APPLICATION PROGRAM INFORMATION

Dry Contact 24CH Sensor

M/S24.1

KNX/EIB-BUS

Document Version: 1.0, Date: _____

This document describes the M/S24.1-functions with the KNX-product- application:_____

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Location:___Gungzhou___Date:__15. April.2015_____ Signature:_____

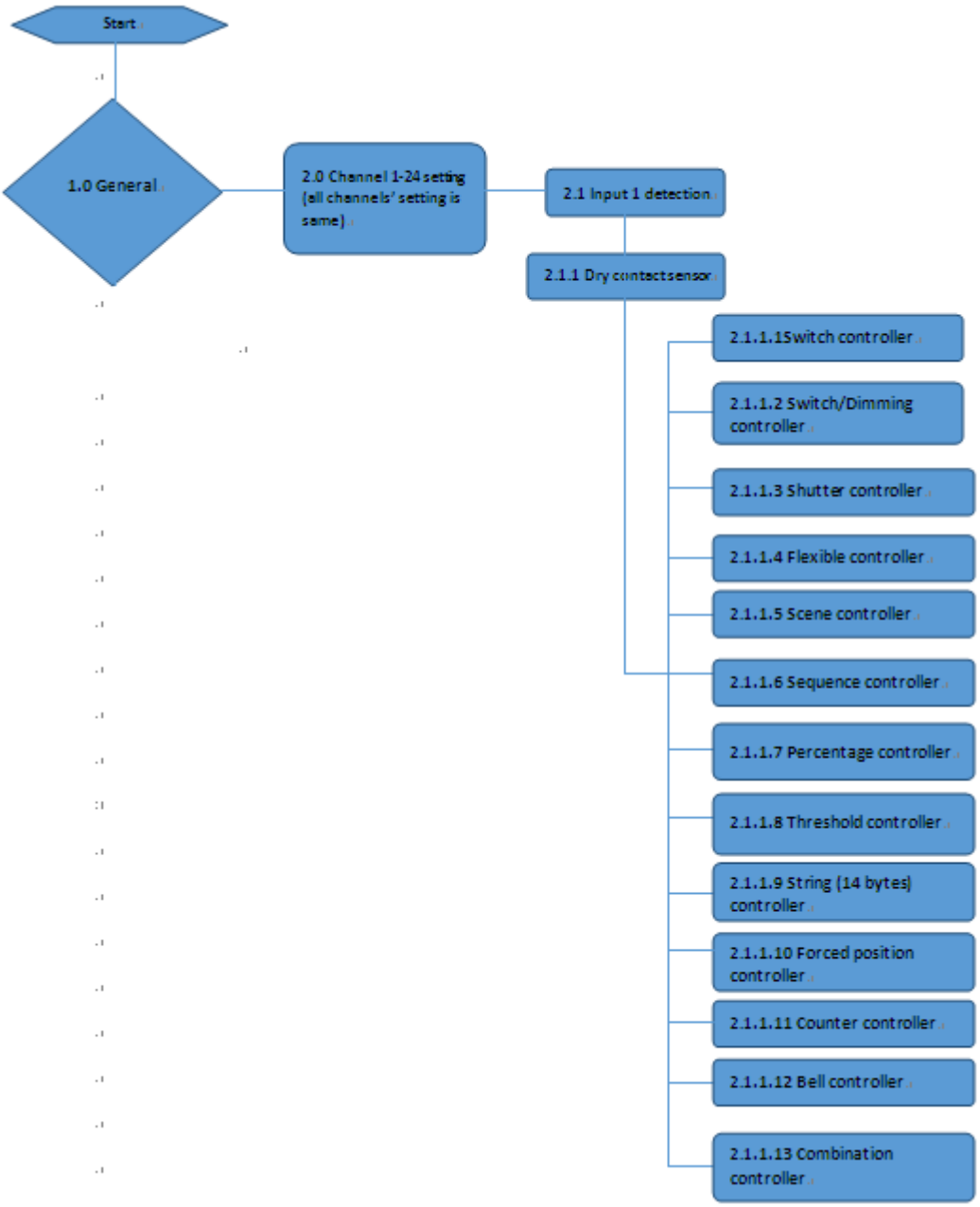
Document History			
Version	Date	Comments	Author (english name)
1.0	27.12.2014	First issue	Jie Tan

A. General description
B. Function overview flowchart
C. Function description
D. Communication objects

A.

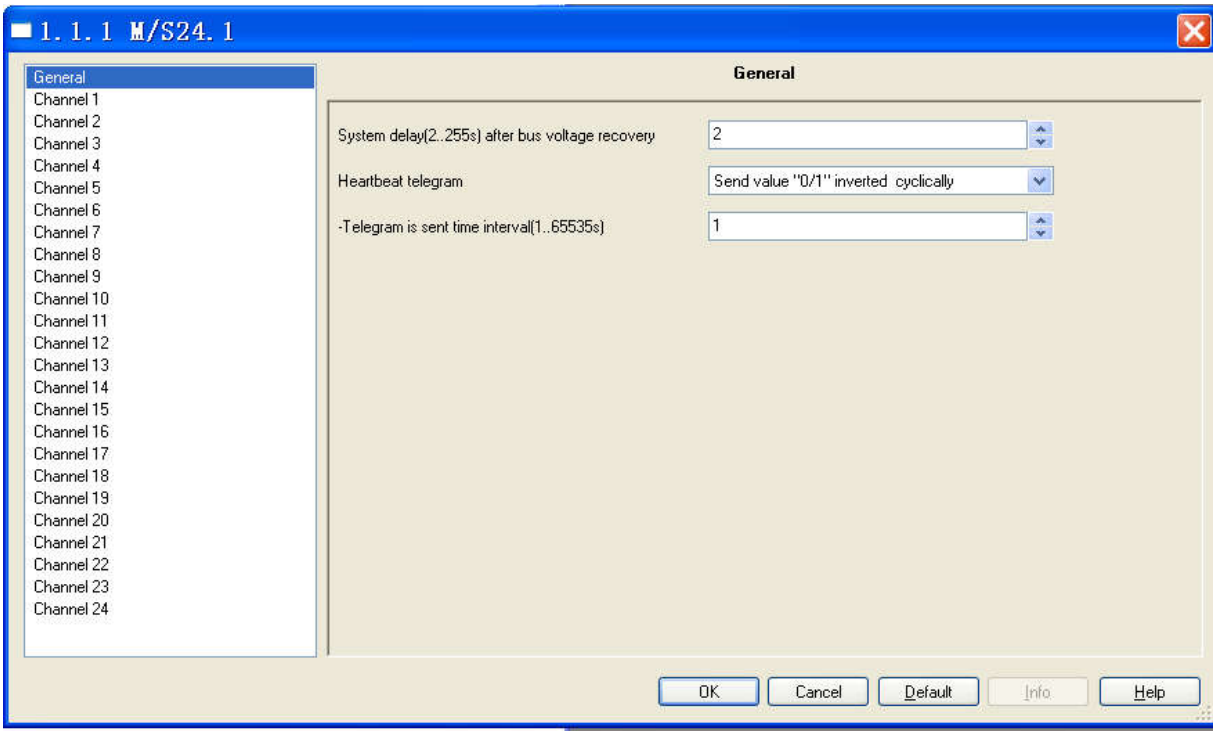
The Dry Contact 24CH Sensor is used to operate building functions. This manual contains the programming of this device.

B.



C.

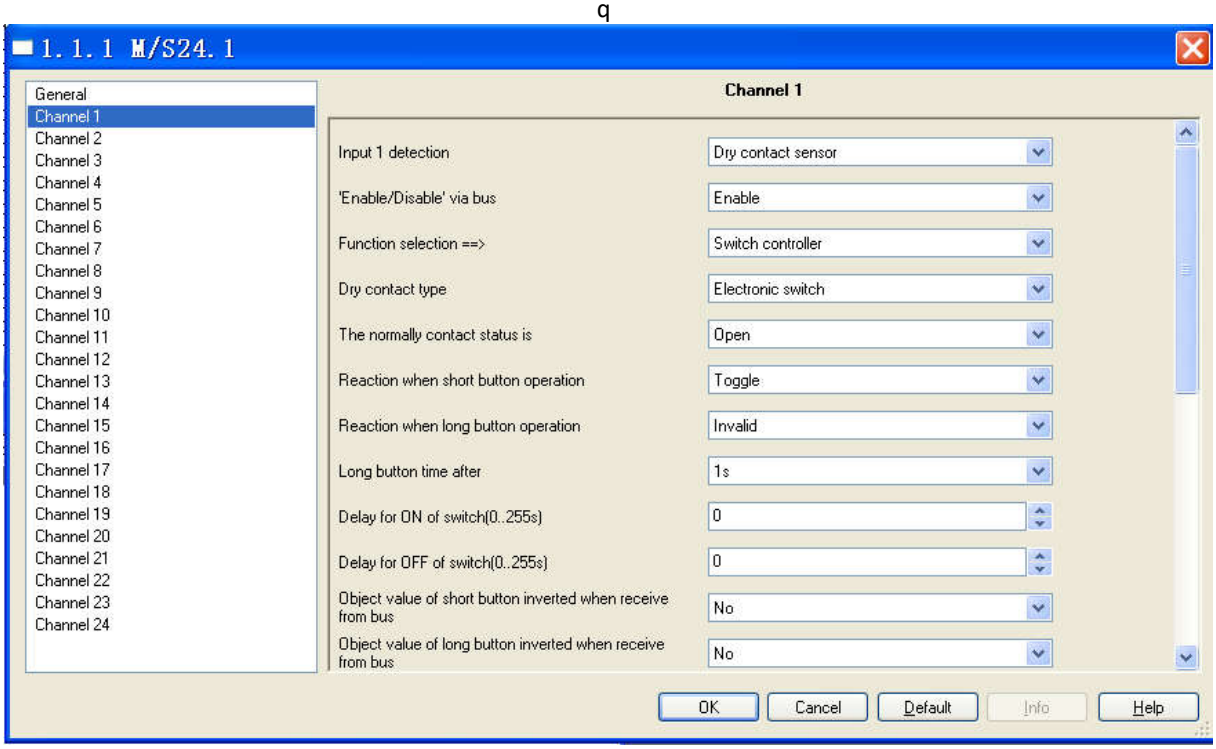
1.0_General



No.	ETS-Parameter	Range (default)	Description
1	System delay(2...255s) after bus voltage recovery	(2)...255S	*Set the delay time for the device after power on, the range is 2~255s*
2	Heartbeat telegram	(Disable) Send value '0' cyclically Send value '1' cyclically Send value '0/1' inverted cyclically	*If the value is set '0', send '0', the device will send telegram cyclically; If the value is set '1',send '1', the device will send telegram cyclically; If the value is set '0/1',the device will send telegram(alternately between 0 and 1)cyclically. If set disable, the heart telegram is invalid.*
3	Telegram is sent time interval(1..65535s)	(1)...65535s	*Set the parameter, the device will send the telegram cyclically after time out.*

2.0_Channel 1-24 setting (all channels setting is same), Input 1 detection

q

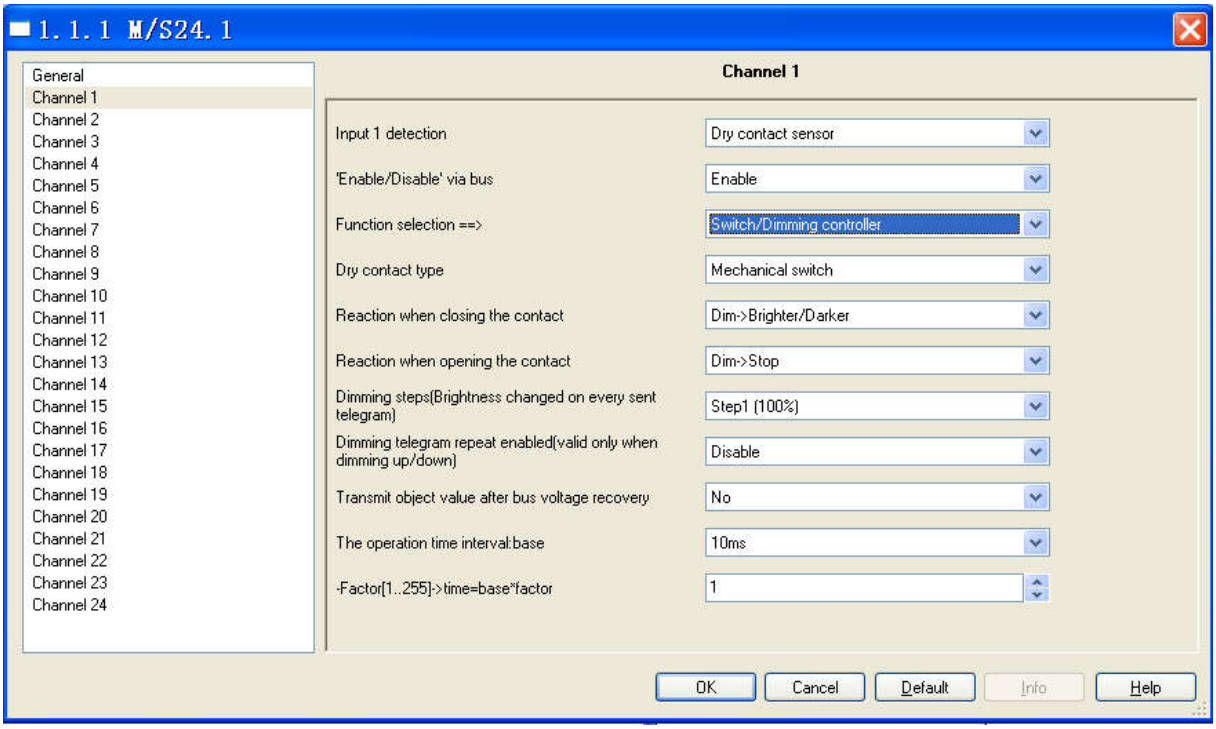


No.	ETS-Parameter	Range (default)	Description
4	Input 1 detection	-(No detection) -Dry contact sensor	*Functions selection*
2.1_Dry contact sensor			
5	Enable/Disable via bus	(Disable), Enable	*If select 'Enable', you can enable/disable the channel 1 via bus*
6	Function selection==>	-(Switch controller) -Switch / Dimming controller -Shutter controller -Flexible controller -Scene controller -Sequence controller -Percentage controller -Threshold controller -String (14bytes) controller -Forced position controller -Counter controller -Combination controller	*Select the output control function.*
2.1.1.1_Switch controller			
7	Dry contact type	-(Mechanical switch) -Electronic switch	*Mechanical switch: it has two states, "OFF" and "ON". You can set commands to each state.(act as a bi-stable button)* *Electronic Switch: act as a mono-stable button.*
2.1.1.1.1_Mechanical switch			
8	Reaction when closing the contact	-Unchanged -(ON)	***Unchanged:*** *It will send the same value as the last time.*

		-OFF -Toggle -Stop cyclic telegram	***ON**: The value it will send is 1.* ***OFF**: The value it will send is 0.* ***Toggle**: It will invert the last time's value then send it out.* ***Stop cyclic telegram:** This is mainly used for the following cycle settings.*
9	Reaction when opening the contact	-Unchanged -ON -(OFF) -Toggle -Stop cyclic telegram	***Unchanged:** It will send the same value as the last time.* ***ON**: The value it will send is 1.* ***OFF**: The value it will send is 0.* ***Toggle**: It will invert the last time's value then send it out.* ***Stop cyclic telegram:** This is mainly used for the following cyclic settings.*
10	Delay for ON of switch(0..255s)	(0)...255	*Set the delay time for switch on*
11	Delay for OFF of switch(0..255s)	(0)...255	*Set the delay time for switch off*
12	Object value inverted when receiving from bus	-(NO) -YES	***NO:** It will not invert the receiving value* ***YES:** It will invert the receiving value*
13	Cyclic telegram of object	-(NO) -if switch is "ON" -if switch is "OFF" -Always transmission	***NO:** There is not cyclic function.* ***If switch is ON:** It will send out the telegram cyclically when the switch is on.* ***If switch is OFF:** It will send out the telegram cyclically when the switch is off.* ***Always transmission:** No matter the switch is on or off, it will send out the telegram cyclically.*
14	Transmit object value after bus voltage recovery	-NO -(YES)	*Whether transmit object value after bus voltage recovery.*
15	The operation time interval: base	-(10ms) -100ms -1sec -1min -1hour	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
16	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
2.1.1.1.2_Electronic switch			
17	The normally contact status is	-Closed -(Open)	*Set the dry contact's normal status when have no*

			operation. ***Closed:*** *The dry contact's normal status is closed.* ***Open:*** *The dry contact's normal status is open*
18	Reaction when short button operation	-Invalid -Unchanged -ON -OFF -(Toggle)	*Set the output control type when short press the button*
19	Reaction when long button operation	-(Invalid) -Unchanged -ON -OFF -Toggle	*Set the output control type when long press the button*
20	Long button time after	0.2s..(1s)...60s	*Set the long press time*
21	Delay for ON of switch(0..255s)	(0)...255	*Set the delay time for switch on*
22	Delay for OFF of switch(0..255s)	(0)...255	*Set the delay time for switch off*
23	Object value of short button inverted when receive from bus	-(NO) -YES	***NO:*** *It will not invert the receiving value* ***YES:*** *It will invert the receiving value*
24	Object value of long button inverted when receive from bus	-(NO) -YES	***NO:*** *It will not invert the receiving value* ***YES:*** *It will invert the receiving value*
25	The operation time interval: base	-(10ms) -100ms -1sec -1min -1hour	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
26	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*

2.1.1.2_Switch/Dimming controller



No.	ETS-Parameter	Range (default)	Description
27	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.2.1_Mechanical switch			
28	Reaction when closing the contact	-Invalid -Dim->Brighter -Dim->Darker -(Dim-> Brighter/Darker) -Dim-> Stop	***Invalid:*** *no action when closing the dry contact.* ***Dim->Brighter:*** *When closing the dry contact, it will increase the brightness.* ***Dim->Darker:*** *When closing the dry contact, it will decrease the brightness.* ***Dim-> Brighter/Darker:*** *When closing the dry contact, it will increase/decrease the brightness. If at the first time, it increases the brightness, next time, it will decrease the brightness* ***Dim->Stop:*** *when closing the dry contact, it will stop dimming.*
29	Reaction when opening the contact	-Invalid -Dim->Brighter -Dim->Darker -Dim-> Brighter/Darker -(Dim-> Stop)	***Invalid:*** *no action when closing the dry contact.* ***Dim->Brighter:*** *When closing the dry contact, it will increase the brightness.* ***Dim->Darker:*** *When closing the dry contact, it will decrease the brightness.*

			Dim-> Brighter/Darker: *When closing the dry contact, it will increase/decrease the brightness. If at the first time, it increases the brightness, next time, it will decrease the brightness* ***Dim->Stop:*** *when closing the dry contact, it will stop dimming.*
30	Dimming steps (Brightness changed on every sent telegram)	-(Step1 (100%)) -Step2 (50%) -Step3 (25%) -Step4 (12.5%) -Step5 (6.25%) -Step6 (3.13%) -Step7 (1.56%)	*Set the dimming value when send out the telegram*
31	Dimming telegram repeat enabled (valid only when dimming up/down)	-(Disable) -Enable	*Whether repeat sending dimming telegram.* ***Disable:*** *do not repeat sending dimming telegram.* ***Enable:*** *when dimming up/down will repeat sending dimming telegram.*
32	Dimming telegram repeated time	0.2s...(0.4s)...60s	*Set the repeat time*
33	Dimming telegram repeated number (1-255,0-unlimted)	(0)...255	*The repeat time of the dimming telegram*
34	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.*
35	The operation time interval: base	(10ms)...1hour	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
36	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
2.1.1.2.2_Electronic switch			
37	The normally contact status is	-Closed -(Open)	*Set the dry contact's normal status when have no operation.* ***Closed:*** *The dry contact's normal status is closed.* ***Open:*** *The dry contact's normal status is open*
38	Reaction when short button operation	-Invalid -Unchanged -ON -OFF -(Toggle)	*Set the output control type when short press the button*
39	Reaction when long button operation	-Invalid -Dim->Brighter -Dim->Darker -(Dim-> Brighter/Darker)	*Set the output control type when long press the button*
40	Long button time after	0.2s..(1s)..60s	*Set the time for long press*
41	Delay for ON of switch(0..255s)	(0)..255	*Set the delay time for ON of*

			switch.
42	Delay for OFF of switch(0..255s)	(0)..255	*Set the delay time for OFF of switch.*
43	Dimming steps (Brightness changed on every sent telegram)	-(Step1 (100%)) -Step2 (50%) -Step3 (25%) -Step4 (12.5%) -Step5 (6.25%) -Step6 (3.13%) -Step7 (1.56%)	*Set the dimming value when send the out the telegram*
44	Dimming telegram repeated enable	(Disable) Enable	*Whether repeat sending the dimming telegram*
45	Dimming telegram repeated time	0.2s..(0.3s)..60s	*Set the repeat time*
46	Dimming telegram repeated number (1..255,0-unlimited)	(0)..255	*The repeat time for the dimming telegram*
47	The operation time interval: base	(10ms)..1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
48	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*

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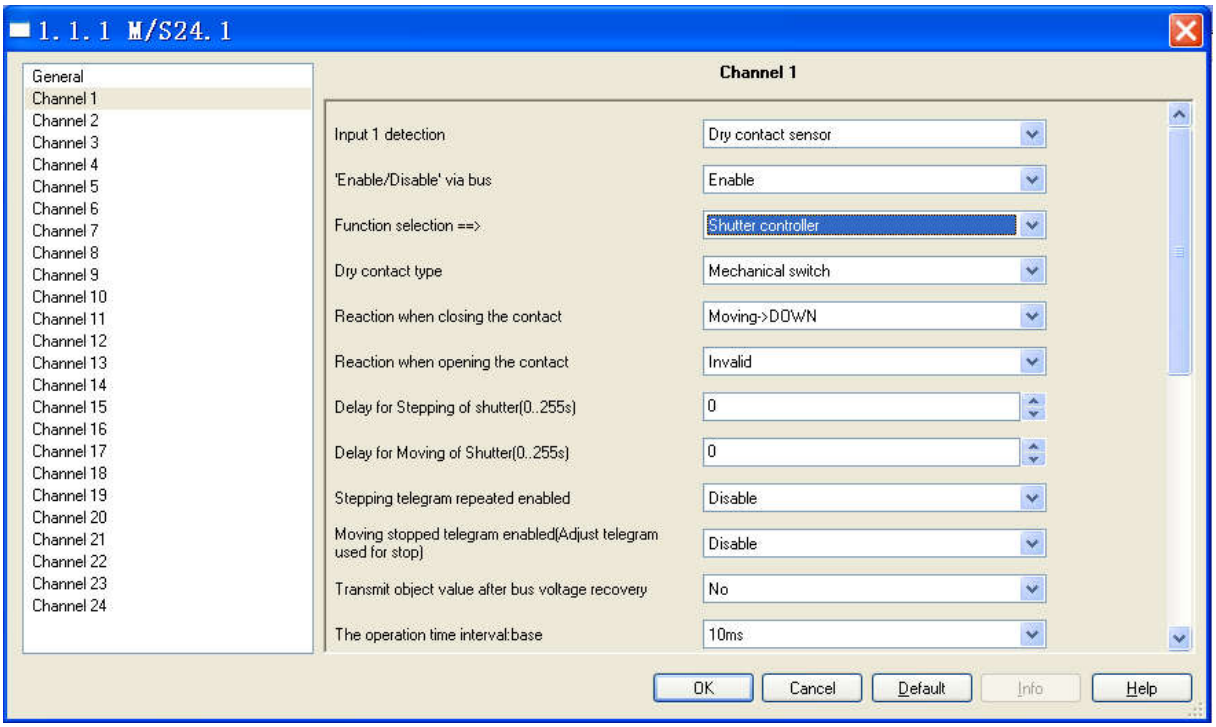
2.1.1.3_Shutter controller



No.	ETS-Parameter	Range (default)	Description
49	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.3.1_Mechanical switch			
50	Reaction when closing the contact	-Invalid -Stepping->Increase -Stepping->Decrease -Stepping->Toggle -Stepping->Repeat telegram stopped -Moving->UP -(Moving->DOWN) -Moving->Toggle	***Invalid:*** *no action when closing the contact* ***Stepping->Increase:*** *when closing dry contact, it will increase the angle of shutter* ***Stepping-> Decrease:*** *when closing dry contact, it will decrease the angle of shutter* ***Stepping-> Toggle:*** *when closing dry contact, it will increase/decrease the angle of shutter.* ***Stepping->Repeat telegram stopped:*** *when closing dry contact, it will stop repeating sending the telegram.* ***Moving-> UP:*** *when closing dry contact, it will send move up telegram, the position will be up.* ***Moving-> Down:*** *when closing dry contact, it will send move down telegram, the position will be down.*

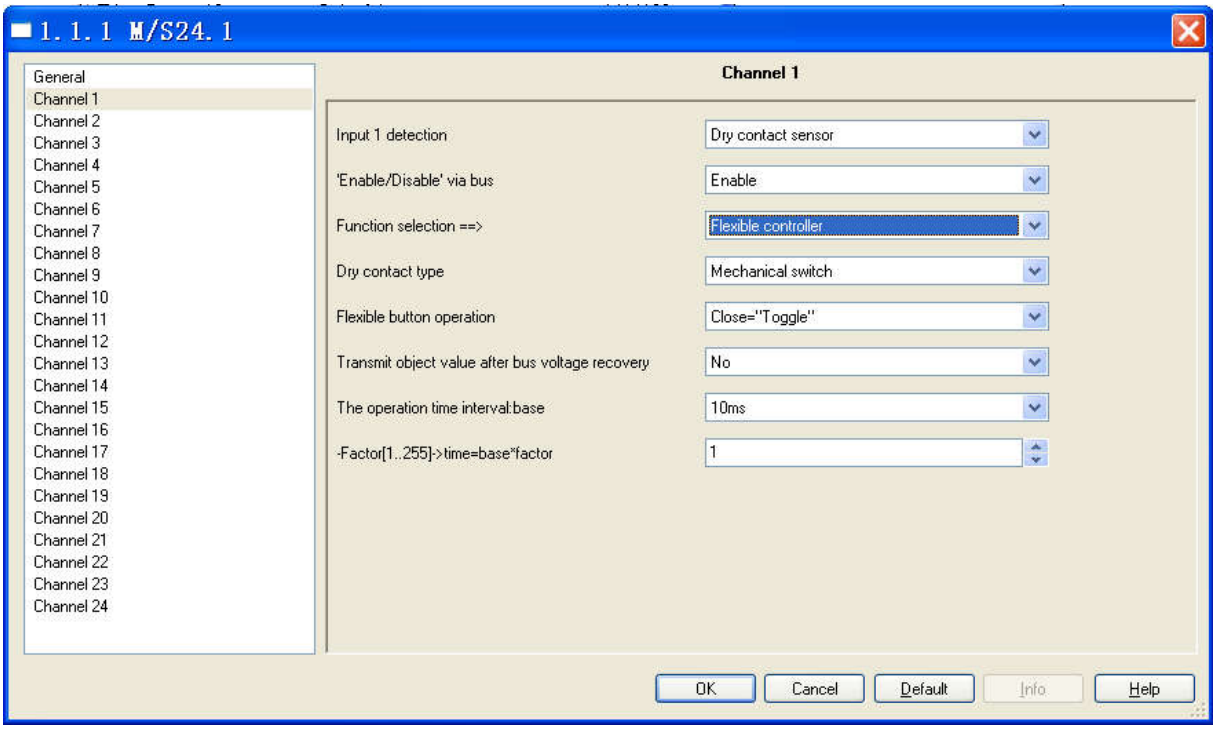
			Moving-> Toggle: *when closing dry contact, it will send move up/down telegram, the position will be up/ down.*
51	Reaction when opening the contact	-(Invalid) -Stepping->Increase -Stepping->Decrease -Stepping->Toggle -Stepping->Repeat telegram stopped -Moving->UP -(Moving->DOWN) -Moving->Toggle	***Invalid:*** *no action when opening the contact* ***Stepping->Increase:*** *when opening dry contact, it will increase the angle of shutter* ***Stepping-> Decrease:*** *when opening dry contact, it will decrease the angle of shutter* ***Stepping-> Toggle:*** *when opening dry contact, it will increase/decrease the angle of shutter.* ***Stepping->Repeat telegram stopped:*** *when opening dry contact, it will stop repeat sending the telegram.* ***Moving-> UP:*** *when opening dry contact, it will send move up telegram, the position will be up.* ***Moving-> Down:*** *when opening dry contact, it will send move down telegram, the position will be down.* ***Moving-> Toggle:*** *when opening dry contact, it will send move up/down telegram, the position will be up/ down.*
52	Delay for Stepping of Shutter(0..255s)	(0)...255s	*Set the delay time for adjusting the angle of the shutter*
53	Delay for Moving of Shutter(0..255s)	(0)...255s	*Set the delay time for moving the position of the shutter*
54	Stepping telegram repeated enabled	-(Disable) -Enable	*Whether repeat sending telegram for adjusting the angle* *Disable: do not send telegram for adjusting the angle* *Enable: send telegram for adjusting the angle*
55	Stepping telegram repeated time	(0.2s)..60s	*The interval of sending adjusting telegram*
56	Stepping telegram repeated number (1…255, 0-unlimited)	(0)..255	*The repeat times of sending dimming telegram*
57	Moving stopped telegram enabled(Adjust telegram used for stop)	-(Disable) -Enable	*Enable/disable the function to auto stop the shutter after moving*
58	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.* ***NO****: do not transmit object value after bus voltage recovery.*

