

12 CO Scene 740701**Devices Employing the Program**

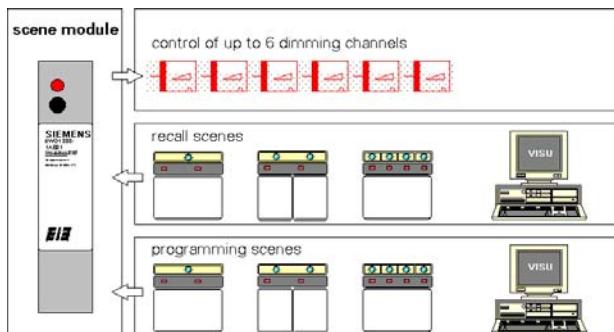
Product family: Controller
Product type: Controller
Manufacturer: Siemens

Name: Scene Module N300
Order-no.: 5WG1 300-1AB01

Application Description

This application program allows you to store and recall up to 4 scenes for handling up to 6 dimming channels each. Individual light intensity values can be specified in the parameter list.

On recalling a scene, the scene module sends the desired light intensity values as 8 bit telegrams (set value) to the appropriate switching/dimming actuators.



By employing more than one scene module any number of dimming channels can be allocated to a single scene. However, no more than 6 scene modules (= 36 dimming channels) should be accessed by a scene simultaneously. Otherwise hardly any information could be sent while the bus is busy dealing with the individual dimming channels. The preselection of the desired light intensity values to the individual scenes takes place when modifying the application's parameter list with the ETS.

Alternatively, these light intensity values can be adjusted and stored via a push button 4-fold and the application program 11 S4 Scene 240D01.

The four scenes are stored with two 1 bit switching telegrams, scenes 1 and 3 on a "0" telegram, and scenes 2 and 4 on a "1" telegram.

On receiving such a telegram, the scene module reads the actual light intensity values from the switching/dimming actuators and stores them to the specified scene. Before programming a scene, the desired light intensity must be established at the respective actuators

with the appropriate sensors. These settings are preserved in case of resetting the device (i.e. on bus voltage failure).

The light intensity values are read via the group addresses assigned to the objects "Program group". To allow the scene module to read the light intensity values, the group address that is to be used also must be assigned to the state object of the switching/dimming actuator as "sending" and the read flag must be set.

The four scenes are also recalled with two 1 bit switching telegrams, scenes 1 and 3 on a "0" telegram, and scenes 2 and 4 on a "1" telegram.

Thus, the scenes can be recalled and programmed with any switching telegram available.

Communication Objects

Phys.Addr. no.	Program		Type
	Function	Object name	
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0	Recall groups	Group 1	1 Byte
1	Save groups	Group 1	1 Byte
2	Recall groups	Group 2	1 Byte
3	Save groups	Group 2	1 Byte
4	Recall groups	Group 3	1 Byte
5	Save groups	Group 3	1 Byte
6	Recall groups	Group 4	1 Byte
7	Save groups	Group 4	1 Byte
8	Recall groups	Group 5	1 Byte
9	Save groups	Group 5	1 Byte
10	Recall groups	Group 6	1 Byte
11	Save groups	Group 6	1 Byte
12	Recall scenes	Scene 1 / 2	1 Bit
13	Recall scenes	Scene 3 / 4	1 Bit
14	Save	Scene 1 / 2	1 Bit
15	Save	Scene 3 / 4	1 Bit

Note:

The order of the entries may vary from the above due to individual customization of the table.

Obj	Function	Object name	Type	Flag
0	Recall groups	Group 1	1-Byte	CTU
Via this object's group address the stored light intensity value is sent to dimming group 1 when recalling the scene. This group address must also be assigned to the "Set value" object of the respective switching/dimming actuators of this group.				
1	Save groups	Group 1	1-Byte	CWTU
Via this object's group address the actual light intensity value of the dimming group 1 is read when programming scenes. The address must also be assigned to the switching/dimming actuator's state object as "sending".				

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Obj	Function	Object name	Type	Flag
2	Recall groups	Group 2	1-Byte	CTU
Via this object's group address the stored light intensity value is sent to dimming group 2 when recalling the scene. This group address must also be assigned to the "Set value" object of the respective switching/dimming actuators of this group.				
3	Save groups	Group 2	1-Byte	CWTU
Via this object's group address the actual light intensity value of the dimming group 2 is read when programming scenes. The address must also be assigned to the switching/dimming actuator's state object as "sending".				
4	Recall groups	Group 3	1-Byte	CTU
Via this object's group address the stored light intensity value is sent to dimming group 3 when recalling the scene. This group address must also be assigned to the "Set value" object of the respective switching/dimming actuators of this group.				
5	Save groups	Group 3	1-Byte	CWTU
Via this object's group address the actual light intensity value of the dimming group 1 is read when programming scenes. The address must also be assigned to the switching/dimming actuator's state object as "sending".				
6	Recall groups	Group 4	1-Byte	CTU
Via this object's group address the stored light intensity value is sent to dimming group 4 when recalling the scene. This group address must also be assigned to the "Set value" object of the respective switching/dimming actuators of this group.				
7	Save groups	Group 4	1-Byte	CWTU
Via this object's group address the actual light intensity value of the dimming group 4 is read when programming scenes. The address must also be assigned to the switching/dimming actuator's state object as "sending".				
8	Recall groups	Group 5	1-Byte	CTU
Via this object's group address the stored light intensity value is sent to dimming group 5 when recalling the scene. This group address must also be assigned to the "Set value" object of the respective switching/dimming actuators of this group.				
9	Save groups	Group 5	1-Byte	CWTU
Via this object's group address the actual light intensity value of the dimming group 5 is read when programming scenes. The address must also be assigned to the switching/dimming actuator's state object as "sending".				
10	Recall groups	Group 6	1-Byte	CTU
Via this object's group address the stored light intensity value is sent to dimming group 6 when recalling the scene. This group address must also be assigned to the "Set value" object of the respective switching/dimming actuators of this group.				

