



Manufacturer: Somfy Electronics
 Model: SDN2.0
 Device Type: Shades/Drape Controller

CONTACT SUPPORT:

COMPANY NAME:	Somfy Systems
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GENERAL INFORMATION

SIMPLWINDOWS NAME:	Somfy SDN2.0 Motor Control v1.2
CATEGORY:	Shades/Drapes
VERSION:	1.2
SUMMARY:	This module will control a single Somfy shade/drape motor on the SDN2.0 Data Hub.
GENERAL NOTES:	<p>This module will control a single Somfy motor on the SDN2.0. It does provide true feedback.</p> <p>There are two sets of control inputs on the module, three-button and two-button.</p> <p>The threeButton<Up/Down/Stop> inputs are to be pulsed. The up and down will start the motors moving in the desired direction. They will continue to move until either the motors reach their limits or the stop input is pulsed.</p> <p>The twoButton<Up/Down> are press and hold inputs. Pressing up or down will cause the motors to start moving in the desired direction. They will continue to move until either the motors reach their limits or the up or down input is released.</p> <p>When the initialization string is received from the Somfy SDN2.0 Serial Queue module the Somfy SDN2.0 Motor Control module will respond with the motor address and then it will send the position request command to get the current position and preset.</p> <p>This module will also poll the Somfy for the current position and preset for a period of time after a control command is sent.</p> <p>This module must be used with the Somfy SDN2.0 Serial Queue module.</p>
CRESTRON HARDWARE REQUIRED:	RS485 capable Crestron COM Port



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SETUP OF CRESTRON HARDWARE:	RS485 Baud: 4800 Parity: Odd Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	Somfy motors must be assigned to a group.
VENDOR SETUP:	Limits MUST be set prior to use with Crestron. In order to retrieve the address for the motor you must use Somfy software. The address from the Somfy software is then entered exactly into the paramMotorAddress parameter field. This can be retrieved by using Somfy software like SDNConfig tool and a USB to RS485 adapter, 9-Pin cable to RJ45, Somfy Data Hub, and POE injector to power the Somfy Data Bus. Recommended USB to RS-485 adapter is from usconverters.com model XS890 and a DB9F - RJ45 adapter Example: 20002B
CABLE DIAGRAM:	On a 9-Pin Crestron Port Using 568B Pattern RJ-45: <ul style="list-style-type: none"> - RJ45 Pin 1 Orange/White goes to Pin 2 on the 9-Pin Connector - RJ45 Pin 2 Orange goes to Pin 3 on the 9-Pin Connector - RJ45 Pin 7 & 8 Brown & Brown/White goes to Pins 4 & 6 on the 9-Pin Connector On a Phoenix style 3-Series RS-485 Port Using 568B Pattern RJ-45: <ul style="list-style-type: none"> - RJ45 Pin 1 Orange/White goes to RTS - RJ45 Pin 2 Orange goes to RX - RJ45 Pin 7 & 8 Orange goes to Gnd

CONTROL:		
threeButton<Up/Down>	D	Pulse to adjust the individual motor. The motor will move in the desired direction until either they reach their limits or the threeButtonStop input is pulsed.
threeButtonStop	D	Pulse to stop the individual motor in the group.
twoButton<Up/Down>	D	Press and hold to adjust the individual motor in the group. The motor will move in the desired direction until either they reach their limits or the input is released.



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preset<Up/Down>	D	Pulse to move the next preset up or down. Presets must be setup in the motor. Presets are also known as IP's or Intermediate Positions.
goToPercentDown	A	Analog input for the percent down to go to. This is intended to be driven from an Analog Init symbol. Enter the values 0% to 100% in the Analog Init symbol. 0% is full up, 100% is full down.
goToPreset	A	Analog input for the preset to go to. Presets must be setup in the motor. Valid range is 1d to 16d. Presets are also known as IP's or Intermediate Positions.

FEEDBACK:

currentPosition	A	Analog output indicating the current position. The range is 0d to 65535d. 0 is fully opened and 65535 is fully closed.
currentPreset	A	Analog output indicating the currently selected preset. Valid values are 0d indicating no preset selected, and 1d to 16d.
curtainControllerPosition	A	Analog output indicating the inverted current position. This output is intended to be used with a Curtain Controller Smart Object on a touch screen. 0 is fully closed and 65535 is fully opened.
toQueueModule	S	Serial signal to be routed to the fromModules input on the Somfy SDN2.0 Serial Queue module.



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PARAMETERS

paramCrestronAddress	S	Select the Crestron address from the dropdown list. The default value is \x80\x80\x80. This should work for most installations.
paramMotorAddress	S	Enter the motor SN. Enter the values as they appear on the motor. This can be retrieved by using Somfy software like SDNConfig tool and a USB to RS485 adapter, 9-Pin cable to RJ45, Somfy Data Hub, and POE injector to power the Somfy Data Bus Recommended USB to RS-485 adapter is from usconverters.com model XS890 and a DB9F - RJ45 adapter Example: 20002B

TESTING:

OPS USED FOR TESTING:	CP3 V1.503.3568.26236 Not Tested on 2-Series
SIMPL WINDOWS USED FOR TESTING:	4.11.06
DEVICE DB USED FOR TESTING:	114.00.001.00
CRES DB USED FOR TESTING:	88.06.004.00
SYMBOL LIBRARY USED FOR TESTING:	1101
SAMPLE PROGRAM:	Somfy SDN2.0 v1.2 Demo
REVISION HISTORY:	V1.2 <ul style="list-style-type: none"> - added additional beginning string which were coming back from different motors for feedback purposes - corrected size of the parameter paramMotorAddress from 3 to 6 - added allowance for the Ultra Glydea motor response which begins with \xF2\xE9\x9F - Updated names for presets and swapped position