			***YES**: it will transmit object value after bus voltage recovery.*
59	The operation time interval: base	(10ms)...1hour	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
60	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
2.1.1.3.2_Electronic switch			
61	The normally contact status is	-Closed -(Open)	*Set the dry contact normal status when has no operation.* ***Close:** the contact's normal status is closed.* ***Open:** the contact's normal status is open.*
62	Reaction when short button operation	-Invalid -(Stepping->Increase/STOP) -Stepping->Decrease/STOP -Stepping->Toggle/STOP -Moving->UP -Moving->DOWN -Moving->Toggle	***Invalid:** no action when short press* ***Stepping->Increase/Stop:** when short press the button, it will increase/stop adjusting the angle of shutter* ***Stepping-> Decrease/Stop:** when short press the button, it will decrease/ stop adjusting the angle of shutter* ***Stepping-> Toggle/Stop:** when short press the button, it will toggle/ stop adjusting the angle of shutter* ***Moving-> UP:** when short press the button, it will it will send move up telegram, the position will be up.* ***Moving-> Down:** when short press the button, it will it will send move up telegram, the position will be up.* ***Moving-> Toggle**: when short press the button, it will send move up/down telegram, the position will be up/ down.*
63	Reaction when long button operation	-Invalid -Stepping->Increase/STOP -Stepping->Decrease/STOP -Stepping->Toggle/STOP -Moving->UP -Moving->DOWN -(Moving->Toggle) -Press: Moving->UP, Release: Call short button -Press: Moving->DOWN, Release: Call short button	***Invalid:** no action when long press the button* ***Stepping->Increase/Stop:** when long press the button, it will increase/stop adjusting the angle of shutter* ***Stepping-> Decrease/Stop:** when long press the button, it will decrease/stop adjusting the angle of shutter* ***Stepping-> Toggle/Stop:***

		-Press: Moving->Toggle, Release: Call short button	*when long press the button, it will toggle/ stop adjusting the angle of shutter* ***Moving-> UP:*** *when long press the button, it will send move up telegram, the position will be up.* ***Moving-> Down****: when long press the button, it will it will send move up telegram, the position will be down.* ***Moving-> Toggle:*** *when long press the button, it will send move up/down telegram, the position will be up/ down.* ***Press: Moving->UP, Release:*** *Call short button: When long press the button, it will send move up telegram, when release, it will send telegram of short press.* ***Press: Moving->DOWN, Release:*** *When long press the button, it will send move down telegram, when release, it will send telegram of short press.* ***Press: Moving->Toggle, Release: Call short button:*** *When long press the button, it will send move up/down telegram, when release, it will send telegram of short press*
64	Long button time after	0.2s..(1s)...60s	*Set the time for long press*
65	Delay for Stepping of shutter(0..255s)	(0)...255s	*Set the delay time for adjusting the angle of shutter*
66	Delay for Moving of shutter(0..255s)	(0)...255s	*Set the delay time for Moving the position of shutter.*
67	Stepping telegram repeated enable	(Disable), Enable	*Whether repeat sending adjusting telegram.* ***Disable:*** *do not repeat sending adjusting telegram.* ***Enable:*** *it will repeat sending the adjusting telegram.*
68	Stepping telegram repeated time	0.2s...(0.3s)...60s	*The interval of sending adjusting telegram*
69	Moving stopped telegram enabled (Adjust telegram used for stop)	(Disable), Enable	*Enable/disable the function to auto stop the shutter after moving*
70	Moving stopped telegram delay time: base	100ms...1sec..1hour	*These two parameters are used to set the delay time to stop the shutter after moving, the delay time = base*factor.*
71	Factor[1..255]->time=base*factor	1..(10)...255	*These two parameters are used to set the delay time to stop the shutter after moving,*

			*the delay time = base*factor.*
72	The operation time interval: base	(10ms)..1hour	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
73	Factor[1..255]->time=base*factor	1..(10)...255	*These two parameters are used to set the delay time to stop the shutter after moving, the delay time = base*factor.*

2.1.1.4_Flexible controller

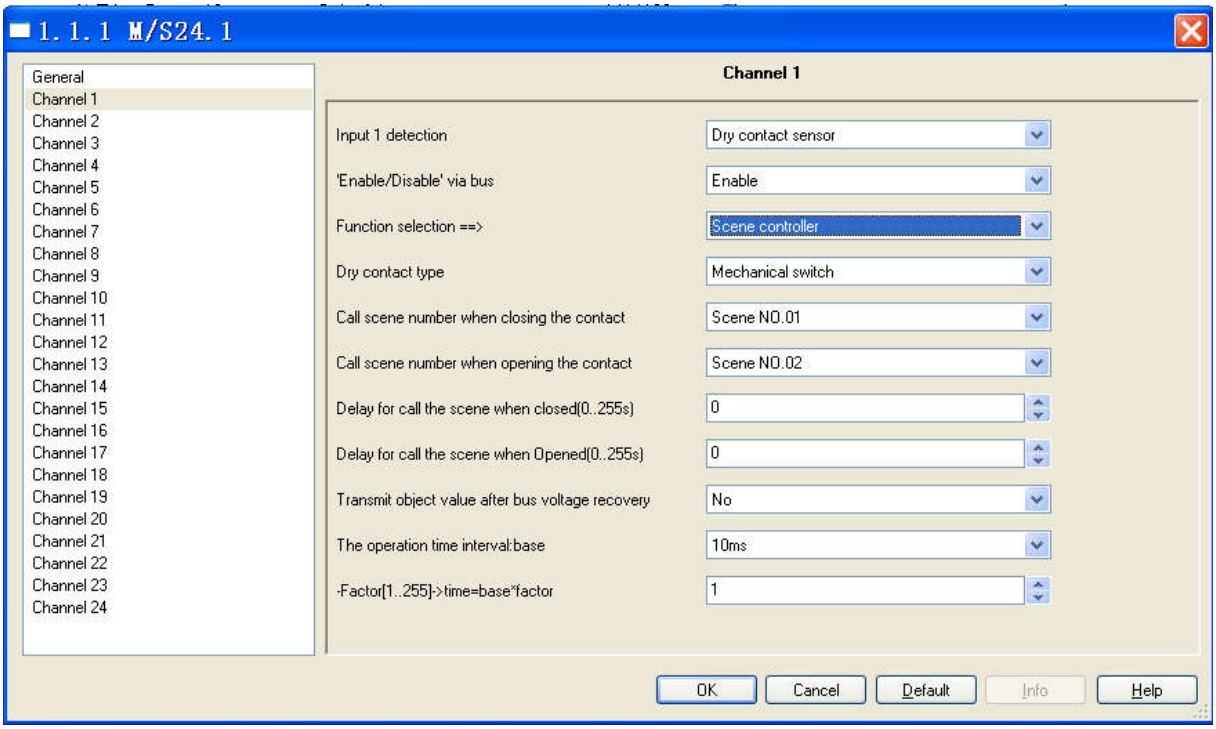


No.	ETS-Parameter	Range (default)	Description
75	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.4.1_Mechanical switch			
76	Flexible button operation	-Invalid -(Close='toggle') -Open='toggle' -Close='ON' -Open='ON' -Close='ON', Open='ON' -Close='OFF' -Open='OFF' -Close='OFF', Open='OFF' -Close='ON', Open='OFF' -Close='OFF', Open='ON'	*Invalid: the dry contact is invalid.* *Close='toggle': when close, it will invert the last time's value then send it out* *Open='toggle': When open, it will invert the last time's value then send it out* *Close='ON': when close, the value will send '1'* *Open='ON': when open, the value will send '1'* Close='ON', Open='ON': the value will always send '1' Close='OFF': when close, the

			value will send '0' Open='OFF': when open, the value will send '0' Close='OFF', Open='OFF': the value will always send '0' Close='ON', Open='OFF': when close, the value will send '1'; when open, the value will send '0' Close='OFF', Open='ON': when close, the value will send '0'; when open, the value will send '1'
77	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.* ***NO**: do not transmit object value after bus voltage recovery.* ***YES**: will transmit object value after bus voltage recovery.*
78	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
79	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
2.1.1.4.2_Electronic switch			
80	The normally contact status is	-Closed -(Open)	*Set the dry contact normal status when has no operation.* ***Close:** the contact's normal status is closed.* ***Open:** the contact's normal status is open.*
81	Flexible button operation	Invalid -(Press='toggle') Release='toggle' Press ='ON' Release ='ON' Press ='ON', Release ='ON' Press =='OFF' Release ='OFF' Press ='OFF', Release ='OFF' Press ='ON', Release ='OFF' Press ='OFF', Release ='ON'	***Invalid:** the dry contact is invalid.* ***Press='Toggle':** when press, it will invert the last time's value then send it out* ***Release='Toggle':** when release, it will invert the last time's value then send it out* ***Press ='ON':** when press, the value will send is 1* ***Release ='ON':** when release, the value will send is 1* ***Press='ON', Release ='ON':** the value will send is always 1* ***Press='OFF':** when press, the value will send is 0* ***Release='OFF':** when release, the value will send is 0* ***Press=' OFF', Release='OFF':** the value will send is always 0* ***Press='ON', Release='OFF':***

			when press, the value will send is 1; when release, the value will send is 0 ***Press='OFF', Release='ON':*** *when press, the value will send is 0; when release, the value will send is 1*
82	The operation time interval: base	(10ms)..1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
83	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*

2.1.1.5_Scene controller

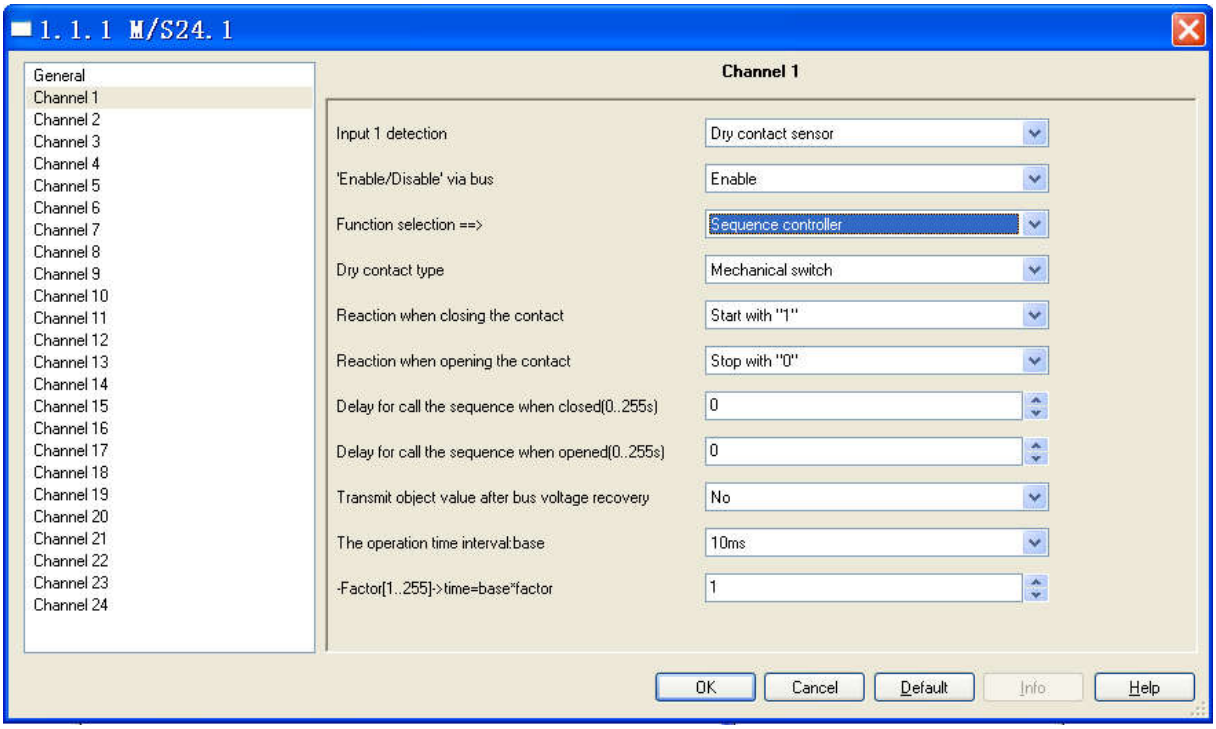


No.	ETS-Parameter	Range (default)	Description
84	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.5.1_Mechanical switch			
85	Call scene number when closing the contact	Invalid...(Scene NO.01)...Scene NO.64	*When close, call corresponding scene*
86	Call scene number when opening the contact	Invalid... (Scene NO.02)...Scene NO.64	*Call the scene number of opening the dry contact*
87	Delay for call the scene when closed (0…255s)	(0)...255s	*Set the delay time to call scene when close*

88	Delay for call the scene when Opened (0…255s)	(0)...255s	*Set the delay time to call scene when open*
89	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.* ***NO**: do not transmit object value after bus voltage recovery.* ***YES**: will transmit object value after bus voltage recovery.*
90	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
91	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
2.1.1.5.2_Electronic switch			
92	The normally contact status is	-Closed -(Open)	*Set the dry contact status when has no operation.* ***Close:** the contact normal status is close.* ***Open:** the contact normal status is open.*
93	Call scene when short button operation	(Scene NO.01)...Scene NO.24	*When short press, call corresponding scene*
94	Reaction when long button operation	-(Scene dimming) -Scene saving -Dimming and saving	*Set long press's control functions* *Scene dimming: when long press, will dim the scene* *Scene saving: when long press, will save current value to the scene* *Dimming and saving: when long press, will dim the scene and save current value to the scene*
95	-Scene dimming	-(Dim->Brighter) -Dim->Darker -Dim->Brighter/Darker	*Dim->Brighter: when long press, will increase the brightness* *Dim->Darker: when long press, will decrease the brightness* *Dim-> Brighter/Darker: when long press, will increase/decrease the brightness*
96	Long button time after	0.2s...(1s)...60s	*Set time for long press*
97	Short button operation toggled	-(NO) -YES	*Whether toggle the scene when short press* *No: do not toggle the scene when short press* *Yes; will toggle the scene when short press*
98	-Toggled scene of the short operation	Scene NO.01, (Scene NO.02)..Scene NO.24	*Call another scene when short press, toggle between two of them*

99	Delay for Call the scene(0..255s)	(0)...255	*Set delay time to call the scene*
100	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
101	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*

2.1.1.6_Sequence controller

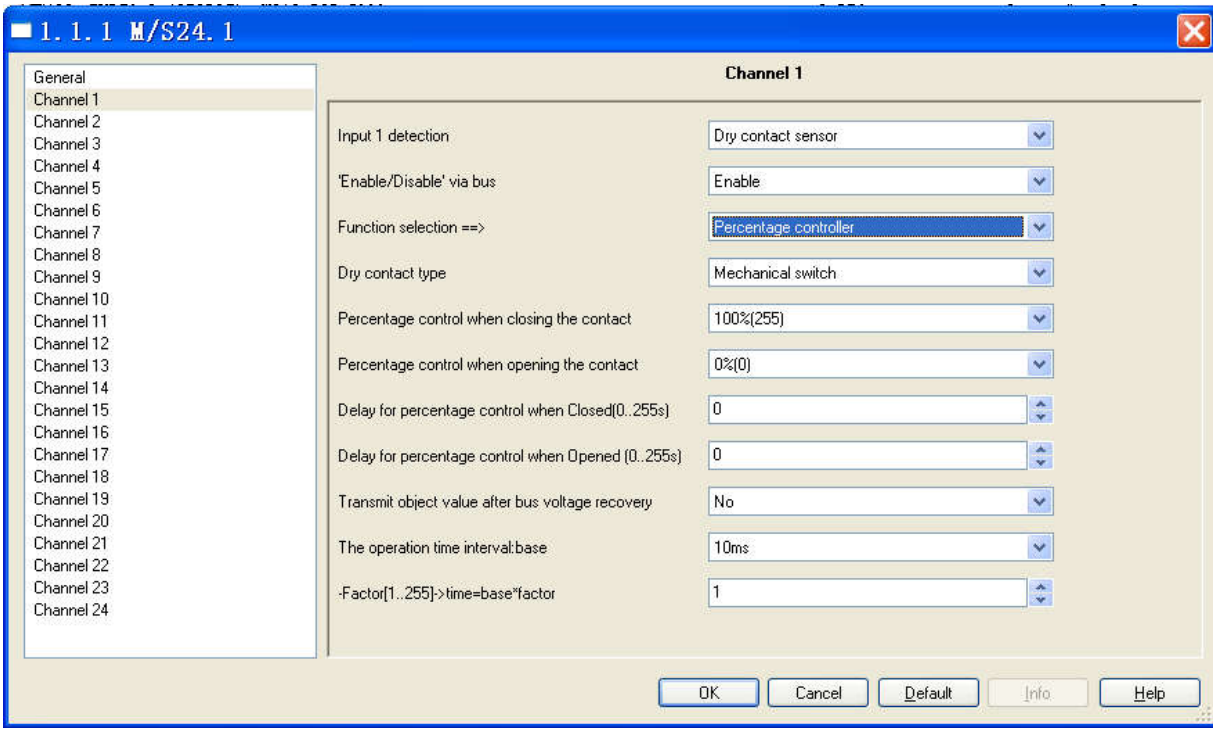


No.	ETS-Parameter	Range (default)	Description
102	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.6.1_Mechanical switch			
103	Reaction when closing the contact	-Invalid -Toggle -(Start with '1') -Stop with '0'	*Set the function of the dry contact when closing the contact* ***Invalid:** no action when closing the contact* ***Toggle:** It will invert the last time's value then send it out when closing* ***Start with '1':** the telegram will send '1' to start the sequence* ***Stop with '0':** the telegram will send '0' to stop the*

			sequence
104	Reaction when opening the contact	-Invalid -Toggle -Start with '1' -(Stop with '0')	*Set the function of the dry contact when open the contact* ***Invalid:*** *no action when opening the contact* ***Toggle:*** *It will invert the last time's value then send it out when closing* ***Start with '1'****: the telegram will send '1' to start the sequence* ***Stop with '0'****: the telegram will send '0' to stop the sequence*
105	Delay for call the sequence when closed(0..255s)	(0)...255	*Set the delay time to call the sequence after closing*
106	Delay for call the sequence when opened(0..255s)	(0)...255	*Set the delay time to call the sequence after opening*
107	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.* ***NO****: do not transmit object value after bus voltage recovery.* ***YES****: will transmit object value after bus voltage recovery.*
108	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
109	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
2.1.1.6.2_Electronic switch			
110	The normally contact status is	-Closed -(Open)	*Set the dry contact status when has no operation.* ***Closed:*** *The dry contact's normal status is closed.* ***Open:*** *The dry contact's normal status is open*
111	Reaction when short button operation	-Invalid -(Toggle) -Start with '1' -Stop with '0'	*Set the function of the dry contact when short press* ***Invalid:*** *no action when short press* ***Toggle:*** *It will invert the last time's value then send it out when short press* ***Start with '1'****: the telegram will send '1' to start the sequence* ***Stop with '0'****: the telegram*

			will send '0' to stop the sequence
112	Reaction when long button operation	-(Invalid) -Toggle -Start with '1' -Stop with '0'	*Set the function of the dry contact when open the contact* ***Invalid:*** *no action when long press* ***Toggle:*** *It will invert the last time's value then send it out when long press* ***Start with '1'****: the telegram will send '1' to start the sequence* ***Stop with '0'****: the telegram will send '0' to stop the sequence*
113	Long button time after	0.2s..(1s)...60s	*Set the time for long press*
114	Delay for short operation(0..255s)	(0)...255	*Set the delay time for short press*
115	Delay for long operation(0..255s)	(0)...255	*Set the delay time for long press*
116	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
117	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*

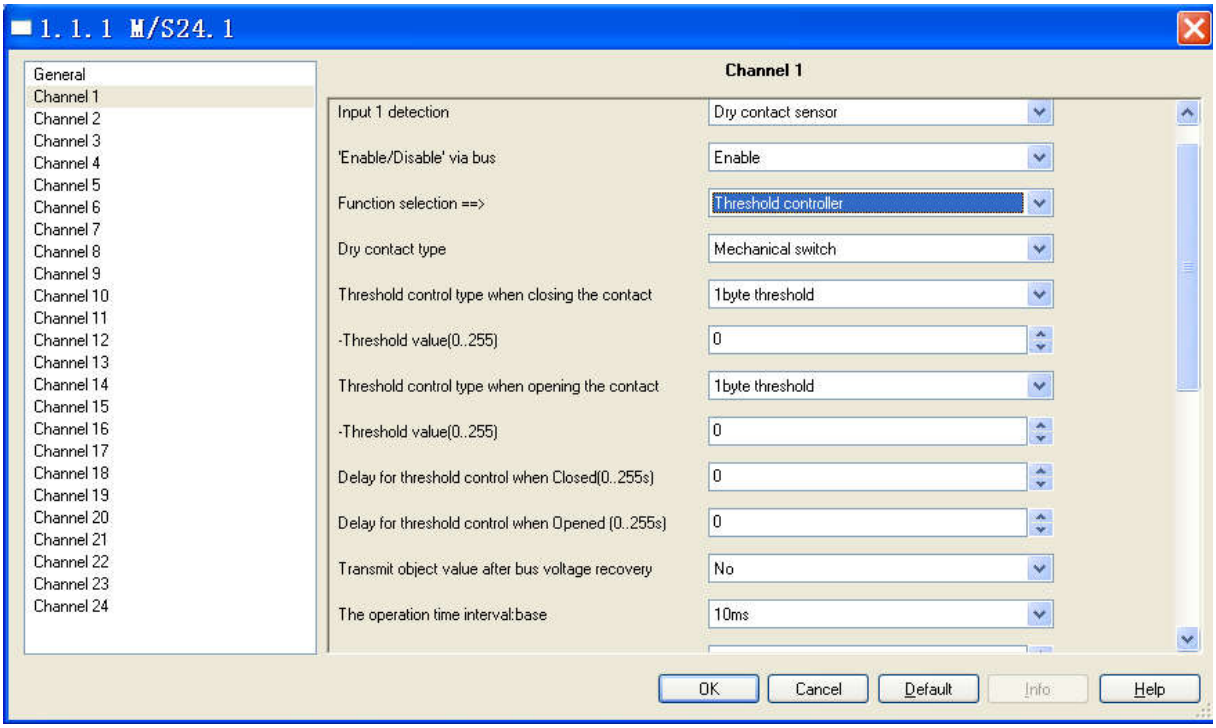
2.1.1.7_Percentage controller



No.	ETS-Parameter	Range (default)	Description
118	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.7.1_Mechanical switch			
119	Percentage control when closing the contact	-Invalid -0%(0)...(100%(255))	*Set the percentage value when closing the contact* ***Invalid:*** *the dry contact is invalid.* ***0%(0)—100%(255) :*** *the percentage of the value*
120	Percentage control when opening the contact	-Invalid -(0%(0))...100%(255)	*Set the percentage value when opening the contact* ***Invalid:*** *the dry contact is invalid.* ***0 % (0)—100%(255) :*** *the percentage of the value*
121	Delay for percentage control when Closed (0..255s)	(0)...255	*Set the delay time when Closed*
122	Delay for percentage control when Opened (0..255s)	(0)...255	*Set the delay time when Opened*
123	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.* ***NO****: do not transmit object value after bus voltage recovery.* ***YES****: will transmit object value after bus voltage recovery.*
124	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of*

			*repeat operation dry contact, the time is base*factor.*
125	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
2.1.1.7.2_Electronic switch			
126	The normally contact status is	-Closed -(Open)	*Set the dry contact status when has no operation.* ***Close:** the contact status is closed.* ***Open:** the contact status is open.*
127	Reaction when short button operation	-Invalid -0 % (0)...(100%(255))	***Invalid:** the dry contact is invalid.* ***0% (0)—100%(255) :** the percentage of the value*
128	Reaction when long button operation	-Invalid -0% (0)...(100%(255))	***Invalid:** the dry contact is invalid.* ***0% (0)—100%(255) :** the percentage of the value*
129	Long button time after	0.2s...(1s)...60s	*Set the time for long press*
130	Short button operation toggled	-(NO) -YES	*Enable/disable the toggle function for short press*
131	Toggled brightness of the short operation	-(0%(0))..100%(255)	*Send another percentage value when short press, toggle between two of them*
132	Long button operation toggled	-(NO) -YES	*Enable/disable the toggle function for long press*
133	Toggled brightness of the long operation	-(0%(0))..100%(255)	*Send another percentage value when long press, toggle between two of them*
134	Delay for short operation (0..255s)	(0)..255	*Set the delay time for short press*
135	Delay for long operation (0..255s)	(0)..255	*Set the delay time for long press*
136	The operation time interval: base	(10ms)..1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
137	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*

2.1.1.8_Threshold controller

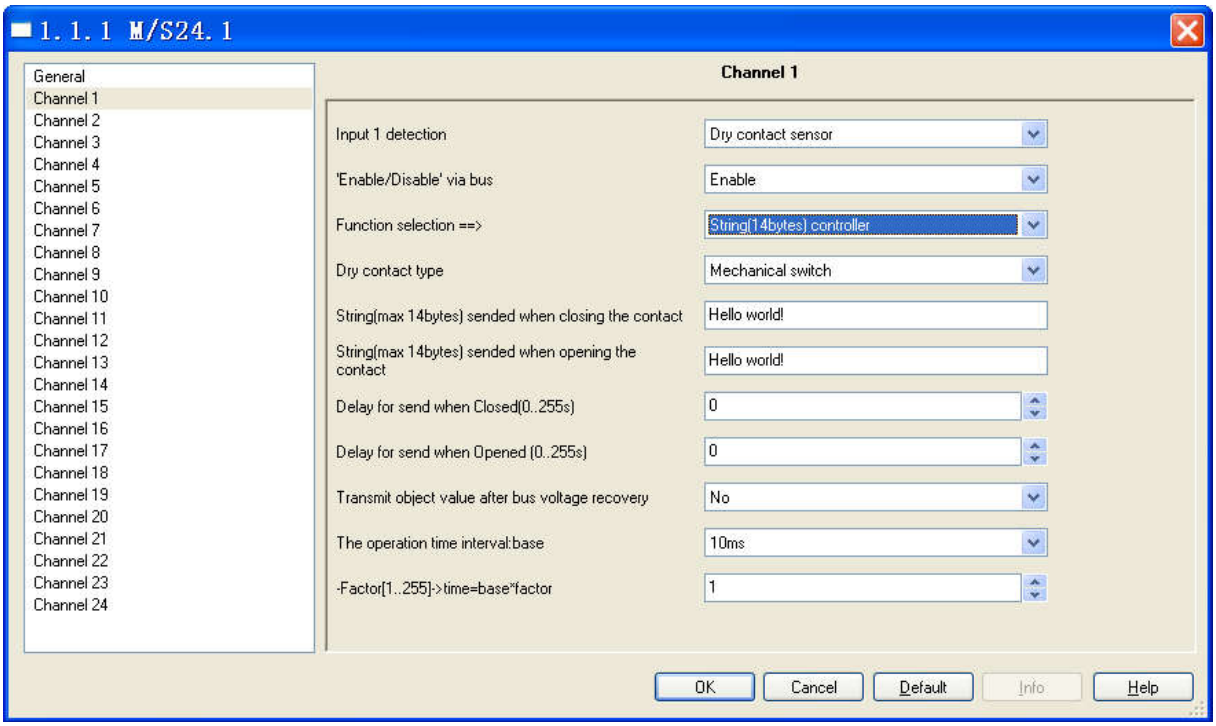


No.	ETS-Parameter	Range (default)	Description
138	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.8.1_Mechanical switch			
139	Threshold control type when closing the contact	-Invalid -(1byte threshold) -2bytes threshold	Select the threshold control type when closing
140	Threshold value(0...255)	(0)...255	*When closing,will send the threshold value*
141	Threshold control type when opening the contact	-Invalid -(1byte threshold) -2bytes threshold	*Set the threshold control type when opening*
142	Threshold value(0...255)	(0)...255	*When opening,will send the threshold value*
143	Delay for threshold control when Closed (0..255s)	(0)...255	*Set the delay time to send threshold value when closed*
144	Delay for threshold control when Opened (0..255s)	(0)...255	*Set the delay time to send threshold value when opened*
145	Transmit object value after bus voltage recovery	-(NO) -YES	Whether transmit object value after bus voltage recovery. **NO**: do not transmit object value after bus voltage recovery. **YES**: will transmit object value after bus voltage recovery.
146	The operation time interval: base	(10ms)..1hour	These two parameters are setting the time interval of

			repeat operation dry contact, the time is base*factor.
147	Factor[1..255]->time=base*factor	(1)...255	These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.
2.1.1.8.2_Electronic switch			
148	The normally contact status is	-Closed -(Open)	*Set the dry contact's normal status when have no operation.* ***Close:*** *the contact's normal status is closed.* ***Open:*** *the contact's normal status is open.*
149	Reaction when short button operation	-Invalid -(1byte threshold) -2bytes threshold	*Set the threshold value type for short press.*
150	Threshold value(0..255)	(0)...255	*When short press, will send the threshold value*
151	Threshold value(0..65535)	(0)..65535	*Set the threshold value of 2byte*
152	Reaction when long button operation	-Invalid -(1byte threshold) -2bytes threshold	*Set the threshold value type for long press*
153	Threshold value(0..255)	(0)...255	*When long press, will send the threshold value*
154	Threshold value(0..65535)	(0)..65535	*Set the threshold value of 2byte*
155	Long button time after	0.2s...(1s)...60s	*Set time for long press*
156	Short button operation toggled	-(NO) -YES	*Whether toggle the threshold value when short press* *No: do not toggle the threshold value when short press* *Yes: will toggle the threshold value when short press*
157	Toggled threshold(0..255) of the short operation	(0)..255	*Send another threshold value when short press, toggle between two of them*
158	Toggled threshold(0..65535) of the short operation	(0)..65535	*Send another threshold value when short press, toggle between two of them*
159	Long button operation toggled	-(NO) -YES	*Enable/disable the toggle function for long press*
160	Toggled threshold(0..255) of the long operation	(0)..255	*Send another threshold value when long press, toggle between two of them*
161	Toggled threshold(0..65535) of the long operation	(0)..65535	*Send another threshold value when long press,*

			toggle between two of them
162	Delay for short operation (0..255s)	(0)...255	*Set the delay time for short press*
163	Delay for long operation (0..255s)	(0)...255	*Set the delay time for long press*
164	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
165	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*

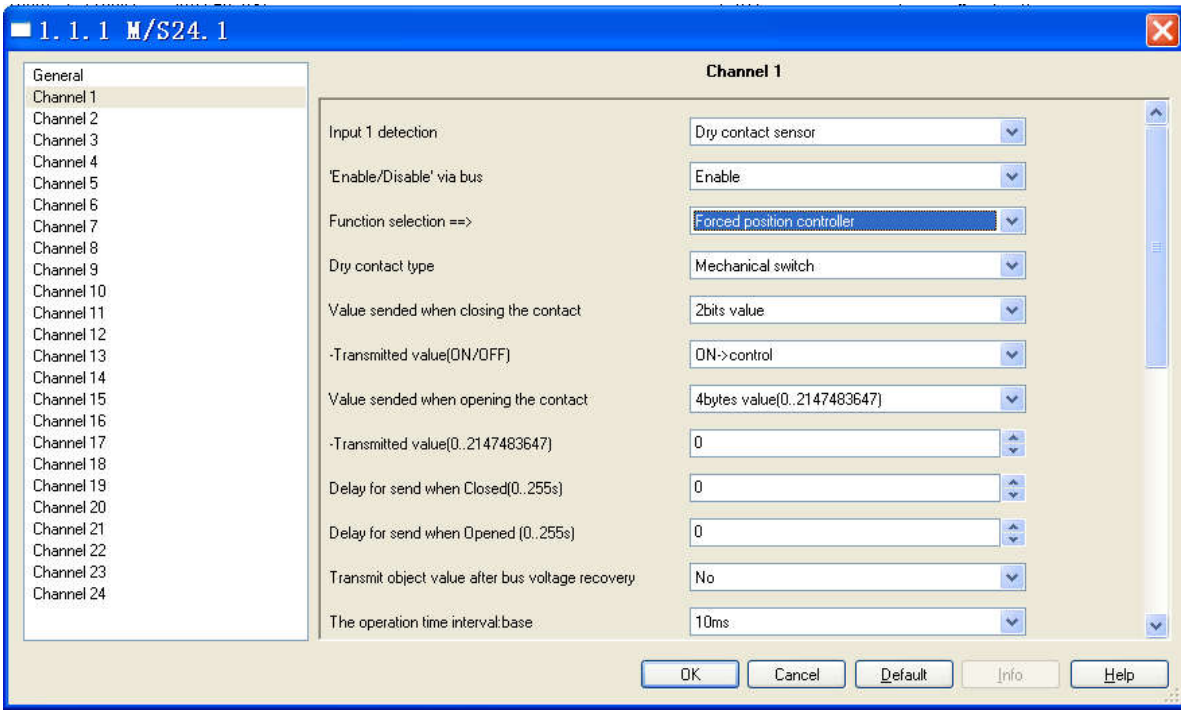
2.1.1.9_String(14bytes) controller



No.	ETS-Parameter	Range (default)	Description
166	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.9.1_Mechanical switch			
167	String(max 14bytes) sended when closing the contact	(Hello world!)	*Set the string to send when short press the dry contact.*
168	String(max 14bytes) sended when opening the contact	(Hello world!)	*Set the string to send when short press the dry contact.*
169	Delay for send when Closed(0...255s)	(0)...255	*Set the delay time to send string when closed*

170	Delay for send when Opened (0..255s)	(0)...255	*Set the delay time to send string when opened*
171	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.* ***NO**: do not transmit object value after bus voltage recovery.* ***YES**: will transmit object value after bus voltage recovery.*
172	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
173	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
2.1.1.9.2_Electronic switch			
174	The normally contact status is	-Closed -(Open)	*Set the dry contact's normal status when have no operation.* ***Close:** the contact's normal status is closed.* ***Open:** the contact's normal status is open.*
175	String(max 14bytes) sended when short button operation	(Hello world!)	*Set the string to send when short press the dry contact.*
176	String(max 14bytes) sended when long button operation	(Hello world!)	*Set the string to send when long press the dry contact*
177	Long button time after	0.2s...(1s)...60s	*Set the time for long press*
178	Delay for short operation (0..255s)	(0)...255	*Set the delay time to send string for short press*
179	Delay for long operation (0..255s)	(0)...255	*Set the delay time to send string for long press*
180	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
181	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*

2.1.1.10_Forced position controller

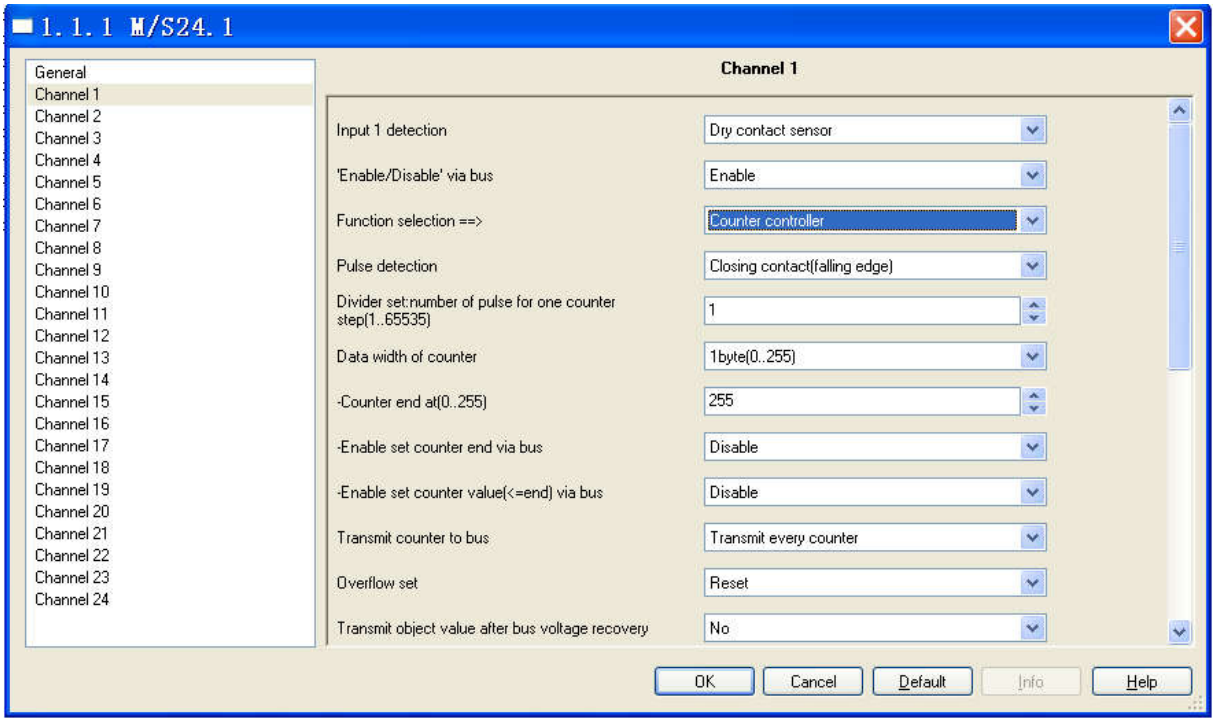


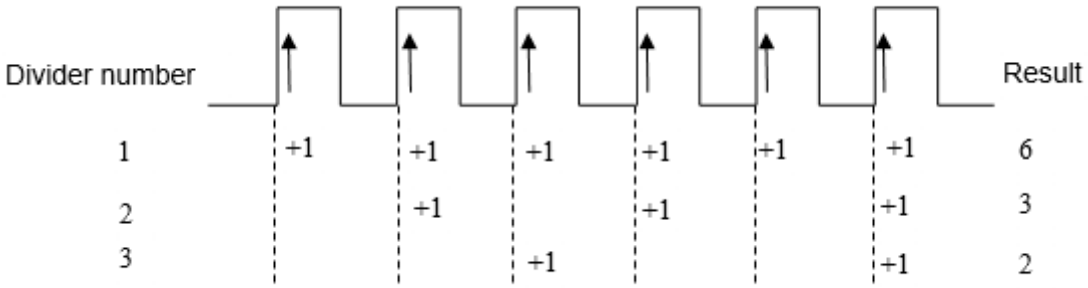
No.	ETS-Parameter	Range (default)	Description
182	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.10.1_Mechanical switch			
183	Value sended when closing the contact	-Invalid -(2bits value) -1byte value(0..255) -2bytes value(-32768..32767) -2bytes value(0..65536) -2bytes value(Float) -4bytes value(0..2147483647)	*Set the value type to send when closing the dry contact.*
184	-Transmitted value (ON/OFF)	-(ON->control) -OFF->control -No control	*Set the control type of 2 bit when closing: ON, OFF, No Control*
185	-Transmitted value (0.255)	(0)..255	*Set the transmitted value of 1 byte when closing*
186	-Transmitted value(-32768..32767)	-32768..(0)..32767	*Set the transmitted value of 2 byte when closing*
187	-Transmitted value(0-65535)	(0)..65536	*Set the transmitted value of 2 byte when closing*
188	-Transmitted value	-100..(0)..100	*Set the transmitted value of 2 byte when closing*
189	-Transmitted value(0..2147483647)	(0)..2147483647	*Set the transmitted value of 4 byte when closing*
190	Value sended when opening the contact	-Invalid -(2bits value) -1byte value(0..255) -2bytes value(-32768..32767) -2bytes value(0..65536) -2bytes value(Float) -4bytes value(0..2147483647)	*Set the value type to send when opening the dry contact.*

191	-Transmitted value (ON/OFF)	-ON->control -(OFF->control) -No control	*Set the control type of 2 bit when closing: ON, OFF, No Control*
192	-Transmitted value (0.255)	(0)..255	*Set the transmitted value of 1 byte when closing*
193	-Transmitted value(-32768..32767)	-32768..(0)..32767	*Set the transmitted value of 2 byte when closing*
194	-Transmitted value(0-65535)	(0)..65536	*Set the transmitted value of 2 byte when closing*
195	-Transmitted value	-100..(0)..100	*Set the transmitted value of 2 byte when closing*
196	-Transmitted value(0..2147483647)	(0)..2147483647	*Set the transmitted value of 4 byte when closing*
197	Delay for send when Closed (0..255s)	(0)..255	*Set the delay time to send the value when closing*
198	Delay for send when Opened (0..255s)	(0)..255	*Set the delay time to send the value when opening*
199	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.* ***NO**: do not transmit object value after bus voltage recovery.* ***YES**: will transmit object value after bus voltage recovery.*
200	The operation time interval: base	(10ms)..1hour	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
201	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
2.1.1.10.2_Electronic switch			
202	The normally contact status is	Closed/(Open)	*Set the dry contact's normal status when have no operation.* ***Close**: the contact's normal status is closed.* ***Open:** the contact's normal status is open.*
203	Value when short button operation	-Invalid -(2bits value) -1byte value(0..255) -2bytes value(-32768..32767) -2bytes value(0..65536) -2bytes value(Float) -4bytes value(0..2147483647)	*Set the value type to send when short press*
204	-Transmitted value (ON/OFF)	-(ON->control) -OFF->control -No control	*Set the control type of 2 bit when closing: ON, OFF, No Control*
205	-Transmitted value (0.255)	(0)..255	*Set the transmitted value of 1 byte when closing*

206	-Transmitted value(-32768..32767)	-32768..(0)..32767	*Set the transmitted value of 2 byte when closing*
207	-Transmitted value(0-65535)	(0)..65536	*Set the transmitted value of 2 byte when closing*
208	-Transmitted value	-100..(0)..100	*Set the transmitted value of 2 byte when closing*
209	-Transmitted value(0..2147483647)	(0)..2147483647	*Set the transmitted value of 4 byte when closing*
210	Value when long button operation	-Invalid -(2bits value) -1byte value(0..255) -2bytes value(-32768..32767) -2bytes value(0..65536) -2bytes value(Float) -4bytes value(0..2147483647)	*Set the value type to send when short press*
211	Long button time after	0.2s..(1s)..60s	*Set time for long-press, define the long press by end-user*
212	Delay for short operation (0..255s)	(0)..255	*Set the delay time to send the value for short press*
213	Delay for long operation (0..255s)	(0)..255	*Set the delay time to send the value for long press*
214	The operation time interval: base	(10ms)..1hour	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
215	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*

