Somfy Integration Solutions
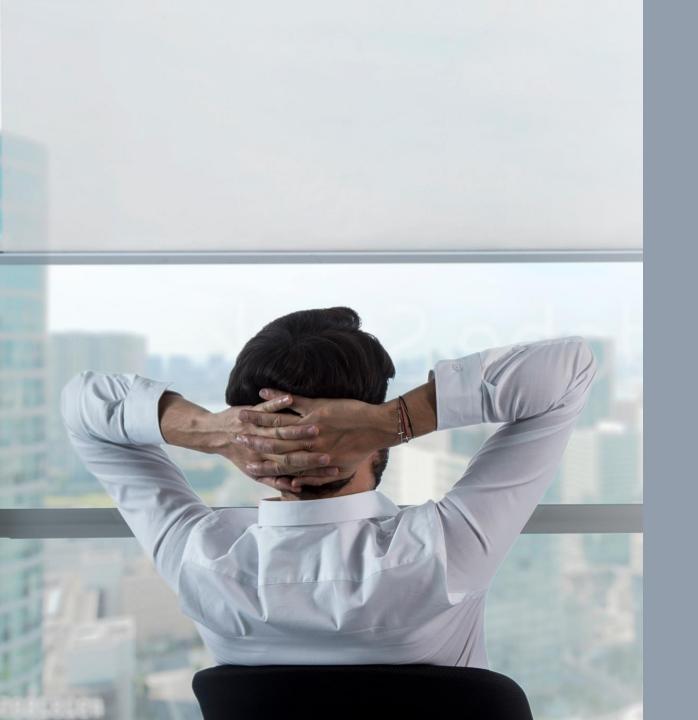
Powered by Somfy Systems, Inc.

Course Agenda

1. Who is Somfy?
2. What is Integration?
3. How to Integrate?
4. When to Integrate?
5. Somfy Interfaces
   - myLink
   - UAI Plus
   - Specialty Interfaces
6. animeo IP
7. Integrating with Lutron

1

Who is Somfy?

Who is Somfy
Somfy Organization

50 •• **years** **of experience in motorization**

60 Countries

121 Subsidiaries

8,940 Employees

2,066 Patents in Somfy portfolio

175+ million
motors produced

Production capacity **20,000,000** motors per year

100+ million
radio motors sold worldwide

270+ million
users worldwide

8 manufacturing plants

Over 2 million
connected devices

somfy.

Who is Somfy
North American Locations

Irvine,
California

Mississauga,
Canada

Dayton,
New Jersey

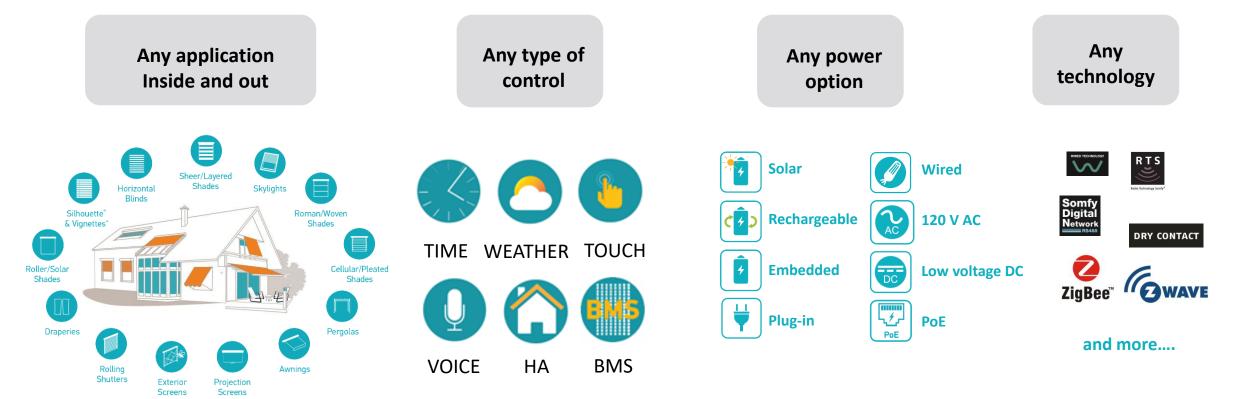Boynton Beach,
Florida

- 150 EMPLOYEES

- 4 TRAINING CENTERS

- CUSTOMER SERVICE

  8 am to 8 pm EST

somfy.
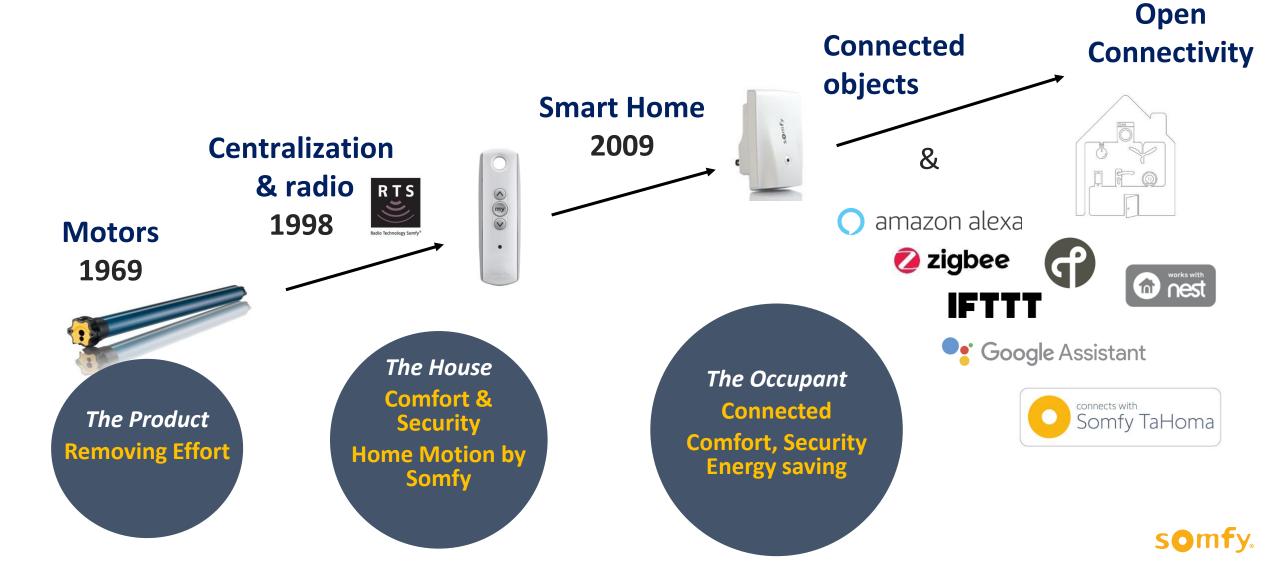
The **widest range of strong, quiet motors and variety of controls** for
all types of applications and technologies

**Any application
Inside and out**

**Any type of
control**

**Any power
option**

**Any
technology**

Silhouette®
& Vignettes®

Horizontal
Blinds

Sheer/Layered
Shades

Skylights

Roman/Woven
Shades

Cellular/Pleated
Shades

Pergolas

Draperies

Roller/Solar
Shades

Rolling
Shutters

Exterior
Screens

Projection
Screens

Awnings

TIME WEATHER TOUCH

VOICE HA BMS

Solar   Wired

Rechargeable   120 V AC

Embedded   Low voltage DC

Plug-in   PoE

WIRED TECHNOLOGY   RTS
Radio Technology Somfy®

Somfy
Digital
Network
RS485   DRY CONTACT

ZigBee™   Z-WAVE

and more....

somfy.

Open Connectivity

Connected objects

Smart Home 2009

Centralization & radio 1998

RTS
Radio Technology Somfy®

Motors 1969

&

amazon alexa

zigbee

IFTTT

Google Assistant

works with nest

connects with Somfy TaHoma

The Product
Removing Effort

The House
Comfort & Security
Home Motion by Somfy

The Occupant
Connected Comfort, Security Energy saving

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2

What is Integration?

Two (or more) unlike systems to communicate with each other

WE ARE
So Open!
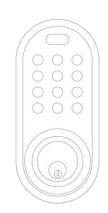
Somfy's system
connects to almost everything!

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3

How to Integrate?

There are several flexible ways to provide power to a motor

Battery operated motor (primary batteries or batteries)

Benefits
- No electrical power connection required:
  - No electrician required for installation
  - No wiring costs
  - No visual impact
- Recommended for renovation projects and/or locations where there is no mains power supply available nearby.

Limitations
- Battery-operated motors can only be used to motorize small blinds
- Batteries require changing (the battery life can be extended through the use of solar panels)

AC power (connects directly to the mains power)

Benefits
- Can be used to motorize large curtains, blinds and projection screens
- No additional accessories (transformers) required
- Easy alignment in installations containing several blinds (the AC current is constant): the blinds move up and down simultaneously
- No maintenance required for the entire product lifetime

Limitations
- An electrician is required for installation
- Takes up more space than DC / battery-operated motors
- A mains power supply is required for renovation projects

DC power (connects to the mains power via a transformer)

Benefits
- Small, economical and easy to integrate
- No electrician required for installation
- Regulated speed (according to motor)
- No maintenance required for the entire product lifetime

Limitations
- Cannot be used to motorize large or heavy blinds
- A transformer is required to convert AC current to DC current

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How to Integrate
What Can be Motorized

Somfy INTEGRATION

Any application Inside and out

Silhouette® & Vignettes®

Horizontal Blinds

Sheer/Layered Shades

Skylights

Roman/Woven Shades

Roller/Solar Shades

Cellular/Pleated Shades

Draperies

Pergolas

Rolling Shutters

Exterior Screens

Projection Screens

Awnings

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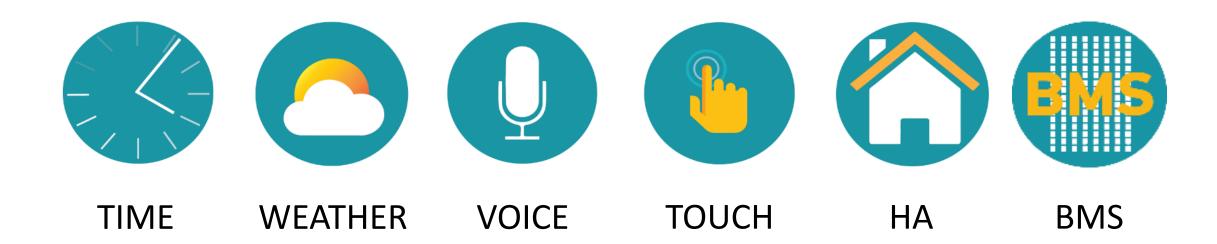
Somfy-powered solutions feature
FLEXIBLE CONTROL

TIME   WEATHER   VOICE   TOUCH   HA   BMS

4

When to Integrate?

Scenes

Voice control

Conference rooms

Home theater

Connected home devices

Building Management Systems

When to Integrate
Technologies

Dry contact – Simple contact closures manage trigger keypad button presses

animeo IP - DecoFlex Keypad for animeo IP
SDN – DecoFlex Keypad for standalone SDN
RTS – Dry Contact to RTS Interface
Motors – Direct control over select motors

IP – High speed data over a computer network

SDN animeo$^®$ IP – HTTP Web API
Somfy myLink™– IP Somfy Synergy
Somfy Connect™ UAI Plus – IP Somfy Synergy

RS232 – Serial Communication to a single or multiple devices

SDN – Two way communication through an RS485 connection
RTS – One way communication through an URTSI

Gateway/Translators – A bridge providing two-way communication between third-party systems and Somfy product family

SDN Power Over Ethernet (POE) Gateway
Somfy Connect™ LTI
Somfy Connect™ BMS Interface

Lighting Control Systems

Stand Alone SDN systems can directly interact with Lighting or Shading systems via a Somfy Connect LTI or SDN 0-10V Interface, enabling lighting controls to operate Somfy Motors

Building Management Systems (BMS)

Utilizing the Somfy Connect BMS, SDN and animeo IP systems are able to send and receive data points on a BACnet system

Automation Control Systems

Through RS232, IP, or Dry Contact automation systems can be programmed to directly interact with SDN and animeo IP systems

5

Somfy Interfaces

Somfy Interfaces
Products

- Individual Group Control (IGC) 4n1 Motor Controller

- Somfy myLink™

- Z-Wave to RTS Interface (ZRTSI)

- Universal RTS Interface (URTSI)

- Somfy Connect™ UAI Plus

- Somfy Connect™ LTI

- Somfy Connect™ BMS Interface

- SDN Power over Ethernet (PoE) Gateway

- SDN 0-10V Interface

- DecoFlex Digital Keypads

- animeo® IP

5

Somfy Interfaces

myLink™

- RTS is omnidirectional; One way

- Maximum range of 65' in optimal conditions

- "my" feature offers 1 intermediate position

- Motors can be controlled by up to 12 programmable devices

- Mix and match controls (handheld remotes, wall switches, timers, etc.)

- Integration through IR, Serial & Wi-Fi

UP

MY/ STOP

DOWN

- When wires cannot be run to the window (battery solution)

- Exterior application control (AC motors).

  - All Somfy exterior motors are rated for outdoor use

- Lower cost solution than traditional hard-wired motors

- Small window applications

- Multiple control options available

- Control for up to 16 RTS channels per myLink™ from iOS and Android devices

- Join up to 10 myLinks together for multi-zone control

- Manually activate RTS products

- Automate window coverings with scenes and schedules

- Supports Up/Down/My/Stop commands and incremental control (tilt/brightness)

- Multiple users

- Remote access

- Integration with third-party systems over IP

- Compatible with Somfy Synergy™ API

- Compatible with Amazon Alexa

myLink RTS Smartphone and Tablet Interface
(1811403)

|	ELEMENT	FUNCTION
1	**Setup Button**	Engages setup mode
2	**Status LED**	Solid Red: Setup mode. The myLink is ready to accept WiFi network information or have its PIN changed. This is the mode the myLink should be in out of the box.
		Solid Green: myLink is successfully connected to a WiFi network
		Slow Blinking Green: myLink is trying to connect to a WiFi network/is disconnected from its known WiFi network
		Single Orange Blink: myLink is sending RTS commands
		Solid Orange: Firmware update mode
		Slow Blinking Red: myLink is scanning both 2.4GHz and 5GHz bands for nearby WiFi networks
3	**AC Prongs**	AC prongs

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Customer's Wi-Fi router

Customer's Wi-Fi router
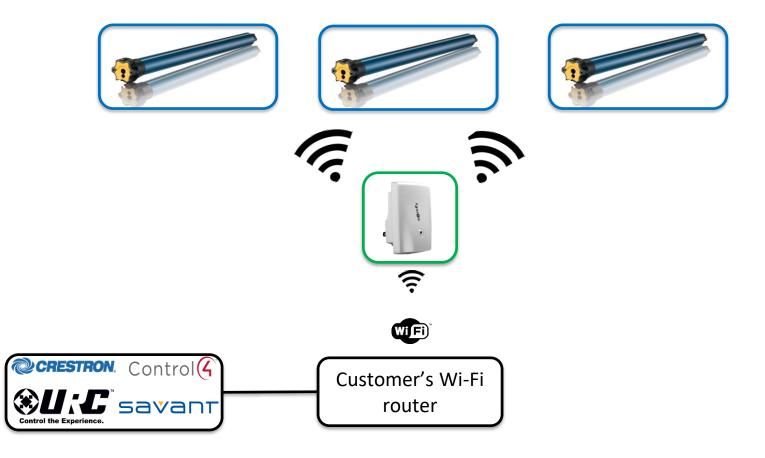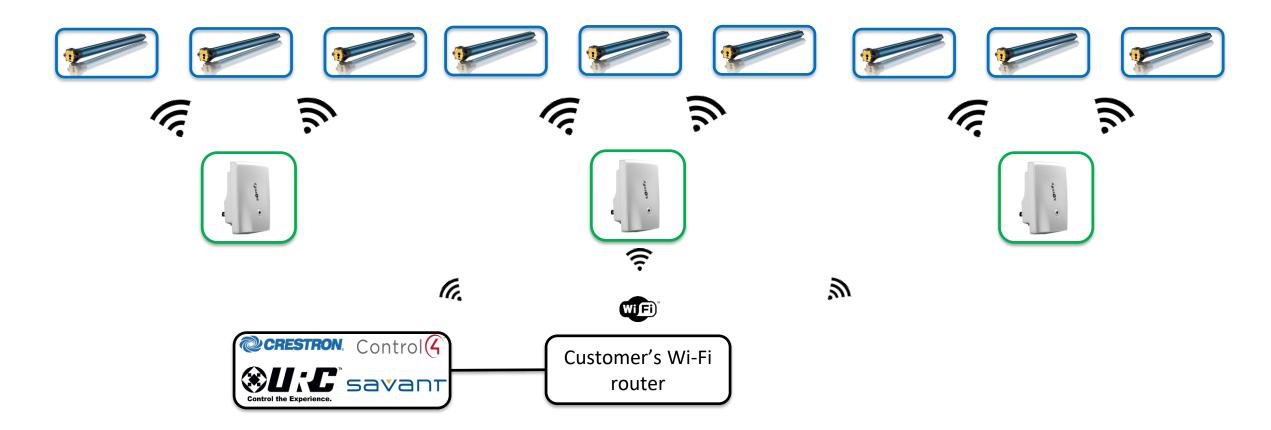
Somfy Interfaces
myLink™ – Plug & Play Smarthome Control

REMOTE
Control your shades anytime / anywhere
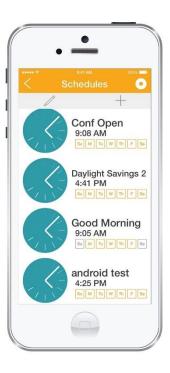
SCENE
Group shades & trigger them to a desired position

SCHEDULE
Timed events or Sunset /Sunrise

Easy to Program

Easy to add users

- Only software required is the app
- Visual prompts and walkthroughs
  - Initial setup wizard
  - RTS programming wizard

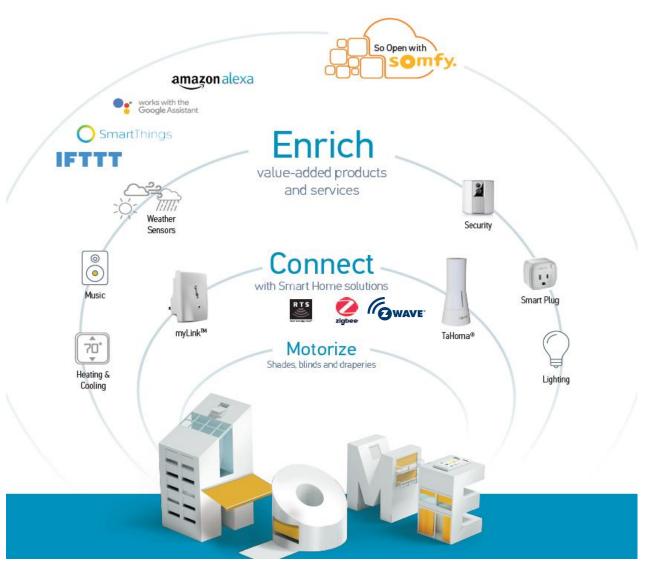- Share access with multiple users/devices using 4 digit PIN
- App generates email with step by step instructions

**Building
a Smart Home
with Somfy**

Situo® 5 RTS Pure
Use a multi-channel RTS hand-held remote to control various motorized applications.

Channel	Control	Application	Room
1	Group	2 Motorized skylights & 2 shades	Kitchen
2	Individual	Motorized shade	South Facing Living Room
3	Individual	Motorized shade	North Facing Living Room
4	Individual	Motorized awning	Patio
5	Group	Channels 1-4	Kitchen, Living Room, Patio

DecoFlex WireFree™ 4 RTS Black

Channel	Control	Application	Room
1	Individual	Motorized shade	Family Room
2	Individual	Motorized drapery	Family Room
3	Individual	Motorized shade	Den
4	Group	Channels 1-3	Family Room, Den

DecoFlex WireFree™ 2 Channel RTS Ivory

Channel	Control	Application	Room
1	Individual	Motorized roller shade	Bathroom
2	Group	Motorized roller shades	Bedroom

Somfy myLink™
Each myLink™ provides ideal zone control* for up to sixteen individual or sixteen groups of motorized applications. Program your desired schedules, scenes or operation for a zone or the entire house, using the same app for all devices.
*myLink must be within 35 ft. of the RTS products it controls.

Telis 1 RTS Patio

Channel	Control	Application	Room
1	Individual	Motorized awning	Patio

myLink™ 1

Channel	Control	Application	Room
1	Group	2 Motorized skylights & 2 shades	Kitchen
2	Individual	Motorized shade	South Facing Living Room
3	Individual	Motorized shade	North Facing Living Room
4	Individual	Motorized awning	Patio
5	Group	Channels 1-4	Kitchen, Living Room, Patio

myLink™ 2

Channel	Control	Application	Room
1	Individual	Motorized roller shade	Bathroom
2	Group	Motorized roller shades	Bedroom

myLink™ 3

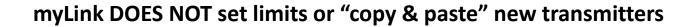| Channel	Control	Application	Room
	Group	Motorized shades & awning	Living Room & Patio

- **WIRELESS ROUTER**
  - 2.4GHz & 5Ghz networks with WEP, WPA2, TKIP, open and mixed mode encryption

- **IOS DEVICE RUNNING IOS 8 OR HIGHER OR ANDROID DEVICE RUNNING JELLYBEAN OR HIGHER**

- **RADIO TECHNOLOGY SOMFY® MOTORIZED PRODUCTS**
  - All RTS motor limits are set (including the MY position if desired)

  - There is a preprogrammed RTS control (handheld, in-wall or table top) that controls the motors that will also be controlled by the myLink

  - Individual channels on transmitter to create groups on myLink

  myLink DOES NOT set limits or "copy & paste" new transmitters

Use this checklist (system requirements) to ensure myLink™ will perform as designed.

- ☐ **Radio Technology Somfy® (RTS) products** programmed with limits and "my" position set, and an RTS control device (Telis, Decoflex or similar).
- ☐ A **wireless router** running 2.4 or 5 GHz networks with WEP, WPA2, open and mixed mode encryption
- ☐ Healthy, robust **WiFi network** (without WiFi extenders)
  Note: Internet only required for remote access
- ☐ A **mobile device** running iOS 7 or higher, or an Android™ device running Jellybean or higher
- ☐ 110V **outlet** available
- ☐ For indoor use only

The myLink is a WIFI to RTS interface and requires the same RTS environmental considerations for optimal performance:

- ☐ Must be within a range of up to 35 ft. from window covering featuring RTS
- ☐ Motor antenna accessible
- ☐ Designed as a room/zone controller
- ☐ Environmental factors such as steel or concrete may affect RTS signals.
- ☐ Areas in close proximity can cause interference.

Is the Wi-Fi network stable and reliable?

- Do not use Wi-Fi extenders!!

- Use Mesh Networks to improve Wi-Fi signal

Are you aware of any higher-level network settings such as:

- Restricted by MAC/IP address?

- Subnets?

- Blocked ports?

- Blocking of UDP broadcasts?

Range to motors

- Within 25-35FT or Room Control
- **Do Not USE!!!! RTS Repeater**
  - Creates overlapping signals
  - Add another myLink instead

When to choose 2.4ghz or 5gHZ Wi-Fi network?

- 2.4Ghz = longer distance, slower speeds
- 5Ghz = shorter distance, faster speeds

Check the Wi-Fi strength at the spot you want to install your myLink system.

- Setup a myLink at the spot you want to install your myLink
- Go to the Info page, and select the myLink.
  - View Wi-Fi Signal Strength information
  - If signal is listed as Poor you will need to find a new location, or improve the Wi-Fi signal strength
- Poor Signal strength means a poor connection for myLink

AVOID PLACEMENT NEAR HIGH INTERFERENCE AREAS

- Racks, microwaves, RF equipment, lots of metal/concrete

COME PREPARED WITH YOUR OWN WIFI NETWORK

- Bring standalone router to prove myLink performance when site's network has issues

Info	
Living Room	
Hardware	
ID:	CC100441
Base Address:	004710
MAC Address:	28:24:FF:29:19:29
Firmware Version:	4.92
System Time:	Tue, Feb 20, 07:48 PM
Network	
Network:	Amazon Demo
Wifi Signal Strength:	Excellent (54)
IP Address:	192.168.9.58
Get Device Logs	

somfy.

Indicates network connection status and RTS command transmission

- Blinking red to solid red:
  - Scanning for Wi-Fi networks. Blinking stops when scan complete
  - Re-engage by pressing setup button

- Solid Green: connected to LAN

- Slow Blinking Green: myLink is trying to connect to a Wi-Fi network/is disconnected from its known Wi-Fi network

- Quick Red Flash: sending RTS command

- Solid Amber: firmware update mode

1.

2.

3.

4.

5.

Integrates with

- Control 4

- Crestron

- Savant

- RTI

- URC – Universal Remote Control

- Elan
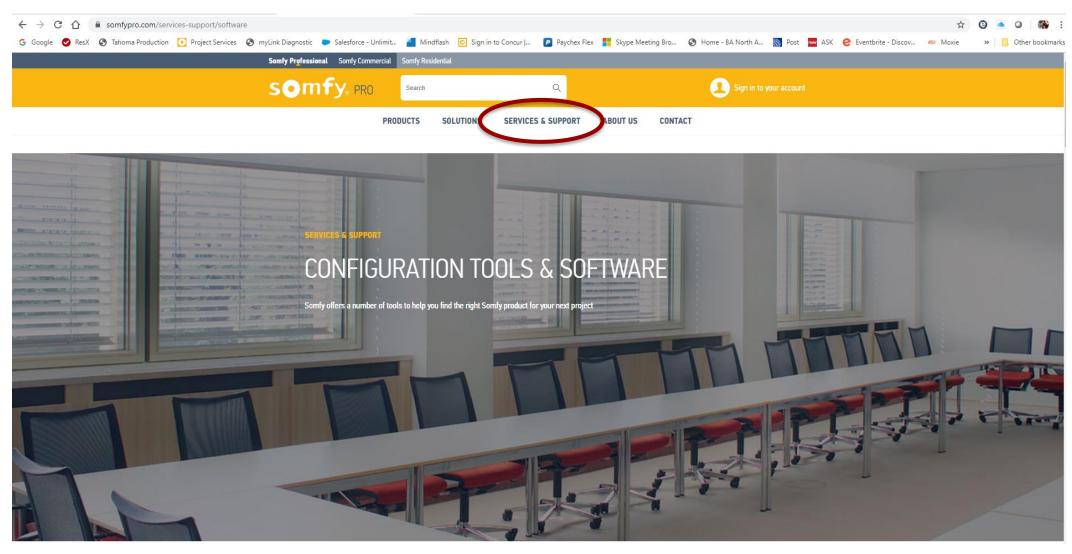
Somfy Interfaces
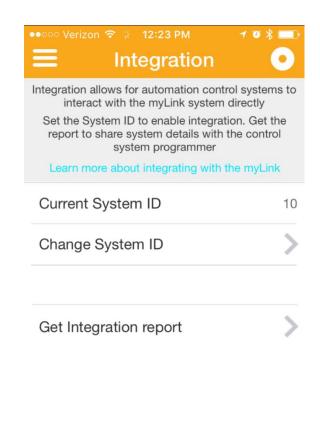*myLink™ – Driver Availability*
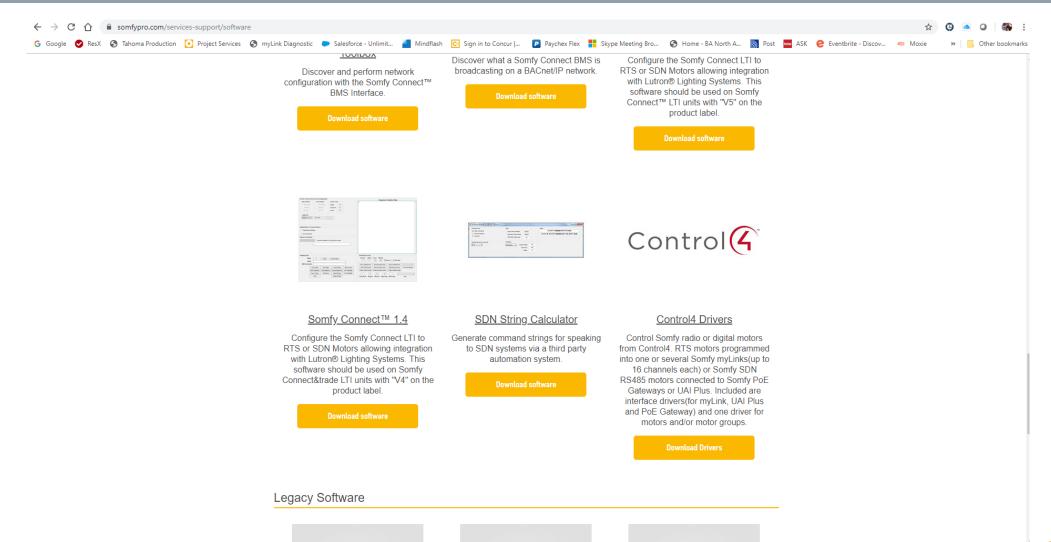
Somfy Interfaces
myLink™ – Driver Availability

somfypro.com/services-support/software

Google | ResX | Tahoma Production | Project Services | myLink Diagnostic | Salesforce - Unlimit... | Mindflash | Sign in to Concur |... | Paychex Flex | Skype Meeting Bro... | Home - BA North A... | Post | ASK | Eventbrite - Discov... | Moxie | Other bookmarks

Toolbox

Discover and perform network configuration with the Somfy Connect™ BMS Interface.

Download software

Discover what a Somfy Connect BMS is broadcasting on a BACnet/IP network.

Download software

Configure the Somfy Connect LTI to RTS or SDN Motors allowing integration with Lutron® Lighting Systems. This software should be used on Somfy Connect™ LTI units with "V5" on the product label.

Download software

Somfy Connect™ 1.4

Configure the Somfy Connect LTI to RTS or SDN Motors allowing integration with Lutron® Lighting Systems. This software should be used on Somfy Connect&trade LTI units with "V4" on the product label.

Download software

SDN String Calculator

Generate command strings for speaking to SDN systems via a third party automation system.

Download software

Control4 Drivers

Control Somfy radio or digital motors from Control4. RTS motors programmed into one or several Somfy myLinks(up to 16 channels each) or Somfy SDN RS485 motors connected to Somfy PoE Gateways or UAI Plus. Included are interface drivers(for myLink, UAI Plus and PoE Gateway) and one driver for motors and/or motor groups.

Download Drivers

Legacy Software

Key Integration Points

Setting System ID – This is an added security measure to ensure the myLink can speak with the automation system. The system ID can be just about anything you want. Usually a birthday, street address or the end users last name will work just fine. This must be set in the myLink app.

The Somfy myLink also supports Simple Device Discovery Protocol (SDDP). This allows for the myLink to be discovered by a Control4 system when it is on the IP network.
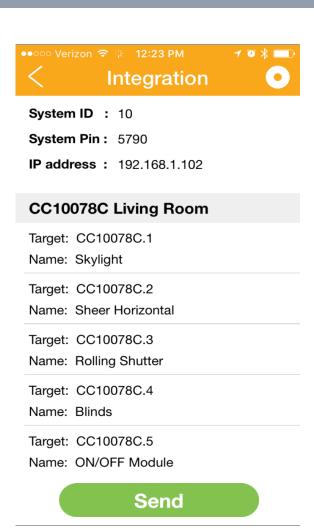
Key Integration Points

Integration Report – The integration report contains all of the necessary channel addresses, scenes, scene identifications, system id and the IP Address needed to integrate the myLink into 3rd party control systems. This can be printed or emailed.

This report can be found in the integration section of the myLink app menu.

70 MILLION USERS

Somfy
INTEGRATION

40%

OF AMERICAN ADULTS ARE
USING SMART SPEAKERS

Voice assistants, such as Amazon's Alexa and Google Home, free people's hands to do other tasks, making households feel much more productive.

Smart Speaker Use Case Frequency January 2018

Ask a question	91%	72.9%	33.3%
Listen to streaming music service	89.5%	76.2%	41.9%
Check the weath			
Set a tim			
Listen to rad			
Set an alar			
Listen to news / sports	58.1%	39.4%	14.8%
Play game or answer trivia	52.3%	31.2%	11.1%
Find a recipe or cooking instructions	49.5%	26.5%	5.1%
Use a favorite skill or assistant app	46.5%	29.8%	14.7%
Check traffic	41.2%	25.8%	7.7%
Call someone	40.7%	22.7%	10.3%
Listen to podcasts and other talk formats	40.7%	24.1%	10.1%
Control smart home devices	38.1%	29.9%	20.8%
Access my calendar	35.1%	19.6%	6.2%
Message someone	34.2%	17.9%	8.2%
Made a purchase	26%	11.5%	2.1%

Use daily
Use monthly
Have ever tried

voicebot.ai

Source: Voicebot Smart Speaker Consumer Adoption Report January 2018

Smart Speaker Use Case Frequency - January 2019

Ask a question	84.0%	66.0%	36.9%
Listen to streaming music service	83.0%	69.9%	38.2%
Check the weather	80.1%	61.4%	35.6%
	8%	23.5%	
	46.7%	22.9%	
	21.2%		
	8%		
Play game or answer trivia	48.0%	29.1%	10.8%
Control smart home devices	45.8%	33.3%	23.5%
Listen to news or sports	43.8%	28.8%	13.4%
Search for product info	41.2%	27.8%	10.8%
Call someone	40.2%	23.5%	11.4%
Find a recipe / cooking instructions	40.2%	26.1%	7.8%
Listen to podcast / other talk formats	39.9%	26.5%	11.1%
Check traffic	36.9%	22.9%	11.8%
Access my calendar	31.7%	21.2%	11.4%
Send a text message	30.4%	18.3%	10.5%
Make a purchase	26.1%	15.0%	3.9%

EVER TRIED
MONTHLY
DAILY

voicebot.ai

Source: Voicebot Smart Speaker Consumer Adoption Report Jan 2019

Control smart home devices

U.S. Adult Smart Speaker Installed Base - January 2019

Total US Adult Population
253 MILLION

39.8%
One-Year Growth

Jan 2019 / 66.4 MILLION

Jan 2018 / 47.3 MILLION

voicebot.ai

Source: Voicebot Smart Speaker Consumer Adoption Report Jan 2019

**Connected journey for every consumer, every need
at any budget**

TOUCH   TIME   WEATHER

VOICE

HA

Third party integration

RTS
Radio Technology Somfy®

somfy. myLink™

amazon alexa

IFTTT

works with the Google Assistant

RTI   Control4   URC Control the Experience.

ELAN   VANTAGE AUTOMATION & LIGHTING CONTROL   AMX

savant NOW YOU CAN   CRESTRON

somfy.
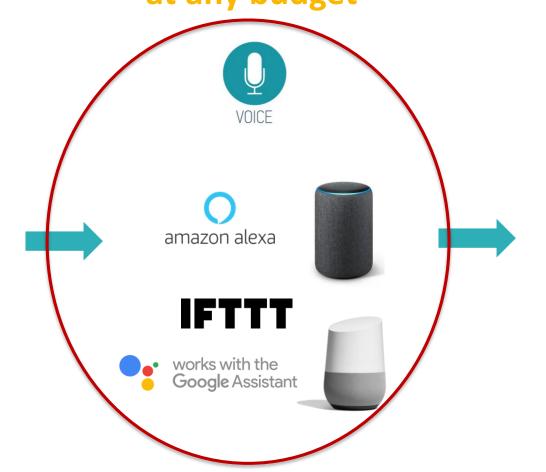
NEW SMART HOME
mYLINK ECOSYSTEM

So
Easy

ROUTINES

works with the
Google Assistant

APPLETS
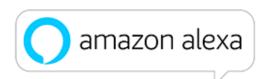
myLink: Alexa Smart Home Skill

You can now activate your shades in combination with other devices through voice control (Lights, Thermostats etc.)

amazon alexa

" Alexa, Good Morning"

"Alexa, Good Night"

somfy.

myLink: Alexa Smart Home Skill

STEP 1

Download the Amazon Skills Smart Home

Alexa Skills › Smart Home

STEP 2

Link Amazon Alexa and myLink

amazon alexa

Somfy myLink has been successfully linked.

STEP 3

Speak and Enjoy…

amazon alexa

How to
create a routine
in the Amazon Alexa app

somfy.
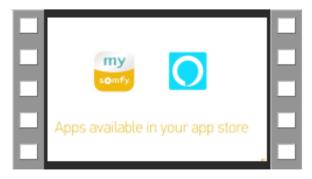
myLink Smart Shading even easier

Alexa Routines series

"How to" videos

1. How to connect myLink to Amazon Alexa - Routines quick start

2. How to create a routine in the Alexa App

3. How to edit or delete a routine in the Alexa App

mylink: IFTTT and Google Home

You can now activate your shades in combination with other devices through IFTTT and voice control (Lights,Thermostats, etc)

" Hey Google, Welcome Home"

"Hey Google, Good night"

- **IF THIS...**

- **THEN...**

- **THAT...**

somfy myLink™

IFTTT and Google Home

My Leviton

Location

Nest Thermostat

Ring

Button widget

Weather Underground

Google Assistant

mylink: IFTTT and Google Home

STEP 1
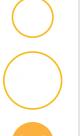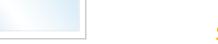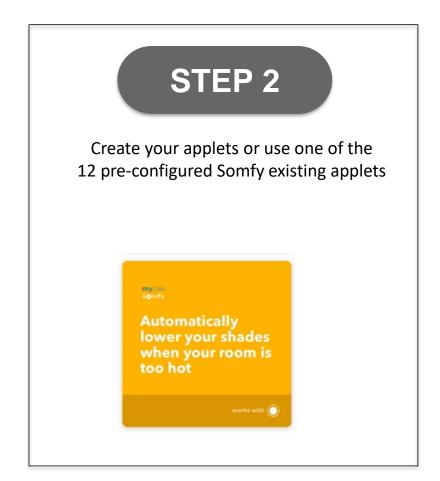
Download the IFTTT app and create an account

STEP 2

Create your applets or use one of the 12 pre-configured Somfy existing applets

myLink.
somfy.

Automatically lower your shades when your room is too hot

works with ◉

STEP 3

Speak and Enjoy...

works with the
Google Assistant

IFTTT

* IFTTT is also compatible with Amazon Alexa

5

Somfy Interfaces

Somfy Connect™ Universal Automation Interface Plus

Somfy Interfaces
Somfy Connect™ UAI Plus - Features

- SDN commission and integrate over IP/Wi-Fi

  - Onboard serial pot for integration only, not commissioning

- Setup wizard for commissioning (programming)

- Common names for grouping

- Drag and drop grouping into a table

- Embedded programming software (Google Chrome required)

- Easily discovered using the "Network" tab in your Windows PC file folder

- Programming is password protected

- Firmware update over network with internet access

- 250 motor limit

- Only 1 installer needed to program SDN

  - No need for a second "runner" while programming

- Integration report that can be printed or email

Somfy Connect Universal Automation Interface Plus
(1870272)
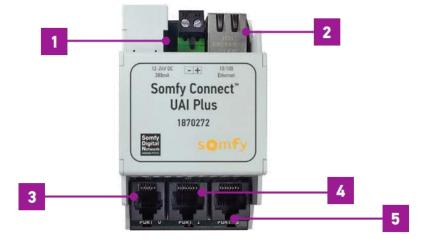
	ELEMENT	FUNCTION
1	**External Power input**	12-24V DC power supply
2	**Ethernet Port**	Ethernet input
3	**Port 0**	N/A
4	**Port 1**	RS-232 Input/SDN Bus Power input
5	**Port 2**	SDN connection

Somfy Interfaces
Somfy Connect™ UAI Plus - Comparison

	SDN PC Programming	UAI Plus
Serial Port for Programming	✔	
USB converter	✔	
Group Setting	✔	✔
Set and adjust limits	✔	✔
Auto Discovery	✔	✔
PC Programming	✔	✔
Easy Group design		✔
Integration Report		✔
WiFi Connectivity		✔
1 programmer for setting the motors		✔
Drag and Drop grouping		✔
Embedded programming Software		✔
Updates via IP		✔

Integrates with

- Control 4

- Crestron

- Savant

- RTI

- URC – Universal Remote Control

- Elan

- Lutron

Somfy Interfaces
Somfy Connect™ UAI Plus

Bus Input

Bus Output

Under 200'
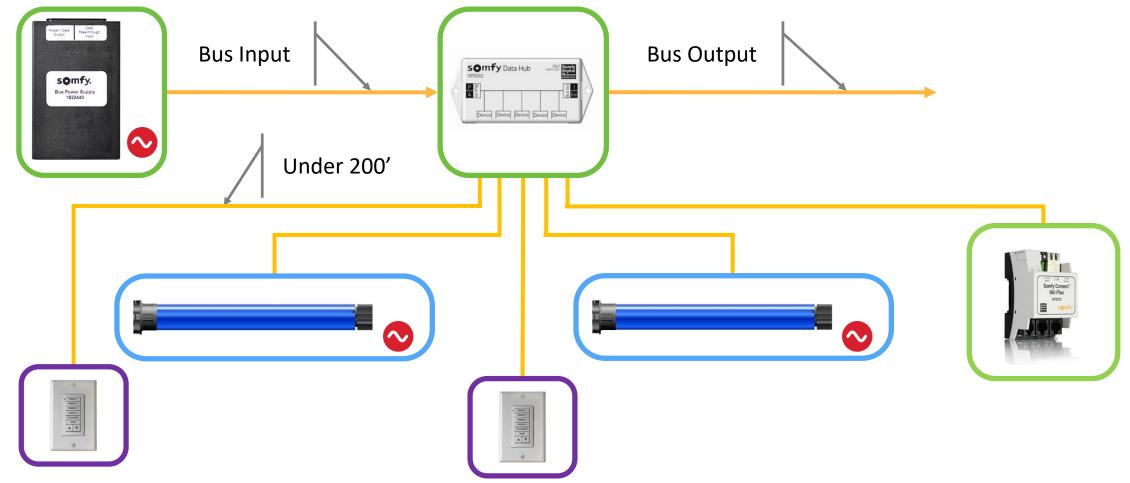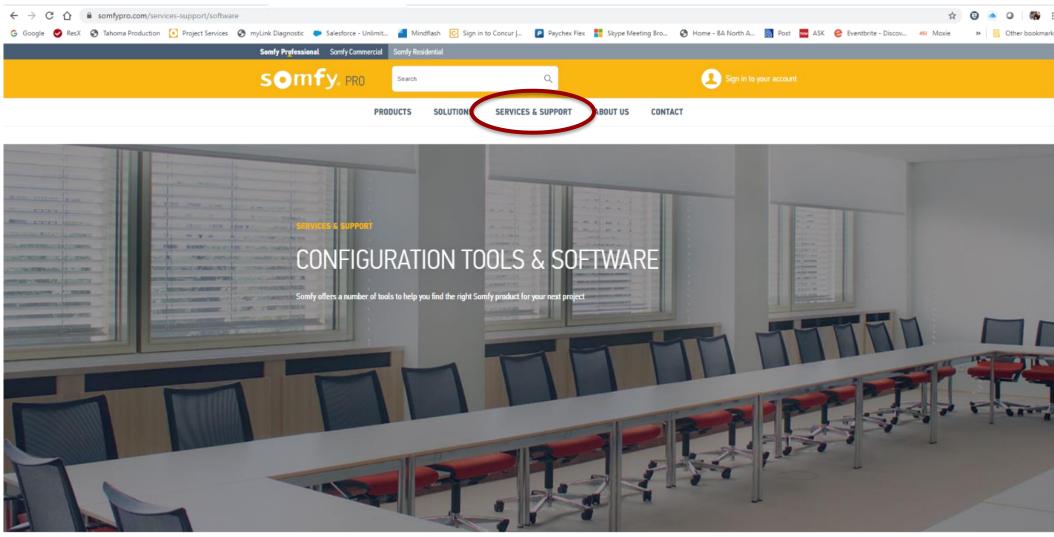
Somfy Interfaces
Somfy Connect™ UAI Plus – Driver Location

5

Specialty Interfaces

- 16 channels of RTS control per URTSI communicates with:

  - RS232

  - RS485

  - IR

- Using RS485

  - Control up to 16 URTSI II's together

- 256 channels in a system

  - Cascade up to 16 URTSI IIs with Cat 5e or better

  - Power up to 16 URTSI IIs with one power supply in a system (alternate power supply sold separately by outside vendor)

- L: 3" x W: 4" x H: 1.75"

Universal RTS Interface
(1810872)
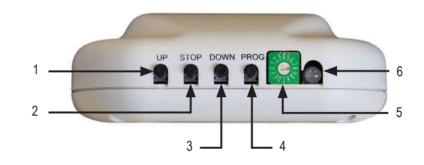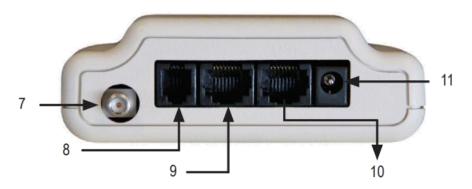
	ELEMENT	FUNCTION
1	Up Button	RTS (Test) Up directional button
2	Stop Button	RTS (Test) Stop directional button
3	Down Button	RTS (Test) Down directional button
4	Programming Button	RTS Programming button
5	Rotary Dial	**Programming:** RTS Channel selector
		Operation: URTSI Address selector (RS485) (A-0 = CH 10-16)
6	Bi-Color LED	Green = Power; Red Flash = RTS Transmission

	ELEMENT	FUNCTION
7	Antenna	RTS antenna
8	IR Sensor Input	RJ9 port for Somfy's IR receiver (9015078)
9	RS232 or RS485 Input	RJ45 for RS232 or RS485 serial input
10	RS485 Expansion	RJ45 for RS485 expansion
11	Power	3.5mm jack for included power supply (9V DC 200mA)

When should I use the URTSI?

- When you must use serial

- When you need to integrate RTS motors into Lutron (see later slides)

- When needing to use IR (Somfy IR Receiver required)
  - There have been reported issues with making your own IR cable

Somfy IR Receiver
(9015078)

- Network Wide Inclusion

- Z-Wave Development Kit 4.54.03 (Bridge Controller Library 3.42)

- Z-Wave 300 series chip

- Easy to navigate LCD menu

- 16 Channels of RTS

- Repeating node within the Z-Wave network

- Plugs into any standard 120V AC outlet

Z-Wave to RTS Interface
(1810872)
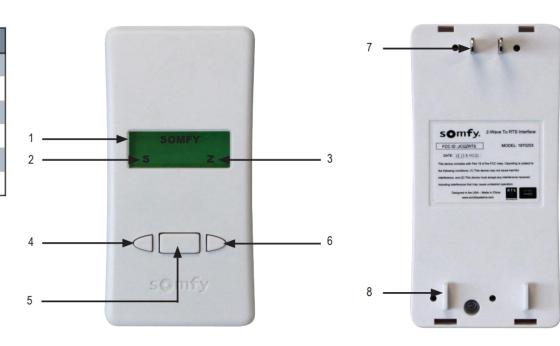
Somfy Interfaces
Specialty Interfaces - ZRTSI

	ELEMENT	FUNCTION
1	LCD Screen	Navigation Menu
2	S Indicator	Fashes when RTS Transmits
3	Z Indicator	Stays On when connected to a Z-Wave Network
4	Left Arrow	Navigates Menu Left
5	Select Button	Selection Button for Menu
6	Right Arrow	Navigates Menu Right

	ELEMENT	FUNCTION
7	AC Prongs	AC Prongs
8	Support	Wall Supports when plugged into an outlet

Integrating:

- Z-Wave Certified Product
    - This device will work with other Z-Wave certified controllers with On (up) and Off (down) commands. Stop command may be missing.

- Does not support stop on reverse

- Supported Controller (With Stop)
    - Nexia
    - Vera
    - Iris
    - Homeseer

- Supported Controllers (Without Stop)
    - Smart Things
    - Wink
    - Fibaro
    - Logitech

- The RTS Dry Contact Interface can be used to communicate between home automation or other third party systems and SOMFY's RTS products.

- Need at least 2 dry contact ports
  - 1 for UP
  - 1 for Down
    - Closing both will issue a STOP

- Momentary contact closure (Normally Open or Normally Closed 0.5 – 1 sec closure times)

- Battery operated

- 1 Single Channel of RTS

RTS Dry Contact Interface
(1810493)
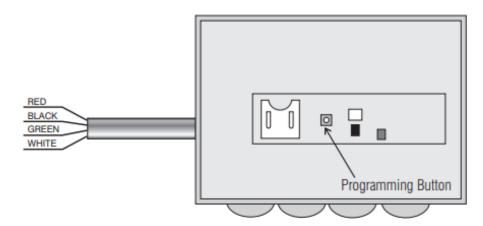
MECHANICAL SPECIFICATIONS

Overall Dimensions: L: 6 in.   W: 4 ¼ in.   D: 2 ¼ in.

Typical Range (Optimal Conditions): 65 ft.

ELECTRICAL SPECIFICATIONS

Power: 3v Lithium battery CR2430

Frequency: 433.42 Mhz

OPERATING INSTRUCTIONS

Programming Button

RED
BLACK
GREEN
WHITE

1. Place the RTS compatible motor or control in programming mode as described in the individual product operating instructions.
2. Press the programming button on the RTS Interface to program it in the memory of the RTS motor or control.
3. To activate an UP command, a momentary contact (relay) closure is required between the WHITE and GREEN wires.
4. To activate a DOWN command, a contact closure is required between the BLACK and GREEN wires.
5. To activate a STOP command or Intermediate Position, a contact closure is required between the RED and GREEN wires.

- When choosing Wired control units, power supply and wiring should be planned prior to construction and include the possibilities of future renovations.

- Manual controls must be located near windows and in strategic areas which often requires a detailed system design process before development could take place.

System Features:

- Provides control of motorized window coverings via a line voltage or low voltage wall switch wired directly to a standard motor

- Offers control using common line voltage switching

- Requires an electrician for line voltage switches

- Wall switches provide single or group motor control

- A separate switch is required for each motorized window covering

- Control up to four WT motors individually or in groups

- Provides default intermediate positions of 25%, 50% and 75%

openness which can also be customized for each motor

- Individual control and Master control using DecoFlex Dry

Contact Keypads

- Four Keypad ports and two Master ports

- CSA/UL certified E160923

- Plenum rated

Individual Group Control (IGC) 4N1 Motor Controller (1811416)

somfy.

	ELEMENT	FUNCTION
1	Power LED	Indicates power is on
2	Motor Selector Button	Sets Keypad group
3	Dip Switches	Motor selection
4	Master Ports	Connect Master Keypads and Daisy Chain Controllers
5	Individual Motor Key Ports	Connect Keypads for each group
6	To 110V AC	Connect to power
7	Program Button	Set intermediate positions
8	To Motors	Connect to motors
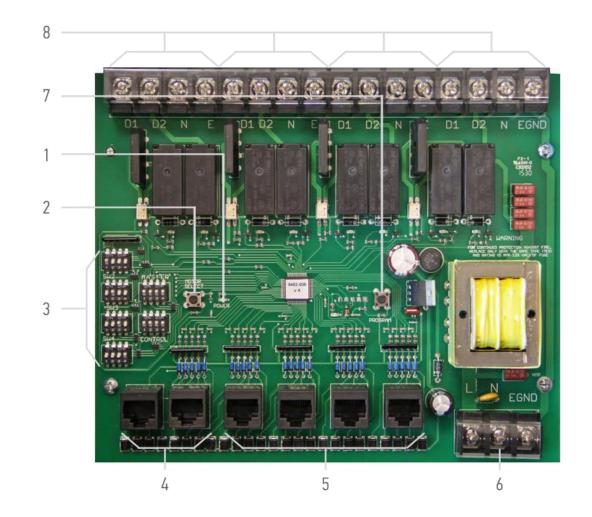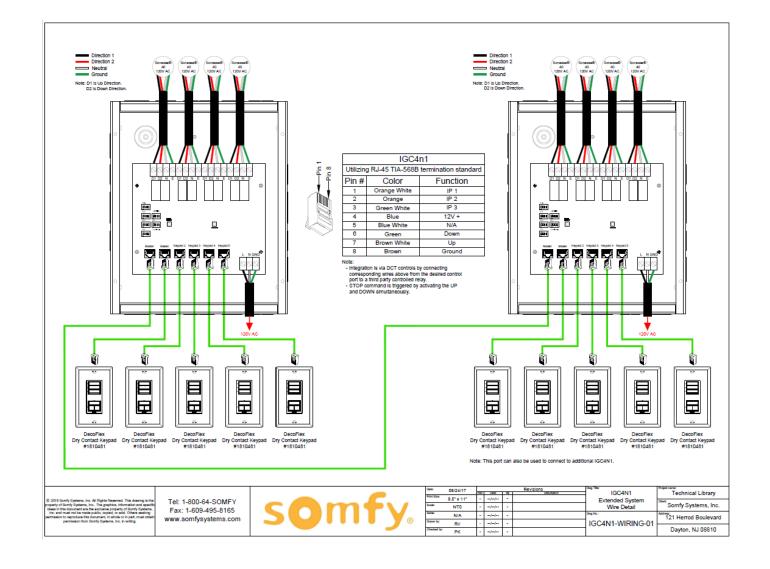
Somfy Interfaces
Specialty Interfaces – IGC 4N1 Motor Controller

- 2-way hardwire motor control

- Bus segments

  - 255 Devices
  - 4000 ft. total cumulative length

- Group programming allows for multiple motors to move at the same time

- Percentage positions

- Bus line devices for easy connection

- Freedom of wiring

6 button   8 button
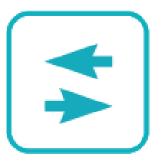
- Hardwired solution a must

- Positional feedback from the motor is needed

- Building or residence already wired

- Multiple control options available

- In-wall control with plug-in connections

- 6 button and 8 button configurations

- Dry contact third party integration

- Custom engravable buttons

- Fits into any Decora wall plate

- Powered and communicates over single wire

- Available in White*, Black, & Ivory

Part number show for white version only
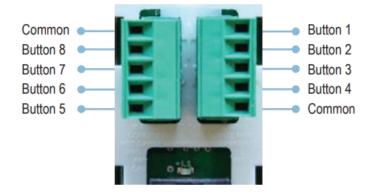
6 button   8 button

SDN DecoFlex Digital Keypad 6-Button White 1811252 (shown)
SDN DecoFlex Digital Keypad 8-Button White 1811253 (shown)
SDN DecoFlex Digital Keypad with Group Function 6-Button 1811749
SDN DecoFlex Digital Keypad with Group Function 8-Button 1811750

somfy.

ELEMENT		FUNCTION
1	**Buttons**	Press for motor control. Can be programmed with functions for Press, Release, Hold and Sequential
2	**Front LEDs**	Group selection Amber - Solid in SDN mode and flashes in group mode
3	**Dry Contact Inputs**	Triggers programmed button function
4	**Power LED**	Blinking Red - SDN power
5	**SDN Connection**	Power and data connection to SDN bus

Detail of Inputs
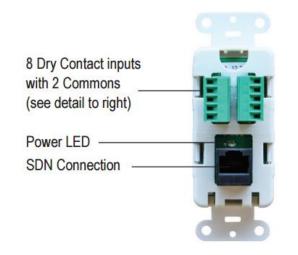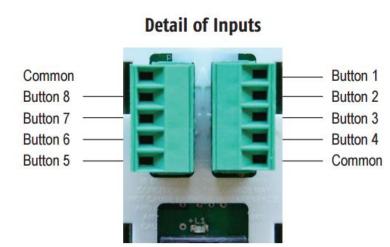
- 8 Contacts to provide control of each button

- A basic level of integration supported by almost all control systems

- Actions determined by keypad programming

- One relay required per button contact

6 button   8 button

8 Dry Contact inputs with 2 Commons (see detail to right)

Power LED

SDN Connection

Detail of Inputs

Common
Button 8
Button 7
Button 6
Button 5

Button 1
Button 2
Button 3
Button 4
Common

The 0-10V Interface is a Somfy Digital Network™ (SDN) device which receives lighting industry standard 0-10V control input to operate SDN RS485 motors.

- Interface for controlling Somfy Digital motors through 0-10V Input

- 0-10V is a standard type of control for many Lighting companies (Eaton, Acuity, Leviton, etc)

- Grouping up to 20 motors (4 Data Hubs) per interface

0-10V Interface (11 Position)
(1870489)

	ELEMENT	FUNCTION
1	**Reverse Button**	Reverse shade position percentage
2	**Power Input (5.5 mm Female Barrel Connector)**	Supply 24V DC power to device
3	**0-10V Input (screw clamp connector)**	Input from Control System
4	**SDN Bus Power and Data Output (Female RJ45)**	Output for bus data and power

LED Indicators

LABEL	ELEMENT	COLOR	FUNCTION ON	FUNCTION OFF
P	**Bus Power**	Green	Power	No Power
A	**A (activity)**	Green	Data	No Data

Back Side

Front Side

Top Side

- System control
  - Stand-alone SDN - control individual or motor groups position (%) – feedback on motors only
    - Position (absolute) – feedback on motors only
    - Intermediate position
    - Up, Stop, and Down control
  - animeo® IP – control individual or motor groups, sensors, and virtual keypads
    - Position (%) – feedback on motors only
    - Up, Stop, and Down control/commands
    - Priority control
    - Sensor data – provides single direction information to BMS system
  - Supports up to 1500 data points
  - Integration capabilities:
    - Modbus
    - BACnet MS/TP
    - BACnet IP
- Programmable through user friendly interface
- Auto discovery for animeo IP
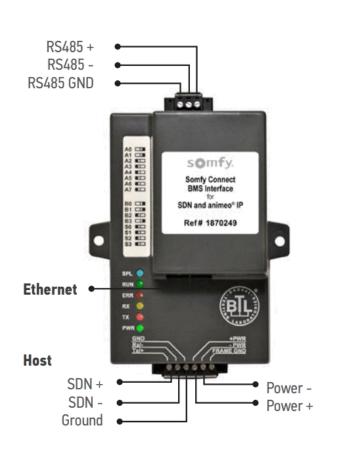
Somfy Connect™ BMS Interface
(1870249)
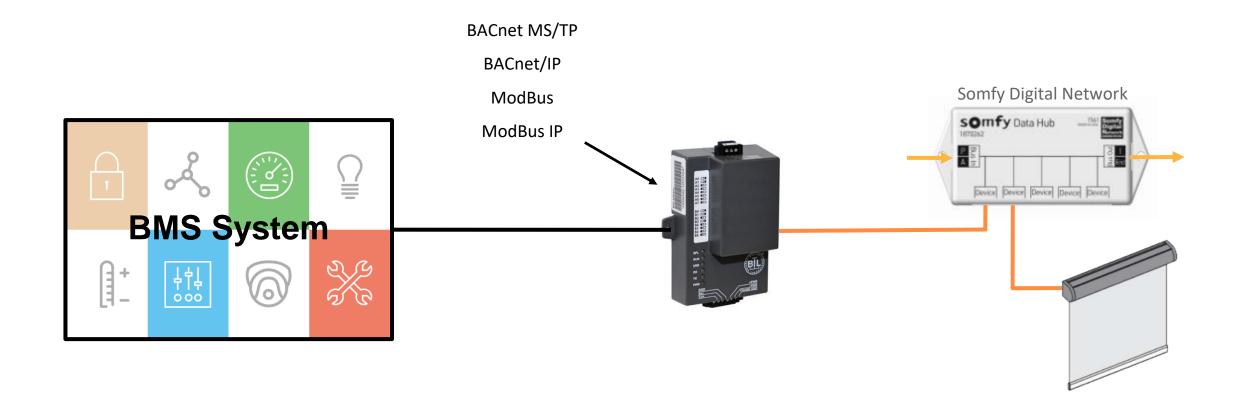
TAG	ELEMENT
SPL	Not used
RUN	Once powered, wait 20 seconds and the green LED will begin to flash to indicate normal operation.
ERR	A solid red light indicates a system error on the interface.
RX	Blinks yellow to indicate activity
TX	Blinks red to indicate activity
PWR	Solid green at all times
RTC	Unused

	ELEMENT	FUNCTION
1	Field	BACnet MS/TP and Modbus connection screw terminal
2	Ethernet Port	Local area network configuration connection using an RJ45 connection port
3	Host	Stand-alone SDN connection screw terminal
4	Power	9–30V DC or 12–24V AC screw terminal
5	Dip Switches	Change configuration options

BACnet MS/TP

BACnet/IP

ModBus

ModBus IP

Somfy Digital Network

BMS System
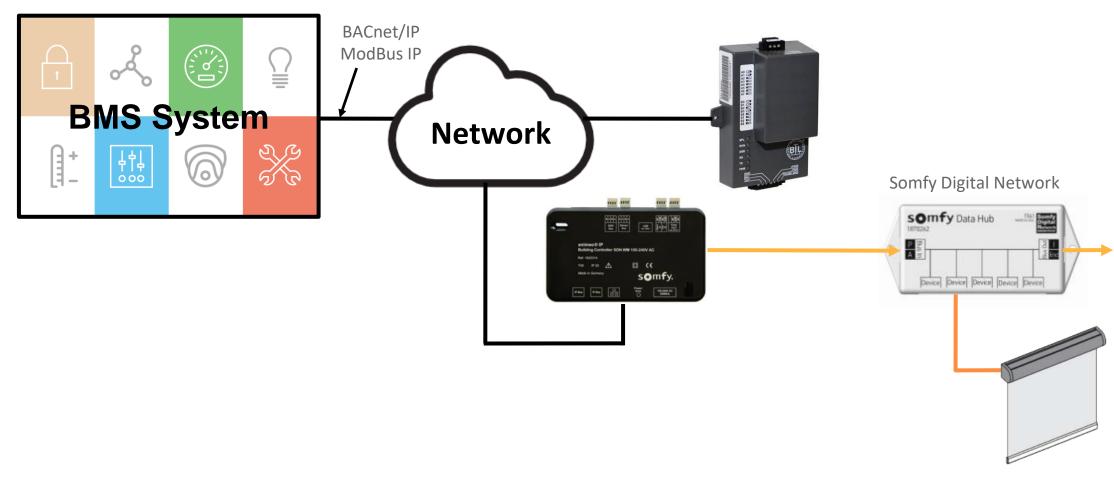
Power over Ethernet (PoE) distributes network signals and electrical power to transmit communication over standard low-voltage category cabling to various endpoints, including shades, draperies, LED lighting, HVAC controls, cameras and other networked devices in new or existing projects.

Savings up to

46%

SAVINGS PROFITS

on infrastructure cost
& service for shading!

Cut costs:
Lower infrastructure costs and capital expenses by eliminating wall circuits for endpoints and consolidating continuous power supply systems.

Save time:
Shorten deployment time through reducing the stages of construction and installation.

Efficiency:
Simplifies the building code process for new construction or renovations.

Conserve energy:
Reduce energy expenditures using Cisco energy management systems.

Improve performance:
Extend intelligent load-shedding capabilities to switch-connected devices.

- Compatible with Molex Transcend Control System, distributes power and data to shade and drapery motors IEEE 802.3bt and Cisco UPoE compliant device

- PoE switches must support LLDP

- Capable of powering a single or multiple motors compatible with third party control drivers

- Easy and secure convergence of IP infrastructure

- Easy to connect/disconnect; allow daisy-chain capability safe operation and industry-standard compliance (UL 2108/ UL 1310)

- Metal enclosure meets Plenum requirements

SDN Power over Ethernet Gateway (1860326)

	ELEMENT	FUNCTION
1	**Ethernet Input**	Power and Data Input from PoE system
2	**SDN Output to motors**	Power and Data output to Somfy 24V DC SDN RS485 motors

LED Indicators

LABEL	ELEMENT	COLOR	FUNCTION ON	FUNCTION OFF
PWR	**Power**	**Green**	Powered	No Power
ACT	**Active Ethernet**	**Green**	Ethernet Active	No Ethernet Activity
LINK	**Communication Link**	**Orange**	Linked (Blinks)	Not Linked (not blinking)

Side view   Side view

Power Over Ethernet:

- For shades and draperies up to **4 motors** per interface (individual control only)

- Trend for POE infrastructure to power Buildings:
  - 1 wire for power and data
- Compatible with our **24v motors**:
  - ST30 DC
  - ST50 DC
  - Irismo 35
- Control Methods: CoAP/Somfy Synergy API
- (Control 4 & other drivers to be developed)

	Sonesse® ULTRA 50 DC RS485	Sonesse® 30 RS485	Irismo™ 35 Mini DC (w/RS485 Enclosure Kit)
Number of motors operating at a time	1	2	1
Group operation	Cascading individually	2 motors at a time	Not available: 1 motor per Gateway
Wattage per motor	36W	20W	48W
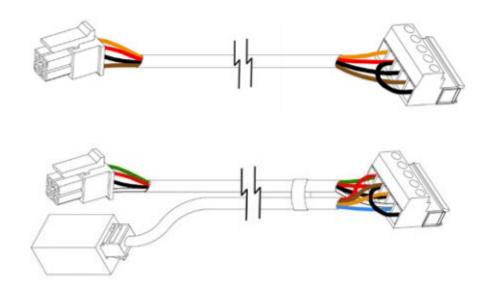
Gateway input pinout:

• Supports both ANSI/TIA/EIA 568 A & B Standards

Gateway output cables:

• PoE Gateway to Motor Adapter (9025010)
  • Cable length: 13 in.
• PoE Gateway to Motor/animeo® Keypad Adapter (Plenum Rated) (9025011).
  • Cable length: 13 in. overall, 8 in. to keypad

somfy.

Break Area Floor One

Up

30%

Stop

50%

Down

70%

Eco-Mode

...has been overridden in this zone. The "Eco-button will return this zone to automated functions.

6

animeo® IP

animeo® IP
Building Controller

- Solar depth entrance management for dynamic facade control

- Sensor-threshold-based motor control

- Accurate time & astronomic motor control

- Network-based motor control with user account access

- Facility manager access to global system status & control

- Integration-ready for third party control systems and BMS systems

- System auto discovery of motors, sensors and keypads

- IP connectivity for Sub Controller connections, virtual keypads, remote access and programming

- System can be expanded with the addition of a Sub Controller

animeo IP Building Controller
(1822314)
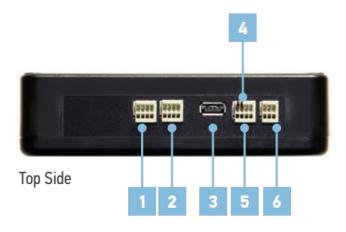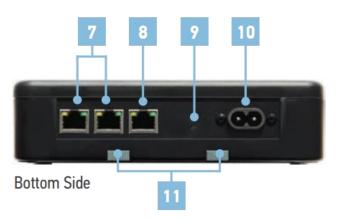
animeo® IP
Building Controller

	ELEMENT	FUNCTION
1	SDN Bus	Connection to SDN Bus
2	Sensor Bus	Connection to SDN sensor bus
3	Service	USB connection for service
4	Alarm Input	N/C input allowing for system override from 3rd party controller
5	Key In	N/O input allowing for system override from 3rd party controller
6	Error Out	Digital output for notification of system failure 24V DC @ 1A (N/C or N/O)
7	animeo IP Network	10/100 mbps Internal network for connecting to Sub Controllers
8	External Network	10/100 mbps Network connection to LAN for virtual keypads and remote access
9	Status Indicator	Solid Green = initial system boot up Rapid Green/Red Flash saving configuration Green Flash* = system normal Red Flash = system has experienced an error *Speed of flash indicates system load
10	Power Input	100V AC – 240V AC switching power supply
11	Din-rail mounting pins	For din-rail mounting

Top Side

Bottom Side

- In-wall control with plug-in connections

- 6 button and 8 button configurations

- Dry contact third party integration

- Custom engravable buttons

- Fits into any Decora wall plate

- Powered and communicates over single cat5e (or better) cable

- Available in White*, Black, & Ivory

*Part number show for white keypads only

6 button   8 button

animeo IP DecoFlex Digital Keypad 6-Button White 1811288
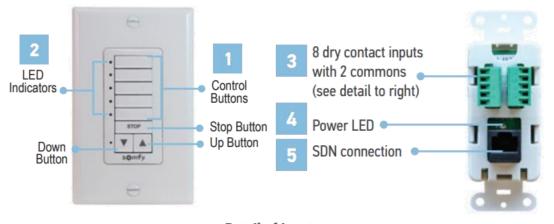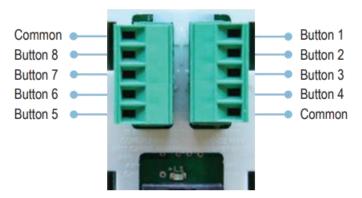animeo IP DecoFlex Digital Keypad 8-Button White 1811289

animeo® IP
DecoFlex Digital Keypads

ELEMENT		FUNCTION
1	**Buttons**	Press for motor control. Can be programmed with functions for Press, Release, Hold and Sequential
2	**Front LEDs**	Group selection Amber - Solid in SDN mode and flashes in group mode
3	**Dry Contact Inputs**	Triggers programmed button function
4	**Power LED**	Blinking Red - SDN power
5	**SDN Connection**	Power and data connection to SDN bus

2 LED Indicators

1 Control Buttons

Stop Button
Up Button

Down Button

3 8 dry contact inputs with 2 commons (see detail to right)

4 Power LED

5 SDN connection

Detail of Inputs

Common
Button 8
Button 7
Button 6
Button 5

Button 1
Button 2
Button 3
Button 4
Common

animeo® IP
DecoFlex Digital Keypads

- Single zone of control

- Button profiles

- Includes all necessary engraved buttons

- Included into the system with the one button keypad wizard

- Available in multiple colors:
  - White, Black, & Ivory

6-Button

8-Button

6 BUTTON KEYPAD CONFIGURATION OPTIONS

	No Eco (default)		Eco Priority		Preset Priority	
Button 1	Move to 25%		Toggle Eco-Mode		Move to 25%	
Button 2	Move to 50%		Move to 40%		Move to 50%	
Button 3	Move to 75%		Move to 60%		Move to 75%	
Button 4	*Dry Contact Integration		*Dry Contact Integration		*Dry Contact Integration	
Button 5	*Dry Contact Integration		*Dry Contact Integration		*Dry Contact Integration	
Button 6	Stop		Stop		Toggle Eco-Mode	
Button 7	Move to Down Limit		Move to Down Limit		Move to Down Limit	
Button 8	Move to Up Limit		Move to Up Limit		Move to Up Limit	

8 BUTTON KEYPAD CONFIGURATION OPTIONS

|	Preset Priority (default)		Eco Priority		No Eco	
Button 1	Move to 20%		Toggle Eco-Mode		Open	
Button 2	Move to 40%		Move to 20%		Move to 20%	
Button 3	Move to 60%		Move to 40%		Move to 40%	
Button 4	Move to 80%		Move to 60%		Move to 60%	
Button 5	Toggle Eco-Mode		Move to 80%		Move to 80%	
Button 6	Stop		Stop		Close	
Button 7	Move to Down Limit		Move to Down Limit		Move to Down Limit	
Button 8	Move to Up Limit		Move to Up Limit		Move to Up Limit	

somfy.
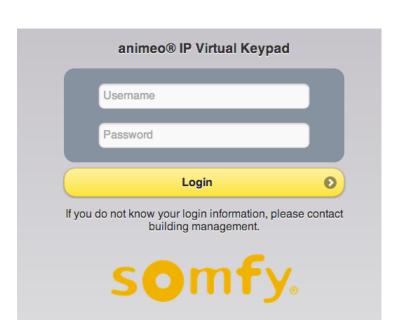
animeo® IP
Virtual Keypads

- Web based access to animeo IP system

- Compatible with all devices (HTML5, CSS)

- Two way feedback

- User based login

animeo® IP Virtual Keypad

Username

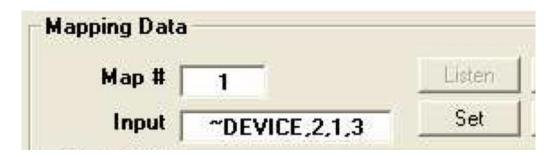Password

Login

If you do not know your login information, please contact building management.

somfy.

50.201.105.7

Gym

Up   30 %

Stop   50 %

Down   70 %

0   Lift

Eco-Mode

7

Integrating with Stand Alone Lutron Systems

Lutron is a very popular lighting control system. There are some occasions in which their keypads need to control Somfy Motors. There are various Lutron systems currently on the market today:

- Homeworks QS

- Radio RA 2

- Radio RA Select

- Grafik Eye QS

- myRoom Plus

Integration with Lutron
LTI

- Support for RadioRA® 2, HomeWorks® QS, Quantum®, and GRAFIK Eye® QS systems
  - Able to interpret:
    - Button press
    - Button release
    - Button Hold
    - Toggle
    - Group Raise/Lower
- Hardware real-time clock for scheduled events
  - Astronomic events
  - Repeatable schedules
- 300 Programmable Lutron Home Control and communication maps
- 198 programmable timed events
- One Somfy Connect™ LTI can power up to 4 URTSI IIs when using included power supply.

Somfy Connect LTI
(1870210)
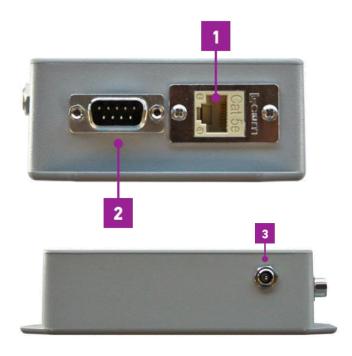
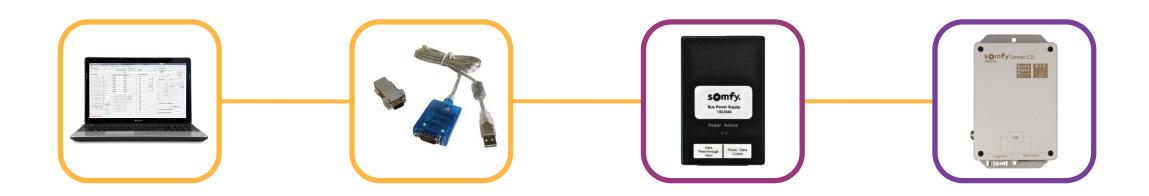| ELEMENT		FUNCTION
1	**SDN BUS**	RS485 – Connect to SDN system or URTSI
2	**Integration Port**	RS232 – Connect to Lutron Intergration port
3	**Power**	3.5mm Barrel connector (female)

- PC based configuration software
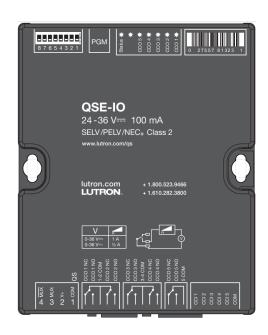- Connect PC to Translator with same USB to RS485 adapter as used for SDN motor configuration
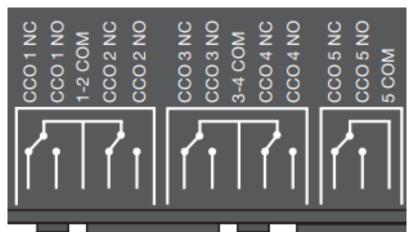
RTS

Dry Contact control over RTS motors will require a QSE-IO board (Sold and distributed by Lutron) and a Dry Contact to RTS Interface. This solution will work with the following Lutron System(s):

- Homeworks QS
- Grafik Eye QS
- myRoom

RTS

Serial control over RTS motors will require an IP to RS-232 interface Digi One Converter (Sold and distributed by Lutron) and a Universal RTS Interface. This will require the Lutron Integrator to write custom command strings to the URTSI. This solution will work with the following Lutron System(s):

- Homeworks QS

RTS

Direct Control using the Somfy Connect LTI. Radio RA Main Repeater will be installed into the project. This now requires 2 interfaces from Somfy. The Somfy Connect LTI & a Universal RTS Interface (URTSI). This also requires a completed Lutron system to be functional to Program.

- Radio RA 2

SDN

For Integration with the Somfy Digital Network, a Somfy Connect Universal Automation Interface Plus (UAI Plus) is required. The UAI Plus will have the ability to monitor the button presses from Lutron to send out Somfy Commands. There is no interface required from Lutron.

- Homeworks QS
- RadioRA 2
- RadioRA 2 Select
- Grafik Eye QS

SDN

For Integration with the Somfy Digital Network, where a UAI Plus is not present, The Somfy Connect LTI will be required. This connects into the RadioRA 2 Main Repeater and monitors the button presses.

- RadioRA 2

Integration Training Presentation
Thank you!

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www.facebook.com/somfycanada

Follow us on Twitter @somfyus

www.linkedin.com/company/somfyus

www.instagram.com/somfyus/

www.pinterest.com/somfyus

Check us out on our YouTube channel,
www.youtube.com/somfysystems

somfysystems.com

1-800-22-SOMFY

50 years

somfy.