Somfy® /Vantage®

Somfy RS-485 SDN 2.0 Integration Guide

09/2024

Description	Specification
Manufacturer	Somfy
Model Number(s)	RS-485 SDN 2.0
Driver Version	v. or higher
DC Version	v 3.3 or higher

Description	Specification
Widget	Shade
Aliases	None
Widget Category	Shades/Blinds
Connection Type	Serial (RS-485)

OVERVIEW

As part of its Premier Partner Program, Vantage Equinox products support the Somfy RS-485 SDN 2.0 for control of the shades in your InFusion Project. After setting up the Somfy in Design Center, the Equinox Shade Widget user interface for control of the Somfy Shades automatically appears in the EQ41 and EQ73 in-wall touch screens and on mobile devices installed with the Equinox App (available for iPhones, iPads, iPods, and Android products).

*see Notes section for information about Vantage RS-485 stations.

FEATURES SUPPORTED/NOT SUPPORTED

Feature	Equinox 40	Equinox 41, 73 and App
Open / Close / Stop Full control over open, close, and stop for all shades	☰	✓
Position Control Set the shades to specific positions	☰	✓
Visual Feedback Graphic presents the position of every shade	X	✓
Group Control Configure and control a shade group or individual shades	☰	✓
Configure Presets ISet up to four user-defined presets for each group	X	✓

✓ SUPPORTED ☰ TASK ONLY SUPPORT X NOT SUPPORTED

NOTE: EQ40 support for open, close, and stop is supported only through Design Center Tasks.

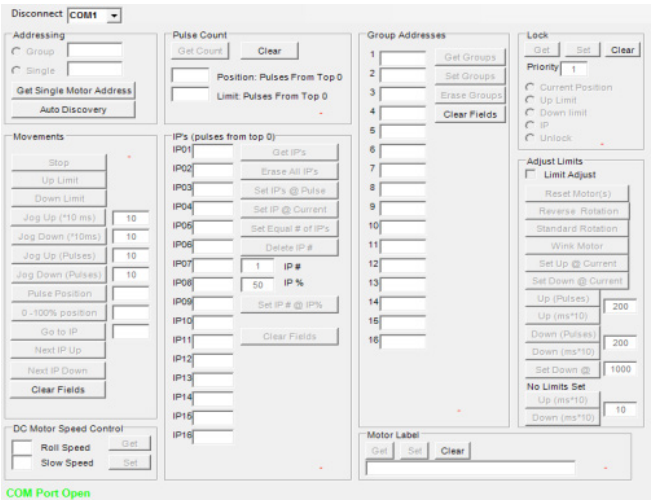
NOTES

- Somfy shades contain a calibration property within Design Center. If checked, this will cause the shade to execute a full open and close. While this occurs, the system will measure the travel time from bottom to top and top to bottom. These values will be used to produce an accurate position animation. If the position animation seems too fast or too slow, the travel time can be reset. This is done by un-checking the “Calibrate” checkbox and performing an update, then rechecking the box and performing a full program. This will cause the shade to perform a full open and close to re-measure the travel time. Once the travel time is set, it will not change until recalibrated through Design Center or some property of the shade is changed in Design Center. If the calibration does not work there is an option to enter the full open and close times. This can be measured by a stop watch or smartphone.
- Somfy products **ARE NOT** compatible with the RS-485 station. If a similar setup is desired it is best to use an RS-232 station with an RS-485 to RS-232 converter. For more information, see the ***Installation Steps*** section.

LINKS

Specifications: https://www.somfysystems.com/file.cfm/Sonesse_Range_Brochure_Sept_2015.pdf?contentid=211977
Databook: https://www.somfypro.com/documents/531668/9493868/Sonesse-30-Databook.pdf
Installation Instructions: https://www.somfypro.com/documents/531668/7162585/Sonesse30_RS485_Installation_Instructions.pdf
Somfy Downloads Page: https://www.somfypro.com/downloads

INSTALLATION STEPS



1. Use the above guide links to install the Somfy shade systems. Please make note of the node ID written on the tag for each shade. These will be used in the Design Center setup. The limits of each shade must be set up outside of Design Center using the limit setting tool SDN Motor Configuration Software as pictured above.

2. Go to the Downloads page in the links above to find a link to the software. In order to use this software, you will need to connect the Somfy system to your computer's com port. This is typically done with an adapter such as the one pictured above from B&B Electronics (Part # 485USBTB-2W).