2.1.1.11_Counter controller



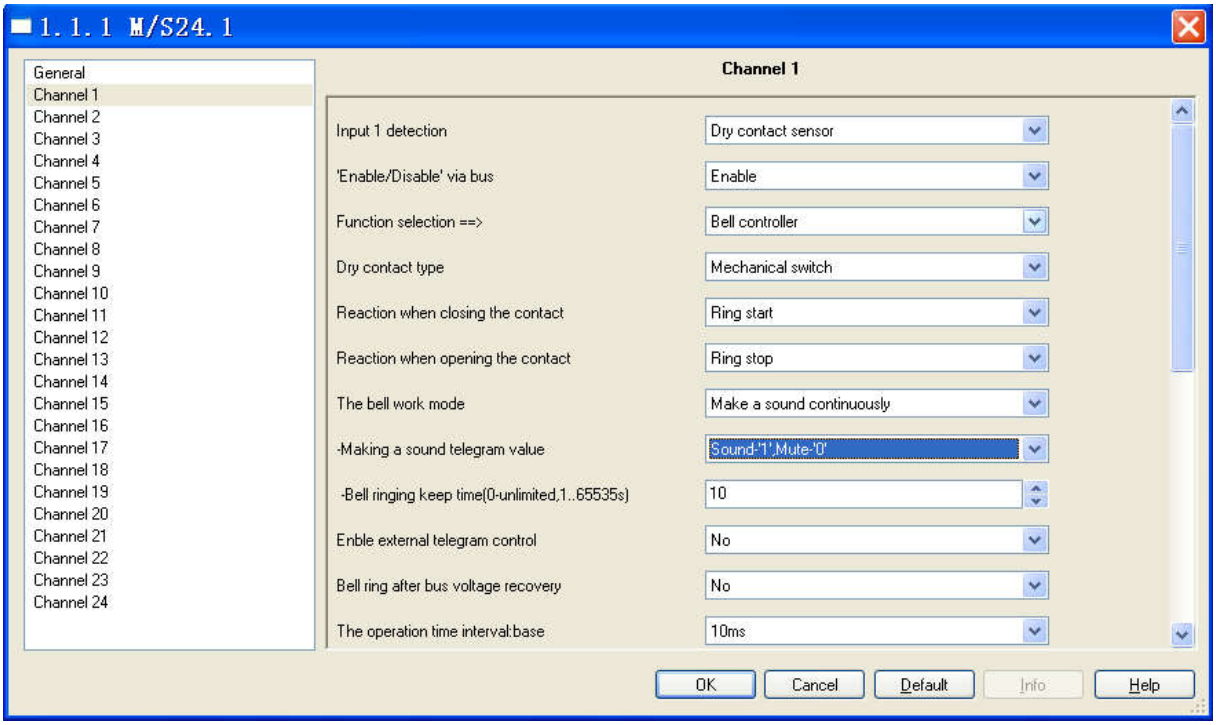


No.	ETS-Parameter	Range (default)	Description
216	Pulse detection	-(Closing contact (falling edge)) -Opening contact (rising edge) -Closing (falling edge) and Opening (rising edge)	***Closing contact (falling edge):*** *take as pulse when detect the falling edge* ***Opening contact (rising edge):*** *take as pulse when detect the rising edge* ***Closing (falling edge) and Opening (rising edge):*** *take as pulse when detect falling/rising edge*
217	Divider set: number of pulse for one counter step (1..65535)	(1)...65535	*Set the number of pulse for one counter*

218	Data width of counter	-(1byte value(0..255)) -2bytes value(0..65536) -4bytes value(0..2147483647)	*Set the data width of counter*
219	-Counter end at (0..255)	0...(255)	*Set the end of the counter*
220	-Counter end at (0..65535)	0...(65535)	*Set the end of the counter*
221	-Counter end at (0..2147483647)	0...(100000)...2147483647	*Set the end of the counter*
222	Counter end at(0...255)	0...(255)	*Set the end of the counter*
223	-Enable set counter end via bus	-(Disable) -Enable	*Whether set the end of counter via bus* *Enable: you can set the end of counter via bus* *Disable: you cannot set the end of counter via bus*
224	-Enable set counter value (<=end) via bus	-(Disable) -Enable	*Whether set the starting counter via bus.* *Enable: you can set the starting counter via bus.* *Disable: you can't set the starting counter via bus.*
225	Transmit counter to bus	-Don't transmission -(Transmit every counter) -Transmit counter cyclically	***Don't transmission:*** *don't transmit any counter to bus.* ***Transmit every counter:*** *transmit every counter to bus* ***Transmit counter cyclically:*** *transmit the counter to bus cyclically*
226	-Counter value transmitted time: base	-(1sec) -1min -1hour	*These two parameters are used to set the time interval of transmission, the time interval = base*factor.*
227	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are used to set the time interval of transmission, the time interval = base*factor.*
228	Counter Transmitted number (1..255, 0-unlimited)	(0)..255	*Set the number of the counter to transmit*
229	Overflow set	-(Reset) -Reset and Alarm -Stop -Stop and Alarm	***Reset****: will reset the counter when overflow.* ***Reset and Alarm****: will reset the counter and alarm when overflow* ***Stop****: will stop the counter when overflow.* ***Stop and Alarm:*** *will*

			stop the counter and alarm when overflow.
230	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.* ***NO**: do not transmit object value after bus voltage recovery.* ***YES**: it will transmit object value after bus voltage recovery.*
231	The operation time interval: base	(10ms)...1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
232	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*

2.1.1.12_Bell controller

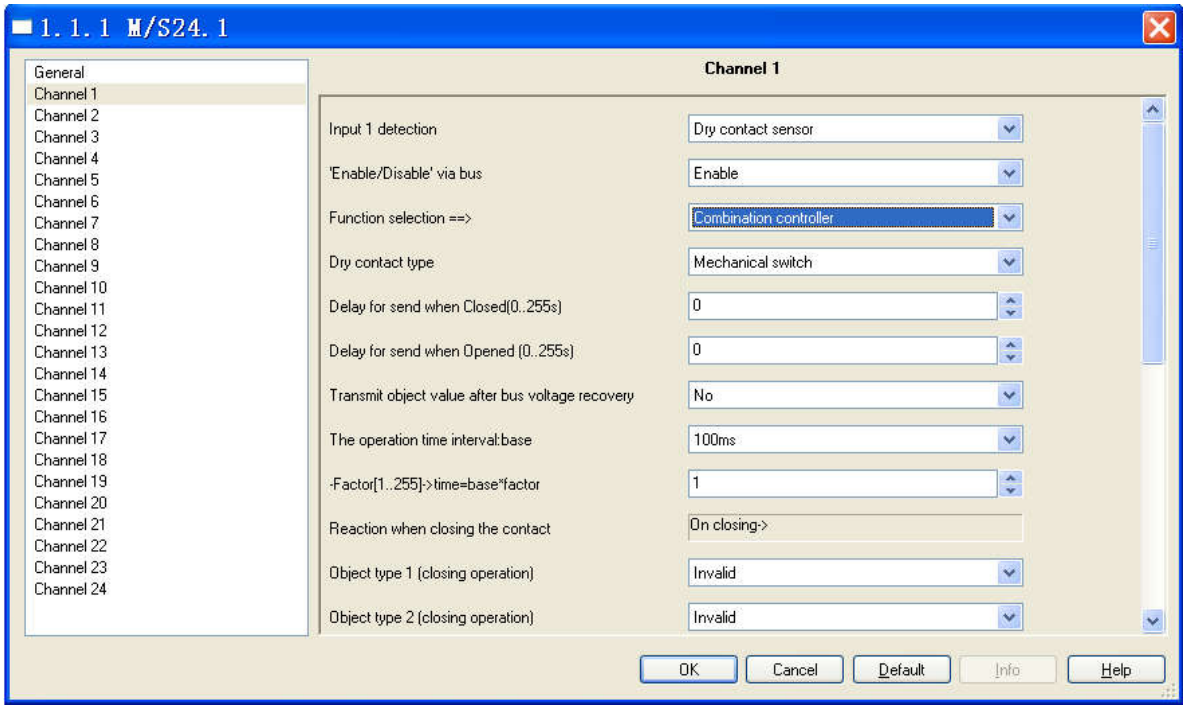


No.	ETS-Parameter	Range (default)	Description
233	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.12.1_Mechanical switch			
234	Reaction when closing the contact	-Invalid -(Ring start) -Ring stop -Ring toggle	*Set the output control type when closing*
235	Reaction when opening the contact	-Invalid -Ring start -(Ring stop) -Ring toggle	*Set the output control type when opening*
236	The bell work mode	-(Make a sound continuously) -Make a sound brokenly	*Set the working mode of the bell*
237	-Making a sound telegram value	-(Sound-'1', Mute-'0') -(Sound-'0',Mute-'1')	*Send the telegrams to control the sound*
238	-Bell ringing keep time(0-unlimited,1...65535s)	1...(10)...65535	*Set the time for the bell ringing*
239	-Sound duration (1...255s)	(1)...255	*Set the time for sound duration*
240	-Mute duration (1...255s)	(1)...255	*Set the time for mute duration*
241	-Ring times (0-unlimited,1...255)	1...(5)...255	*Set the ring time*
242	Enable external telegram control	-(No) -Yes	*Enable/Disable external telegram control* *No: cannot send the external telegram to control* *Yes: can send the external telegram to control*

243	-External telegram control mode	-Ring start-'1', Ring stop-'0' -Ring start-'0', Ring stop-'1' -Ring start-'0'/'1' -Ring stop- '0'/'1'	*Set the external telegram control mode*
244	Bell ring after bus voltage recovery	-(No) -Yes	*Whether the bell ring after bus voltage recovery* *No: the bell won't ring after bus voltage recovery* *Yes: the bell will ring after bus voltage recovery*
245	The operation time interval: base	-(10ms) -100ms -1sec -1min -1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
246	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
2.1.1.12.2_Electronic switch			
247	The normally contact status is	-Closed -(Open)	*Set the dry contact normally status when has no operation.* ***Close:** the contact status is closed.* ***Open:** the contact status is open.*
248	Reaction when short button operation	-Invalid -(Ring start) -Ring stop -Ring toggle	*Set the control type when short press the button*
249	Reaction when long button operation	-Invalid -Ring start -(Ring stop) -Ring toggle	*Set the control type when long press the button*
250	Long button time after	0.2...(1)...60	*Set time for long press*
251	The bell work mode	-Make a sound continuously -Make a sound brokenly	*Set the working mode of the bell*
252	-Making a sound telegram value	-(Sound-'1', Mute-'0') -(Sound-'0',Mute-'1')	*Send the telegrams to control the sound*
253	-Bell ringing keep time(0-unlimited,1...65535s)	1...(10)...65535	*Set the time for the bell ringing*
254	-Sound duration (1...255s)	(1)...255	*Set the time for sound duration*
255	-Mute duration (1...255s)	(1)...255	*Set the time for mute duration*
256	-Ring times (0-unlimited,1...255)	1...(5)...255	*Set the ring time*
257	Enable external telegram control	-(No) -Yes	*Enable/Disable external telegram control* *No: cannot send the external telegram to control* *Yes: can send the external telegram to control*

258	-External telegram control mode	-Ring start-'1', Ring stop-'0' -Ring start-'0', Ring stop-'1' -Ring start-'0'/'1' -Ring stop- '0'/'1'	*Set the external telegram control mode*
259	The operation time interval: base	-(10ms) -100ms -1sec -1min -1hour	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*
260	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are setting the time interval of repeat operation dry contact, the time is base*factor.*

2.1.1.13_Combination controller



No.	ETS-Parameter	Range (default)	Description
261	Dry contact type	-(Mechanical switch) -Electronic switch	*Function selection*
2.1.1.12.1_Mechanical switch			
262	Delay for send when Closed (0..255s)	(0)..255	*Set the delay time to send telegram when closing*
263	Delay for send when Opened (0..255s)	(0)..255	*Set the delay time to send telegram when opening*
264	Transmit object value after bus voltage recovery	-(NO) -YES	*Whether transmit object value after bus voltage recovery.* ***NO**: do not transmit object value after bus voltage recovery.* ***YES**: will transmit object value after bus voltage recovery.*
265	The operation time interval: base	10ms..(100ms)..1hour	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
266	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
267	Object type 1-10 (closing operation)	-(Invalid) -Switch controller -Shutter controller -Scene controller -Sequence controller -Percentage controller -Threshold controller -String (14bytes) controller	*it can send several control telegrams simultaneously when closing.* *Set the control objects' type here*

268	-Switch value	-Toggle -(ON) -OFF	***Toggle**: It will invert the last time's value then send it out.* ***ON**: The value it will send is 1.* ***OFF**: The value it will send is 0.*
269	-Shutter value	-Toggle -(UP) -DOWN	***Toggle:** it will send move up/down telegram* ***UP: i**t will send move up telegram* ***Down:** it will send move down telegram*
270	-Scene value	-(Scene NO.01)..Scene NO.64	*Set the output scene number*
271	-Scene toggled	-(NO) -YES	*Enable/disable the toggle function for scene control*
272	-Toggled scene NO. is	-Scene NO.01..(Scene NO.02)..Scene NO.64	*Set another output scene number, toggle between two of them to send out*
273	-Sequence value	-Toggle -(Start) -Stop	***Toggle:** It will invert the last time's value then send it out* ***Start with"1"**: The value it will send is 1 to start the sequence.* ***Stop with"0"**: The value it will send is 0 to stop the sequence.*
274	-Percentage value	0%(0)..(100%(255))	*Set the output percentage value*
275	-Brightness toggled	-(NO) -YES	*Enable/disable the toggle function for percentage control*
276	-Toggled brightness is	(0%(0))..100%(255)	*Set another output percentage value, toggle between two of them to send out*
277	-Threshold value type	-(1byte threshold) -2bytes threshold	*Set the threshold control type*
278	-Threshold (0..255) value	0..(255)	*Set the threshold value*
279	-Threshold(065535) value	0..(1000)..65535	*Set the threshold value*
280	-Threshold toggled	-(NO) -YES	*Enable/disable the toggle function for threshold control*
281	-Toggled threshold (0..255) is	0..(255)	*Set another output threshold value, toggle between two of them to send out*
282	-String (14bytes) value	(Hello world!)	*Set the output string content*
283	Object type 1-10 (opening operation)	-(Invalid) -Switch controller -Shutter controller -Scene controller -Sequence controller -Percentage controller -Threshold controller -String (14bytes) controller	*it can send several control telegrams simultaneously when opening.* *Set the control objects' type here*
284	-Switch value	-Toggle -(ON) -OFF	***Toggle**: It will invert the last time's value then send it out.* ***ON**: The value it will send is 1.*

			***OFF**: The value it will send is 0.*
285	-Shutter value	-Toggle -(UP) -DOWN	***Toggle:** it will send move up/down telegram* ***UP:** it will send move up telegram* ***Down:** it will send move down telegram*
289	-Scene value	-(Scene NO.01)..Scene NO.64	*Set the output scene number*
290	-Scene toggled	-(NO) -YES	*Enable/disable the toggle function for scene control*
291	-Toggled scene NO. is	-Scene NO.01..(Scene NO.02)..Scene NO.64	*Set another output scene number, toggle between two of them to send out*
292	-Sequence value	-Toggle -(Start) -Stop	***Toggle:** It will invert the last time's value then send it out* ***Start with"1":** The value it will send is 1 to start the sequence.* ***Stop with"0":** The value it will send is 0 to stop the sequence.*
293	-Percentage value	0%(0)..(100%(255))	*Set the output percentage value*
294	-Brightness toggled	-(NO) -YES	*Enable/disable the toggle function for percentage control*
295	-Toggled brightness is	(0%(0))..100%(255)	*Set another output percentage value, toggle between two of them to send out*
296	-Threshold value type	-(1byte threshold) -2bytes threshold	*Set the threshold control type*
297	-Threshold (0..255) value	0..(255)	*Set the threshold value*
298	-Threshold(065535) value	0..(1000)..65535	*Set the threshold value*
299	-Threshold toggled	-(NO) -YES	*Enable/disable the toggle function for threshold control*
300	-Toggled threshold (0..255) is	0..(255)	*Set another output threshold value, toggle between two of them to send out*
301	-String (14bytes) value	(Hello world!)	*Set the output string content*
2.1.1.12.2_Electronic switch			
302	The normally contact status is	Closed/(Open)	*Set the dry contact's normal status when have no operation.* ***Close:** the contact's normal status is closed.* ***Open:** the contact's normal status is open.*
303	Long button time after	0.2s..(1s)..60s	*Set time for long-press, define the long press by end-user*
304	Delay for short operation (0..255s)	(0)..255	*Set the delay time to send out telegram for short press*
305	Delay for long operation (0..255s)	(0)..255	*Set the delay time to send out telegram for long press*

306	The operation time interval: base	10ms..(100ms)..1hour	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
307	Factor[1..255]->time=base*factor	(1)...255	*These two parameters are used to set the time interval of repeat operation, the time interval = base*factor.*
308	Object type 1-10 (short operation)	-(Invalid) -Switch controller -Shutter controller -Scene controller -Sequence controller -Percentage controller -Threshold controller -String (14bytes) controller	*it can send several control telegrams simultaneously when short press.* *Set the control objects' type here*
309	-Switch value	-Toggle -(ON) -OFF	***Toggle**: It will invert the last time's value then send it out.* ***ON**: The value it will send is 1.* ***OFF**: The value it will send is 0.*
310	-Shutter value	-Toggle -(UP) -DOWN	***Toggle:** it will send move up/down telegram* ***UP: i**t will send move up telegram* ***Down:** it will send move down telegram*
311	-Scene value	-(Scene NO.01)..Scene NO.64	*Set the output scene number*
312	-Scene toggled	-(NO) -YES	*Enable/disable the toggle function for scene control*
313	-Toggled scene NO. is	-Scene NO.01..(Scene NO.02)..Scene NO.64	*Set another output scene number, toggle between two of them to send out*
314	-Sequence value	-Toggle -(Start) -Stop	***Toggle:** It will invert the last time's value then send it out* ***Start with"1"**: The value it will send is 1 to start the sequence.* ***Stop with"0"**: The value it will send is 0 to stop the sequence.*
315	-Percentage value	0%(0)..(100%(255))	*Set the output percentage value*
316	-Brightness toggled	-(NO) -YES	*Enable/disable the toggle function for percentage control*
317	-Toggled brightness is	(0%(0))..100%(255)	*Set another output percentage value, toggle between two of them to send out*
318	-Threshold value type	-(1byte threshold) -2bytes threshold	*Set the threshold control type*
319	-Threshold (0..255) value	0..(255)	*Set the threshold value*

320	-Threshold(065535) value	0..(1000)..65535	*Set the threshold value*
321	-Threshold toggled	-(NO) -YES	*Enable/disable the toggle function for threshold control*
322	-Toggled threshold (0..255) is	0..(255)	*Set another output threshold value, toggle between two of them to send out*
323	-String (14bytes) value	(Hello world!)	*Set the output string content*
324	Object type 1-10 (long operation)	-(Invalid) -Switch controller -Shutter controller -Scene controller -Sequence controller -Percentage controller -Threshold controller -String (14bytes) controller	*it can send several control telegrams simultaneously when long press.* *Set the control objects' type here*
325	-Switch value	-Toggle -(ON) -OFF	***Toggle**: It will invert the last time's value then send it out.* ***ON**: The value it will send is 1.* ***OFF**: The value it will send is 0.*
326	-Shutter value	-Toggle -(UP) -DOWN	***Toggle:** it will send move up/down telegram* ***UP:** it will send move up telegram* ***Down:** it will send move down telegram*
327	-Scene value	-(Scene NO.01)..Scene NO.64	*Set the output scene number*
328	-Scene toggled	-(NO) -YES	*Enable/disable the toggle function for scene control*
329	-Toggled scene NO. is	-Scene NO.01..(Scene NO.02)..Scene NO.64	*Set another output scene number, toggle between two of them to send out*
330	-Sequence value	-Toggle -(Start) -Stop	***Toggle:** It will invert the last time's value then send it out* ***Start with"1"**: The value it will send is 1 to start the sequence.* ***Stop with"0"**: The value it will send is 0 to stop the sequence.*
331	-Percentage value	0%(0)..(100%(255))	*Set the output percentage value*
332	-Brightness toggled	-(NO) -YES	*Enable/disable the toggle function for percentage control*
333	-Toggled brightness is	(0%(0))..100%(255)	*Set another output percentage value, toggle between two of them to send out*
334	-Threshold value type	-(1byte threshold) -2bytes threshold	*Set the threshold control type*
335	-Threshold (0..255) value	0..(255)	*Set the threshold value*
336	-Threshold(065535) value	0..(1000)..65535	*Set the threshold value*
337	-Threshold toggled	-(NO) -YES	*Enable/disable the toggle function for threshold control*
338	-Toggled threshold (0..255) is	0..(255)	*Set another output threshold*

			value, toggle between two of them to send out
339	-String (14bytes) value	(Hello world!)	*Set the output string content*

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D. Communication Objects (‘Electronic switch’ adjustment)

D. 0 General

Objects ‘General’ and Enable ‘Heartbeat telegram’

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send “0“			1 bit	C	-	-	T	-		Low
1	General	Heartbeat telegram send “1“			1 bit	C	R	W	T	U		Low
2	General	Heartbeat telegram send “0“ an			1 bit	C	R	W	T	U		Low

NO.	Objectname	Function	Flags	Data type
0	General	Heartbeat telegram send ‘0’	C T	DPT 1.003 1bit
This communication object is ‘Heartbeat telegram’. When set ‘0’, will send the telegram value ‘0’ cyclically				
1	General	Heartbeat telegram send ‘1’	C R W T U	DPT 1.003 1bit
This communication object is ‘Heartbeat telegram’. When set ‘1’, will send the telegram value ‘1’ cyclically				
2	General	Heartbeat telegram send’0’ and ‘1’	C R W T U	DPT1.003 1bit
This communication object is ‘Heartbeat telegram’. When set ‘0/1’, will send the telegram (alternately between 0 and 1) cyclically.				

D. 1 Dry contact sensor

Objects ‘Switch controller’

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send “0“			1 bit	C	-	-	T	-		Low
10	Input 1	’1’-Enable/’0’-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	Switching			1 bit	C	-	W	T	U		Low
12	Input 1 (long)	Switching			1 bit	C	-	W	T	U		Low

NO.	Objectname	Function	Flags	Data type
10	Input 1	‘1’ -Enable/’0’-Disable	C W	DPT 1.003 1bit
This communication object is enable/disable for Input 1. When it receives telegram ‘1’, the Input 1 function is enable; when it receives telegram ‘0’, the Input 1 function is disable.				
11	Input 1(short)	Switching	C W T U	DPT 1.001 1bit
12	Input 1(long)	Switching	C W T U	DPT1.001 1bit
These communication objects are switch controller, when short /long press the Input 1, will send telegram to control switch				

Objects 'Switch/Dimmingcontroller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
12	Input 1	Dimming			4 bit	C	-	-	T	-		Low

NO.	Objectname	Function	Flags	Data type
12	Input 1	Dimming	C W	DPT 3.007 4 bit

This communication object is dimming control, when you control Input 1, will send the telegram to control dimming.

Objects 'shuttercontroller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-	
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-	
11	Input 1 (short)	Adjust for shutter(Inc)			1 bit	C	-	W	T	U	
12	Input 1 (long)	Move for shutter(Toggle)			1 bit	C	-	W	T	U	

NO.	Objectname	Function	Flags	Data type
11	Input 1(short)	Adjust forshutter(Inc)	C W T U	DPT 1.007 1 bit
12	Input 1(long)	Move forshutter(Toggle)	C W T U	DPT 1.008 1 bit

These communication objects are shutter control, when you short/long press Input1, will send the telegram to control shutter.

Objects 'Flexible controller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1	Flexible			1 bit	C	-	W	T	U		Low

NO.	Objectname	Function	Flags	Data type
11	Input 1	Flexible	C W T U	DPT 1.001 1 bit

This communication object is flexible control, when you control input 1, will send telegram and then, can be flexible control.

Objects 'Scene controller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	Call scene			1 Byte	C	-	W	T	U		Low
12	Input 1 (long)	Scene dimming			4 bit	C	-	-	T	-		Low

NO.	Objectname	Function	Flags	Data type
11	Input 1(short)	Call scene	C W T U	DPT 18.001 1 byte
12	Input 1(long)	Scene dimming	C T	DPT 3.007 4 bit
These communication objects are scene control, when you short/ long press the Input 1, will send telegram to call scene or scene dimming.				

Objects 'Sequencecontroller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	Sequence			1 bit	C	-	W	T	U		Low
12	Input 1 (long)	Sequence			1 bit	C	-	W	T	U		Low

NO.	Objectname	Function	Flags	Data type
11	Input 1(short)	Sequence	C W T U	DPT 1.010 1 bit
12	Input 1(long)	Sequence		
These communication objects are sequence control, when short/long press Input 1, will sends the telegram to control sequence.				

Objects 'Percentagecontroller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	Sequence			1 bit	C	-	W	T	U		Low
12	Input 1 (long)	Sequence			1 bit	C	-	W	T	U		Low

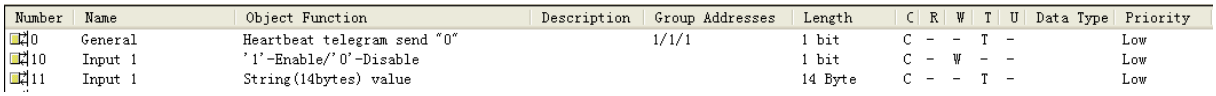
NO.	Objectname	Function	Flags	Data type
11	Input 1(short)	Percentage	C W T U	DPT 5.001 1 byte
12	Input 1(long)	percentage		
These communication objects are percentage control, when short/long press Input 1, will send telegram to control percentage.				

Objects 'Threshold controller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	Threshold(1byte)			1 Byte	C	-	W	T	U		Low
12	Input 1 (long)	Threshold(1byte)			1 Byte	C	-	W	T	U		Low

NO.	Object name	Function	Flags	Data type
11	Input 1(short)	Threshold (1byte)	C W T U	DPT 5.004 1byte
12	Input 1(long)	Threshold (1byte)	C W T U	DPT 5.004 1 byte
These communication objects are threshold, when short/ long press input 1, will send telegram to control threshold.				

Objects 'String (14bytes) controller'

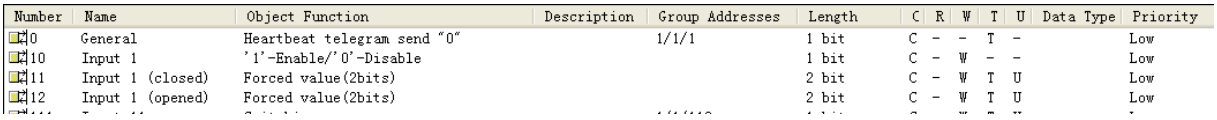


Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1	String(14bytes) value			14 Byte	C	-	-	T	-		Low

NO.	Objectname	Function	Flags	Data type
11	Input 1(short)	String(14 bytes)value	C T	DPT 16.000 2 bytes

These communication objects are string control, when short/long press input 1, will send telegram to control the string value

Objects 'Forcedpositioncontroller'

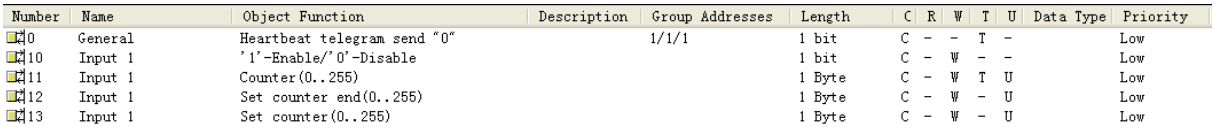


Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (closed)	Forced value(2bits)			2 bit	C	-	W	T	U		Low
12	Input 1 (opened)	Forced value(2bits)			2 bit	C	-	W	T	U		Low

NO.	Objectname	Function	Flags	Data type
11	Input 1(closed)	Forced value (2bits)	C W T U	DPT 2.001 2bit
12	Input 1(opened)	Forced value (2bits)	C W T U	DPT 2.001 1 bit

These communication objects are forced control, when opened / closed input 1, will send telegram to control the forced value.

Objects 'counter controller'

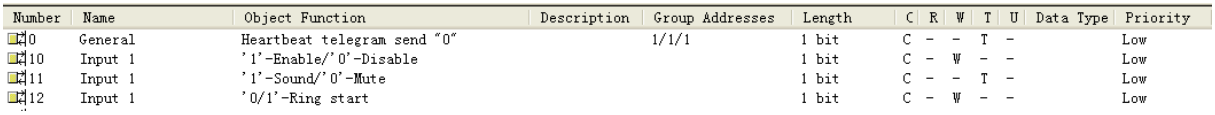


Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1	Counter(0..255)			1 Byte	C	-	W	T	U		Low
12	Input 1	Set counter end(0..255)			1 Byte	C	-	W	-	U		Low
13	Input 1	Set counter(0..255)			1 Byte	C	-	W	-	U		Low

NO.	Objectname	Function	Flags	Data type
11	Input 1	Counter (0…255)	C W T U	DPT 5.004 1 byte
12	Input 1	Set counter end(0…255)	C W U	DPT 5.004 1 byte
13	Input 1	Set counter (0…255)	C W U	DPT 5.004 1 byte

These communication objects are counter control, set the value, will start the counter function. And control the No.12 to set the end of the counter and control No.13 to set the counter

Objects 'Bell controller'



Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1	'1'-Sound/'0'-Mute			1 bit	C	-	-	T	-		Low
12	Input 1	'0/1'-Ring start			1 bit	C	-	W	-	-		Low

NO.	Objectname	Function	Flags	Data type

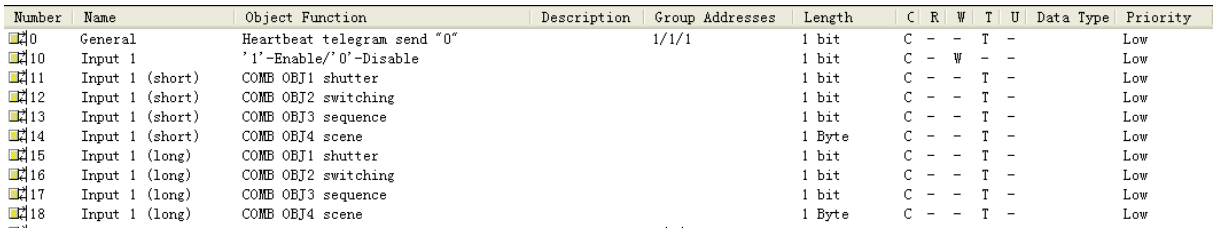
11	Input 1	'1'-Sound/'0'-Mute	C T	DPT 1.001 1 byte
12	Input 1	'0/1'-Ring start	C W	DPT 1.010 1 byte
These communication objects are bell control, when send telegram value, can control the bell, such as, send '1' the bell will sound; send '0' the bell will mute; send '0/1', the ring will start.				