Obj	Function	Object name	Type	Flag
11	Save groups	Group 6	1-Byte	CWTU
Via this object's group address the actual light intensity value of the dimming group 6 is read when programming scenes. The address must also be assigned to the switching/dimming actuator's state object as "sending".				
12	Recall scenes	Scene 1/2	1-Bit	CWTU
Via this object's group address the scenes 1 and 2 are recalled. On receiving a "0" telegram, the scene module sends the stored light intensity values to scene 1 to the respective switching/dimming actuators via the group addresses assigned to the "Call group" objects. On receiving a "1", the information to scene 2 are sent.				
13	Recall scenes	Scene 3/4	1-Bit	CWTU
Via this object's group address the scenes 3 and 4 are recalled. On receiving a "0" telegram, the scene module sends the stored light intensity values to scene 3 to the respective switching/dimming actuators via the group addresses assigned to the "Call group" objects. On receiving a "1", the information to scene 4 are sent.				
14	Save	Scene 1/2	1-Bit	CWTU
Via the group address of this object the telegrams the scenes 1 and 2 are programmed. On receiving a "0" telegram the scene module reads the actual light intensity values of the respective switching/dimming actuators via the "Program group" objects and stores them to scene 1. On receiving a "1", the information to scene 2 are read and stored.				
15	Save	Scene 3/4	1-Bit	CWTU
Via the group address of this object the telegrams the scenes 3 and 4 are programmed. On receiving a "0" telegram the scene module reads the actual light intensity values of the respective switching/dimming actuators via the "Program group" objects and stores them to scene 3. On receiving a "1", the information to scene 4 are read and stored.				

Maximum number of group addresses: 16

Maximum number of assignments: 16

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Parameters

Programming:

Programming	Scene 1	Scene 2	Scene 3	Scene 4
Used groups	Group 1 to 6			

Parameters	Settings
Used groups	Group 1 to 6
	Group 1 to 5
	Group 1 to 4
	Group 1 to 3
	Group 1 to 2
	Group 1
<p>If less than the scene module's six groups are used, the unused groups must be disabled. Thus, an unused group cannot be selected in the programming mode. Otherwise the scene module might malfunction. To the enabled groups a range must be specified. All groups outside this range are disabled by the application program while all groups within the range are enabled. Apart from that, individual groups cannot be enabled or disabled. The range of enabled groups always starts with group 1.</p> <p>"Group 1 to 6": The groups 1 to 6 are enabled using the objects 0 to 11.</p> <p>"Group 1 to 5": The groups 1 to 5 are enabled using the objects 0 to 9.</p> <p>"Group 1 to 4": The groups 1 to 4 are enabled using the objects 0 to 7.</p> <p>"Group 1 to 3": The groups 1 to 3 are enabled using the objects 0 to 5.</p> <p>"Group 1 to 2": The groups 1 and 2 are enabled using the objects 0 to 3.</p> <p>"Group 1": Only group 1 is enabled using the objects 0 and 1.</p>	

Scene 1:

Programming	Scene 1	Scene 2	Scene 3	Scene 4
Starting value (0-255), Group 1	255			
Starting value (0-255), Group 2	255			
Starting value (0-255), Group 3	255			
Starting value (0-255), Group 4	255			
Starting value (0-255), Group 5	255			
Starting value (0-255), Group 6	255			

The parameters of the scenes 2 to 4 can be set accordingly.

Parameters	Settings
Starting value (0-255), Group 1	255
Starting value (0-255), Group 2	255
Starting value (0-255), Group 3	255
Starting value (0-255), Group 4	255
Starting value (0-255), Group 5	255
Starting value (0-255), Group 6	255

This parameters hold the light intensity values to the six-groups of scene 1. This allows you to configure scene settings that can be used via the ETS immediately on loading the scene module. The values are preserved in the scene module until they are overwritten by the actual light intensity values read from the corresponding actuators on receiving a "0" telegram at the "Programming scene 1/2" object. To each of the six groups an individual light intensity can be specified where ranges are given as 0 = 0% light intensity and 255 = 100% light intensity.

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Notes: