11 S2 Switching, Value, Scene 221D01

Application program usage

Product family: Timer
Product type: REG-Devices
Manufacturer: Siemens

Name: 2-channel Time-switch REG 371
Order-No.: 5WG1 371-5EY01

Functional description

The 2-channel time switch REG 371 (weekly scheduler) with integrated bus coupling unit is a DIN rail mounted device for mounting in distribution boards. The connection to EIB is made via a bus connector.

The time switch offers: 36 schedules, which may be assigned to one, several or all weekdays (free block formation). Additionally, the REG 371 is already set ex factory with the current time and valid Middle European settings for daylight savings time switchover (summer / winter time). If another or no switchover is desired this can be set as described in the operation manual.

- Programmed schedules are saved for up to 10 years in case the bus voltage fails and the back-up battery runs low
- automatic program review
- 99 days holiday program, programmable 99 days in advance
- switching pre-select
- permanent ON/OFF
- Lithium battery backup, approx. 6 years

On each channel switching, priority and dimming or value messages can be transmitted at pre-set times.

Application examples

- Ideally suited for residential applications and smaller EIB projects
- Up to four telegrams may be sent to the bus when one channel schedule switches (e.g. at the end of a work day: switch off main lighting, close shutters, reduce room temperature, lock perimeter doors)

Communication objects

| Phys.Addr.	Program		Order number	
no.	Object name	Function	Type	
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0	Channel 1 - Object A	Positive drive (EIS 8)	2 Bit	
1	Channel 1 - Object B	8-bit Value (EIS 6)	1 Byte	
2	Channel 1 - Object C	Positive drive (EIS 8)	2 Bit	
3	Channel 1 - Object D	On / Off	1 Bit	
4	Channel 2 - Object A	On / Off	1 Bit	
5	Channel 2 - Object B	On / Off	1 Bit	
6	Channel 2 - Object C	On / Off	1 Bit	
7	Channel 2 - Object D	On / Off	1 Bit	
8	Blocking	0=normal / 1=blocked	1 Bit	

Note

Your screen presentation may vary from these typical snap shots.

Obj	Object name	Function	Type	Flag
0	Channel 1 – Object A	On / Off	1 Bit	KÜ
		8-bit Value (EIS 6)	1 Byte	
		Positive drive (EIS 8)	2 Bit	
1	Channel 1 – Object B	...	...	KÜ
2	Channel 1 – Object C	...	...	KÜ
3	Channel 1 – Object D	...	...	KÜ
4	Channel 2 – Object A	On / Off	1 Bit	KÜ
		8-bit Value (EIS 6)	1 Byte	
		Positive drive (EIS 8)	2 Bit	
5	Channel 2 – Object B	...	...	KÜ
6	Channel 2 – Object C	...	...	KÜ
7	Channel 2 – Object D	...	...	KÜ

On / Off:
Send a switching telegram when scheduler channel 1 or scheduler channel 2 switches.

8-bit Value (EIS 6):
Send an 8-bit value (dimming, set value), when scheduler channel 1 or scheduler channel 2 switches.

Positive drive (EIS 8):
Send an 8-bit value (dimming, set value), when scheduler channel 1 or scheduler channel 2 switches.

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Obj	Object name	Function	Type	Flag
8	0= normal / 1= blocked	Blocking	1 Bit	KSÜ

If Blocking is set to 1 = blocked and the parameter for blocking of a channel object is enabled then sending for that channel object is blocked.

Note

Requesting the value of a communication object is not possible.

Maximum number of group addresses: 11
Maximum number of assignments: 11

Parameter

General

Parameter	Settings
Number of objects for channel 1	**1 object** 2 objects 3 objects 4 objects
Setting for how many scene objects shall be available for channel 1.	
Number of objects for channel 2	**1 object** 2 objects 3 objects 4 objects
Setting for how many scene objects shall be available for channel 2.	
Interval for cyclical sending	2,5 minutes 5 minutes **10 minutes** 15 minutes 20 minutes 30 minutes 45 minutes 60 minutes
Setting of the time interval used for sending telegrams repeatedly to the bus. For small time values the real length of the interval may differ slightly from the value set. **This parameter applies to all communication objects which are set for "cyclical sending".**	

Switching Channel 1 (2) – Object A (B-D)

Function and parameters of channels 1 - 2 and the corresponding objects A - D are identical and described only once.

Parameter	Settings
Function	**switch** 8-bit value positive drive
Select if a switch (1 bit) , value (8 bit) or positive drive (2 bit) telegram shall be sent via this scheduler channel.	
Behaviour if clock switches OFF	**send telegram** do not send any telegrams
Select if a telegram shall be sent when the clock channel switches off.	
Switching telegram	**switch off** switch on
This parameter appears if a switching telegram shall be sent. Select if a "0" or "1" telegram shall be sent when the clock channel switches off.	
Behaviour if clock switches ON	**send telegram** do not send any telegrams
Select if a telegram shall be sent when the clock channel switches on.	
switching telegram	**switch off** switch on
This parameter appears if a switching telegram shall be sent. Select if a "0" or "1" telegram shall be sent when the clock channel switches off.	
Behaviour of sending	cyclical sending **no cyclical sending**
Select if the telegram shall be sent once only or cyclically.	
Behaviour if blocking object is ON	**ignore blocking** enable blocking
If the EIB object Blocking is set to 1 = blocking and this parameter is set to enable blocking then sending for this channel is blocked.	
Behaviour at the beginning of blocking	**do not send any telegrams** send following telegram once
This parameter appears if blocking is enabled. It determines the sending behaviour when blocking starts.	

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Parameter	Settings
	as if clock switches OFF as if clock switches ON
This parameter appears if a telegram shall be sent once after blocking starts.	

8-bit Value Channel 1 (2) – Object A (B – D)

Function and parameters of channels 1 - 2 and the corresponding objects A - D are identical and described only once.

Parameter	Settings
Function	**switch** 8-bit value positive drive
Select if a switch (1 bit) , value (8 bit) or positive drive (2 bit) telegram shall be sent via this scheduler channel.	
Behaviour if clock switches OFF	**send telegram** do not send any telegrams
Select if a telegram shall be sent when the clock channel switches off.	
Value (0-255)	**50**
This parameter appears if a value telegram shall be sent. Select which value telegram shall be sent when the clock channel switches off.	
Behaviour if clock switches ON	**send telegram** do not send any telegrams
Select if a telegram shall be sent when the clock channel switches on.	
Value (0-255)	**200**
This parameter appears if a value telegram shall be sent. Select which value telegram shall be sent when the clock channel switches on.	
Behaviour of sending	cyclical sending **no cyclical sending**
Select if the telegram shall be sent once only or cyclically.	

Parameter	Settings
Behaviour if blocking object is ON	**ignore blocking** enable blocking
If the EIB object Blocking is set to 1 = blocking and this parameter is set to enable blocking then sending for this channel is blocked.	
Behaviour at the beginning of blocking	**do not send any telegrams** send following telegram once
This parameter appears if blocking is enabled. It determines the sending behaviour when blocking starts.	
	as if clock switches OFF as if clock switches ON
This parameter appears if a telegram shall be sent once after blocking starts.	

Positive drive Channel 1 (2) – Object A (B – D)

Function and parameters of channels 1 - 2 and the corresponding objects A - D are identical and described only once.

Parameter	Settings
Function	**switch** 8-bit value positive drive
Select if a switch (1 bit) , value (8 bit) or positive drive (2 bit) telegram shall be sent via this scheduler channel.	
Behaviour if clock switches OFF	**send telegram** do not send any telegrams
Select if a telegram shall be sent when the clock channel switches off.	
Positive drive	disable positive drive **switch OFF with positive drive** switch ON with positive drive
This parameter appears if a positive drive telegram shall be sent. Select which positive drive telegram shall be sent when the clock channel switches off.	

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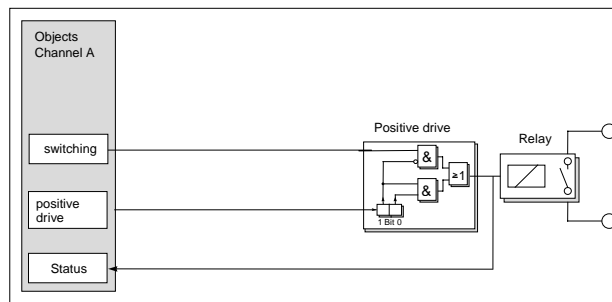| Parameter	Settings
Behaviour if clock switches ON	**send telegram** do not send any telegrams
Select if a telegram shall be sent when the clock channel switches on.	
Positive drive	disable positive drive switch OFF with positive drive **switch ON with positive drive**
This parameter appears if a positive drive telegram shall be sent. Select which positive drive telegram shall be sent when the clock channel switches on.	
Behaviour of sending	cyclical sending **no cyclical sending**
Select if the telegram shall be sent once only or cyclically.	
Behaviour if blocking object is ON	**ignore blocking** enable blocking
If the EIB object Blocking is set to 1 = blocking and this parameter is set to enable blocking then sending for this channel is blocked.	
Behaviour at the beginning of blocking	**do not send any telegrams** send following telegram once
This parameter appears if blocking is enabled. It determines the sending behaviour when blocking starts.	
	as if clock switches OFF as if clock switches ON
This parameter appears if a telegram shall be sent once after blocking starts.	

Positive drive
Actuators with positive drive input allow for overriding of outputs via central control commands.
E.g. when in energy savings or night operation mode switching on of selected lights or loads can be blocked.
In the case of night operation mode a switch OFF positive drive telegram may be sent at 20h00 and at 06h00 a switch ON positive drive telegram.

For explanation of positive drive assume a switch actuator with two input objects. The input object switching controls the output dependent on the status of the input positive drive.

The positive drive object is a 2-bit object.
Bit 1 determines, whether positive drive is "active" (= 1) or „passive" (= 0).

If Bit 1 has the value 0, then positive drive is set to be „passive" and the switching input value is directly available at the positive drive output. At the same time this value is loaded into Bit 0 of the positive drive object. Thus Bit 0 of the positive drive object <u>always</u> contains the status.

If Bit 1 of the positive drive object has the value 1, then the positive drive is set to be "active" and the switching input value is irrelevant for the output value. In this case Bit 0 of the positive drive object determines the output of the positive drive. If positive drive is not activated then the switching input value is directly available at the output of the positive drive.

Bit 1	Bit 0	Function
0	0	Positive drive is not activated
0	1	Positive drive is not activated
1	0	Off with positive drive object value
1	1	On with positive drive object value

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