12 CO Scene 740501

### 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 8 1-bit switching channels (e.g. lighting on/off, raise/lower blinds etc.) each.
On recalling a scene, the scene module sends the desired switching states to the appropriate actuators as 1 bit telegrams.
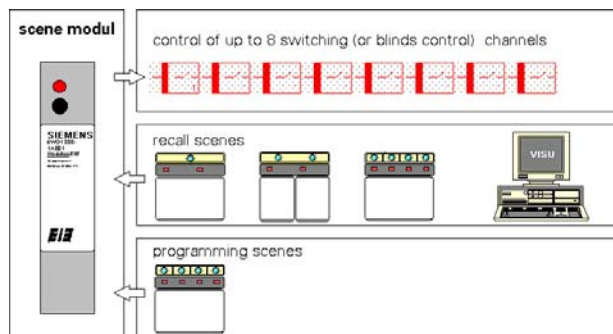
By employing more than one scene module any number of switching channels can be allocated to a single scene. However, no more than 5 scene modules (= 40 switching channels) should be accessed by a scene simultaneously. Otherwise hardly any information could be sent while the bus is busy dealing with 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 switching states can be adjusted and stored via a 4-fold push button and the application 11 S4 Scene 240B01. The scenes are stored via a special 2 byte telegram.

Thus, the push button 4-fold establishes the desired switching states in turn and stores the settings to the scene module.
These settings are preserved in case of resetting the device (i.e. on bus voltage failure).

Scenes are recalled with 1 bit telegrams. The scenes 1 and 3 are recalled with "0" telegrams, the scenes 2 and 4 are recalled with "1" telegrams respectively.
Thus, the scenes can be recalled with any available switching telegram. However, the scenes can be programmed only with the ETS or, at any time, with the push button 4-fold in combination with the application program 11 S4 Scene 240B01. When using all groups of the scene module an extra push button 4-fold is required to changing and storing the scenes to the scene module.

Communication Objects

Phys.Addr.	Program		
no.	Function	Object name	Type
01.01.026	12 CO Scene 740501		
0	Groups	Group 1	1 Bit
1	Groups	Group 2	1 Bit
2	Groups	Group 3	1 Bit
3	Groups	Group 4	1 Bit
4	Groups	Group 5	1 Bit
5	Groups	Group 6	1 Bit
6	Groups	Group 7	1 Bit
7	Groups	Group 8	1 Bit
8	Recall scene	Scene 1 / 2	1 Bit
9	Recall scene	Scene 3 / 4	1 Bit
10	Save	Save	2 Byte

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	Groups	Group 1	1-Bit	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 appropriate switching object or in the blinds control object of the respective actuator s of this group.				
1	Groups	Group 2	1-Bit	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 appropriate switching object or in the blinds control object of the respective actuators of this group.				
2	Groups	Group 3	1-Bit	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 appropriate switching or blinds control object of the respective actuator s of this group.				

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Obj	Function	Object name	Type	Flag
3	Groups	Group 4	1-Bit	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 appropriate switching object or in the blinds control object of the respective actuator s of this group.				
4	Groups	Group 5	1-Bit	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 appropriate switching object or in the blinds control object of the respective actuator s of this group.				
5	Groups	Group 6	1-Bit	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 appropriate switching object or in the blinds control object of the respective actuator s of this group.				
6	Groups	Group 7	1-Bit	CTU
Via this object's group address the stored switching and blinds control telegrams are sent to group 7 when recalling the scene. This group address must also be assigned to the appropriate switching object or in the blinds control object of the respective actuator s of this group.				
7	Groups	Group 8	1-Bit	CTU
Via this object's group address the stored switching and blinds control telegrams are sent to group 8 when recalling the scene. This group address must also be assigned to the appropriate switching object or in the blinds control object of the respective actuator s of this group.				
8	Recall scene	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 appropriate actuators via the group addresses assigned to the group objects. On receiving a "1", the information to scene 2 are sent.				
9	Recall scene	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 appropriate actuators via the group addresses assigned to the group objects. On receiving a "1", the information to scene 4 are sent.				

Obj	Function	Object name	Type	Flag
10	Save	Save	2-Byte	CWTU
Via the group address of this object the telegrams from the push button 4-fold are received when programming the scenes. According to the groups specified with the push button the actuator is set via the corresponding group address and subsequently the actual states are stored to the selected scene. The address must be assigned to the special 2 byte programming object of the corresponding "scene" push button.				

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

Parameters

Basic Settings:

Parameters	Settings
Range of scenes	**Range A** Range B
If more than four scenes are required, a second scene module and another push button 4-fold is required. However, when programming the scenes, different group addresses must be assigned to the device pairs push button #1 (scenes 1 to 4) and corresponding scene module #1 (scenes 1 to 4), and push button #2 (scenes 5 to 8) and corresponding scene module #2 (scenes 5 to 8). When using the same programming address to both device pairs the allocation must be resolved via the scene range. When using different programming addresses to each pair (push button and corresponding scene module) the default setting can be maintained. "Range A": Scene range A is selected. The same programming address and "Scene range" must be entered to the corresponding scene module. "Range B": Scene range B is selected. The same programming address and "Scene range" must be entered to the corresponding scene module.	

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Parameters	Settings
Range of groups	**Range A**
	Range B
	Range C
	Range D
If more than eight groups are required, a second scene module and another push button 4-fold is required. However, when programming the scenes, different group addresses must be assigned to the device pairs push button #1 (scenes 1 to 4) and corresponding scene module #1 (scenes 1 to 4), and push button #2 (scenes 5 to 8) and corresponding scene module #2 (scenes 5 to 8). When using the same programming address to both device pairs the allocation must be resolved via the scene range. When using different programming addresses to each pair (push button and corresponding scene module) the default setting can be maintained. "Range A": Range A is selected. The same programming address and "Group range" must be entered to the corresponding scene module. "Range B": Range B is selected. The same programming address and "Group range" must be entered to the corresponding scene module. "Range C": Range C is selected. The same programming address and "Group range" must be entered to the corresponding scene module. "Range D": Range D is selected. The same programming address and "Group range" must be entered to the corresponding scene module.	
Used groups (in the range)	**Group 1 onwards**
	Group 2 onwards
	....
	Group 7 onwards
	Group 8 onwards
If less than the scene module's eight 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. "From group 1": Object [0] is the first object enabled. "From group 2": Object [1] is the first object enabled. "From group 3": Object [2] is the first object enabled. "From group 4": Object [3] is the first object enabled. "From group 5": Object [4] is the first object enabled. "From group 6": Object [5] is the first object enabled. "From group 7": Object [6] is the first object enabled. "From group 8": Object [7] is the first object enabled.	
Used groups (in the range)	**up to Group 8**
	up to Group 7
	....
	up to Group 2
	up to Group 1
If less than the scene module's eight groups are to be 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.	

"Up to group 1": Object [0] is the last object enabled.
"Up to group 2": Object [1] is the last object enabled.
"Up to group 3": Object [2] is the last object enabled.
"Up to group 4": Object [3] is the last object enabled.
"Up to group 5": Object [4] is the last object enabled.
"Up to group 6": Object [5] is the last object enabled.
"Up to group 7": Object [6] is the last object enabled.
"Up to group 8": Object [7] is the last object enabled.

Function of group:

Parameters	Settings
Group 1 used for	**Switch function (On/Off)**
	Shutter (Down/Up)
Group 2 used for	**Switch function (On/Off)**
	Shutter (Down/Up)
Group 3 used for	**Switch function (On/Off)**
	Shutter (Down/Up)
Group 4 used for	**Switch function (On/Off)**
	Shutter (Down/Up)
Group 5 used for	**Switch function (On/Off)**
	Shutter (Down/Up)
Group 6 used for	**Switch function (On/Off)**
	Shutter (Down/Up)
Group 7 used for	**Switch function (On/Off)**
	Shutter (Down/Up)
Group 8 used for	**Switch function (On/Off)**
	Shutter (Down/Up)
This parameter rules the respective group's operating mode, switching (on/off) or blind control (raise/lower). Each of the eight groups can be set individually. This is very important when programming scenes as blinds are lowered with a logic "1" (lower switching point) while the lighting is switched on (upper switching point). "Switch function (On/Off)": The respective group will be used to switching tasks. "Shutter function (Down/Up)": The respective group will be used to moving blinds.	

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Scene 1:

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

Parameters	Settings
Starting value (0-255) Group 1:	**On / Down** Off / Up
Starting value (0-255) Group 2:	**On / Down** Off / Up
Starting value (0-255) Group 3:	**On / Down** Off / Up
Starting value (0-255) Group 4:	**On / Down** Off / Up
Starting value (0-255) Group 5:	**On / Down** Off / Up
Starting value (0-255) Group 6:	**On / Down** Off / Up
Starting value (0-255) Group 7:	**On / Down** Off / Up
Starting value (0-255) Group 8:	**On / Down** Off / Up
This parameters hold the desired switching states to the eight 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 when re-programming the scene module via the "scene" push button. "On / Down": When recalling scene 1 the lighting is switched on and the blinds are lowered according to the specified mode. "Off / Up": When recalling scene 1 the lighting is switched off and the blinds are raised according to the specified mode.	

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