 11: Light Control Parameter Page

3.5.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Use light channel 1/2	This parameter, is used to enable or disable the light channel 1/2 function.	No Yes
Operation mode	This parameter, is used to set the operation mode.	Normal Semi-automatic
- Follow-up time seconds	This parameter, is used to set the follow up time in seconds.	0 59
- Follow-up time minutes	This parameter, is used to set the follow up time in minutes.	0 1 59
- Follow-up time hours	This parameter, is used to set the follow up time in hours.	024
- Follow-up time change via object?	This parameter, is used to enable or disable change follow time via KNX bus by object.	No Yes



Threshold value brightness	This parameter, is used to set the threshold value of brightness.	0 500 1200
Threshold value brightness via object?	This parameter, ise used to enable or disable the changing threshold value brightness via object.	No Yes
Use brightness shutdown?	This parameter, is used to enable or disable the use brightness to shutdown.	No Yes
- Calculate delay time (150minutes)	This parameter, is used to set the delay time in minutes.	150
- Object type	This parameter, is used to set the object type.	1 bit 1 byte
- Value when detection	This parameter, is used to set output value when detection (1 bit).	OFF-"0" ON-"1"
- Value when non-detection time out	This parameter, is used to set output value when non-detection (1 bit).	OFF-"0" ON-"1"
Safety time(seconds)	This parameter, is used to set the safety time in seconds.	0 255
- Value when detection	This parameter, is used to set value when detection (1 byte).	0255
- Value when non-detection time out	This parameter, is used to set value when non-detection (1 byte).	0 192 255
-> When non-detection continue dim delay	This parameter, is used to enable or disable the continue dim delay when non-detection.	No Yes
> A delay time seconds	This parameter, is used to set "A" delay time in seconds.	0 30 59
> A delay time minutes	This parameter, is used to set "A" delay time in minutes.	0 59
> A value	This parameter, is used to set the "A" value.	0 128 255
> B delay time seconds	This parameter, is used to set the "B" delay time in seconds.	0 30 59
> B delay time minutes	This parameter, is used to set the "B" delay time in minutes.	0 59
> B value	This parameter, is used to set the "B" value.	0 64 255
> C delay time seconds	This parameter, is used to set the "C" delay time in seconds.	0 30 59
> C delay time minutes	This parameter, is used to set the "C" delay time in minutes.	0 59
> C value	This parameter, is used to set the "C" value.	0 255





Use lock object?	This parameter, is used to enable or disable the lock object. Disable: The lock object is disabled. '1'-lock, '0'-unlock: The object is locked when the value '1' is received, is unlocked when the value '0' is received.	No '1'-lock, '0'-unlock '0'-lock, '1'-unlock
	'0'-lock, '1'-unlock: The object is locked when the value '0' is received, is unlocked when the value '1' is received.	
Lock	This parameter, is used to set only for locking or for setting both locking and value transmitting.	Only lock Lock and transmit value
> Value	This parameter, is used to determine what the value is to be transmitted when unlocking.	OFF-"0" ON-"1"
Unlock	This parameter, is used to set only for unlocking or for setting both unlocking and value transmitting.	Only unlock Lock and transmit value
> Value	This parameter, is used to determine what the value is to be transmitted when unlocking.	OFF-"0" ON-"1"
Automatic unlock after lock delay	This parameter, is used to enable or disable automatic unlocking after lock.	Disable Enable
> Delay time seconds	This parameter, is used to set the time delay in seconds.	0 59
> Delay time minutes	This parameter, is used to set the time delay in minutes.	0 1 59
> Delay time hours	This parameter, is used to set the time delay in hours.	024



3.6. FUNCTION STATUS

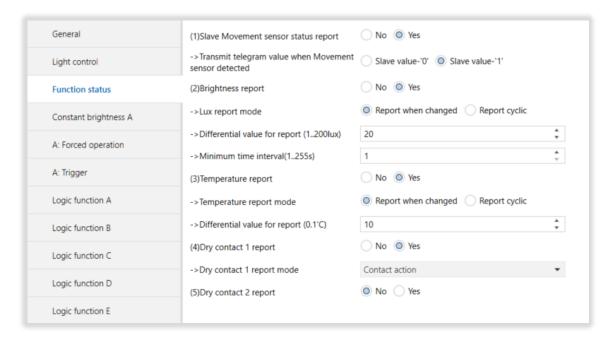


Fig 12: Function Status Parameter Page

3.6.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
(1)Slave Movement sensor status report	This parameter, is used to enable or disable slave movement sensor status report.	No Yes
-> Transmit telegram value when Movement sensor detected	This parameter, is used to set the transmit telegram value when movement sensor detected.	Slave value '0' Slave value '1'
(2)Brightness report	This parameter, is used to enable or disable the lux value report feature. If the brightness value falls into the valid range, it reports the current value to the bus line only once. However, if it is within the range, it does not take the initiative to send the brightness values. But, an external device can always read the current brightness values.	No Yes
-> Lux report mode	This parameter, is used to set the lux value report mode. Report when changed: It is reported when the lux value is changed. Report cyclic: The lux value is reported cyclically.	Report cyclic Report when changed



-> Differantial value for report (1200lux)	This parameter, is used to set the differential lux value for reporting. If the changing lux value higher than the set value, reporting is made.	1 20 200
-> Minimum time interval(1255s)	This parameter, is used to set the minimum time interval in seconds to report when there is a change of value. If the changing lux value higher than the set value, reporting is made.	1255
-> Lux report cycle (1255s)	This parameter, is used to set the time for lux reporting cycle.	1 10 255
(3)Temperature report	This parameter, is used to enable or disable the temperature value reporting feature.	No Yes
-> Temperature report mode	This parameter, is used to set the temperature value reporting mode. Report when changed: It is reported when the temperature value is changed. Report cyclic: The temperature value is reported cyclically.	Report cyclic Report when changed
-> Differential value for report (0.1'C)	This parameter, is used to set the differential temperature value for reporting. If the changing lux value higher than the set value, reporting is made.	1 10 50
-> Temperature report cycle (1255s)	This parameter, is used to set the time for temperature reporting cycle.	110255
Dry contact 1 report	This parameter is used to enable or disable dry contact 1 reporting.	No Yes
-> Dry contact 1 report mode	This parameter, is used to reporting mode of dry contact 1.	Contact action When status value changed True False Contact action and periodically When status value changed and periodically True and periodically False and periodically
->> Report cycle time(1255s)	This parameter, is used to set the reporting period time.	1 10 255
Dry contact 2 report	This parameter is used to enable or disable dry contact 2 reporting.	No Yes



3.7. LOGIC FUNCTION A

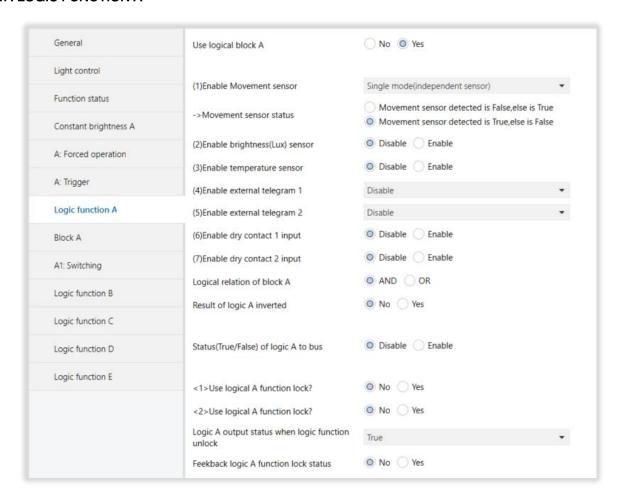


Fig 13: Logic Function A Parameter Page

3.7.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Use logical block A-E	This parameter, is used to enable or disable the using logical block A.	Yes No
(1)Enable movement sensor	This parameter, is used to enable or disable the movement sensor. Single mode: The sensor works as a single sensor. Master/slave mode: It is possible to switch several presence detectors together. If two or more presence detectors are installed in a room, one presence detector must operate as "Master" and all the others must be set to the "Slave" function.	Disable Single mode(independent sensor) Master/slave mode(Master sensor)



-> Movement sensor status	This parameter, is used to set the movement sensor status.	Movement sensor detected is False, else is True
	Movement sensor detected is false, else is true: When the sensor reports movement will be false, else is true.	Movement sensor detected is True, else is False
	Movement sensor detected is True, else is false: When the sensor reports movement will be true, else is false.	
-> Local movement sensor status	This parameter, is used to set the local movement sensor status.	Movement sensor detected is False, else is True
	Movement sensor detected is false, else is true: When the sensor reports movement will be false, else is true.	Movement sensor detected is True, else is False
	Movement sensor detected is True, else is false: When the sensor reports movement will be true, else is false.	
-> Master is set to True when receive	This parameter, is used to set the Master sensor to true value when received slave sensor values.	Slave value-'0' Slave value-'1'
(2)Enable brightness(Lux) sensor	This parameter, is used to enable or disable the lux sensor.	Enable Disable
Enable brightness(Lux) threshold A	This parameter, is used to enable or disable lux threshold A value.	Enable Disable
-> Lux>=Threshold lower (0~1200 lux)	This parameter, is used to set the lux threshold lower value.	0 100 1200
-> Lux<=Threshold upper (0~1200 lux)	This parameter, is used to set the lux threshold upper value.	0 300 1200
-> Changed lux threshold value via bus	This parameter, is used to enable or disable for changing lux threshold value via bus line. Yes: Lux threshold value can be changed via bus line.	Yes No
	No: Lux threshold value can not be changed via bus line.	



-> Brightness(Lux) status	This parameter, is used to set the lux status.	In range is True, else False
	In range is True, else False: If brightness value between lower and upper, the logic is true else false.	Out range is True, else False
	Out range is True, else False: If brightness value is	Under lower is True, above upper is False
	not between lower and upper, the logic is true else false.	Under lower is False, above upper is True
	Under lower is True, above upper is False: If brightness value under lower is true, above upper is false.	
	Under lower is False, above upper is True: If brightness value under lower is false, above upper is true.	
-> Independent control <object< th=""><th>This parameter, is used to enable or disable the</th><th>No</th></object<>	This parameter, is used to enable or disable the	No
output 8>	independent control object.	Yes(Separated from logic and output)
(3)Enable temperature sensor	This parameter, is used to enable or disable the temperature sensor.	Enable Disable
->Temperature>=Threshold lower (0.1'C)	This parameter, is used to set the temperature threshold lower value.	-300 220 700
->Temperature<=Threshold upper (0.1'C)	This parameter, is used to set the temperature threshold upper value.	-300 260 700
->changed temperature threshold value via bus	This parameter, is used to enable or disable for changing temperature threshold value via bus.	Yes No
	Yes: Can change temperature threshold value via bus.	
	No: Can not change temperature threshold value via bus.	
->Temperature status	This parameter, is used to set the temperature status.	In range is True, else False Out range is True, else False
	In range is True, else False: If temperature value between lower and upper, the logic is true else false.	Under lower is True, above upper is False
	Out range is True, else False: If temperature value is not between lower and upper, the logic is true else false.	Under lower is False, above upper is True
	Under lower is True, above upper is False: If temperature value under lower is true, above upper is false.	
	Under lower is False, above upper is True: If temperature value under lower is false, above upper is true.	



Enable external telegram 1/2	This parameter, is used to enable or disable the	Disable
	external telegram 1.	1 bit value('1'/'0')
		1 byte threshold (0255)
		2 bytes threshold (065535)
		2 bytes float threshold (-50'C100'C)
		4 bytes threshold
		(02147483647)
->1 byte threshold (0255)	This parameter, is used to set the 1 byte threshold value.	0 100 255
->Extern telegram status	This parameter, is used to set the external telegram	'1' is True, '0' is False
· ·	status.	'0' is True, '1' is False
->2 byte threshold (065535)	This parameter, is used to set the 2 byte threshold value.	0 1000 65535
->2 byte float threshold (0.1'C)	This parameter, is used to set the 2 byte float threshold value.	-500 250 1000
->4 byte threshold (02147483647)	This parameter, is used to set the 4 byte threshold value.	0 1000000 2147483647
->Extern telegram status	This parameter, is used to set the external telegram status.	True if REV value >= Threshold, else False True if REV value <= Threshold, else False
- Default status ofter bus voltage	This parameter is used to get the default status offer	True
->Default status after bus voltage recovery	This parameter, is used to set the default status after bus voltage recovery.	False
locationy	bus vollage reservery.	Recovery
Logical relation of block A	This parameter, is used to set for logical relation of	AND
	block A.	OR
	AND : All conditions should be satisfied.	
	OR : One condition is satisfied, the logic will trigger.	
Result of logic A inverted	This parameter, is used to enable or disable for	Yes
•	result of logical A inverted.	No
	Yes: Logic function A results non-inverted.	140
	No: Logic function A result Inverted.	
	•	
Status(True/False) of logic A to bus	This parameter, is used to enable or disable the status of logic A to bus.	Enable
		Disable
->Send status when	This parameter, is used to set when the status value will be sent.	Status changed Status is True
	Status changed: When the status is changed, the	Status is True Status is False



	Status is True: When the status is true, the value will be sent.	Status changed and periodically
	Status is False: When the status is false, the value will be sent.	Status is True and periodically
	Status changed and periodically: If the status is changed, the value will be sent periodically.	Status is False and periodically
	Status is True and periodically: If the status is true, the value will be sent periodically.	
	Status is False and periodically: If the status is false, the value will be sent periodically.	
<1>Use logical A function lock?	This parameter, is used to enable or disable the logical A function lock.	No Yes
->Use telegram via bus?	This parameter, is used to enable or disable using of the telegram via bus.	No
	the telegram via bus.	Yes
>> Operation mode	This parameter, is used to set the operation mode.	'1'-Unlock, '0'-Lock
		'1'-Lock, '0'-Unlock
		'1/0'-Lock
		'1/0'-Unlock
		'1'-Unlock, '0'-Invalid
		'0'-Lock, '1'-Invalid
		'1'-Lock, '0'- Invalid
		'0'-Unlock, '1'-Invalid
Logic A output status when logic function lock	This parameter, is used to set the logic A output status when logic function locked.	False and immediately output
	Unchanged: When logic function is locked, logic A	Unchanged
	output will not be changed.	True
	True: When logic function is locked, logic A output will be set to True.	False
	False: When logic function is locked, logic A output will be set to False.	True and immediately output
	True and immediately output: When logic function is locked, logic A output will be set to True immediately.	
	False and immediately output: When logic function is locked, logic A output will be set to False immediately.	
Logic A automatic unlock after logic function lock.	This parameter, is used to enable or disable for unlocking logic A locked status.	No Yes



>>Delay time (017hours)	This parameter, is used to set the time delay in hours.	017
>>Delay time (059min)	This parameter, is used to set the time delay in minutes.	059
>>Delay time (059sec)	This parameter, is used to set the time delay in seconds.	0 30 59
<2>Use logical A function lock?	All settings are same as 1.	All settings are same as 1.
Logic A output status when logic function unlock	This parameter, is used to set the logic A output status when logic function unlocked.	False
		True
		Current logic status
Feedback logic A function lock status	This parameter, is used to enable or disable the feedback logic A function lock status.	Yes
		No
	Yes: Feedback logic A function lock status will be enabled.	
	No: Feedback logic A function lock status will be disabled.	

3.8. BLOCK A-E

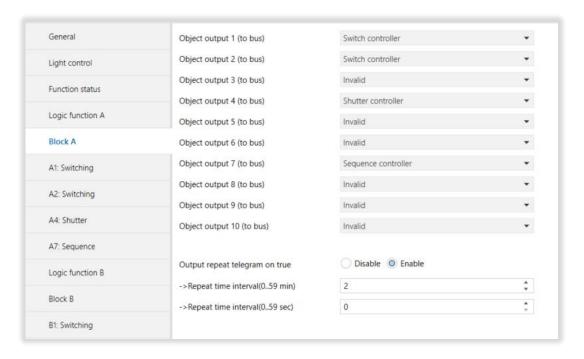


Fig 14: Block A Parameter Page



3.8.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Object output 1-10 (to bus)	This parameter, is used to set the object output 1-10 to bus. A total of 10 targets and 9 types can be set.	Invalid (Out 2-10) Switch controller (Out 1) Absolute dimming controller Shutter controller Alarm controller Percentage controller Sequence controller Scene controller String(14 bytes) controller Threshold controller
Output repeat telegram on true	This parameter, is used to enable or disable the output repeat telegram on true value.	Disable Enable
-> Repeat time interval(059 min)	This parameter, is used to set the time for repeat time interval in minutes.	0 2 59
-> Repeat time interval(059 sec)	This parameter, is used to set the time for repeat time interval in seconds.	0 59

3.9. A1: SWITCHING

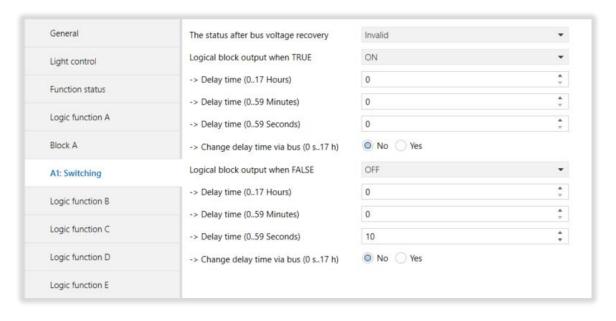


Fig 15: A1:Switching Parameter Page



3.9.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
The status after bus voltage recovery	This parameter, is used to set the status after bus voltage recovery.	Invalid OFF ON Recovery
Logical block output when TRUE	This parameter, is used to set the function when logic block output is true.	Invalid OFF ON Toggle
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	059
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No
Logical block output when FALSE	This parameter, is used to set the function when logic block output is false.	Invalid OFF ON Toggle
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	0 10 59
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No



3.10. A1: DIMMING

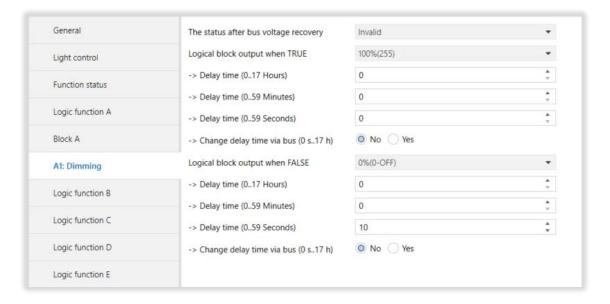


Fig 16: A1:Dimming Parameter Page

3.10.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
The status after bus voltage recovery	This parameter, is used to set the status after bus voltage recovery.	Invalid Recovery Defined dimming
-> Recovery defined dimming	This parameter, is used to set the recovery defined dimming value after bus voltage recovery.	Invalid 0%(0-OFF) 100%(255)
Logical block output when TRUE	This parameter, is used to set the function when logic block output is true.	Invalid 0%(0-OFF) 100%(255)
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	059
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No



Logical block output when FALSE	This parameter, is used to set the function when logic block output is false.	Invalid 0%(0-OFF) 100%(255)
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	0 59
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	0 10 59
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No

3.11. A1: SHUTTER

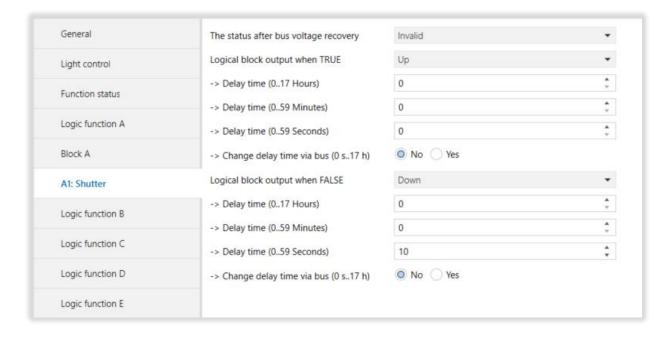


Fig 17: A1: Shutter Parameter Page

3.11.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
The status after bus voltage recovery	This parameter, is used to set the status after bus voltage recovery.	Invalid UP Down Recovery



		,
Logical block output when TRUE	This parameter, is used to set the function when logic block output is true.	Invalid Up Down Toggle
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	059
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No
Logic block output when FALSE	This parameter, is used to set the function when logic block output is false.	Invalid Up Down Toggle
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	01059
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No



3.12. A1: ALARM

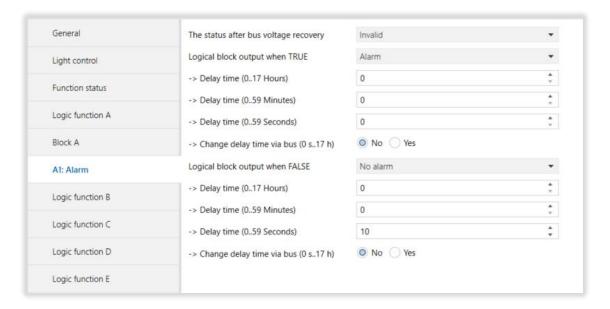


Fig 18: A1:Alarm Parameter Page

3.12.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
The status after bus voltage recovery	This parameter, is used to set the status after bus voltage recovery.	Invalid Alarm No Alarm Recovery
Logical block output when TRUE	This parameter, is used to set the function when logic block output is true.	Invalid Alarm No Alarm Toggle
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	0 59
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	0 59
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No



Logic block output when FALSE	This parameter, is used to set the function when logic block output is false.	Invalid Alarm No Alarm Toggle
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	01059
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No

3.13. A1: PERCENTAGE CONTROL

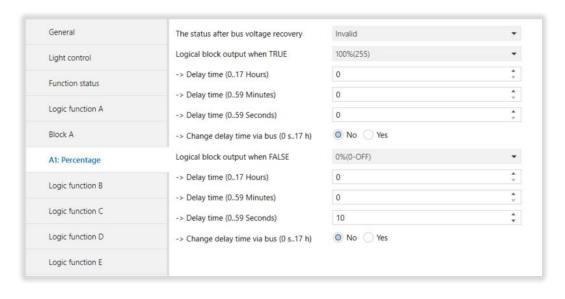


Fig 19: A1: Percentage Control Parameter Page

3.13.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
The status after bus voltage recovery	This parameter, is used to set the status after bus voltage recovery.	Invalid Recovery Defined percentage





		T
-> Recovery defined percentage	This parameter is used to set the value that the function will take after a power failure.	0%(0-OFF) 100%(255)
Logical block output when TRUE	This parameter, is used to set the function when logic block output is true.	Invalid 0%(0-OFF) 100%(255)
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	059
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No
Logic block output when FALSE	This parameter, is used to set the function when logic block output is false.	Invalid 0%(0-OFF) 100%(255)
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	0 10 59
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No



3.14. A1:SEQUENCE CONTROL

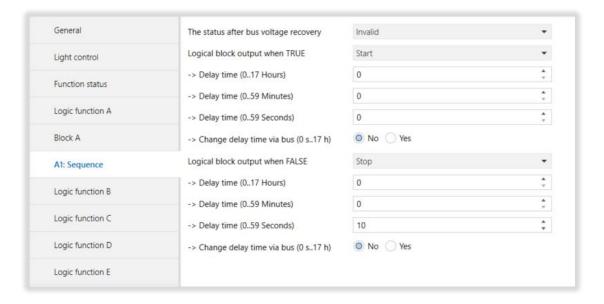


Fig 20: A1: Sequence Control Parameter Page

3.14.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
The status after bus voltage recovery	This parameter, is used to set the status after bus voltage recovery.	Invalid Stop Start Recovery
Logical block output when TRUE	This parameter, is used to set the function when logic block output is true.	Invalid Stop Start Toggle
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	0 59
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	0 59
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No



Logic block output when FALSE	This parameter, is used to set the function when logic block output is false.	Invalid Stop Start Toggle
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	01059
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No

3.15. A1: SCENE CONTROL

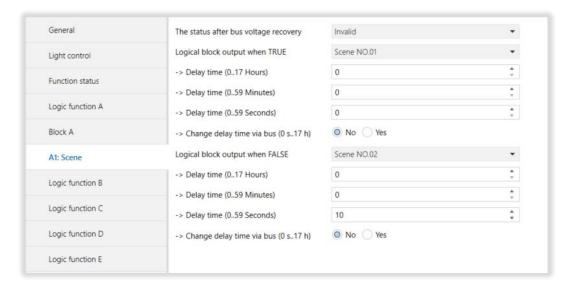


Fig 21: A1: Scene Control Parameter Page

3.15.1. Parameters List

PARAMETERS		DESCRIPTION	VALUES
	voltage	This parameter, is used to set the status after bus	Invalid
recovery		voltage recovery.	Recovery
			Defined scene



Recovery defined scene NO.	This parameter is used to set the scene that the function will take after a power failure.	Scene NO.01Scene NO.64
Logical block output when TRUE	This parameter, is used to set the function when logic block output is true.	Invalid Scene NO.01Scene NO.64
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	059
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus.	Yes No
	Yes: The delay time can be changed via bus.	
	No: The delay time can not be changed via bus.	
Logic block output when FALSE	This parameter, is used to set the function when logic block output is false.	Invalid Scene NO.01Scene NO.02Scene NO.64
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	0 10 59
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus.	Yes No
	Yes: The delay time can be changed via bus.	
	No: The delay time can not be changed via bus.	



3.16. A1: STRING

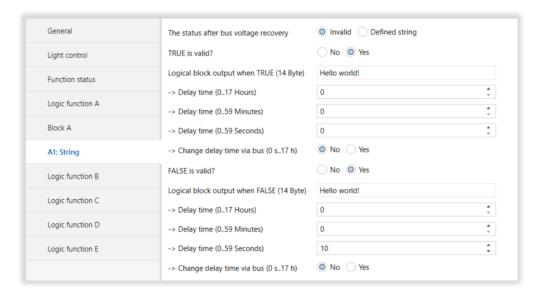


Fig 22: A1: String Parameter Page

3.16.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
The status after bus voltage recovery	This parameter, is used to set the status after bus voltage recovery.	Invalid Defined String
Recovery defined string (14 Byte)	This parameter, is used to set the recovery defined string after bus voltage recovery(14 byte).	Hello world!
TRUE is valid?	This parameter, is used to enable or disable for true value is valid. True: True is valid. No: True is invalid.	Yes No
Logical block output when TRUE (14 byte)	This parameter, is used to set the function when logic block output is true(14 byte).	Hello world!
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	0 59
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	059



-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No
FALSE is valid?	This parameter, is used to enable or disable for false value is valid. True: False is valid. No: False is invalid.	Yes No
Logical block output when FALSE (14 byte)	This parameter, is used to set the function when logic block output is false.	Hello world!
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	0 59
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	0 10 59
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No

3.17. THRESHOLD CONTROL

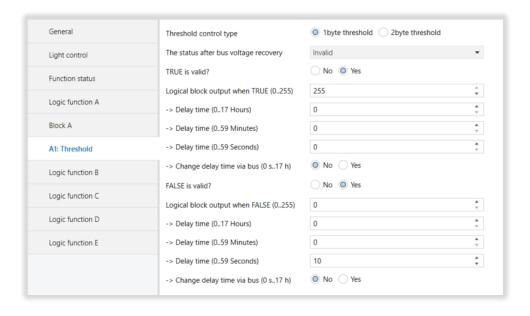


Fig 22: A1: Threshold Parameter Page



3.17.1. Parameters List

PARAMETERS	PARAMETERS DESCRIPTION	
Threshold control type	This parameter, is used to set the threshold control type.	1 byte threshold 2 byte threshold
The status after bus voltage recovery	This parameter, is used to set the status after bus voltage recovery.	Invalid Recovery Defined threshold
Recovery defined threshold (0255)	This parameter, is used to set the recovery defined threshold after bus voltage recovery.	01255
Recovery defined threshold (065535)	This parameter, is used to set the recovery defined threshold after bus voltage recovery.	065535
TRUE is valid?	This parameter, is used to enable or disable for true value is valid. True: True is valid. No: True is invalid.	Yes No
Logical block output when TRUE (0255)	This parameter, is used to set the function when logical block output value is True(1 byte).	0 .255
Logical block output when TRUE (065535)	This parameter, is used to set the function when logical block output value is True(2 byte).	0 1000 65535
-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	059
-> Change delay time via bus (0s17h)	This parameter, is used to set the changing delay time via bus. Yes: The delay time can be changed via bus. No: The delay time can not be changed via bus.	Yes No
This parameter, is used to enable or disable value is valid. True: False is valid. No: False is invalid.		Yes No
Logical block output when FALSE (0255)	This parameter, is used to set the function when logical block output value is False(1 byte).	0255
Logical block output when FALSE (065535)	This parameter, is used to set the function when logical block output value is False(2 byte).	065535



-> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
-> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
-> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	0 10 59
-> Change delay time via bus	This parameter, is used to set the changing delay	Yes
(0s17h)	time via bus.	No
	Yes: The delay time can be changed via bus.	
	No: The delay time can not be changed via bus.	

3.18. LOGIC FUNCTION E

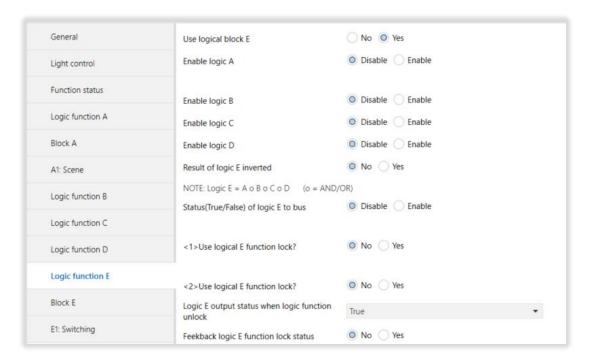


Fig 23 : Logic Function E Parameter Page

3.18.1. Parameters List

PARAMETERS	DESCRIPTION	VALUES
Use logic block E	This parameter, is used to enable or disable the logic block E.	No Yes
Enable logic A-D	These parameters, are used to enable or disable the logic A-D blocks.	Disable Enable





->Result of logic A-E inverted	This parameter, is used to enable or disable the inverse of the value obtained as a result of the logic A-E blocks.	No Yes
Logic relation	This parameter, is used to set logic relations.	AND
	AND : If all logical values (A-D) are true, logic E generates a value of true.	OR
	OR : If any logic value (A-D) is true, logic E generates a value of true.	
Status(True/False) of logic E to bus	This parameter, is used to enable or disable the sending of the status of the logic E to the bus line.	Disable Enable
-> Send status when	This parameter, is used to set the condition for sending status information.	Status changed Status is True Status if false Status changed and periodically
		Status is True and periodically Status is False and periodically
Use logical E function lock?	This parameter, is used to enable or disable the logic E function lock feature.	Yes No
->Use telegram via bus?	This parameter, is used to enable or disable the use of telegram via bus line.	No Yes
>>Operation mode	This parameter, is used to set the operation mode.	'1' -Unlock, '0' -Lock '1' -Lock, '0' -Unlock '1/0' -Lock '1/0' -Unlock '1' -Unlock, '0' -Invalid '0' -Lock, '1' -Invalid '1' -Lock, '0' -Invalid
-Logic E output status when logic function lock	This parameter, is used to set logic E output status when logic function lock.	Unchanged True False True and immediately output False and immediately output
-Logic E automatic unlock after logic function lock	This parameter, is used to enable or disable the automatic unlock after logic function lock.	No Yes



>> Delay time (017 Hours)	This parameter, is used to set the time delay in hours.	017
>> Delay time (059 Min)	This parameter, is used to set the time delay in minutes.	059
>> Delay time (059 Sec)	This parameter, is used to set the time delay in seconds.	0 10 59
-Logic E output status when logic function unlock	This parameter, is used to set logic E output status when logic function unlock.	True False Current logic status
Feedback logic function lock status	This parameter, is used to enable or disable feedback logic function lock status.	Yes No

4. ETS OBJECTS AND DESCRIPTIONS

It was mentioned above that there are parameters and functions with the same feature when making the relevant configurations from the parameter pages. The objects of the same properties are the same, and only the names of the objects are different. Hence, in this section, 1 of the objects with the same feature is explained.

4.1. GENERAL

At the following table, the objects associated with the general parameter page are described.

Object Name	Function	Туре	Flags
General	Heartbeat telegram	1 bit	СТ
This communication object is a	always valid. If telegram '1' is sent	, the next telegram value to	be sent will be '0'.
General	Led indicator status	1 bit	CRWT
This object is used to select th	e LED display status as ON and C	DFF under different condition	ons.
Constant Brightness A	Dimming output value (0%100%)	1 bit	CRTU
This communication object is u	used to set dimming output value.	Brightness increases from	0% to 100%.
Constant Brightness B	Dimming output value (0%100%)	1 bit	CRTU
This communication object is u	used to set dimming output value.	Brightness increases from	0% to 100%.



4.2. LIGHT CONTROL

Object Name	Function	Туре	Flags
Light channel 1,2 slave input	Movement status from bus	1 bit	CW
•	esence detector detects somethin etect any more movement. This fu	~	
Light channel 1,2 external input	External telegram	1 bit	CW
	telegram from external device, the ot reached by value "0"-False of re		value "1"-True of receiving
Light channel 1,2 time input	Follow-up time (minutes)	2 bytes	CW
This object, is used to set follo	w time via bus.		
Light channel 1,2 lux input	Brightness threshold	2 bytes	CW
This object, is used to set lux t	hreshold via bus. You can change	the lux threshold by via bu	IS.
Light channel 1,2 lock input	'1'-lock, '0'-unlock/'0'-lock, '1'- unlock	1 bit	CW
This object, is used to set light "0" light channel 1/2 will be unl	channel 1/2 lock status. When the ocked.	e value is "1" light channel	1/2 will be locked, when value is
Light channel 1,2 output	Switching/Threshold 1byte	1 bit /1 byte	CRT
	ing function, when the logic block eached and delay over, it will send		•
Light channel 1,2 output	Lock status feedback	1 bit	CRT
This object, is used to set the I	ock status feedback. When "locke	ed" or "unlocked" it will resp	onse different value.

4.3. FUNCTION STATUS

Object Name	Function	Туре	Flags		
Function status	Slave status to bus	1 bit	CWT		
•	This object, is used to respond status if detector detects something in its detection zone. When detects something it will response "on", else no response.				
Function status	Brightness (lux)value	2 bytes	CRT		
This object, is used to respond the brightness value. You can set report lux value if lux changed, also you can set report lux value circularly.					
Function status	Temperature value	2 bytes	CRT		
This object, is used to respond the temperature value. You can set report temperature value if temperature changed, also you can set report temperature value circularly.					
Function status	Slave status to bus (logic A)	1 bit	CWT		



This object, is used to respond something it will response "on"	d status if detector detects someth ", else no response.	ing in its detection zone for	logic A. When detects
Function status	Dry contact 1 status	1 bit	CRT
This object is used to respond it is in the OFF state.	to the dry contact 1 state. If dry co	ontact 1 is closed, the outp	ut is in the ON state, otherwise
Function status	Dry contact 2 status	1 bit	CRT
This object is used to respond is in the OFF state.	to the dry contact 2 state. If dry co	ontact 1 is closed, the outpu	ut is in the ON state, otherwise i
Function status	Slave status to bus (logic B,C,D)	1 bit	CWT
This object, is used to respon something it will respond "on",	d status if detector detects somet else no response.	hing in its detection zone	for logic B, C, D. When detects

4.4. LOGIC FUNCTION A-E

Object Name	Function	Туре	Flags
Object input A, B, C, D	Lux threshold A lower (0~1200)	2 bytes	CWTU
This object, is used to chan	ge the lower lux threshold value.		
Object input A, B, C, D	Lux threshold A upper (0~1200)	2 bytes	CWTU
This object, is used to chan	ge the upper lux threshold value.		-
Object input A, B, C, D	Lux threshold B independent	1 bit	CWTU
This object, is used to set of will output true else output t		ld B. If lux between lo	ower set lux value and upper set value
Object input A, B, C, D	Lux threshold C independent	1 bit	CWTU
This object, is used to set of will output true else output t	·	ld C. If lux between le	ower set lux value and upper set value
Object input A, B, C, D	Temperature threshold lower	2 bytes	CWTU
This object, is used to set lo	ower temperature value.		
Object input A, B, C, D	Temperature threshold upper	2 bytes	CWTU
This object, is used to set u	pper temperature value.		I
Object input A, B, C, D	External telegram 1	1 bit	CWU
	1 bit value ('1' / '0')	1 byte	
	1 byte value (0255)	2 bytes	



2 bytes threshold (065525)	2 bytes	
2 bytes float threshold (-50°C-100°C)	4 bytes	
4 bytes threshold (0 2147483647)		

This object is used to set external telegram 1. If you select 1 bit value, you will set 1 or 0 as true or false value, when input 1 or 0, will output true or false. If you select 1 byte value, when your input value >= or <= the set value(0 to 255) will output true or false result. If you select 2 bytes value, when your input value >= or <= the set value(0 to 65535) will output true or false result. If you select 2 bytes float threshold, when your input temperature value >= or <= the set value(< 50°C to 100°C) will output true or false result. If you select 4 bytes threshold, when your input value >= or <= the set value(< to 2147483647) will output true or false result.

Object input A, B, C, D	External telegram 2	1 bit	CWU
	1 bit value ('1' / '0')	1 byte	
	1 byte value (0255)	2 bytes	
	2 bytes threshold (065525)	2 bytes	
	2 bytes float threshold (-50°C-100°C)	4 bytes	
	4 bytes threshold (0 2147483647)		

This object is used to set external telegram 2. If you select 1 bit value, you will set 1 or 0 as true or false value, when input 1 or 0, will output true or false. If you select 1 byte value, when your input value >= or <= the set value(0 to 255) will output true or false result. If you select 2 bytes value, when your input value >= or <= the set value(0 to 65535) will output true or false result. If you select 2 bytes float threshold, when your input temperature value >= or <= the set value(<50°C to 100°C) will output true or false result. If you select 4 bytes threshold, when your input value >= or <= the set value(<0 to 2147483647) will output true or false result.

Object output A1, B1, C1, D1	Switch	1 bit	CRTU
	Absolute Dimming	1 byte	
	Shutter	1 bit	
	Alarm	1 bit	
	Percentage	1 byte	
	Sequence	1 bit	
	Scene	1 byte	
	String	14 byte	
	Threshold(1 byte)	1 byte	
	Threshold(2 bytes)	2 bytes	

This object, is used to set A1/B1/C1/D1 output function:

Switch: It is used for switching function, when the logic block was reached, it will send ON or OFF telegram to the bus. After logic block was not reached and delay over, it will send OFF or ON telegram to the bus.



Absolute Dimming: It is used for absolute dimming function, when the logic block was reached, it will send setting value to control brightness. After logic block was not reached and delay over, it will send another setting value.

Shutter: It is used for shutter function, when the logic block was reached, it will send Up or Down telegram to the bus. After the logic block was not reached and delay over, it will send Down or Up telegram to the bus.

Alarm: It is used for alarm function, when the logic block was reached, it will send Alarm or No alarm telegram to the bus. After the logic block was not reached and delay over, it will send No alarm or Alarm telegram to the bus.

Percentage: It is used for percentage function, when the logic block was reached, it will send setting value to control brightness. After the logic block was not reached and delay over, it will send another setting value.

Sequence: It is used for sequence function, when the logic block was reached, it will send start or stop telegram to the bus. After the logic block was not reached and delay over, it will send Stop or Start telegram to the bus.

Scene: It is used for scene function. 1 to 64 scene calls can be made.

String: It is used for string function, when the logic block was reached, it will send setting value to the bus. After the logic block was not reached and delay over, it will send another setting value.

Threshold(1 byte): It is used for 1 byte threshold function, when the logic block was reached, it will send setting value 0-255 to bus. After the logic block was not reached and delay over, it will send another setting value.

Threshold(2 byte): It is used for 2 byte threshold function, when the logic block was reached, it will send setting value 0-65535 to bus. After the logic block was not reached and delay over, it will send another setting value.

Object output A2, B2, C2, D2, E2	The same as above	The same as above	The same as above
Object output A3, B3, C3, D3, E3	The same as above	The same as above	The same as above
Object output A4, B4, C4, D4, E4	The same as above	The same as above	The same as above
Object output A5, B5, C5, D5, E5	The same as above	The same as above	The same as above
Object output A6, B6, C6, D6, E6	The same as above	The same as above	The same as above
Object output A7, B7, C7, D7, E7	The same as above	The same as above	The same as above
Object output A8, B8, C8, D8, E8	The same as above	The same as above	The same as above
Object output A9, B9, C9, D9, E9	The same as above	The same as above	The same as above
Object output A10, B10, C10, D10, E10	The same as above	The same as above	The same as above
Object input A1, B1, C1, D1, E1	Switch delay time on TRUE	2 byte	CWT
This object, is used to provide a logical state response. If the logic is true, the "true" response is delayed.			
Object input A1, B1, C1, D1, E1	Switch delay time on FALSE	2 byte	CWT



	a logical state response. If the log		
Object input A2, B2, C2, D2, E2	Dimming delay time on TRUE	2 byte	CWT
This object, is used to provide	a logical state response. If the log	ic is true, the "true" i	response is delayed.
Object input A2, B2, C2, D2, E2	Dimming delay time on FALSE	2 byte	CWT
This object, is used to provide	a logical state response. If the log	ic is true, the "false"	response is delayed.
Object input A3, B3, C3, D3, E3	Shutter delay time on TRUE	2 byte	CWT
This object, is used to provide	a logical state response. If the log	ic is true, the "true" i	response is delayed.
Object input A3, B3, C3, D3, E3	Shutter delay time on FALSE	2 byte	CWT
This object, is used to provide	a logical state response. If the log	ic is true, the "false"	response is delayed.
Logic A, B, C, D, E status	1-true / 0-false	1 bit	CRT
This object, is used to provide	a logical state response. If logic is	true, "true" respons	se is given otherwise "false".
<1> Logic A, B, C, D, E function	Lock logic function	1 bit	CWT
This object, is used to lock log	ic, so you can lock or unlock logic	status.	1
<2> Logic A, B, C, D, E function	Lock logic function	1 bit	CWT
This object, is used to lock log	ic, so you can lock or unlock logic	status.	
Logic A, B, C, D, E function	Lock status feedback	1 bit	CRT
This object, is used to respons	se logic lock status. If logic is locke	ed or unlocked, it will	response disable or enable.

4.5. DRY CONTACT FUNCTION

Object Name	Function	Туре	Flags
Extend dry contact 1,2 / short,long	Switching	1 bit	CRT
	Dimming	4 bit	CRT
	Scene	1 byte	CRT
	Percentage	1 byte	CRT
	Led status	1 bit	CWT

This object is used to set the dry contact 1/2 function. If the switching function is selected, the dry contact controls for enabling/disabling. If the dimming function is selected, the dry contact controls the dimming function. If the scene function is selected, the dry contact makes a scene call between number 1 and 64. If the LED status function is selected, the dry contact performs the LED status control.



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