Objects 'Combination controller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	COMB OBJ1 switching			1 bit	C	-	-	T	-		Low
12	Input 1 (short)	COMB OBJ2 shutter			1 bit	C	-	-	T	-		Low
13	Input 1 (short)	COMB OBJ3 scene			1 Byte	C	-	-	T	-		Low
14	Input 1 (short)	COMB OBJ4 sequence			1 bit	C	-	-	T	-		Low
15	Input 1 (long)	COMB OBJ1 switching			1 bit	C	-	-	T	-		Low
16	Input 1 (long)	COMB OBJ2 shutter			1 bit	C	-	-	T	-		Low
17	Input 1 (long)	COMB OBJ3 scene			1 Byte	C	-	-	T	-		Low
18	Input 1 (long)	COMB OBJ4 sequence			1 bit	C	-	-	T	-		Low

NO.	Object name	Function	Flags	Data type
11 … 14	Input1(short)	COMB OBJ1 switching	C T	DPT 1.001 1 bit
		COMB OBJ2 shutter	C T	DPT 1.008 1 bit
		COMB OBJ3 scene	C T	DPT 18.001 1 byte
		COMB OBJ4 sequence	C T	DPT 1.010 1 bit
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you short press, will send out the control telegram.				
NO.	Object name	Function	Flags	Data type
15 ... 18	Input 1(long)	COMB OBJ1 switching	C T	DPT 1.001 1 bit
		COMB OBJ2 shutter	C T	DPT 1.008 1 bit
		COMB OBJ3 scene	C T	DPT 18.001 1 byte
		COMB OBJ4 sequence	C T	DPT 1.010 1 bit
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you long press, will send out the control telegram				

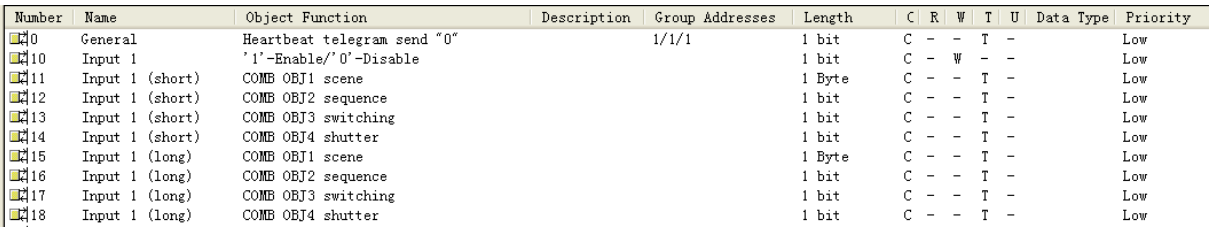
Objects 'Combination controller'



Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	COMB OBJ1 shutter			1 bit	C	-	-	T	-		Low
12	Input 1 (short)	COMB OBJ2 switching			1 bit	C	-	-	T	-		Low
13	Input 1 (short)	COMB OBJ3 sequence			1 bit	C	-	-	T	-		Low
14	Input 1 (short)	COMB OBJ4 scene			1 Byte	C	-	-	T	-		Low
15	Input 1 (long)	COMB OBJ1 shutter			1 bit	C	-	-	T	-		Low
16	Input 1 (long)	COMB OBJ2 switching			1 bit	C	-	-	T	-		Low
17	Input 1 (long)	COMB OBJ3 sequence			1 bit	C	-	-	T	-		Low
18	Input 1 (long)	COMB OBJ4 scene			1 Byte	C	-	-	T	-		Low

NO.	Object name	Function	Flags	Data type
11 … 14	Input1(short)	COMB OBJ1 Shutter	C T	DPT 1.008 1 bit
		COMB OBJ2 switching	C T	DPT 1.001 1 bit
		COMB OBJ3 sequnece	C T	DPT 1.010 1 bit
		COMB OBJ4 scene	C T	DPT 18.001 1 byte
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you short press, will send out the control telegram.				
NO.	Object name	Function	Flags	Data type
15 ... 18	Input 1(long)	COMB OBJ1 shutter	C T	DPT 1.008 1 bit
		COMB OBJ2 switching	C T	DPT 1.001 1 bit
		COMB OBJ3 sequence	C T	DPT 1.010 1 bit
		COMB OBJ4 scene	C T	DPT 18.001 1 byte
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you long press, will send out the control telegram.				

Objects 'Combination controller'



Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	COMB OBJ1 scene			1 Byte	C	-	-	T	-		Low
12	Input 1 (short)	COMB OBJ2 sequence			1 bit	C	-	-	T	-		Low
13	Input 1 (short)	COMB OBJ3 switching			1 bit	C	-	-	T	-		Low
14	Input 1 (short)	COMB OBJ4 shutter			1 bit	C	-	-	T	-		Low
15	Input 1 (long)	COMB OBJ1 scene			1 Byte	C	-	-	T	-		Low
16	Input 1 (long)	COMB OBJ2 sequence			1 bit	C	-	-	T	-		Low
17	Input 1 (long)	COMB OBJ3 switching			1 bit	C	-	-	T	-		Low
18	Input 1 (long)	COMB OBJ4 shutter			1 bit	C	-	-	T	-		Low

NO.	Object name	Function	Flags	Data type
11 … 14	Input1(short)	COMB OBJ1 scene	C T	DPT 18.001 1 byte
		COMB OBJ2 sequence	C T	DPT 1.010 1 bit
		COMB OBJ3 switching	C T	DPT 1.001 1 bit
		COMB OBJ4 shutter	C T	DPT 1.008 1 bit
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you short press, will send out the control telegram.				

NO.	Object name	Function	Flags	Data type
15 ... 18	Input 1(long)	COMB OBJ1 scene	C T	DPT 18.001 1 byte
		COMB OBJ2 sequnece	C T	DPT 1.010 1 bit
		COMB OBJ3 switching	C T	DPT 1.001 1 bit
		COMB OBJ4 shutter	C T	DPT 1.008 1 bit
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you long press, will send out the control telegram.				

Objects 'Combination controller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	COMB OBJ1 sequence			1 bit	C	-	-	T	-		Low
12	Input 1 (short)	COMB OBJ2 scene			1 Byte	C	-	-	T	-		Low
13	Input 1 (short)	COMB OBJ3 shutter			1 bit	C	-	-	T	-		Low
14	Input 1 (short)	COMB OBJ4 switching			1 bit	C	-	-	T	-		Low
15	Input 1 (long)	COMB OBJ1 sequence			1 bit	C	-	-	T	-		Low
16	Input 1 (long)	COMB OBJ2 scene			1 Byte	C	-	-	T	-		Low
17	Input 1 (long)	COMB OBJ3 shutter			1 bit	C	-	-	T	-		Low
18	Input 1 (long)	COMB OBJ4 switching			1 bit	C	-	-	T	-		Low

NO.	Object name	Function	Flags	Data type
11 … 14	Input1(short)	COMB OBJ1 sequence	C T	DPT 1.010 1 bit
		COMB OBJ2 scene	C T	DPT 18.001 1 byte
		COMB OBJ3 shutter	C T	DPT 1.008 1 bit
		COMB OBJ4 switching	C T	DPT 1.001 1 bit
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you short press, will send out the control telegram.				
NO.	Object name	Function	Flags	Data type
15 ... 18	Input 1(long)	COMB OBJ1 sequence	C T	DPT 1.010 1 bit
		COMB OBJ2 scene	C T	DPT 18.001 1 byte
		COMB OBJ3 shutter	C T	DPT 1.008 1 bit
		COMB OBJ4 switching	C T	DPT 1.001 1 bit
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you long press, will send out the control telegram.				

Objects 'Combination controller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	COMB OBJ1 percentage			1 Byte	C	-	-	T	-		Low
12	Input 1 (short)	COMB OBJ2 threshold(0..255)			1 Byte	C	-	-	T	-		Low
13	Input 1 (short)	COMB OBJ3 String(14bytes)			14 Byte	C	-	-	T	-		Low
14	Input 1 (short)	COMB OBJ4 percentage			1 Byte	C	-	-	T	-		Low
15	Input 1 (long)	COMB OBJ1 percentage			1 Byte	C	-	-	T	-		Low
16	Input 1 (long)	COMB OBJ2 threshold(0..255)			1 Byte	C	-	-	T	-		Low
17	Input 1 (long)	COMB OBJ3 String(14bytes)			14 Byte	C	-	-	T	-		Low
18	Input 1 (long)	COMB OBJ4 percentage			1 Byte	C	-	-	T	-		Low

NO.	Object name	Function	Flags	Data type
11 … 14	Input1(short)	COMB OBJ1 percentage	C T	DPT 5.001 1 byte
		COMB OBJ2 threshold(0...255)	C T	DPT 5.004 1 byte
		COMB OBJ3 String(14bytes)	C T	DPT 16.000 14 byte
		COMB OBJ4 percentage	C T	DPT 5.001 1 byte
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you short press, will send out the control telegram.				
NO.	Object name	Function	Flags	Data type
15 ... 18	Input 1(long)	COMB OBJ1 percentage	C T	DPT 5.001 1 byte
		COMB OBJ2 threshold(0....255)	C T	DPT 5.004 1 byte
		COMB OBJ3 String(14bytes)	C T	DPT 16.000 14 byte
		COMB OBJ4 percentage	C T	DPT 5.001 1 byte
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you long press, will send out the control telegram.				

Objects 'Combination controller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	COMB OBJ1 threshold(0..255)			1 Byte	C	-	-	T	-		Low
12	Input 1 (short)	COMB OBJ2 String(14bytes)			14 Byte	C	-	-	T	-		Low
13	Input 1 (short)	COMB OBJ3 percentage			1 Byte	C	-	-	T	-		Low
14	Input 1 (short)	COMB OBJ4 threshold(0..255)			1 Byte	C	-	-	T	-		Low
15	Input 1 (long)	COMB OBJ1 threshold(0..255)			1 Byte	C	-	-	T	-		Low
16	Input 1 (long)	COMB OBJ2 String(14bytes)			14 Byte	C	-	-	T	-		Low
17	Input 1 (long)	COMB OBJ3 percentage			1 Byte	C	-	-	T	-		Low
18	Input 1 (long)	COMB OBJ4 threshold(0..255)			1 Byte	C	-	-	T	-		Low

NO.	Object name	Function	Flags	Data type
11 … 14	Input1(short)	COMB OBJ1 threshold(0...255)	C T	DPT 5.004 1 byte
		COMB OBJ2 String(14bytes)	C T	DPT 16.000 14 bytes
		COMB OBJ3 percentage	C T	DPT 5.001 1 byte
		COMB OBJ4 threshold(0...255)	C T	DPT 5.004 1 byte
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you short press, will send out the control telegram.				

NO.	Object name	Function	Flags	Data type
15 ... 18	Input 1(long)	COMB OBJ1 Threshold(0...255)	C T	DPT 5.004 1 byte
		COMB OBJ2 String(14 bytes)	C T	DPT 16.000 14 bytes
		COMB OBJ3 Percentage	C T	DPT 5.001 1 byte
		COMB OBJ4 Threshold(0...255)	C T	DPT 5.004 1 byte
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you long press, will send out the control telegram.				

Objects 'Combination controller'

Number	Name	Object Function	Description	Group Addresses	Length	C	R	W	T	U	Data Type	Priority
0	General	Heartbeat telegram send "0"		1/1/1	1 bit	C	-	-	T	-		Low
10	Input 1	'1'-Enable/'0'-Disable			1 bit	C	-	W	-	-		Low
11	Input 1 (short)	COMB OBJ1 String(14bytes)			14 Byte	C	-	-	T	-		Low
12	Input 1 (short)	COMB OBJ2 percentage			1 Byte	C	-	-	T	-		Low
13	Input 1 (short)	COMB OBJ3 threshold(0..255)			1 Byte	C	-	-	T	-		Low
14	Input 1 (short)	COMB OBJ4 String(14bytes)			14 Byte	C	-	-	T	-		Low
15	Input 1 (long)	COMB OBJ1 String(14bytes)			14 Byte	C	-	-	T	-		Low
16	Input 1 (long)	COMB OBJ2 percentage			1 Byte	C	-	-	T	-		Low
17	Input 1 (long)	COMB OBJ3 threshold(0..255)			1 Byte	C	-	-	T	-		Low
18	Input 1 (long)	COMB OBJ4 String(14bytes)			14 Byte	C	-	-	T	-		Low

NO.	Object name	Function	Flags	Data type
11 … 14	Input1(short)	COMB OBJ1 String(14bytes)	C T	DPT16.000 14 byte
		COMB OBJ2 percentage	C T	DPT 5.001 1byte
		COMB OBJ3 threshold(0...255)	C T	DPT 5.004 1 byte
		COMB OBJ4 String(14bytes)	C T	DPT 16.000 14 byte
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you short press, will send out the control telegram.				
NO.	Object name	Function	Flags	Data type
15 ... 18	Input 1(long)	COMB OBJ1 String(14bytes)	C T	DPT16.000 14 byte
		COMB OBJ2 percentage	C T	DPT 5.001 1byte
		COMB OBJ3 threshold(0...255)	C T	DPT 5.004 1 byte
		COMB OBJ4 String(14bytes)	C T	DPT 16.000 14 byte
These communication objects are combination control, it includes switch, shutter, scene, sequence, percentage, thereshold, string. When you long press, will send out the control telegram.				

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