Integration Note

Manufacturer:	Somfy
Model Number(s):	**RTS Wireless Motors**
Minimum Core Module Version:	
Document Revision Date:	2/12/2013

OVERVIEW AND SUPPORTED FEATURES

The **g!** system supports Somfy RTS installations through the Somfy RS-232 to RTS Interface, part number 1810686. Somfy has changed their numbering: the old part number is 6300110.

Note: This Integration Note refers to the original series Somfy URTSI controller. If you are using the URTSI **II**, see the URTSI **II** Integration Note.

THE SOMFY RTS SYSTEM SUPPORTS THE FOLLOWING FEATURES:

Various Motors Supported: The Somfy RTS system supports different types of motors for various installation scenarios, including battery powered, AC powered and DC powered.

Positions: Somfy RTS supports momentary up and down, as well as fully up and down.

Presets: Somfy RTS supports one preset position.

Channels: The RS-232 to RTS Interface has 16 separate channels. This allows you to control up to 16 motors independently, 16 groups independently, or any combination of motors and groups totaling 16.

THE SOMFY RTS SYSTEM DOES NOT SUPPORT THE FOLLOWING FEATURES:

Two-Way Control: The Somfy shade control system does not provide any acknowledgement or status when commands are sent, so **g!** assumes commands sent are successful for feedback controls.

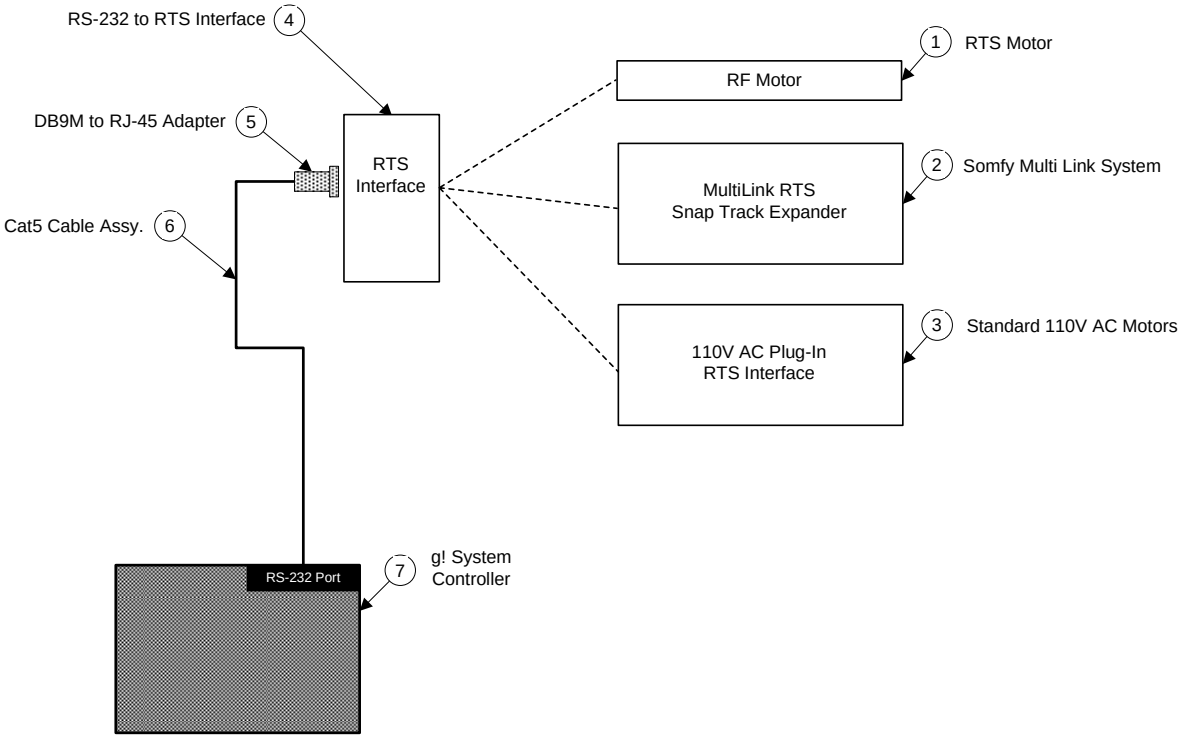
Feedback: The Somfy shade control system does not report back to an external controller when local input (such as from a handheld remote) is used to move the shades. **g!** will attempt to maintain the state of shades based on the last command sent *from **g!*** for feedback controls. If local remotes are used, it is recommended to use only non-feedback controls (see **g!** Configuration Details) to prevent incorrect display.

Any feature not specifically noted as "supported" is not supported.

INSTALLATION OVERVIEW

1. During the rough-in phase, pull power and control wiring as needed for the particular set of motors installed. Refer to Somfy documentation for details.
2. During the rough-in phase, pull a Cat5 cable from the location of the RS-232 to RTS Interface (Somfy part # 1810686). See **Connection Diagram**.
3. Configure the RTS motors and shade system according to typical Somfy procedures. See **Somfy Programming Details**.
4. Connect the RS-232 to RTS Interface to the **g!** system electrically.
5. Configure the **g!** system for the Somfy shades. See **g! Configuration Details**.

CONNECTION DIAGRAM



BILL OF MATERIALS

#	Device	Manufacturer	Part Number	Protocol	Connector Type	Notes
1	Motor	Somfy	Various	RF	Various	
2	Multi Link RTS Snap Track Expander	Somfy	1822166	RF X Multi Link	Standard Multi Link Connections	
3	Multi Link AC Plug-In RTS Interface	Somfy	9012781	RF	Power	
4	RS-232 to RTS Interface	Somfy	1810686	RS-232 X RF	RS-232 X 110V Power	Old part # 6300110
5	DB9M to RJ45 Adapter	ELAN	HA-CB-307	RS-232	DB-9 Male X RJ-45 Female	
6	Cat5 Cable Assy.	Installer	N/A	RS-232	RJ-45 Male X RJ-45 Male	Must terminate all 8 conductors
7	g! System Controller	ELAN	Various (e.g. HC12)	IP	RJ-45 Female	

SOMFY PROGRAMMING DETAILS

This section covers some details that are important to keep in mind when integrating the RTS system with **g!**.

In general, Somfy RTS systems use different “transmitters” or “channels” to control individual motors. During the motor setup process, you assign a transmitter (RF remote control) to the motor. This is necessary to program the motor’s top and bottom positions, in addition to the motor’s intermediate position.

When the basic motor setup is complete, you can then assign ADDITIONAL transmitters to the motor. A total of 12 different transmitters can be assigned to each motor.

The RS-232 to RTS Interface is one such additional transmitter. In other words, you must assign the RS-232 to RTS Interface to each motor as an additional transmitter to control that motor from the **g!** system.

The RS-232 to RTS Interface has 16 channels that you can use when you assign it as an additional transmitter to a particular motor. As explained in the Somfy instructions, when you assign the RS-232 to RTS Interface to a motor, you select which channel to use. Keep in mind that you can assign more than one channel to a motor: RTS motors can have up to 12 different transmitters assigned.

As an example, consider a room with three motors, each with its own wireless handheld RF remote. Once the shades are installed, use the remote for each motor to set the upper and lower limits and the intermediate position, as explained in the motor programming guide.

Then, assign the RS-232 to RTS Interface as an additional transmitter for the first motor, using channel 1. Similarly, assign channel 2 to motor 2, and channel 3 to motor 3. This allows you to move the shades up and down independently of each other from the **g!** interface. In other words, when an “up” command is sent on channel 1, only shade 1 will move.

Finally, assign the RS-232 to RTS interface as an additional transmitter for all three motors, using channel 4. This allows you to control all shades at once. In other words, when “up” command is sent on channel 4, all three motors will move.

In this example, motor 1 has three transmitters assigned to it: the RF handheld remote, channel 1 on the RS-232 to RTS Interface, and channel 4 on the RS-232 to RTS Interface.

g! CONFIGURATION DETAILS

Shades are configured in the **g!** system as lighting devices. Follow the typical steps to add a Communication Device, then add a Somfy RS-232 to RTS Interface, as listed in the table below.

Next, add individual Somfy Units as lighting devices. Add one Somfy Unit for each channel that is being used on the RS-232 to RTS Interface. As explained above, you can have more than one motor assigned to a channel, but only add one Somfy unit for that channel.

The user interface for shades is created by creating a Virtual Keypad or by creating a Custom Tab.

If you build a virtual keypad, use the Somfy units to access the shades.

If you use a custom tab, then add either a Shade 3 Button or a Shade Preset control:

- The Shade Preset allows you to position the shade at the top, bottom and the preset, but will not allow momentary control of the shade. The Shade Preset provides feedback, showing when the shade is up, down or at the preset.
- The Shade 3 Button allows you to position the shade at the top, bottom and the preset, and it also allows you momentary control of the shade. The Shade 3 Button does not provide feedback indicating the shade's current position.

In the tables, the following items appear:

- "<Select>" Select the desired item from the list (or drop-down) in the Configurator.
- "<User Defined>", etc. Type in the desired name for the item.

Devices	Variable Name	Setting	Comments
Communication Devices	**Name**	<User Defined> (Default: **Serial Port**)	
	Type	**Serial Port**	
	Communication Type	**Standard Connection**	
	Location	<User Defined> (Not Required)	
	COM Port	<Select>	
Lighting Interfaces	**Name**	<User Defined>	
	Device Type	**Somfy RS-232 to RTS Interface**	
	Location	<User Defined> (Not Required)	
	COM Device	<Select> (Default: **Serial Port**)	
Lighting Devices	**Name**	<User Defined>	
<Individual Shade Motors>	**Device Type**	**Somfy Unit**	
	Location	<User Defined> (Not Required)	
	Address	<Select> (1-16)	Must match address programmed into motor. See Note 1.

Notes:

1. Add one Somfy Unit for each address (1-16) in use. If you have more than one motor assigned to a channel, only add one Somfy Unit.

COMMON MISTAKES