3. Select the ***Get Single Motor Address*** option. Press ***Up Limit*** button to get the shade to go to what it thinks is the full open. Use ***Jog Up/Down (Pulses)*** to fine tune. When satisfied select **Adjust Limits** box. Select ***Set Up @ Current***. Do the same steps for the full close position setting. You can also assign group addresses to each shade on the system.

4. Select ***Clear Fields*** box then enter in a group box the three byte hex address you chose. Then select ***Set Groups***. Make note of each the group addresses you chose. These will be used in Design Center setup, as well.

5. If the up and down of the motor are backwards select ***Reverse Rotation*** after selecting the ***Limits Adjust*** box. Connect a wire from the Somfy System bus to the InFusion Project. Red is T/R+, Black is T/R-, and Green is Ground. You should be ready for Design Center configuration. If you do not have access to the Group Addresses, you can leave the group address field blank in Design Center and it will send all of the commands individually to each shade.

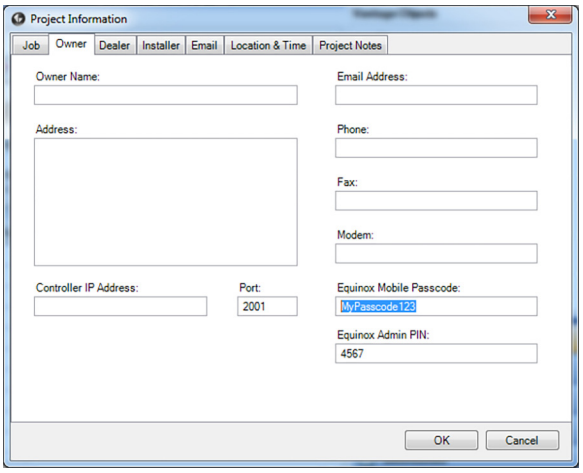
RS-232 Station: https://www.legrand.us/wattstopper/architectural-dimming-platform/infrastructure/rs-323-station.aspx

Converter: http://www.bb-elec.com/Products/Serial-Connectivity/Serial-Converters/Port-Powered-RS-232-to-RS-422-485-Converters/485SD9TB.aspx

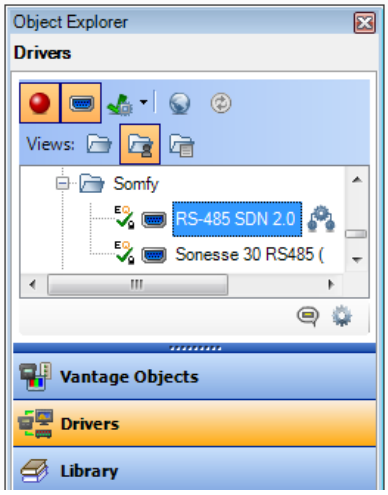
6. Somfy products **ARE NOT** compatible with the Vantage RS-485 station. If a station is wanted or needed, you will need to use an RS-232 station with an RS-485 adapter (see above picture). We recommend the B&B converter with a null modem attached for two way communication. (See links to the left).

DESIGN CENTER SETUP

Follow these instructions to add Somfy shades to your Design Center project and configure their settings appropriately.

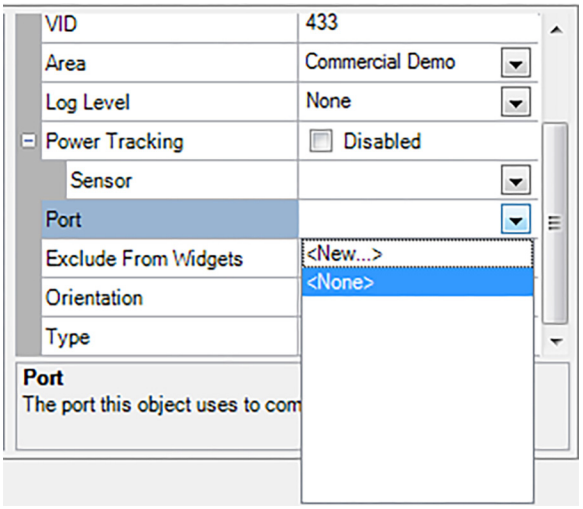


1. Project Settings - Click on ***Settings | Project Information| Owner*** (tab). Fill out the ***Equinox Mobile Passcode***: (alpha/numeric).

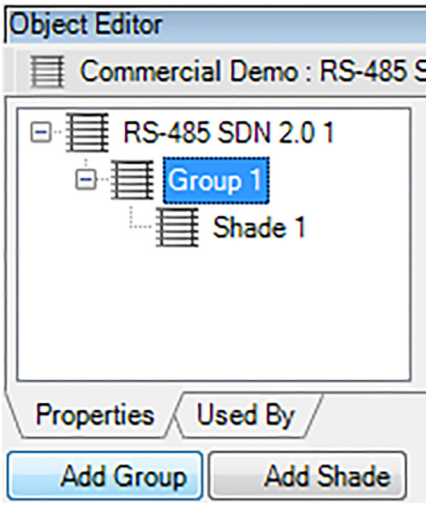


2. Add Somfy RS-485 SDN 2.0 - In the ***Object Explorer***, select ***Drivers*** and drag or double-click the driver to add it to the project.

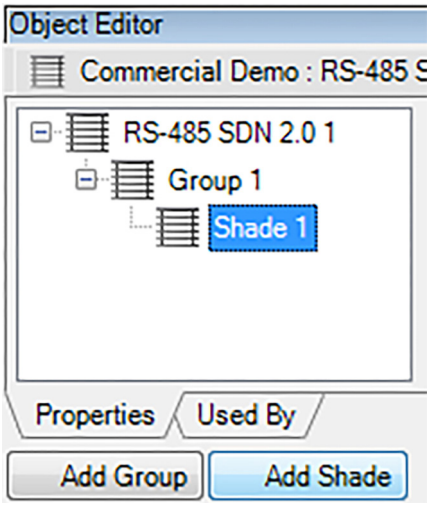
TIP: The driver is added to the room currently selected when double-clicking.



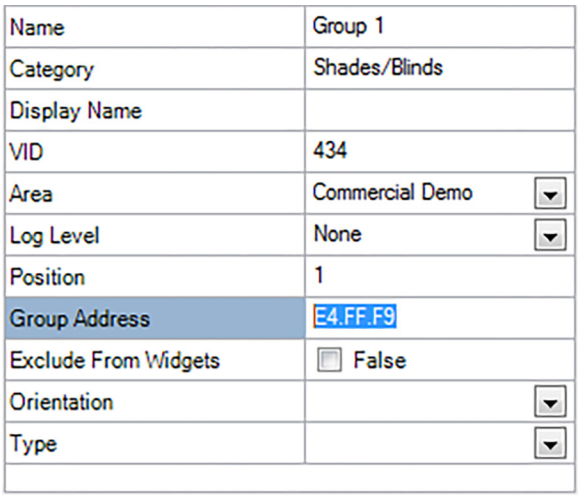
3. Set a Port - Add a new RS-485 port (or RS-232 port with a station as described above). This will correspond to the port that you connected the Somfy to the InFusion Project with.



4. Add Groups - Add the number of groups you programmed during installation.

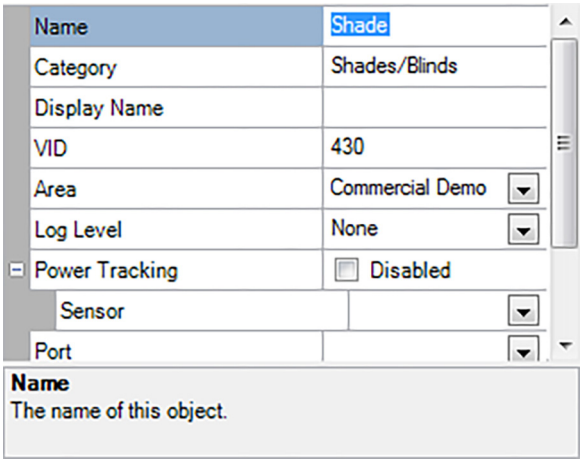


5. Add Shades - Add the number of shades you have in each group.

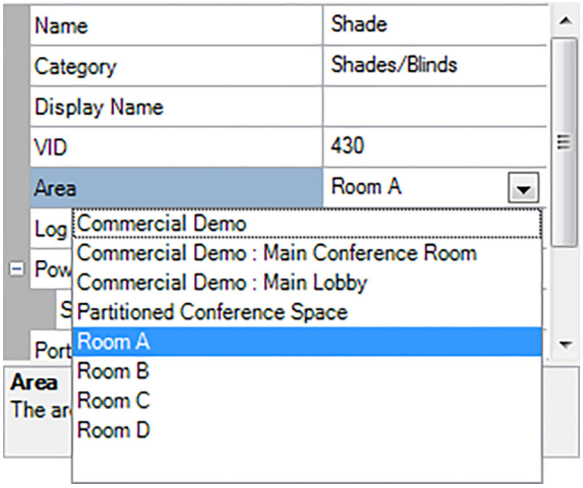


6. Set Group Addresses - Enter the group address you programmed during installation. If you leave this field blank it will send commands to all of the shades individually.

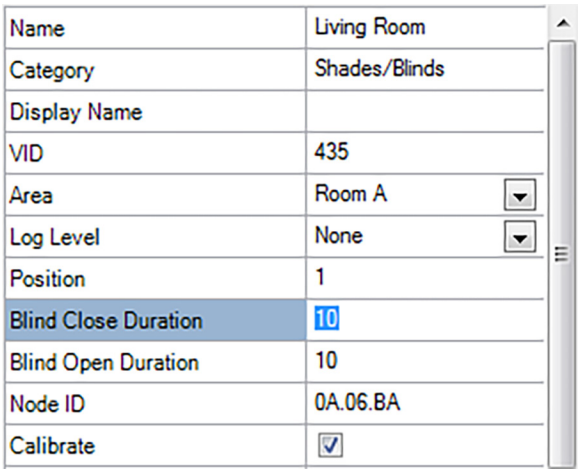
Set Shade Motor Addresses - Enter the motor address for each shade on the system.



7. Name the Shade - In the ***Object Editor,*** name the shade and give it a user-friendly display name.



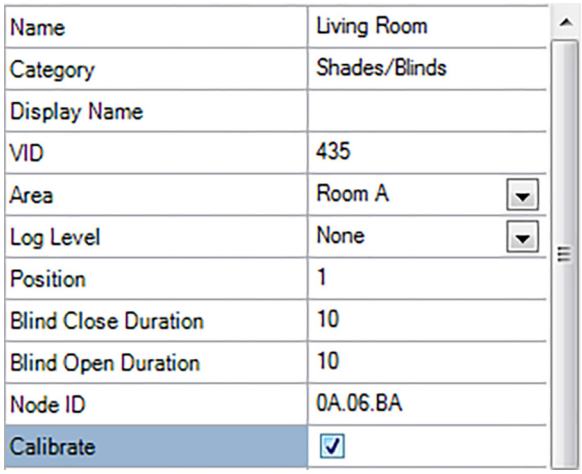
8. Set the Area - Set the area for each shade.



Name	Living Room
Category	Shades/Blinds
Display Name	
VID	435
Area	Room A
Log Level	None
Position	1
Blind Close Duration	10
Blind Open Duration	10
Node ID	0A.06.BA
Calibrate	☑

9. Set the Open and Close Duration - In the ***Object Editor***, set the duration properties to the number of seconds the shade takes to open and close.

-OR-



Name	Living Room
Category	Shades/Blinds
Display Name	
VID	435
Area	Room A
Log Level	None
Position	1
Blind Close Duration	10
Blind Open Duration	10
Node ID	0A.06.BA
Calibrate	☑

Calibrate - When the system is ready, check the ***Calibrate*** checkbox within each shade and perform an InFusion update.

TECH NOTES

- If a shade is experiencing difficulty calibrating, change the shade to a different position and attempt recalibration.
- If a shade appears stuck during calibration, press the open or close button to reanimate it.
- You must use the limit setting tool before the shade can be used in calibration.
- If you do not have access to the group addresses, leave the group address field empty. It will call all of the shades individually.
- Vantage One Button Control procedures are not supported for Somfy shade group addresses
- The Equinox 40 has no native shade widget support for use with the RS-485 SDN 2.0. However, EQ40 (and keypad button) control may be accomplished through Design Center tasks. See *Design Center Task Procedure Table* below.

DESIGN CENTER TASK PROCEDURE TABLE

The following table shows the most common procedures that are available for programming Design Center tasks with Somfy Shades. Tasks can be assigned to keypad buttons and Equinox scenes.

AVAILABLE TASK PROCEDURES		
Category	**Folder**	**Procedure**
Shades/Motors	Shades	One-button Control
		Close Blind
		Open Blind
		Set Blind Position
		Stop Blind