

12 CO Scene 740801

Devices Employing the Program

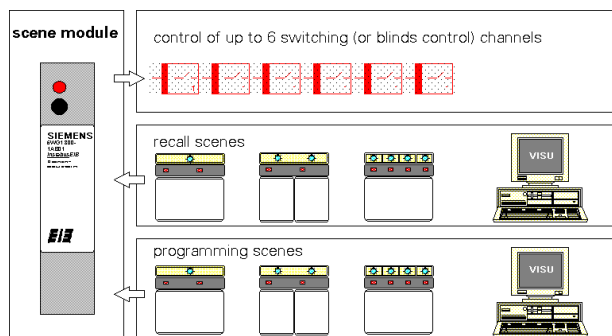
Product family: Controller
Product type: Controller
Manufacturer: Siemens

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 the selected switching states of up to six 1 bit switching channels each.

On recalling a scene, the scene module sends the desired switching states as 1 bit telegrams to the appropriate actuators (e.g. lighting on/off, raise/lower blinds etc.).



By employing more than one scene module any number of switching channels can be allocated to a single scene. However, no more than six scene modules (= 36 switching channels) should be accessed by a scene simultaneously. Otherwise hardly any information could be sent while the bus is busy dealing with the individual switching channels.

The preselection of the desired switching states 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 switching states from the respective actuators and stores them to the specified scene. Before programming a scene, the desired switching states (lighting on/off, raise/lower blinds) 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 switching states are read via the group addresses assigned to the objects "Program group". To allow the scene module to read the switching states, the group address that is to be used also must be assigned to the switching or state object of the respective 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. Program			
no.	Function	Object name	Type
01.01.028 12 CO Scene 740801			
0	Recall groups	Group 1	1 Bit
1	Save groups	Group 1	1 Bit
2	Recall groups	Group 2	1 Bit
3	Save groups	Group 2	1 Bit
4	Recall groups	Group 3	1 Bit
5	Save groups	Group 3	1 Bit
6	Recall groups	Group 4	1 Bit
7	Save groups	Group 4	1 Bit
8	Recall groups	Group 5	1 Bit
9	Save groups	Group 5	1 Bit
10	Recall groups	Group 6	1 Bit
11	Save groups	Group 6	1 Bit
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 switching and blinds control telegrams are sent to group 1 when recalling the scene. This group address must also be assigned to the switching or blinds control object of the respective 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 actuator's switching or state object as "sending".				

12 CO Scene 740801

Obj	Function	Object name	Type	Flag
2	Recall groups	Group 2	1-Byte	CTU
Via this object's group address the stored switching and blinds control telegrams are sent to group 2 when recalling the scene. This group address must also be assigned to the switching or blinds control object of the respective 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 actuator's switching or state object as "sending".				
4	Recall groups	Group 3	1-Byte	CTU
Via this object's group address the stored switching and blinds control telegrams are sent to group 3 when recalling the scene. This group address must also be assigned to the switching or blinds control object of the respective 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 actuator's switching or state object as "sending".				
6	Recall groups	Group 4	1-Byte	CTU
Via this object's group address the stored switching and blinds control telegrams are sent to group 4 when recalling the scene. This group address must also be assigned to the switching or blinds control object of the respective 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 actuator's switching or state object as "sending".				
8	Recall groups	Group 5	1-Byte	CTU
Via this object's group address the stored switching and blinds control telegrams are sent to group 5 when recalling the scene. This group address must also be assigned to the switching or blinds control object of the respective 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 actuator's switching or state object as "sending".				
10	Recall groups	Group 6	1-Byte	CTU
Via this object's group address the stored switching and blinds control telegrams are sent to group 6 when recalling the scene. This group address must also be assigned to the switching or blinds control object of the respective 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 actuator's switching or 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 switching and blinds control telegrams to scene 1 to the respective 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 switching and blinds control telegrams to scene 3 to the respective 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 switching states of the respective binary outputs and shutter switches 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 binary outputs and shutter switches 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

12 CO Scene 740801

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, Group 1		On / Down		
Starting value, Group 2		On / Down		
Starting value, Group 3		On / Down		
Starting value, Group 4		On / Down		
Starting value, Group 5		On / Down		
Starting value, Group 6		On / Down		

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

Parameters	Settings
Starting value, Group 1:	On / Down Off / Up
Starting value, Group 2:	On / Down Off / Up
Starting value, Group 3:	On / Down Off / Up
Starting value, Group 4:	On / Down Off / Up
Starting value, Group 5:	On / Down Off / Up
Starting value, Group 6:	On / Down Off / Up
<p>These parameters hold the desired switching states to the six groups of scene 1. This allows you to configure scene settings that can be used directly via the ETS on loading the scene module. The states are preserved in the scene module until they are overwritten by the actual switching states read from the corresponding actuators on receiving a "0" telegram at the "Programming scene 1/2" object.</p> <p>"On / Down": When recalling scene 1 the lighting is switched on and the blinds are lowered according to the specified mode.</p> <p>"Off / Up": When recalling scene 1 the lighting is switched off and the blinds are raised according to the specified mode.</p>	

12 CO Scene 740801

Notes: