INTEGRATION GUIDE

RTI®
INTEGRATION for
TAHOMA® SWITCH



INTEGRATION GUIDE

RTI® INTEGRATION for TAHOMA® SWITCH

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I. INTRODUCTION

The Somfy Organization's strength has been demonstrated with 50 years of experience in motorization. As leaders in the shading industry with innovative and modern solutions for homes and commercial buildings, Somfy offers the widest range of strong, quiet motors and controls for all types of applications and technologies.

Who is this Guide for?

This guide is aimed at providing support and guidance to RTI® Integrators for achieving complete automation of Zigbee® and Radio Technology Somfy® (RTS) motors with the Somfy TaHoma® switch.

What does this Guide contain?

The sections of this guide contain walkthroughs and methods of controlling Zigbee and RTS motors using the TaHoma® switch(es) as the bridge between RTI and Smart Shading by Somfy.

For questions or assistance please contact technical support:
(800) 22-SOMFY (76639)
Get answers to your questions from our Somfy FAQ page: www.somfysystems.com/en-us/support/faq
Follow the steps to access Service & Support.

How should this Guide be used?

This guide is intended to be used as a reference manual.

II. OVERVIEW

The Somfy TaHoma® switch provides a single platform for Somfy Zigbee and RTS with a wide range of interior and exterior applications.

- The TaHoma system supports up to 60 Zigbee motors (max. 50 WireFree), 10 smart plugs, 15 remotes, and 40 channels of RTS
- Join up to 10 TaHoma switch hubs for multi-zone control (RTS only)
- The TaHoma system supports a maximum of 40 scenes with schedules per install

Each TaHoma switch is connected to Wi-Fi or directly to the local area network by an optional Ethernet adaptor for IP Integration with third-party control systems. TaHoma is compatible with the Somfy Synergy™ API.

Details of these controller and commissioning instructions are available in the Somfy TaHoma pro Dealer Version Programming Guide.

RESOURCES & APPLICATIONS

Visit www.somfypro.com for the following guides:

- Somfy TaHoma pro Dealer Version Programming Guide
- Somfy RTS Pocket Programming Guide

Subscribe to the Somfy YouTube Channel www.youtube.com/somfysystems

Visit Somfy U for all the training you need – your pace, your place www.somfyu.com

Visit the Google Play or iOS App Store for the TaHoma by Somfy app:

SCAN ME

SYSTEM REQUIREMENTS

PC running Windows 10 or higher

RTI Integration Designer® APEX software 10.13.1 or higher

RTI Somfy TaHoma driver

RTI Somfy TaHoma Virtual Panel Demo

III. INSTALLATION

BUTTONS & INDICATORS

TaHoma® switch #1871037
TaHoma® switch (with ethernet adaptor) #1871038

TOP LED BEHAVIOR:

BLUE
WI-FI SETTING PROCESS

WHITE
WI-FI SEARCH – 2 TIMES
WI-FI LOST – 1 TIME

RED
SCENE STOPPED - SOLID
CONNECTION OUTAGE - BLINKING

OFF
STANDING BY

AMBER
RESTARTING

GREEN
TAHOMA PRO MODE

Scene 1 Button
Control customized scene 1

Stop Button
Stop scene underway

Scene 2 Button
Control customized scene 2



BOTTOM LED BEHAVIOR:

WHITE
POWERED,
CONNECTED TO CLOUD SERVER – SOLID
(CAN BE DEACTIVATED)

RED
POWERED,
NOT CONNECTED TO CLOUD SERVER - SOLID

OFF
NOT POWERED

Micro USB Port
Connect power or Ethernet Adaptor



Reset Button
PRESS & HOLD to reset TaHoma switch

TaHoma® Ethernet Adaptor #9028054
(Sold Separately or included with #1871038)
Connect for a wired local area network connection

Micro USB
Connect to TaHoma® switch for power and Ethernet



Ethernet Port
Connect to network router or switch

Micro USB Port
Connect power through Ethernet Adaptor

LED BEHAVIOR:

GREEN
ETHERNET CONNECTION

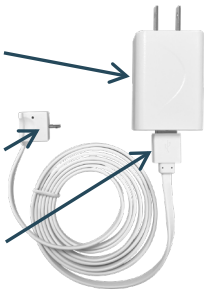
AMBER
DATA TRANSFER

Plug-in Power Supply Required
(Included with TaHoma® switch)
Connect to line-voltage to power TaHoma switch

Power Supply
Plug-in Transformer to line-voltage outlet

Micro USB
Connect power to TaHoma switch

Standard USB
Connect cable to Transformer



Ysia 1 & 5 Zigbee Remotes
Ensure the remote is powered.
Pressing any button will illuminate the LED(s).
Status LED will blink RED if the battery level is not sufficient for programming.
NOTE: Check the charge of the batteries in the remote

Ysia 1 Zigbee #1871153
Ysia 5 Zigbee #1871154

Status LED Indicator
Commands and Zigbee network activity

UP Button

MY/STOP Button

DOWN Button

Channel LED Indicator
Show channel selected

Channel Selection Button
To select channel

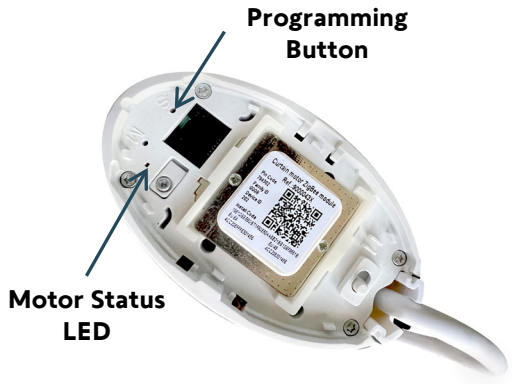
Programming Button
To pair and reset products



BUTTONS & INDICATORS

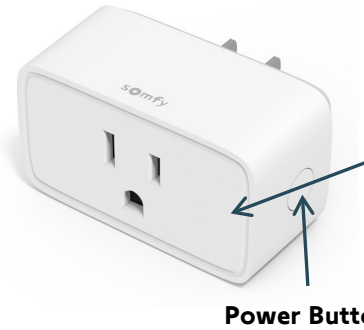
WAKING THE MOTOR:
Ensure the motor has required power available.
Using a small paper clip or similar, BRIEFLY PRESS the Programming Button on the head of the motor
OR
PLUG IN the battery supply/charger.
The motor will jog (briefly move up and down), and the LED will illuminate GREEN for 2 seconds.
The LED will blink AMBER continuously during programming.

DRAPERY MOTOR



Smart Plug Zigbee #1871217

Ensure the Smart Plug is plugged into a properly powered outlet.
QR Code and power button are on opposite sides of the plug.



LED BEHAVIOR:

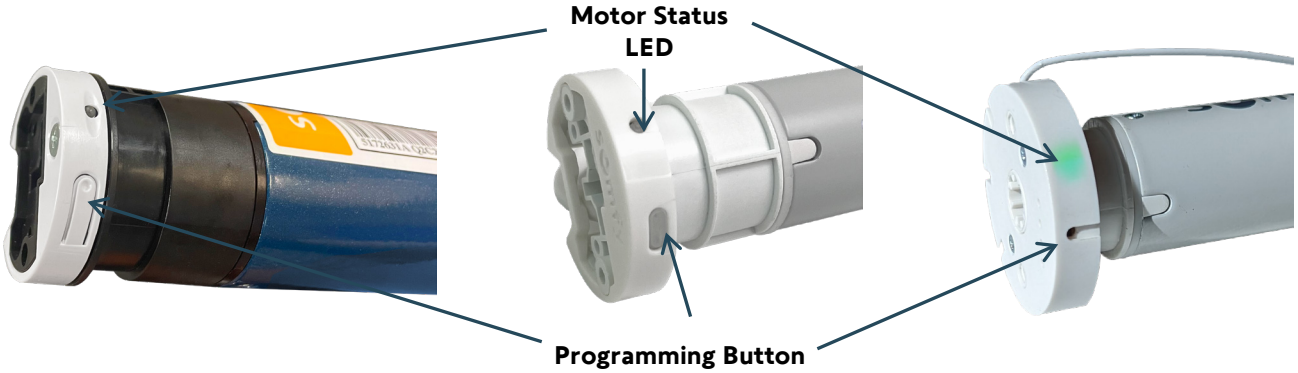
RED
SOLID 3s– NOT CONNECTED
POWERED – OUTPUT OFF

AMBER / GREEN
FLASHING – PAIRING MODE

GREEN
SOLID 3s – CONNECTED
POWERED – OUTPUT ON

OFF
NOT PAIRED
NOT POWERED

ROLLER MOTORS



Sonesse® 40 120V AC Zigbee shown above

Sonesse® 30 24V DC Zigbee shown above

Sonesse® 30 ULTRA WireFree Li-Ion Zigbee shown above (Same for Sonesse® WireFree™ motors)

MOTOR STATUS LED BEHAVIOR:

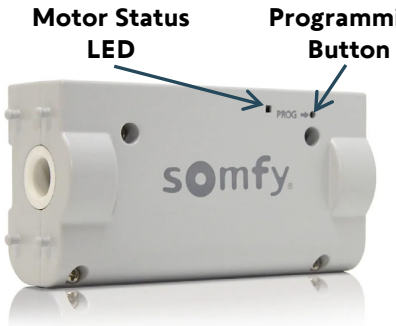
AMBER
MOTOR IS NOT SET
IN SETTING MODE
IN ADJUSTMENT MODE

GREEN
MOTOR IS CHARGING
CONFIRMED SETTING

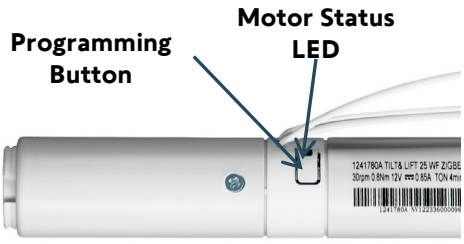
RED
LOW BATTERY CHARGE
THERMAL PROTECTION
IMPOSSIBLE SETTING

NOT ILLUMINATED ONCE
PAIRED AND OPERATIONAL

TILT MOTOR



CORD LIFT MOTOR



IV. SYSTEM PREPARATION

SOMFY SYSTEM

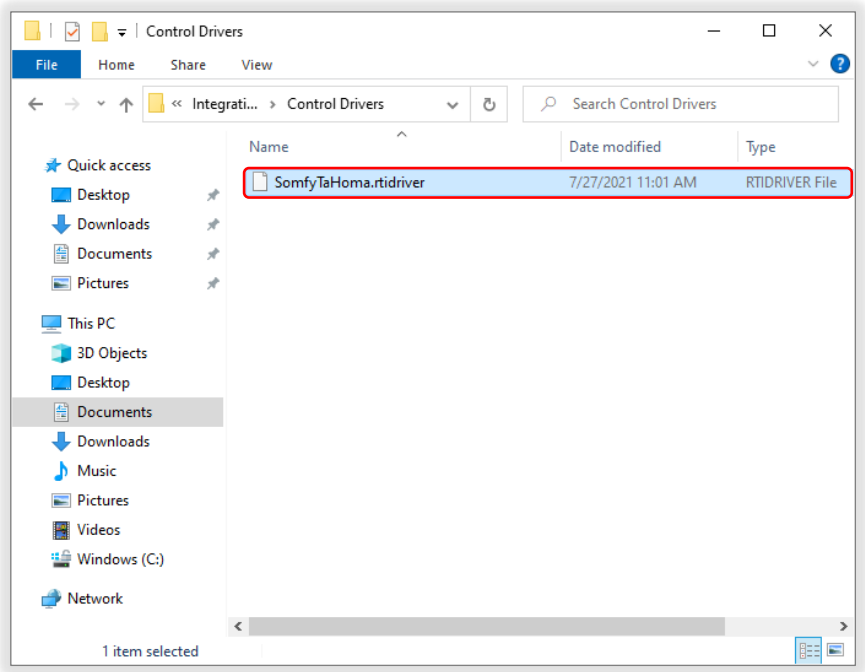
A fully operational TaHoma system is required prior to RTI programming. The TaHoma system supports up to 60 Zigbee motors (max. 50 WireFree), 10 smart plugs, 15 remotes, and 40 channels of RTS.
RTS devices programmed to an RTS channel will only receive commands from the associated TaHoma switch hub.
Hubs must be placed within 25-35' of the devices they control.

- Confirm with the Shade Commissioning Agent that the TaHoma switch firmware is up to date
- An Integration Report is generated in the TaHoma app which will include the TaHoma switch PIN and IP address
  - Ensure that a DHCP Reservation via MAC Address of the TaHoma switch is being used
    - Third-Party Integration must first be enabled in the TaHoma app (see Appendix A)

RTI SYSTEM

A fully operational RTI system is required prior to TaHoma integration.
Visit the RTI Dealer Portal for Integration Designer APEX documentation and additional programming instructions.

1) DOWNLOAD and EXTRACT the Somfy TaHoma driver package from the RTI Dealer Portal
2) BROWSE to the Windows local user Documents > Integration Designer > Control Drivers folder
3) PLACE the file "SomfyTaHoma.rtidriver" in the folder

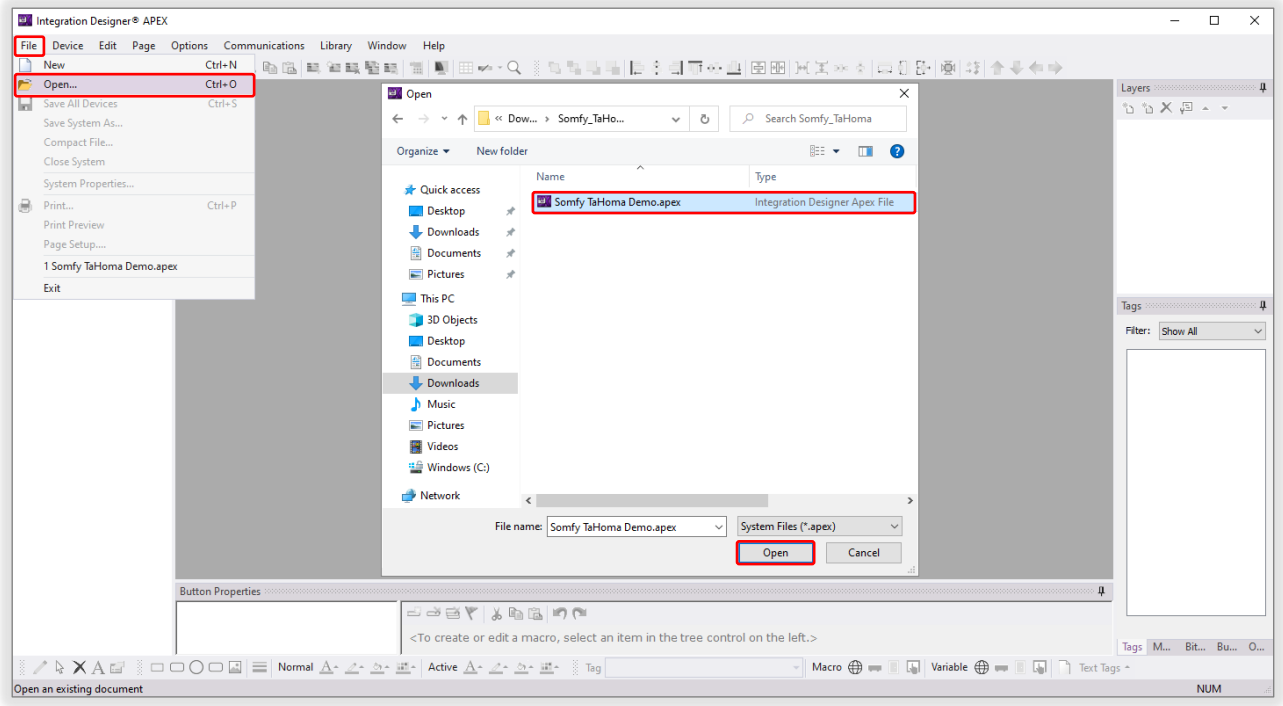


V. SET UP

OPEN DEMO FILE

The Somfy TaHoma Demo file is located in the Somfy TaHoma driver package available in the RTI Dealer Portal.
The Demo file is an Integration Designer APEX template with a sample Virtual Panel.

1) In the Integration Designer Menu Bar, SELECT "File"
2) SELECT "Open"
3) BROWSE to the "Somfy TaHoma Demo.apex" file, SELECT the file
4) SELECT "Open"



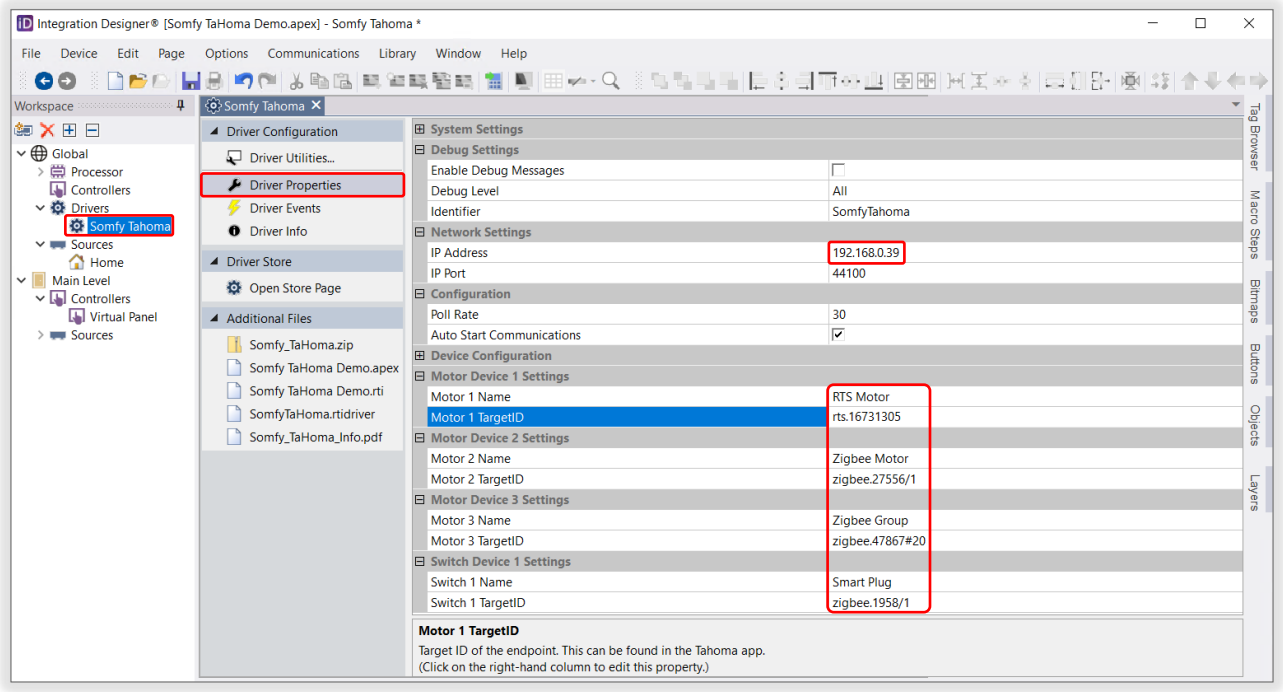
The Somfy TaHoma Demo may require generating a new Network and System Encryption Key before use.
Refer to Appendix B to generate a new Network or System Encryption Key.

DRIVER CONFIGURATION

Refer to the Integration Report for the TaHoma switch IP address and device addresses. All device addresses must be lowercase.

1) In the APEX Workspace tray, EXPAND "Drivers," SELECT "Somfy Tahoma"
2) In the Somfy Tahoma Driver Configuration, SELECT "Driver Properties"
3) In the Network Settings, ENTER the IP Address of the TaHoma switch in the "IP Address" field
4) In the Motor Device 1 Settings, ENTER a Motor or Group Address in the "Motor 1 TargetID" field
5) In the Motor Device 2 Settings, ENTER a second Motor or Group Address in the "Motor 2 TargetID" field
6) In the Motor Device 3 Settings, ENTER a third Motor or Group Address in the "Motor 3 TargetID" field
7) In the Switch Device 1 Settings, ENTER a Smart Plug Address in the "Switch 1 TargetID" field

Device names are automatically polled once communications are established with the TaHoma switch.
It is not necessary to enter individual motor or smart plug names.

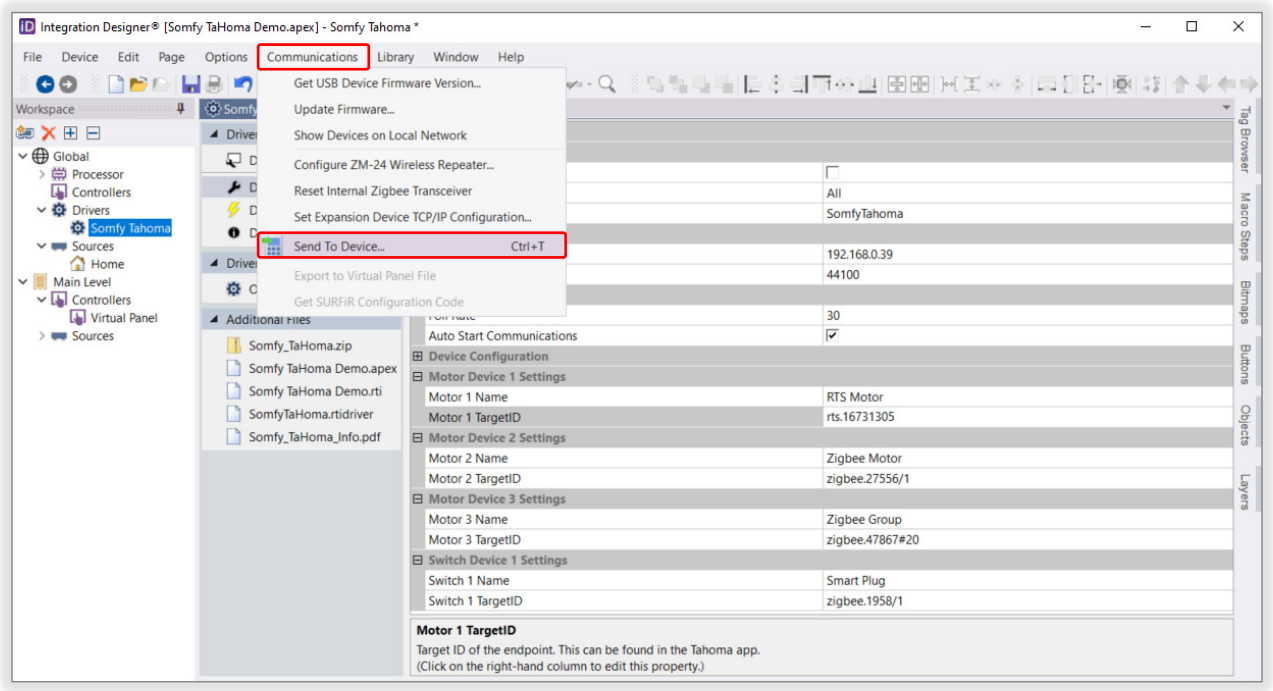


Refer to the Somfy TaHoma Driver details in the Driver Info section.

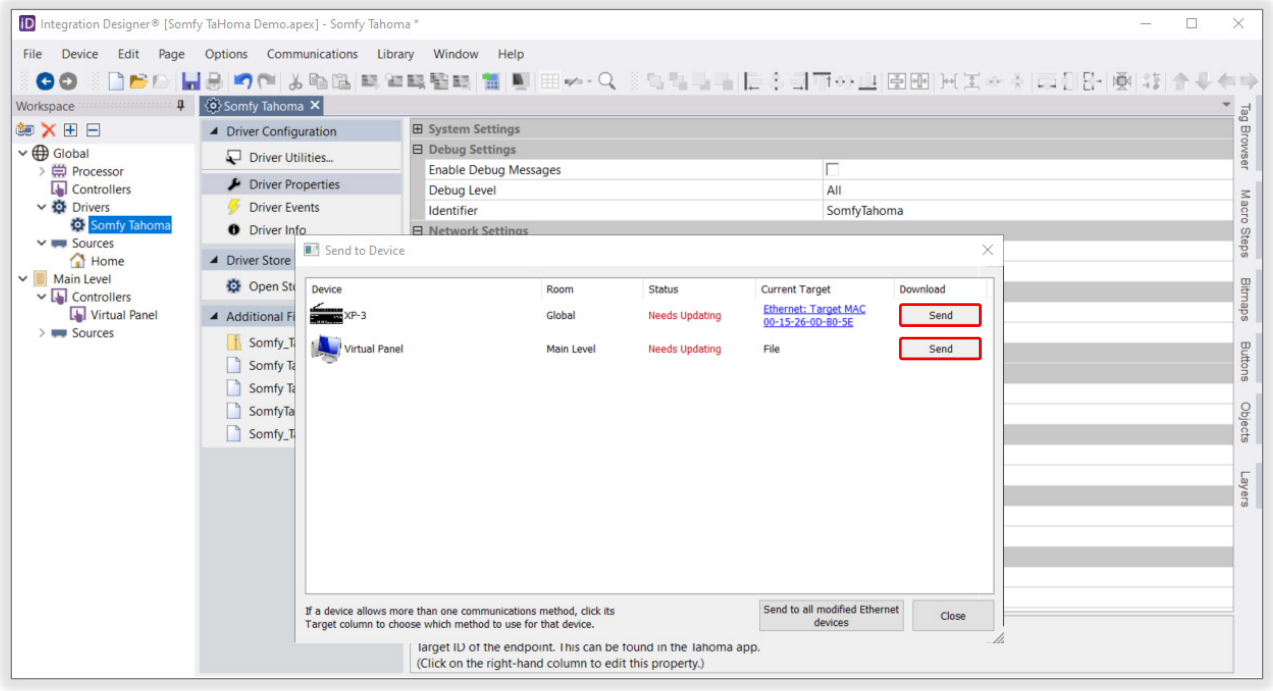
SEND TO DEVICE

Send To Device is a process of uploading the system file from Integration Designer to the connected devices on the system. Run this process to provide the update status of each device. Perform this process after any programming modifications.

1) In the Integration Designer Menu Bar, SELECT "Communications"
2) SELECT "Send To Device…" to display the devices in the current system

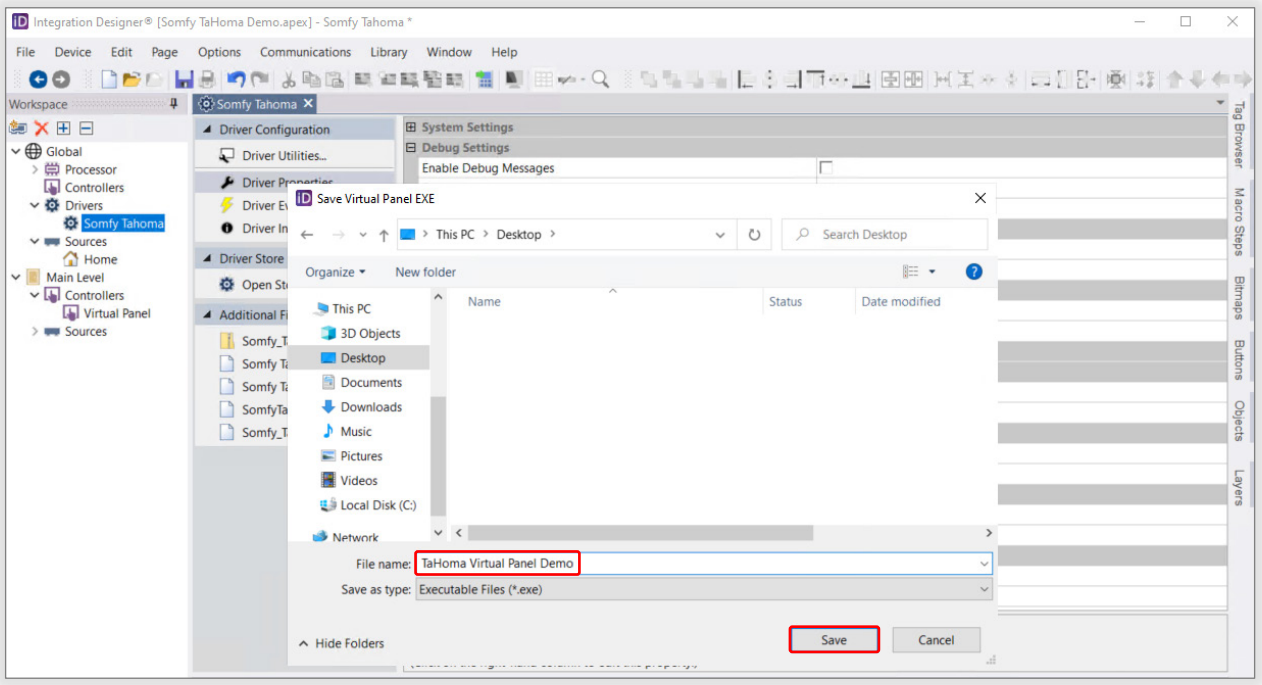


3) SELECT the RTI Processor and communications method in the Target column
4) SELECT "Send" in the Download column of the RTI Processor row
5) SELECT "Send" in the Download column of the Virtual Panel row



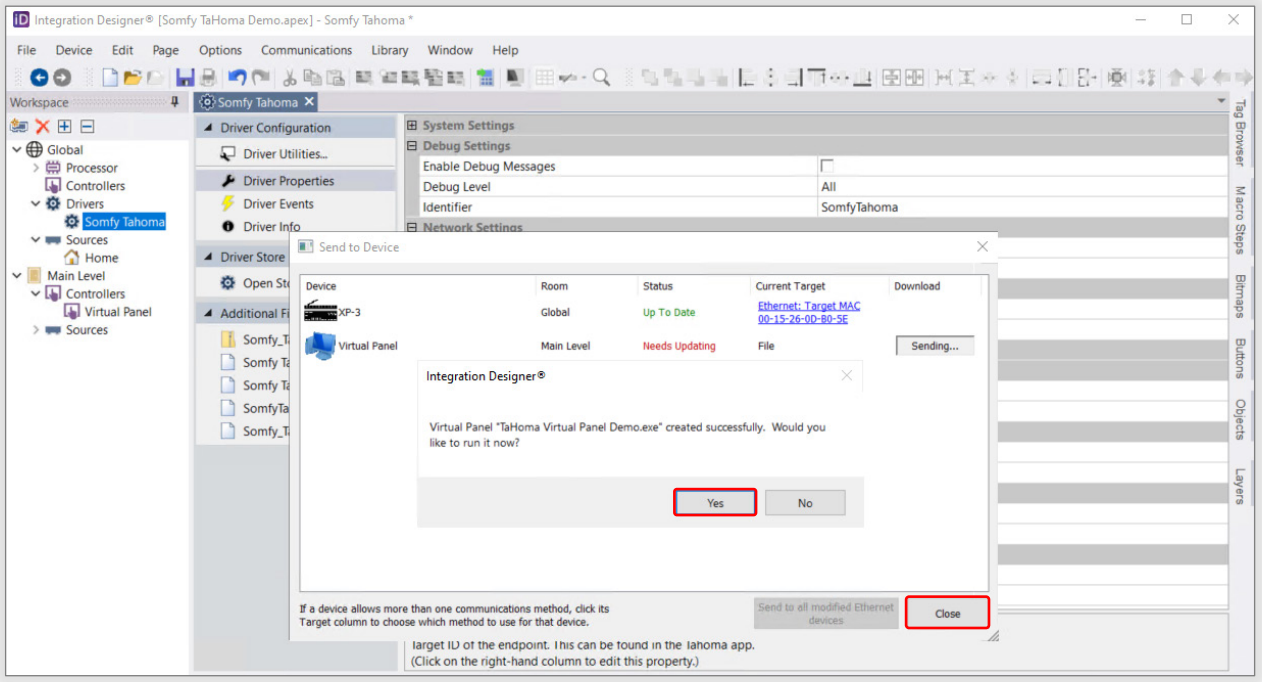
6) NAVIGATE to the desired location to save the file, NAME the Virtual Panel executable file in the “File name” field

7) SELECT “Save”



8) SELECT “Yes” to run the Virtual Panel or SELECT “No” to run later

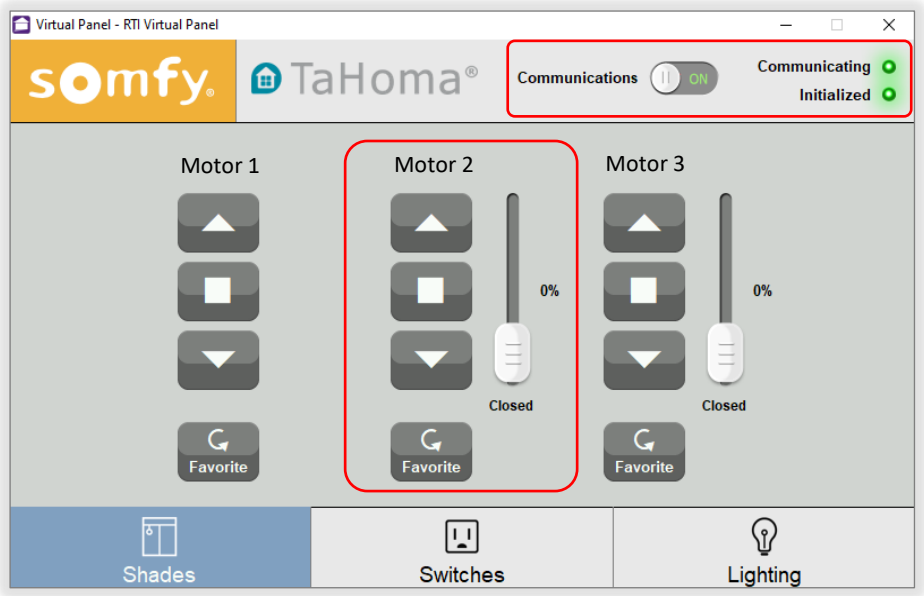
9) SELECT “Close” when the devices are "Up To Date" in the Status column



RUN VIRTUAL PANEL

Refer to Appendix C for a list of Somfy TaHoma specific commands and actions. RTS motors and Groups do not report positional feedback. Motors are capable of one programmable "my" or favorite position. Use the Virtual Panel "Favorite" button to achieve the "my" position command.

1) TOGGLE the Communications switch to the "ON" position
2) ENSURE the Communicating and Initialized indicators are GREEN
3) Use the onscreen controls to TEST device operation:
    - The "Up" button moves the shade to the fully open position
    - The "Stop" button stops the shade when moving
    - The "Down" button moves the shade to the fully closed position
    - The "Favorite" button moves the shade to the programmed "my" position
    - The "Percent Slider" moves the shade to a percent position closed (not available for RTS motors or Groups)



- The "On" button turns power on
- The "Off" button turns power off
- The "Toggle" button sequence controls power on-off

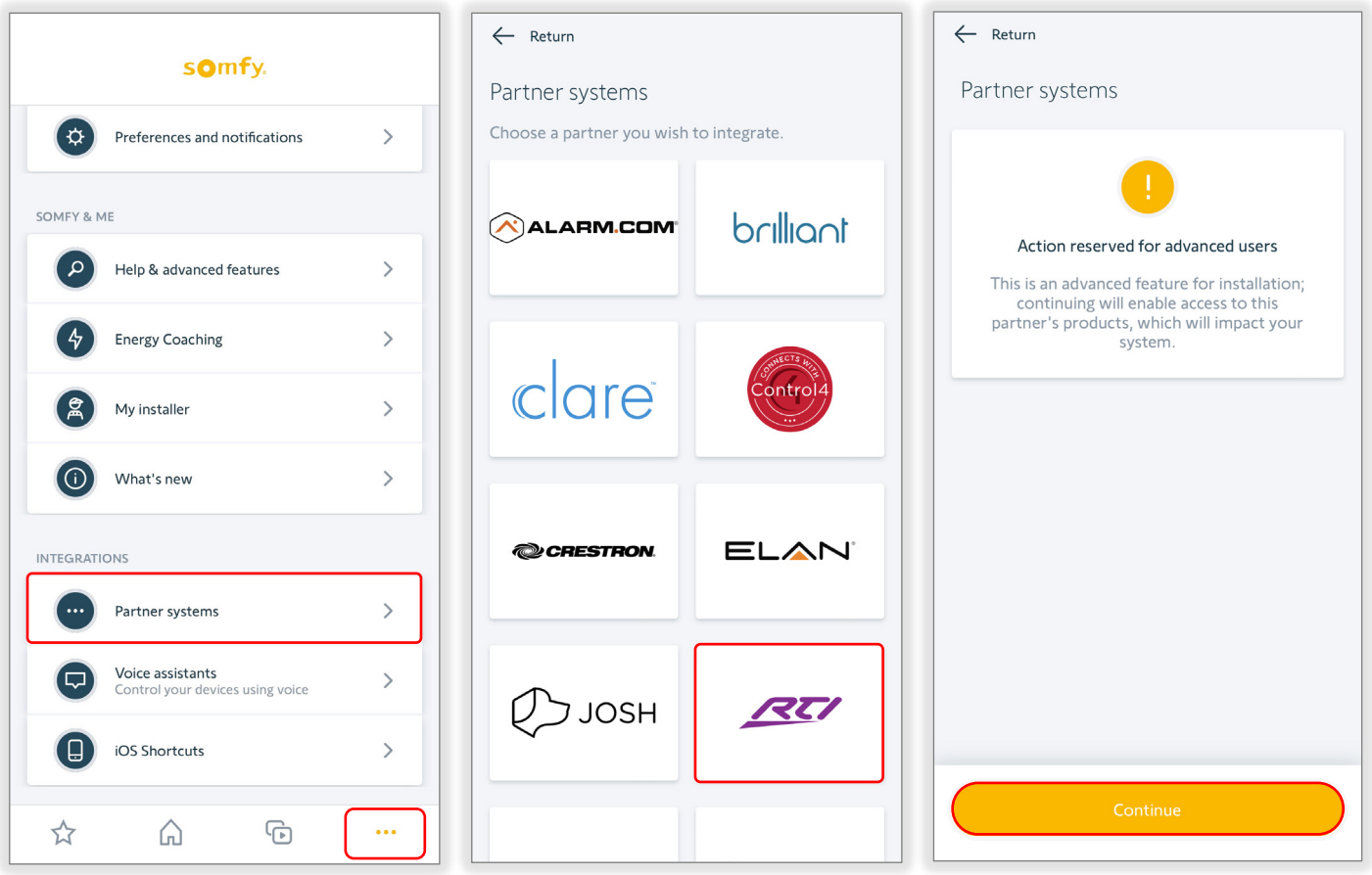


APPENDIX

[APPENDIX A] ENABLE THIRD-PARTY INTEGRATION

1) OPEN the TaHoma by Somfy app
2) SELECT the "Menu" icon in the bottom bar
3) SELECT "Partner systems"
4) SELECT "RTI"
5) SELECT "Continue"

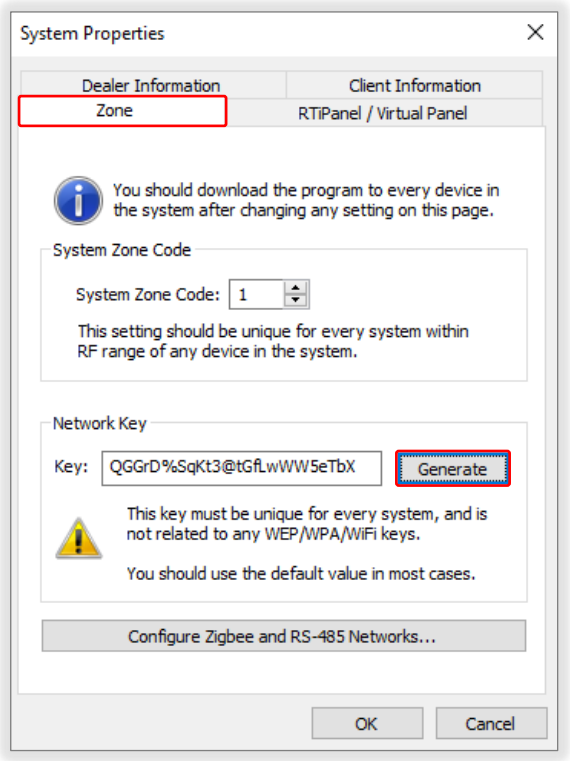
The Integration Report will display all connected products.

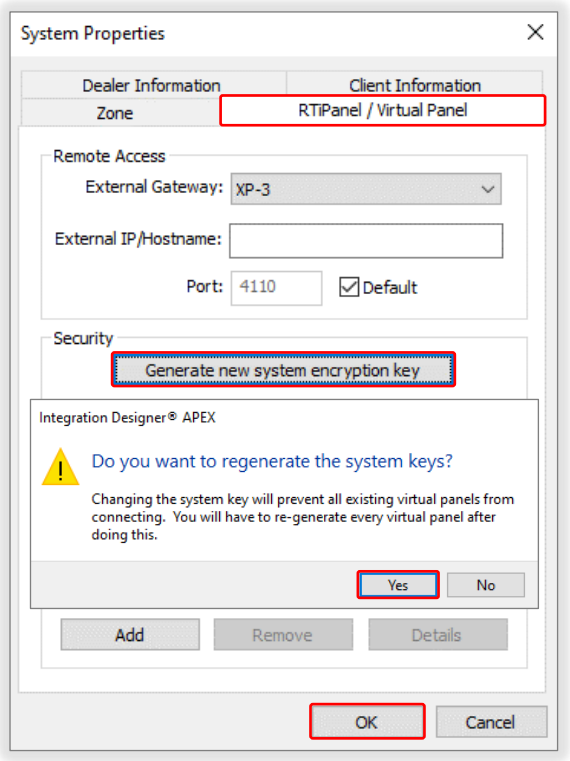


[APPENDIX B] GENERATE NETWORK & SYSTEM KEYS

The Network Key must be unique for every system and is not related to any WEP/WPA/Wi-Fi keys. Changing the system key will prevent all existing virtual panels from connecting and requires a fresh update for each device. Refer to Send to Device to update device connections.

1) In the Integration Designer Menu Bar, SELECT "File"
2) SELECT "System Properties"
3) In the Zone tab, Network Key section, SELECT "Generate"
4) In the RTiPanel / Virtual Panel tab, Security section, SELECT "Generate new system encryption key"
5) SELECT "Yes" to regenerate the system keys
6) SELECT "OK"





[APPENDIX C] AVAILABLE COMMANDS & ACTIONS

TAHOMA ZIGBEE COMMANDS	
Move Basic: Down	Moves blind to the fully closed position
Move Basic: Up	Moves blind to the fully open position
Move Basic: Stop	Stops blind when moving
Move to My	Moves blind to the programmed "my" position if blind is at rest
Move to Percentage	Moves blind to a percent position closed (0-100)

TAHOMA SMART PLUG COMMANDS	
Set State: On	Turns power on to lighting or small appliance
Set State: Off	Turns power off to lighting or small appliance
Toggle	Sequence controls lighting or small appliance on-off

TAHOMA RTS COMMANDS	
Down	Moves blind to the fully closed position
Up	Moves blind to the fully open position
Stop	Stops blind when moving
My	Moves blind to the programmed "my" position if blind is at rest
Tilt Up	Tilts blind up (only available for tilt blinds)
Tilt Down	Tilts blind down (only available for tilt blinds)

FOR QUESTIONS OR ASSISTANCE PLEASE CONTACT TECHNICAL SUPPORT:

(800) 22-SOMFY (76639)

Get answers to your questions from our Somfy FAQ page: www.somfysystems.com/en-us/support/faq

Follow the steps to access Service & Support.

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About Somfy®

For over 50 years, Somfy has been pioneering innovative motorization and automated solutions for window coverings and exterior shading products. With comfort, ease of use, security, and sustainability in mind, our seamless and connected solutions are designed to help people make the move to living spaces impactful for humans and with a reduced impact on nature.

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