Voice Integration

Tech Note 109

www.screeninnovations.com | 512.832.6939 | Doc.#110-109 | Version 1.7 | 8 September 2021

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Introduction

This TECH NOTE 109 and Integration Guide was developed for you, our Integration partner, and your clients. We have provided this simple guide to help assist in the design and integration of a Screen Innovation shade system, and to a provide some best practices which can help yield the best possible performance from deployments.

Control – your way, at Screen Innovations we provide complete control of all your shade and screen products via both wireless and wired technologies.

Screen Innovations® has developed the most innovative shade system available to the CEDIA® market. Our revolutionary Shade Builder tools, ultra-high-quality interior and exterior motorized shades and the most extensive control and power options in the industry. We built our shade products to a world class level and are the absolute best you can buy

We engineered the system in Austin Texas, USA and our products are all engineered and manufactured in the USA. We have some exclusive partnerships with world class raw parts suppliers such as Somfy the world leader in motors. These partnerships combined with our innovations and patent pending technologies mean not only do our shade products look amazing in your client's home, but more importantly "they just work"

This Screen Innovation Tech Note will help with your integration. We provide step-by-step details and screen shots to enable rapid deployments and testing.

For the latest information on our products please visit our website at http://www.ScreenInnovations.com or please call our technical support and sales teams for additional help and information...

How To Use This Tech Note

QR CODES – When you see this image, scan your phone or tablet and you will receive the latest version of the corresponding document.

Zigbee – When you see this logo. This product uses Zigbee 3.0 Mesh RF protocol.

Radio Technology Somfy® (RTS) – When you see this logo, this product uses one-way Radio Frequency commands for control of the shade(s).

Somfy® Digital Network (SDN) – When you see this logo, this product uses an RS-485 network to allow full two-way control and status of the shade(s).

Common Control Nomenclature

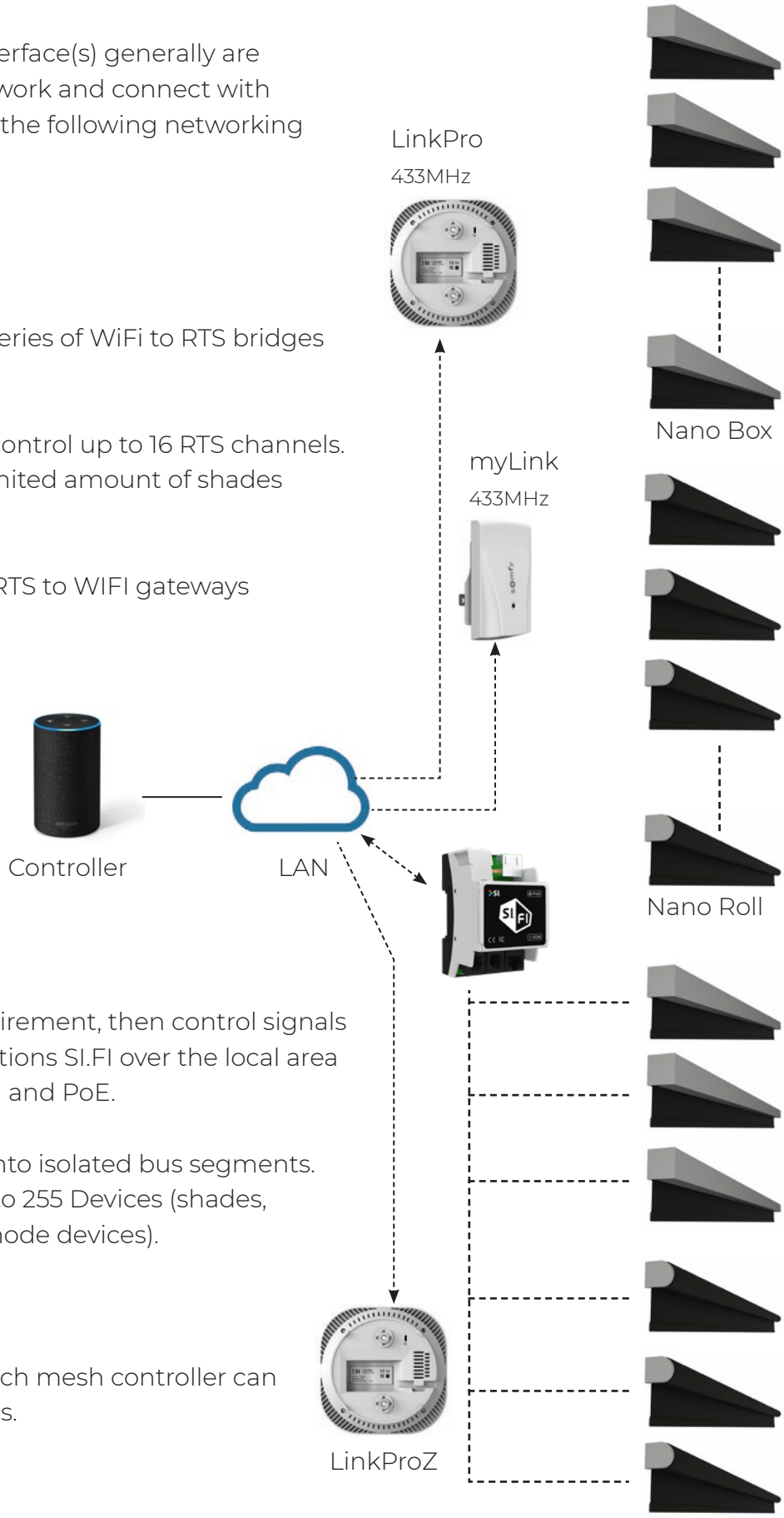
The control system and user interface(s) generally are connected to the local area network and connect with our shades from one or both of the following networking topologies.

One-Way Radio Frequency

Control signals are routed to a series of WiFi to RTS bridges such as the SI Link PRO

Each RTS to WIFI gateway can control up to 16 RTS channels. Each channel can have an unlimited amount of shades associated with it

Each project can have up to 10 RTS to WIFI gateways



Two-way RS-485

When two-way control is a requirement, then control signals are routed to the Screen Innovations SI.FI over the local area network using Internet Protocol and PoE.

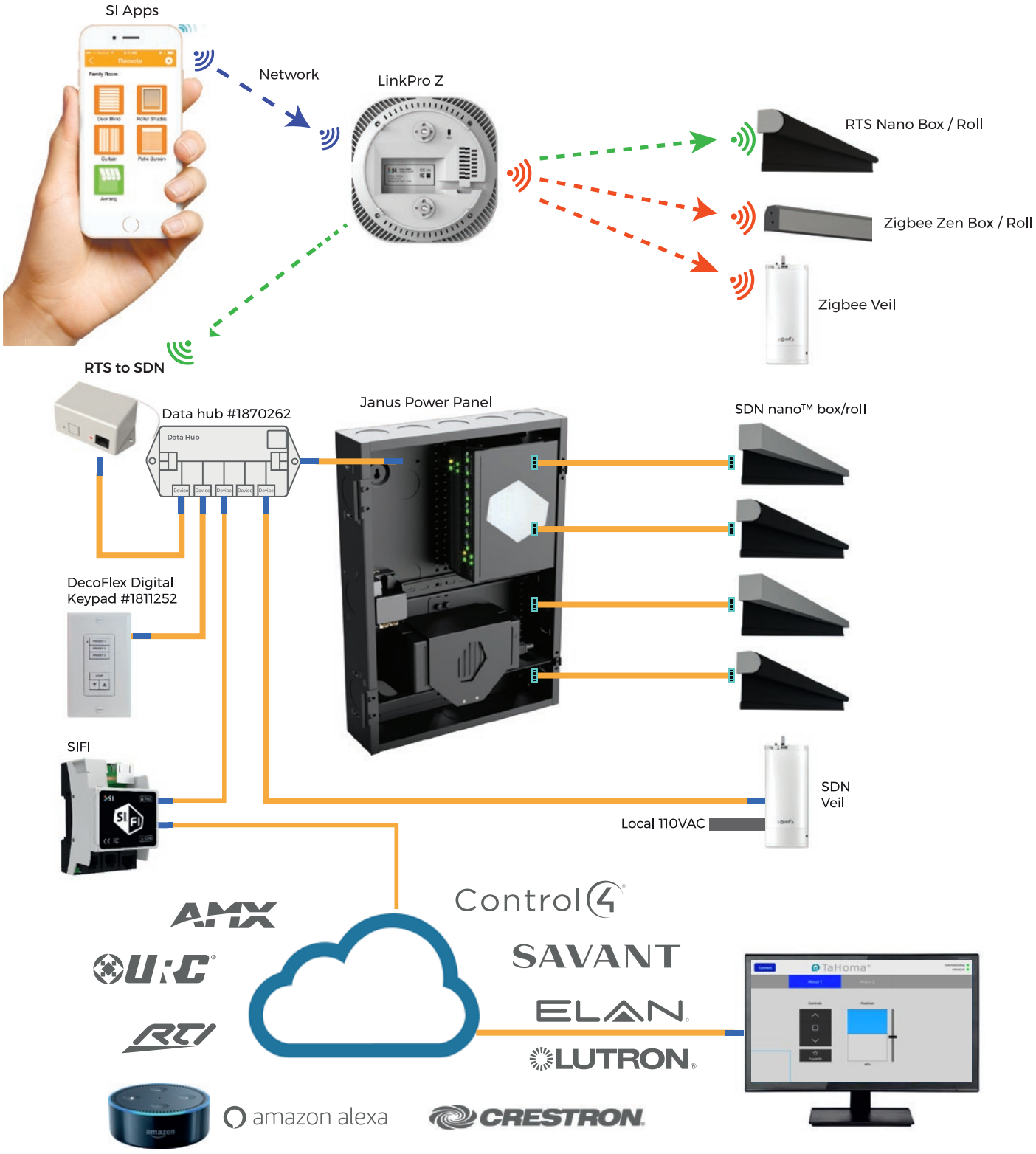
These systems are partitioned into isolated bus segments. Each segment can support up to 255 Devices (shades, gateways, repeaters and other node devices).

Zigbee 3.0 Mesh

Control runs to the linkProZ. Each mesh controller can control upto 72 Zigbee 3.0 nodes.

Screen Innovations Shade System Control Options

It is not typical that all connectivity types are used in a single project.



Zigbee 3.0

CRESTRON

Control4

ELAN

SAVANT

(Coming Soon)

RTI

(Coming Soon)

URC

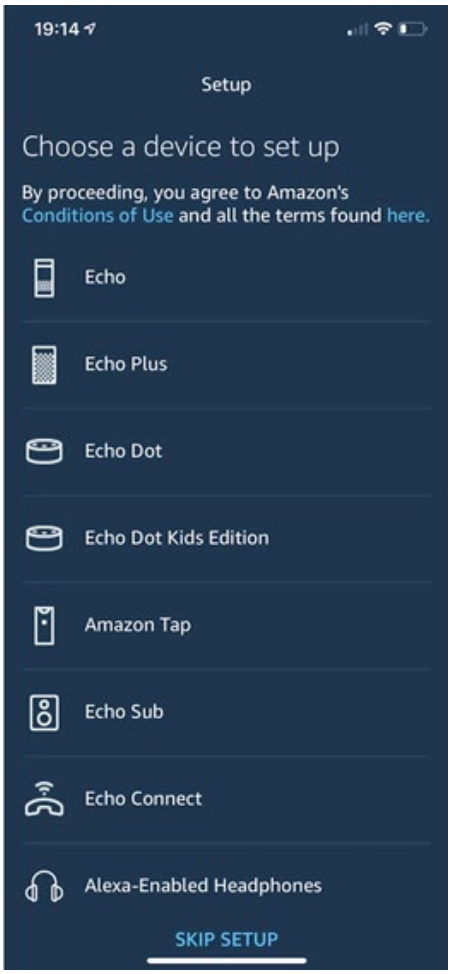
(Coming Soon)

Before you begin your Integration with Zigbee

A fully operational SI Zigbee system is required with all shade limits set (including the MY position if desired) using the TaHoma App, or a Situo remote.

Your Zigbee 3.0 Mesh Controller (Link Pro Z, or TaHoma) must be fully operational and programmed using the Somfy TaHoma app.

Any changes to the shades such as adding a shade, changing the shade name, groups or scenes can require a refresh in the advanced setting of the TaHoma app.



You would also need a fully functioning and setup Alexa app and account.

Compatible with all Echo devices except Echo Auto
TaHoma App Android running v1.07 (192) or later version
TaHoma App IoS running v1.06 (196) or later version

Integration With Zigbee via LinkPro Z and TaHoma

Download App from Apple App Store or Google Play

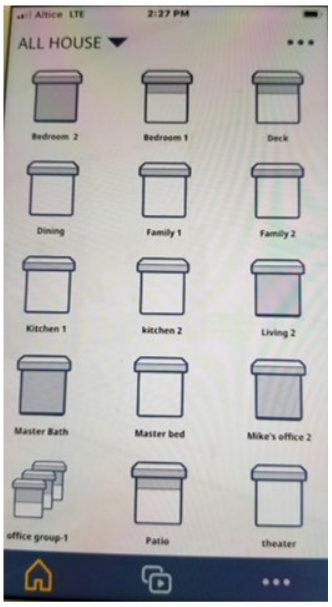
- "Situo remote on your phone"
- Scalable
- Scenes and schedules
- Easy to program
- Local and remote access

- Over the air firmware updates
- Integration Support
- Demo mode
- English, Spanish and French
- Requires fully operation Zigbee installation w/ limits set

Step process - Integration With Zigbee LinkPro Z and TaHoma

Before you begin please download the latest version of the TaHoma app for IoS or Android

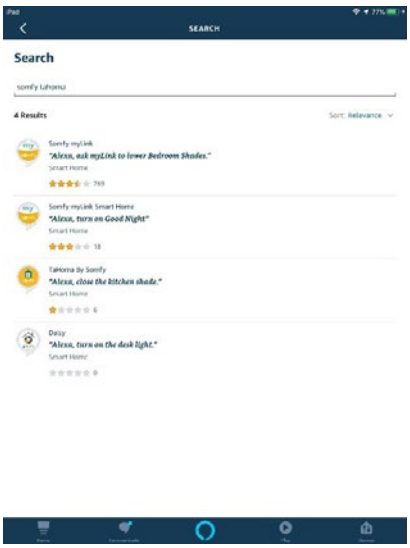
1. Make sure all devices/scenes/groups are added and setup in the TaHoma application.



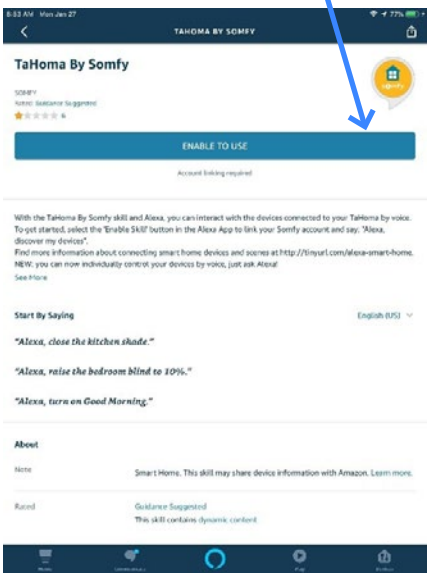
Note: Keep in mind the name of your scenes in the TaHoma App, if you name your scene “Shades up” your end user. Will have to say “Alexa, turn on shades up”.

2. Open the Alexa app.

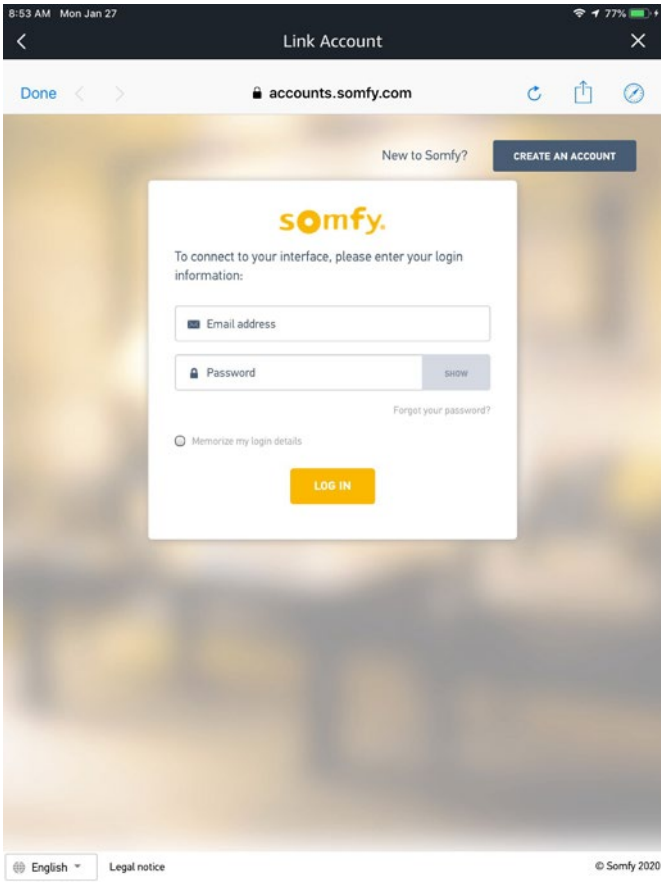
3. Navigate to “Skills & Games” and search for Somfy TaHoma



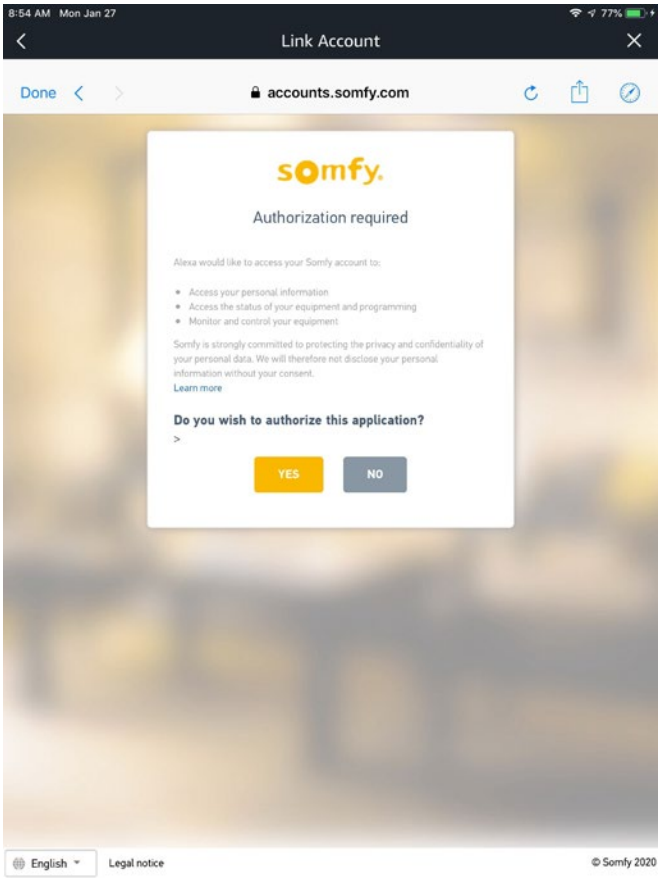
4. Enable the Skill to use



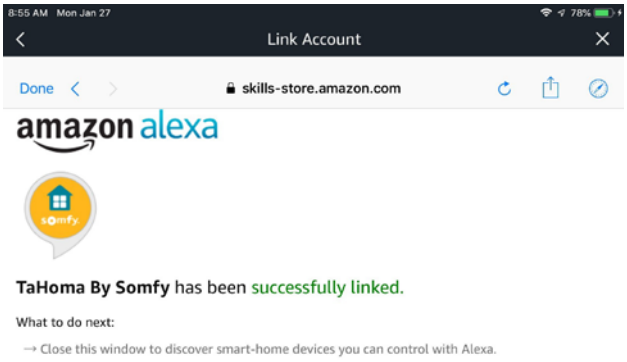
5. Login to your TaHoma account.



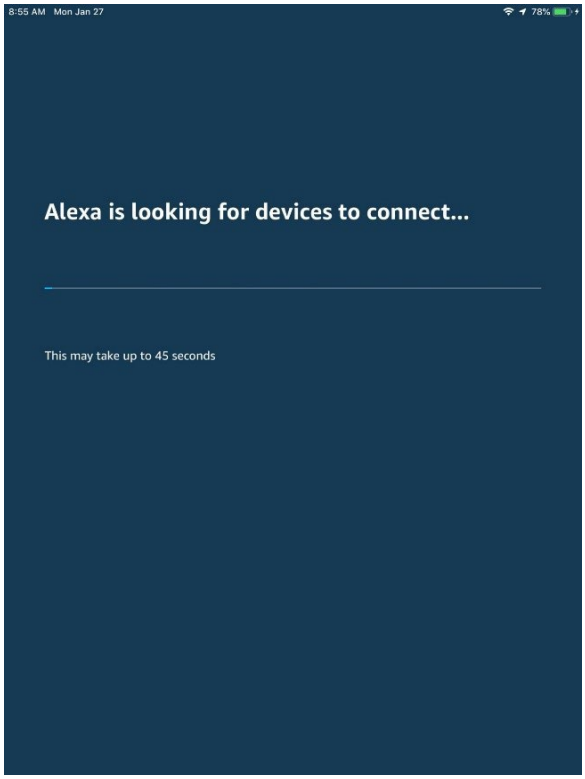
6. Authorize the application to connect to the TaHoma account.

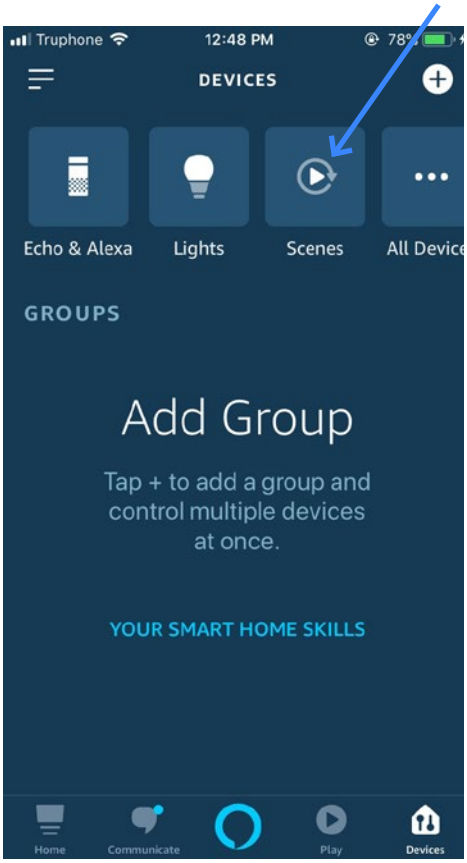


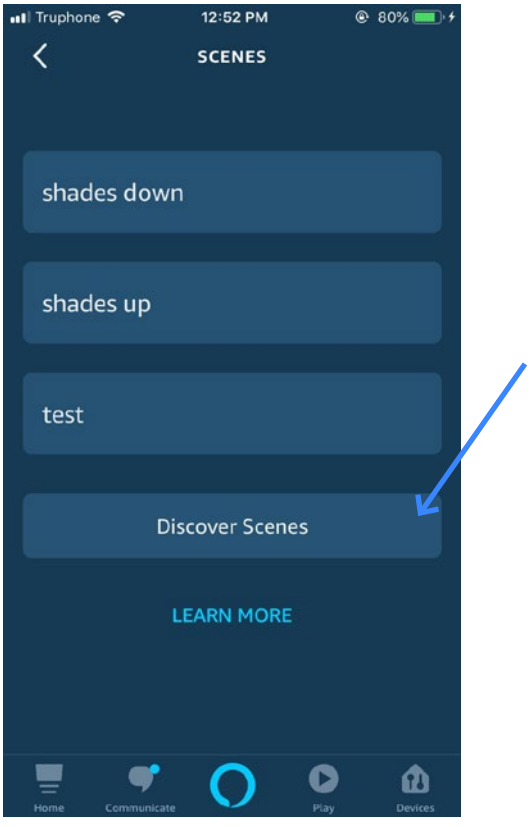
You will see this screen once your accounts have been linked together.



7. Now discover the Zigbee devices and Scenes.







If any changes are made to your system after linking to Alexa and they do not show up in the Alexa devices list you may need to disable the skill and re-enable to refresh the device list

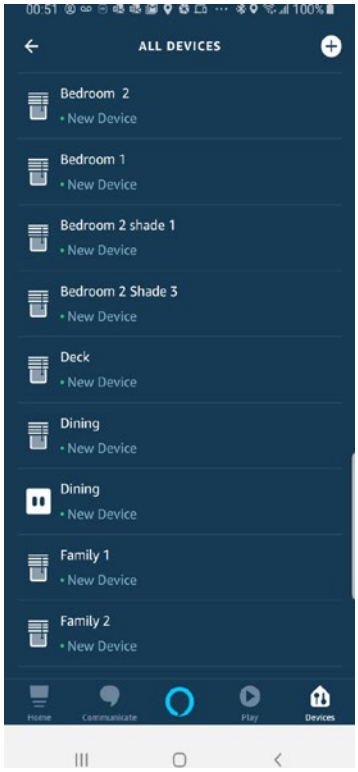
The devices will be listed in Alexa based on the names that were typed into the TaHoma app. The system is now ready to go.

To test the integration, you can use terms like the following or setup routines.

Alexa, “Open, [shade name here]” to open the shade/screen or send to lower limit

Alexa, “Close, [shade name here]” to close the shade/screen or send to upper limit

Alexa, “Stop, [shade name here]” to stop the shade/screen



Scenes that are created in the TaHoma app can be controlled with the following.

“Alexa, turn on <scene name>”
“Alexa, activate <scene name>”

3 easy steps to control a group of shades from Alexa without Cascading.

1. Create a Group in the TaHoma application
2. Create scenes in the TaHoma application to move the group up/down/to any percent ages you plan to use from Alexa.
3. Run the TaHoma created scenes from Alexa, rather than creating scenes or routines in Alexa.

Cascading will always occur when you:

- Create groups of individual shades in Alexa.
- Create a routine with multiple shades in Alexa.
- Create a Scene in TaHoma with individual shades. (TaHoma will warn you of this cascading and recommend the creation of a group.)

Setting up an Alexa Routine

If you program a routine, then you can say whatever you want! So, it improves the user experience but makes the journey longer to achieve this level of satisfaction.

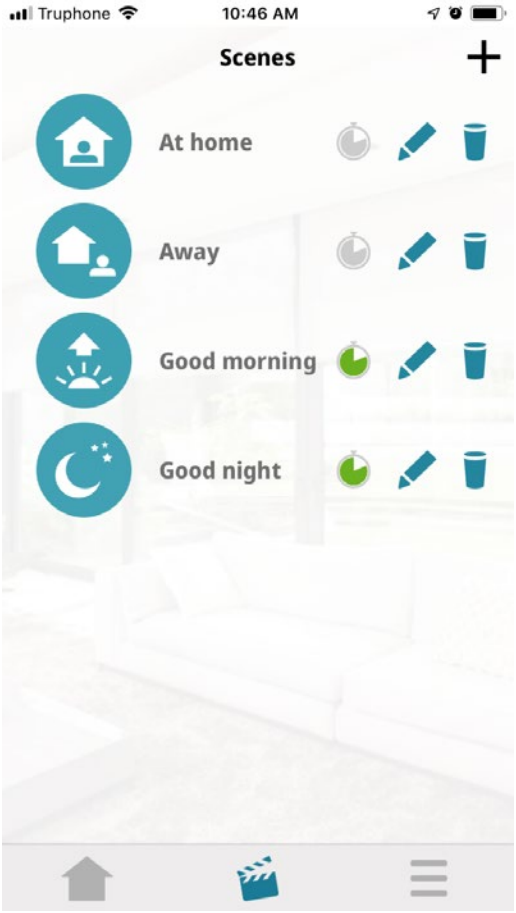
1. Open the Alexa app, open the side menu (by pressing the three bars in the upper left-hand corner), and select Routines.

2. Select the plus sign in the upper right corner.

3. Create a trigger. Select "When This Happens."

4. Choose whether you want something to happen when you say a particular phrase, at a particular time, when you arrive or leave, when another device takes an action, or when you press an Echo Button.

Steps for setting up an IFTTT for use with Zigbee



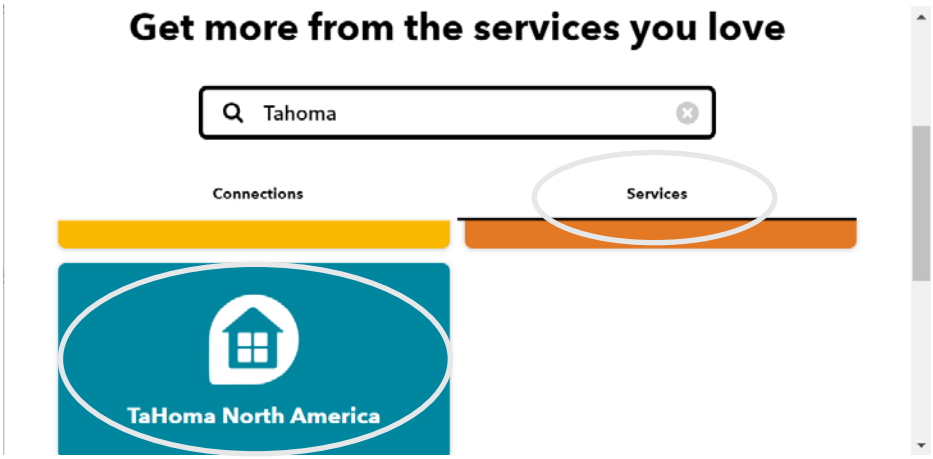
1. Before using Tahoma with IFTTT, make sure you have already some scenes created in your TaHoma app.

2. Go to ifttt.com or download IFTTT application on your Smart device.

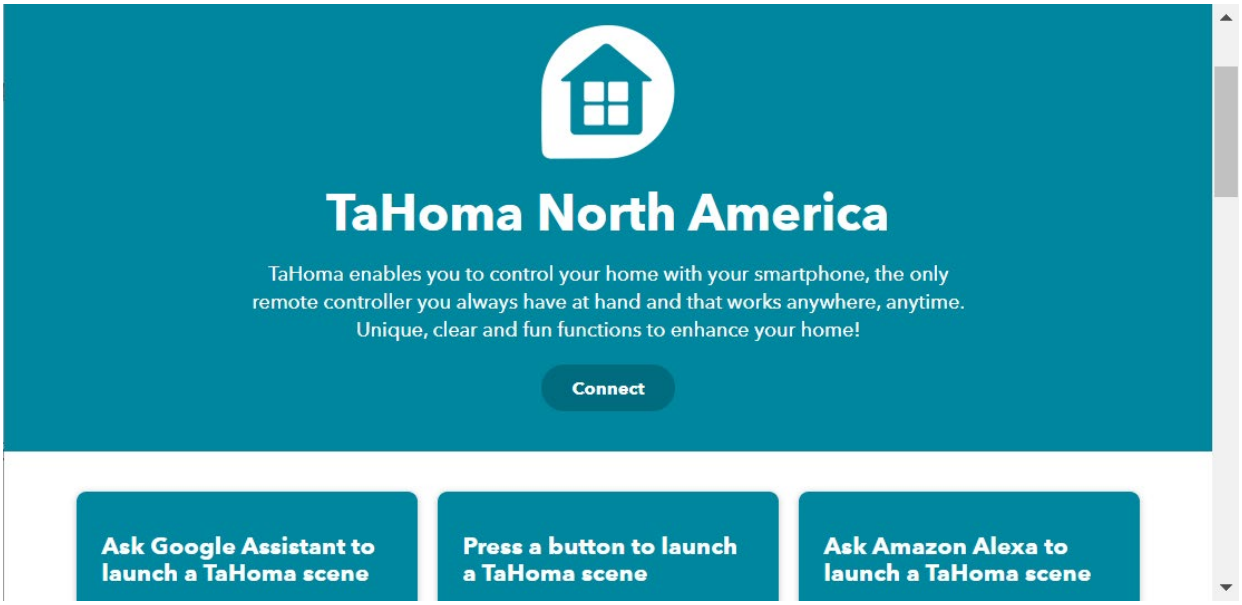
3. Sign in if you already have an IFTTT account or sign up with a new account. (If you want to use Google Assistant applets later, we recommend continuing with your google account).

4. Select “Get more” then type “TaHoma” in the search bar.

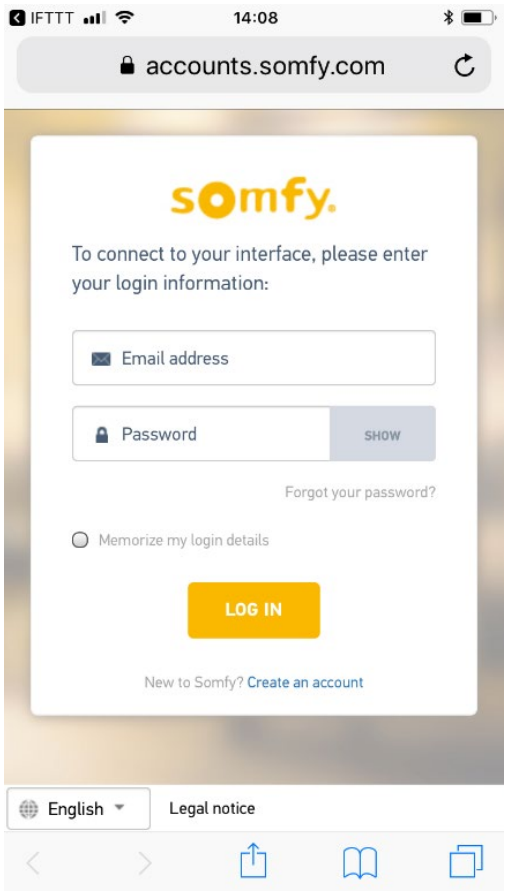
5. Select “services” then select [TaHoma North America]

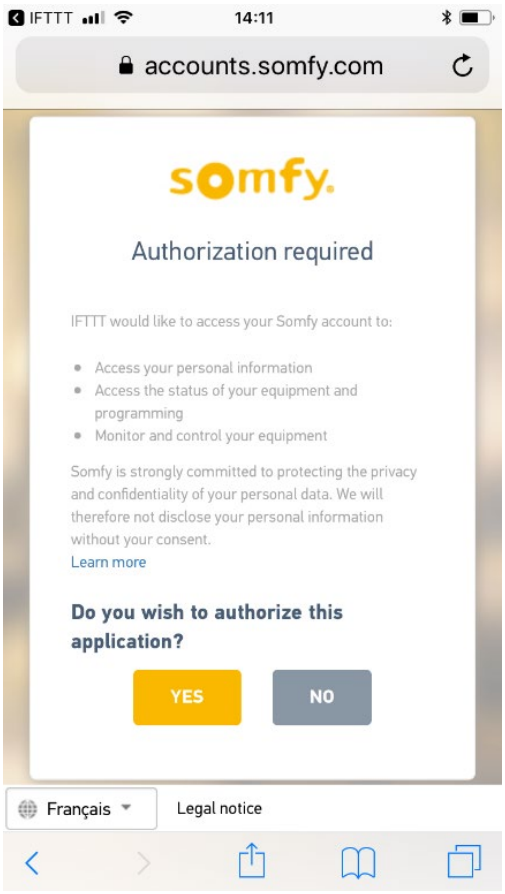


6. You will find applets proposed by [TaHoma North America]. Select the Applet you like and connect to it.



7. Enter your TaHoma login (email address) and password to connect it to IFTTT (Only for the first time when you connected to the service)



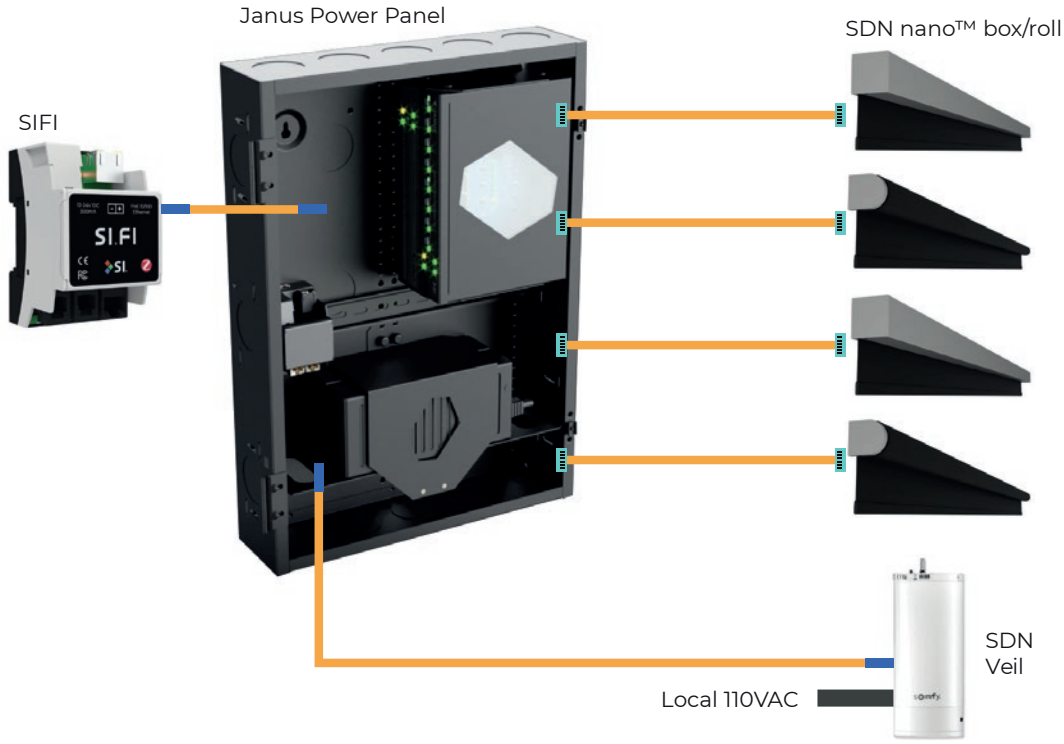


Note: As mentioned in the “Before you begin integration with Zigbee section of this document”, and before any attempts to Integrate Link PRO Z or TaHoma products, the Zigbee 3.0 system will need to be completely setup including any RTS shades that need to be paired with the Link Pro Z or TaHoma BEFORE you begin your 3rd party integration.

485

Before you begin your integration with 485

Requires a fully operational SI 485 system with all shade limits set (including the MY position if desired) and a fully commissioned SI.FI



Integration with 485 via RTS Receiver

Using an RTS gateway for every 4 shades or groups (for a maximum of 16 shades/groups) can provide a 485 system the ability to integrate with Alexa. This will only work with an SI JANUS system. The Somfy Power Panel is not compatible with this type of integration.
You will need a fully commissioned JANUS system including all shades limits set via SI.FI, an RTS remote, and the SI USB to 485 Programming kit. You will also need to download the free IoS or Google Play app called myLink from Somfy.

An RTS gateway is connect to an available device port on the JANUS unit as shown above. JANUS provides the power to run the RTS gateway.

This procedure requires three main integration setups;

1. RTS to SDN receiver Setup
2. RTS to SDN receiver RTS Gateway Channel Pairing
3. SDN Group Configurations

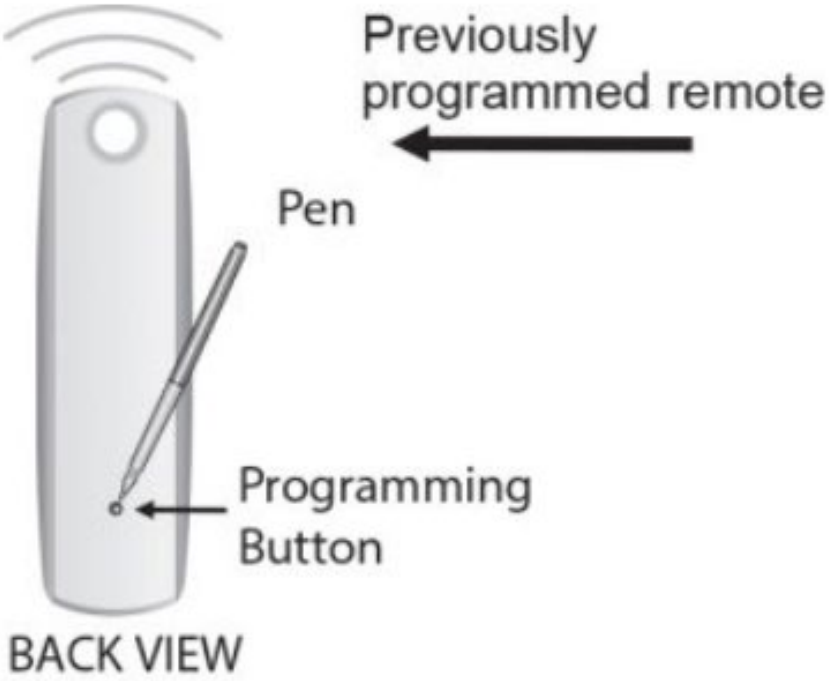
Step Process - Integration with 485 via RTS gateway

RTS to SDN receiver initial setup:

1. Plug in the RTS Receiver to a device port on a Janus and ensure the LED remains illuminated red.
    a. If the LED goes off after a few seconds, then the receiver is already setup. If the receiver needs to be returned to factory settings, it may be reset by holding the programming button on the front of the Receiver for 3 seconds (until the LED illuminates red).

2. On the first RTS transmitter, select the channel that will be identified as Group 1.

3. Press and hold the RTS transmitter's programming button until the LED on the Receiver turns off then back on. Release the RTS transmitter's programming button and the RTS Receiver's LED will remain solid red.



4. Briefly press and release the RTS transmitter's programming button again. The RTS Receiver's LED will turn off and remain off. This is only required for the first RTS transmitter/channel (which cannot be an RTS gateway such as a LinkPro/myLink); when adding subsequent RTS transmitters or channels, this process should not be repeated.

RTS to SDN receiver LinkPro channel pairing

1. Open the myLink application associated with the LinkPro and navigate to the RTS programming section under myLink Settings -> edit -> RTS Programming Settings.

2. Press and hold the programming button of the remote used during the initial setup until the RTS Receiver's LED turns solid red.

3. On the myLink application press "Click to choose an RTS product icon", choose "Roller Shade", and click the "Program" button. The LED on the Receiver should turn off. If the LED does not shut off, push retry.

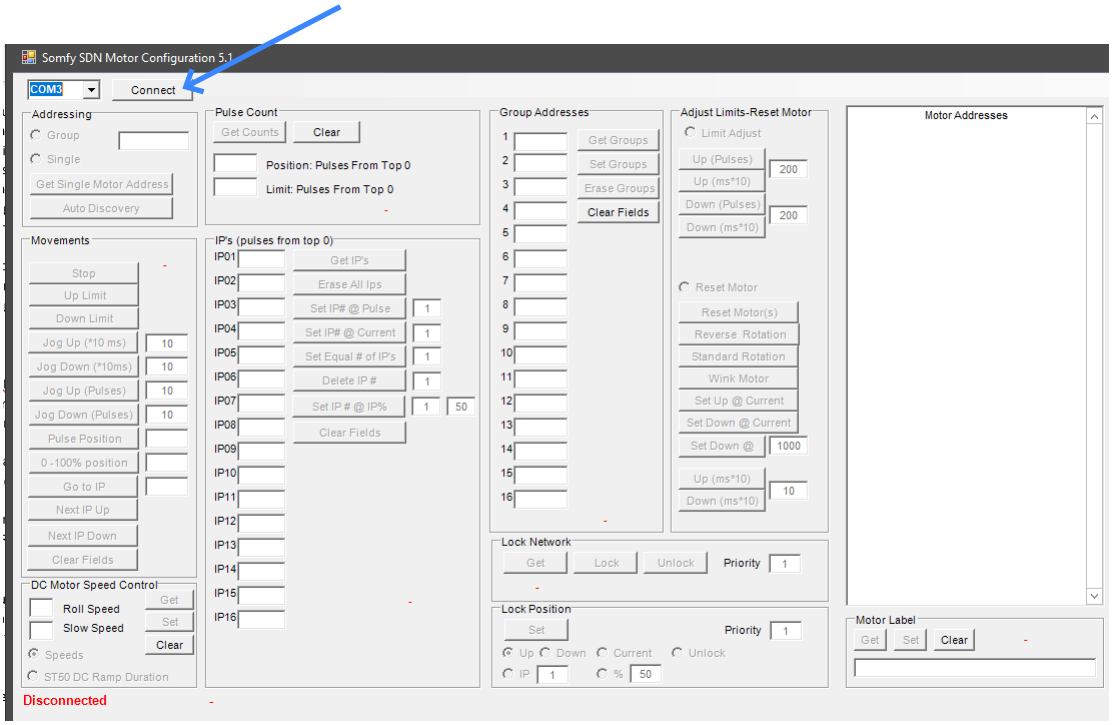
4. Repeat steps 2 and 3 for a total of 4 LinkPro channels per RTS to SDN Receiver. The LinkPro channels will bind to channels/groups 2-5 of the Receiver in the order they are paired.

SDN group configuration

1. Connect the RTS to SDN Receiver to a computer using the SI USB to 485 programming cable.

2. Download from SI [inset QR CODE] and open the Somfy SDN Motor Configuration software.

3. Click "Port" from the dropdown menu and select the COM port the USB cable is currently using and then click "Connect".



4. Click “Get Single Motor Address” in the “Addressing” section. This will be the address of the RTS Receiver on the 485 bus. Make note of this address as it can be used later to configure the RTS Receiver on a live 485 system.

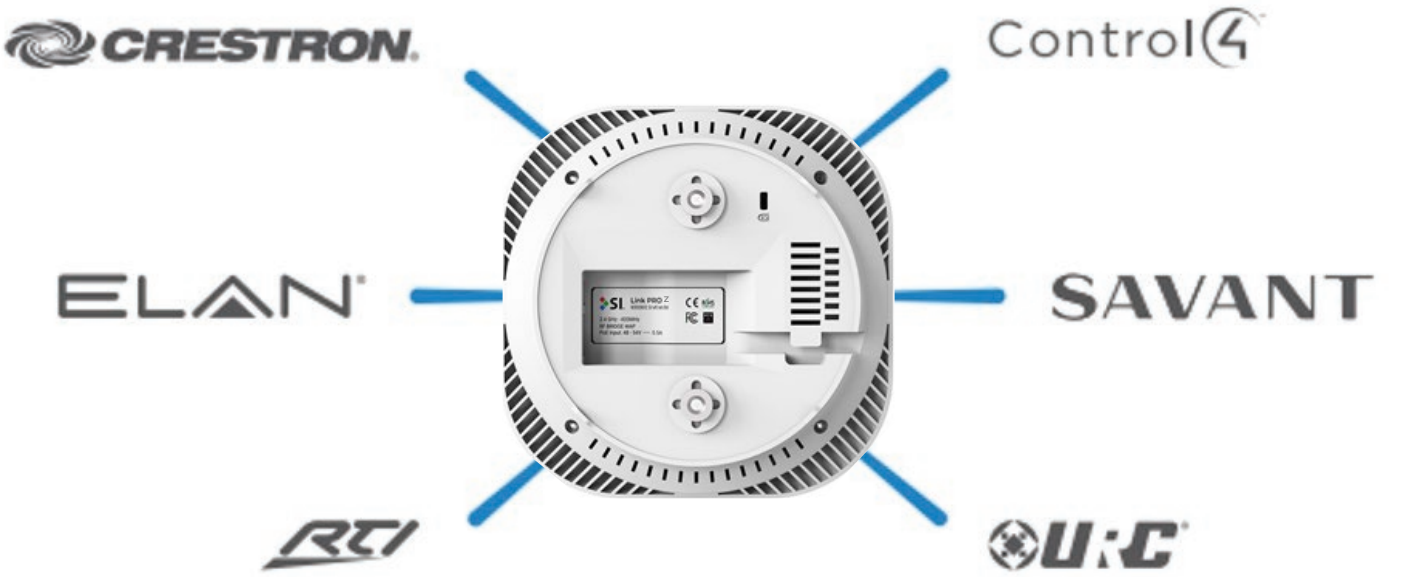
5. Enter the group addresses of the motors to be controlled using the bound LinkPro transmitters in the “Group Address” section. Addresses 2-4 will be the channels bound to the LinkPro in the previous section of this document in the order they were bound.

6. Press the “Set” button within the “Group Addresses” section and the Group Addresses will be sent to the RTS Receiver.

7. To endure the RTS Receiver has received the Group Addresses, press the “Clear” button in the “Group Addresses” section and then press the “Get” button. If the Group Addresses returned match the previously entered groups, then configuration is successful.

8. To confirm the proper RTS transmitter programming, unplug the Receiver from the computer and install it on the active 485 system. Press a directional button or channel button on a previously bound RTS transmitter. The RTS Receiver’s LED will flash and the appropriate motorized products will activate indicating successful group programming.

RTS



Before you begin your Integration with RTS

A fully operational SI RTS system is required with all shade limits set (including the MY position if desired) and at least one SI RTS transmitter.

The RTS Gateway such as Link PRO or myLink must be fully operational and programmed with all desired RTS channels using the Somfy myLink app. The App must also be used to assign a system ID for identification

Integration With RTS via LinkPro

Download App from Apple App Store or Google Play

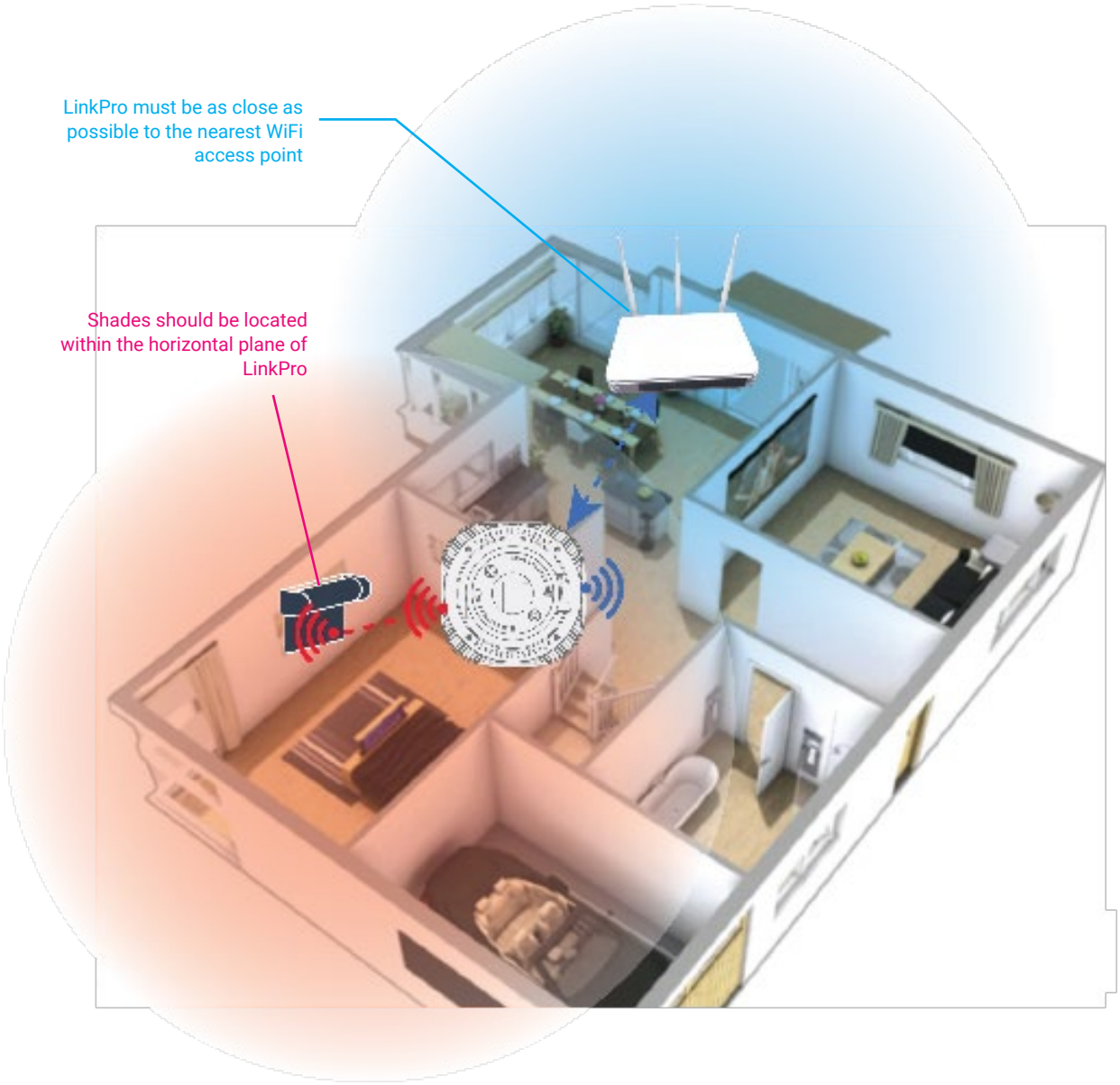
Available on the App Store

GET IT ON Google play

- “telis remote on your phone”
- Scalable
- Scenes and schedules
- Easy to program
- Local and remote access
- Easily add users

- Over the air firmware updates
- Integration Support
- Demo mode
- English, Spanish and French
- DOES NOT set limits or “copy & paste” new transmitters
- Requires fully operation RTS installation w/ limits set and at least 1 programmed RTS transmitter

Wifi and RTS Device Range



Must be located as close as possible to the nearest WAP.

Work best within 30 ft of shades and the horizontal plane of Link Pro.

-65dBm or better

Step process - Integration With RTS via LinkPro

Step-by-Step – Ten steps to Integrate myLink or Link PRO with Alexa

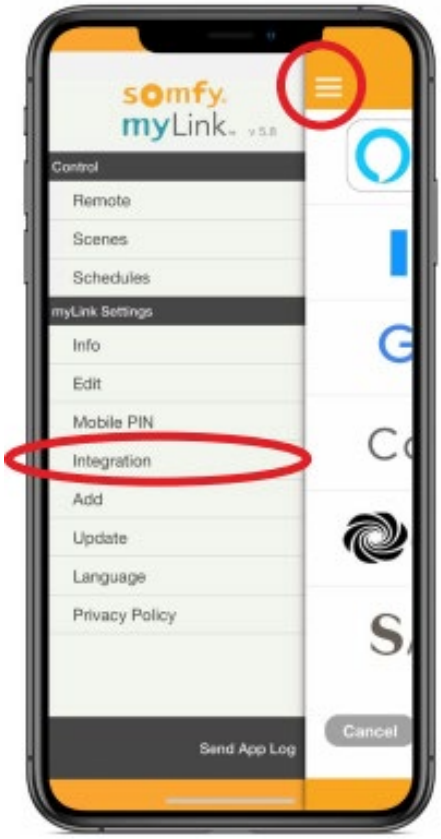
Step 1.

Get Started with Amazon Alexa

- In your Somfy myLink app, SELECT the menu bar at the top left corner.

- SELECT “Integration.”

- SELECT the “Amazon Alexa” icon.



Option 1
Link a New Amazon Account

Step 2.

. Link a New Amazon Account

- SELECT “Link New Account.”

- In the Setup Wizard, SELECT the “Link New Account” button if:

· You are connecting your Amazon account to your myLink app for the 1st time.

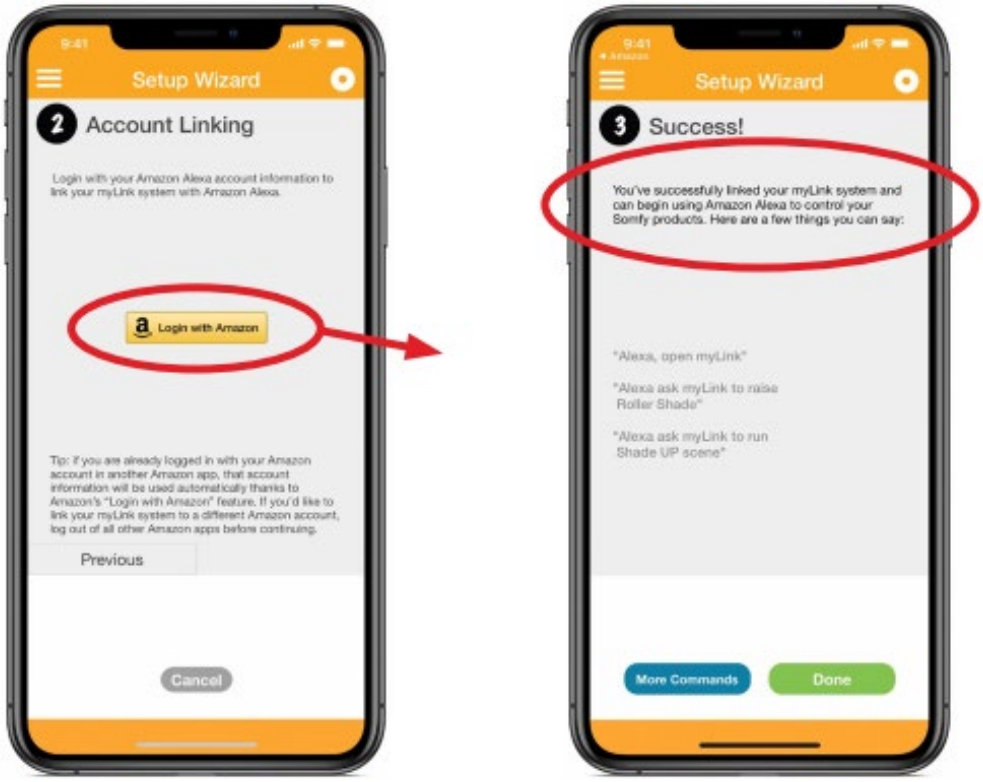
· You have deleted / reinstalled all apps and would like to setup your existing myLink system

- The Setup Wizard will now take you to the “Enabling Skill” screen.

- SELECT “Next.”

Step 2 (cont.)

Link a New Amazon Account

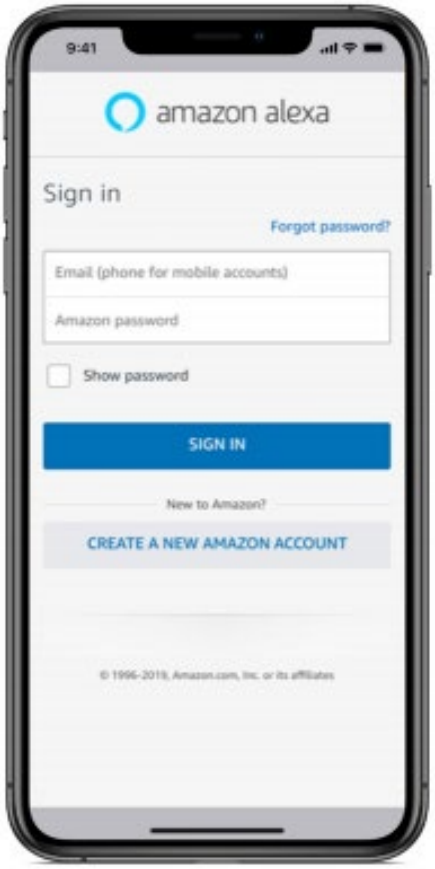


- SELECT “Login with Amazon” to continue.

- Next, you’ll see the Success screen in the Setup Wizard. Your myLink app has been successfully llinked to your Amazon Alexa account.

Step 2 (cont.)
Link a New Amazon Account

NOTE:: The Somfy myLink skill must be enabled through your Amazon Alexa app.

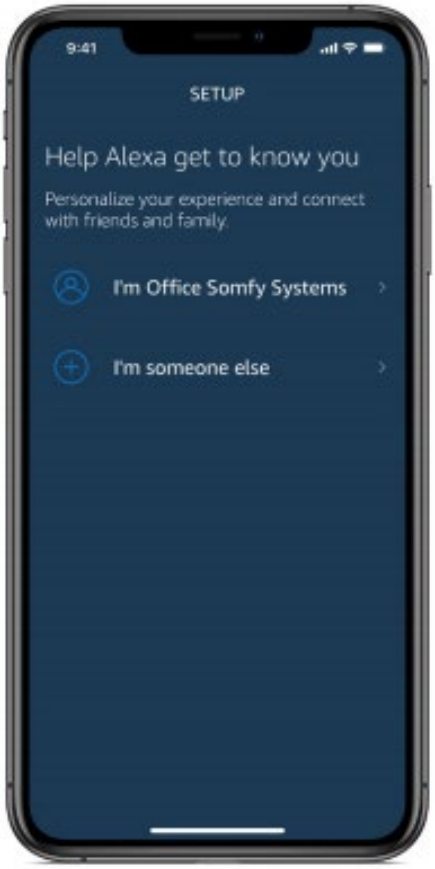


- In the Amazon Alexa app, sign in using your associated Amazon email address.

- Next, enter your Amazon password.

- Next, SELECT “Sign In” to continue.

If you are new to Amazon, you’ll need to “Create a New Amazon Account” by selecting this button at the bottom of the sign in screen. You will be prompted through Amazon’s set-up process.

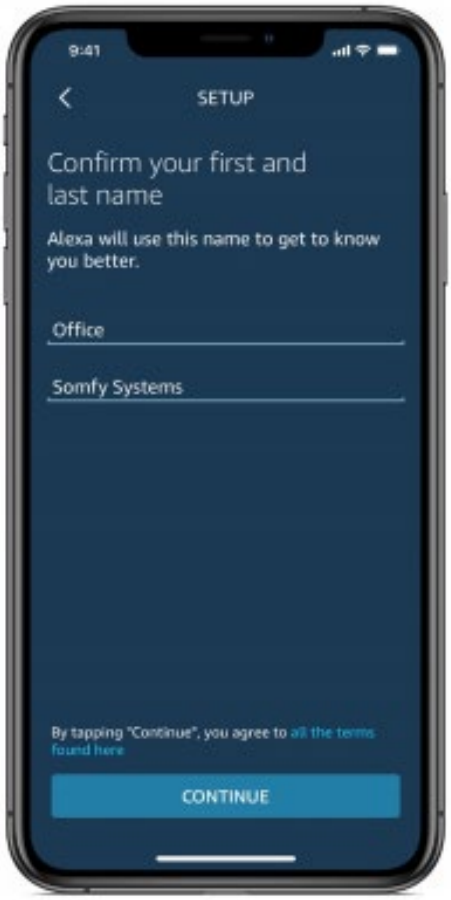


- On this screen, confirm you are the user associated with the email credentials entered on the previous screen. OR, select that you are someone else.

In this example, we’ll SELECT “I’m Office Somfy Systems.”

Step 2 (cont.)

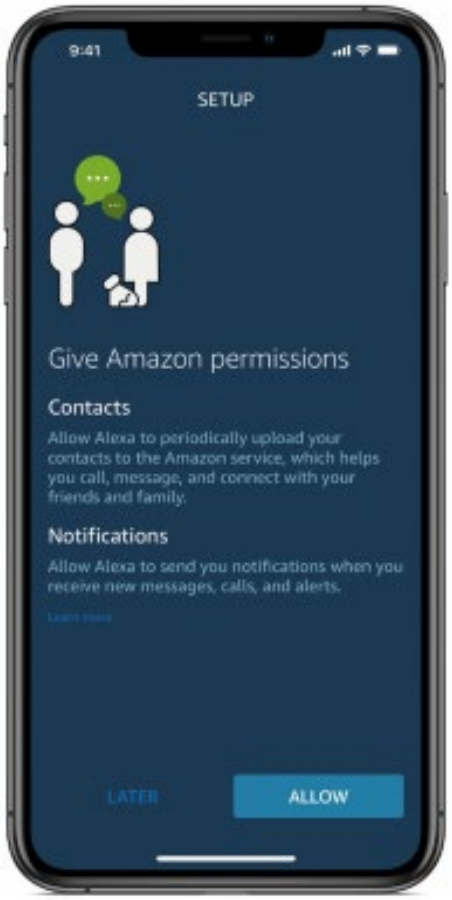
Link a New Amazon Account



- Confirm your First and Last name.

- SELECT “Continue.”

NOTE: By selecting “Continue,” user is agreeing to all of Amazon’s terms and conditions.

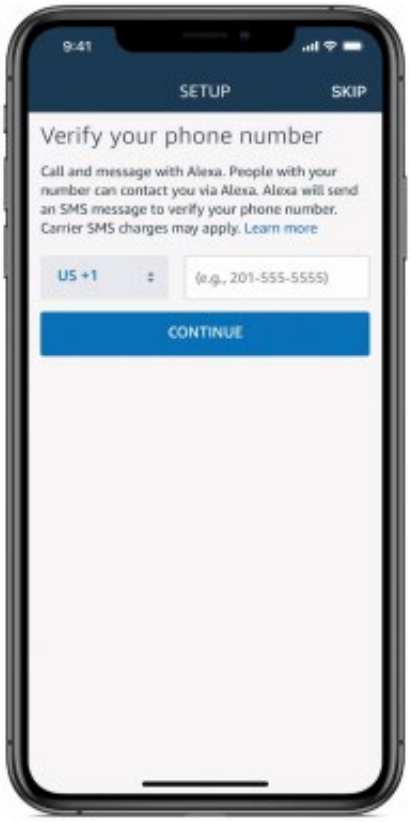


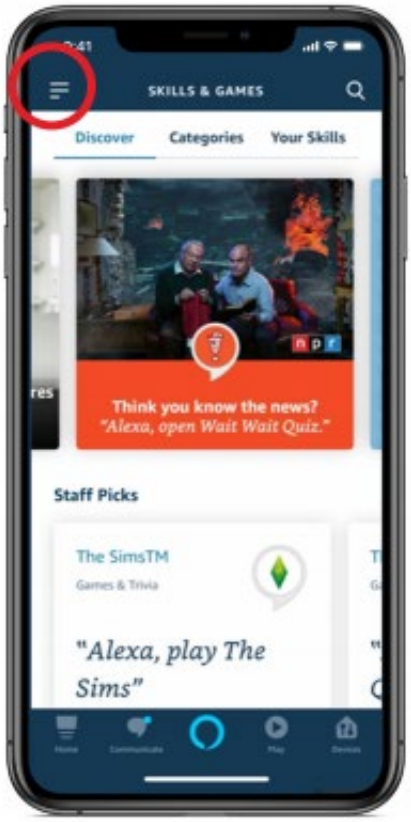
-If you would like Alexa to have permissions to your Contacts and to send Notifications when you receive new messages, calls, and alerts, SELECT “Allow.”

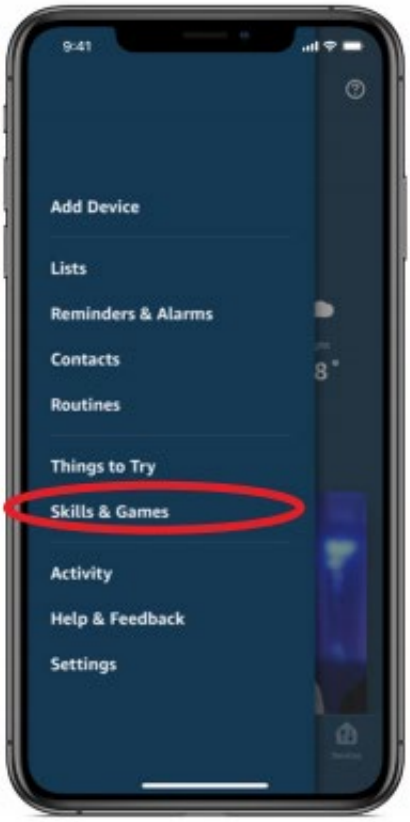
- Or, SELECT “Later” if you want to do this step at another time.

Step 2 (cont.)

Link a New Amazon Account







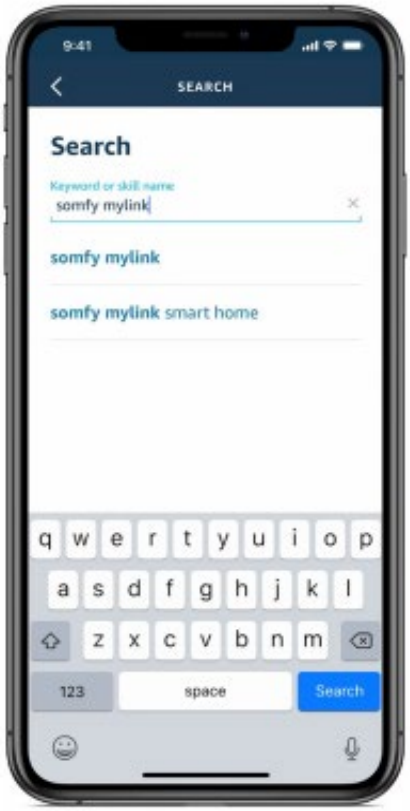
- In order to use Amazon Alexa to send/receive calls and messages, you'll need to verify your phone number.

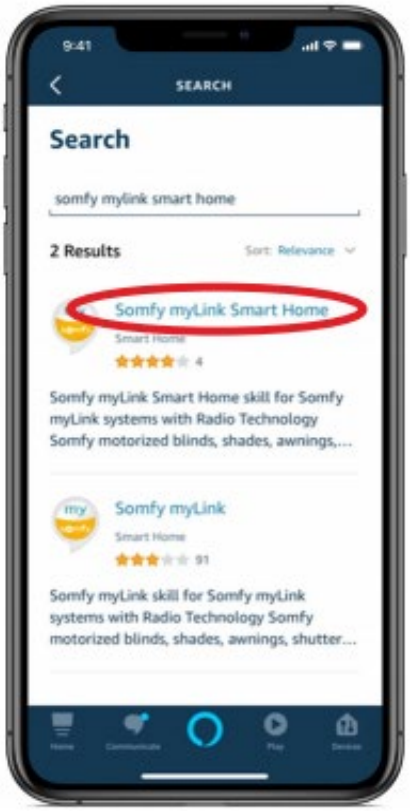
- SELECT "Continue" when finished, or SELECT "Skip" if you prefer not to use these features at this time.

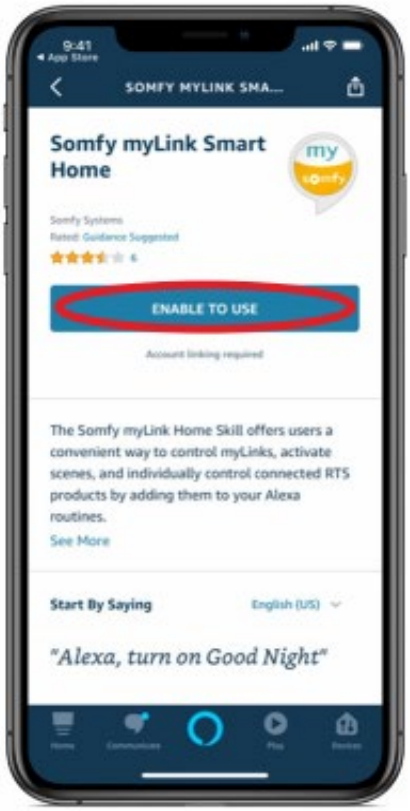
- On the main menu of the Alexa app, SELECT "Skills & Games" to search for the Somfy myLink skills.

Step 2 (cont.)

Link a New Amazon Account







- In the Amazon Alexa search field, TYPE "Somfy" or "myLink" or "Somfy myLink" to find all related myLink skills for Alexa.

- SELECT "Somfy myLink Smart Home."

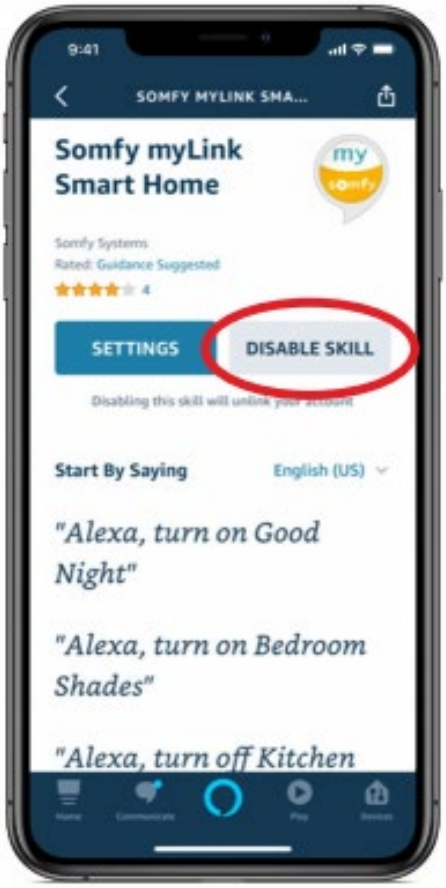
- SELECT "Enable to Use."

NOTE:
Using the "Somfy myLink Smart Home" skill enables users to create and execute Routines.

Routines are a series of actions from one or more devices using a single voice command, or triggered by time of day, or other device triggers (such as sensors).

Step 2 (cont.)

Link a New Amazon Account



- To Enable / Disable the skill, select the cor responding button.

- When setting the skill for the first time (or after unlinking your account), the ENABLE SKILL button will be visible.

NOTE:
Disabling the Somfy myLink Smart Home skill in the Amazon Alexa app will unlink your Somfy myLink account.
You may be prompted to log back in.

You can now control your RTS Somfy-motorized solutions with Amazon Alexa.

Option 2:
Linking an Exiting Amazon Account

Connecting a Somfy myLink to an already linked Amazon Alexa account?

Step 2

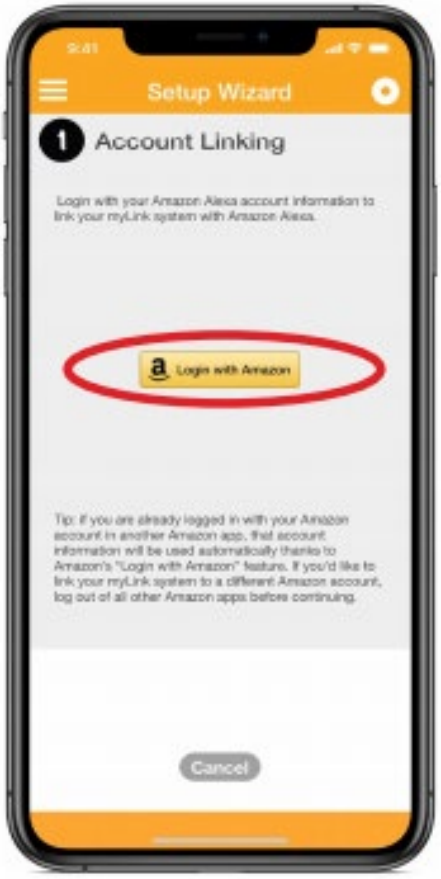
Already Linked?

- In the Setup Wizard, SELECT the “Already Linked?” button if you are reconnecting your Amazon Account to your myLink app.

- SELECT “Ok” after reading “Before you continue...” pop-up screen.

Step 2

Already Linked?



- On the Setup Wizard's Account Linking page, SELECT "Login with Amazon."

Please ensure that you are not logged into any Amazon apps when attempting to link accounts.

- Once connected, you will automatically seethe Success! screen in the Setup Wizard.

- You can SELECT the "More Commands" button for a complete list of voice control options using the Alexa skills.

- When you are finished, SELECT "Done."

>

More Voice Commands

- SELECT “More Commands” to see a complete list of voice commands for your newly connected Somfy myLink.

- List of commands. Create your own personal routines in the Amazon Alexa app to control your Somfy-powered RTS solutions.

Step process - Integration with RTS via LinkPro/myLink

Step-by-Step – Ten steps to Integrate myLink or Link PRO with Google Assistant via IFTTT

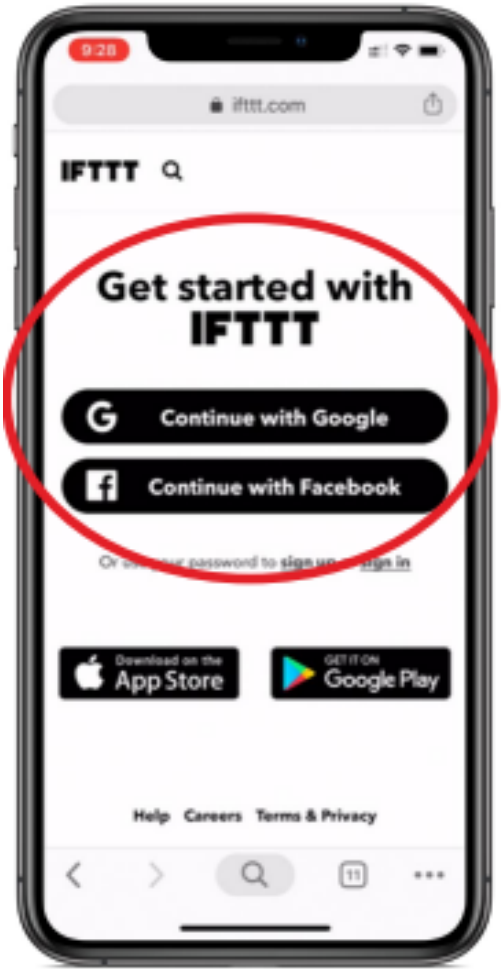
Note: Before using myLink™ with IFTTT, be sure to create “scenes” within the Somfy myLink app.

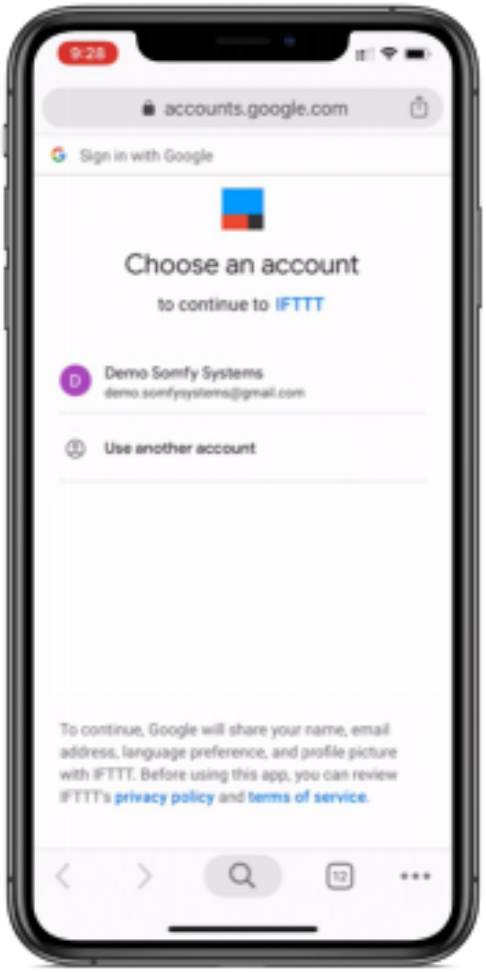
Step 1

Before you get started, make sure you have an IFTTT account created.

- Go to IFTTT.com on your PC or Mac, or download the IFTTT app on your smartphone or tablet.

- Sign in or sign up





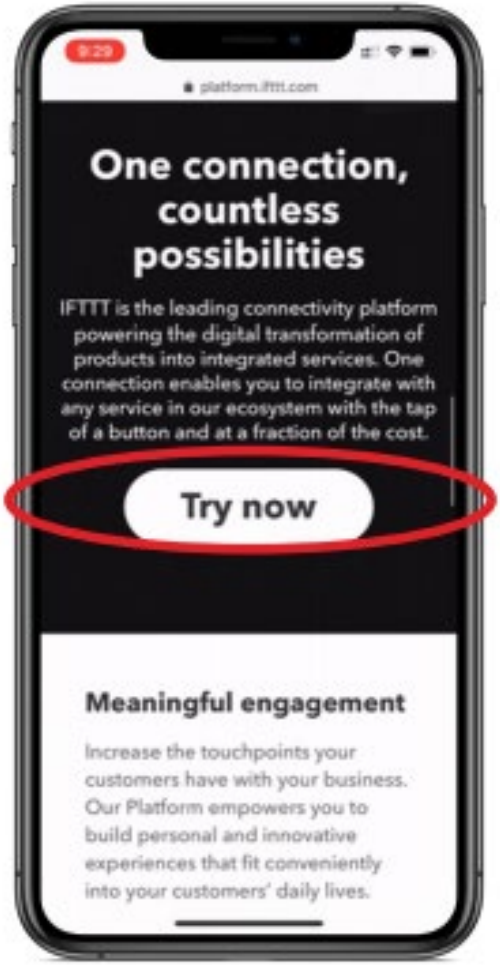
You're ready to begin creating your Applet.

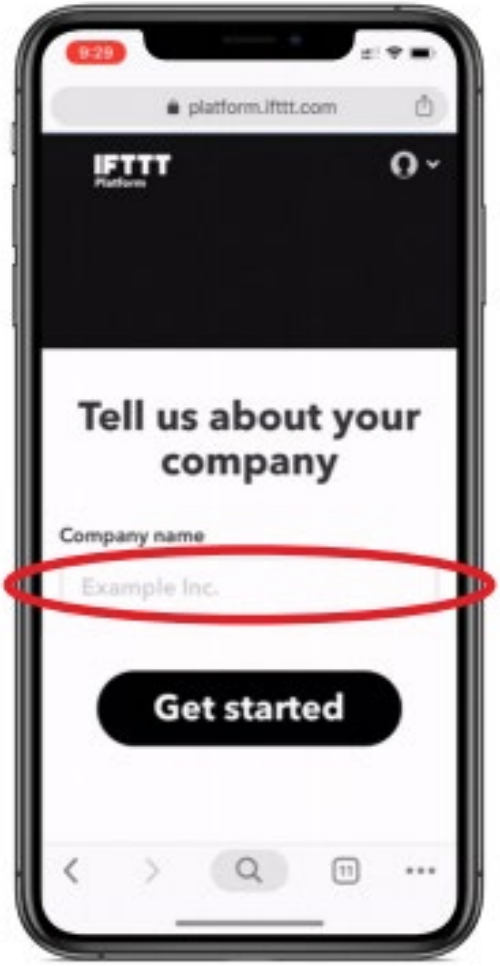
- SEARCH your web browser for "IFTTT Maker" or use the URL: https://platform.ifttt.com/maker

- On the IFTTT Platform screen, SELECT "Try now."

- Next, you'll need to create an organization (or company name for yourself) to complete the next steps.

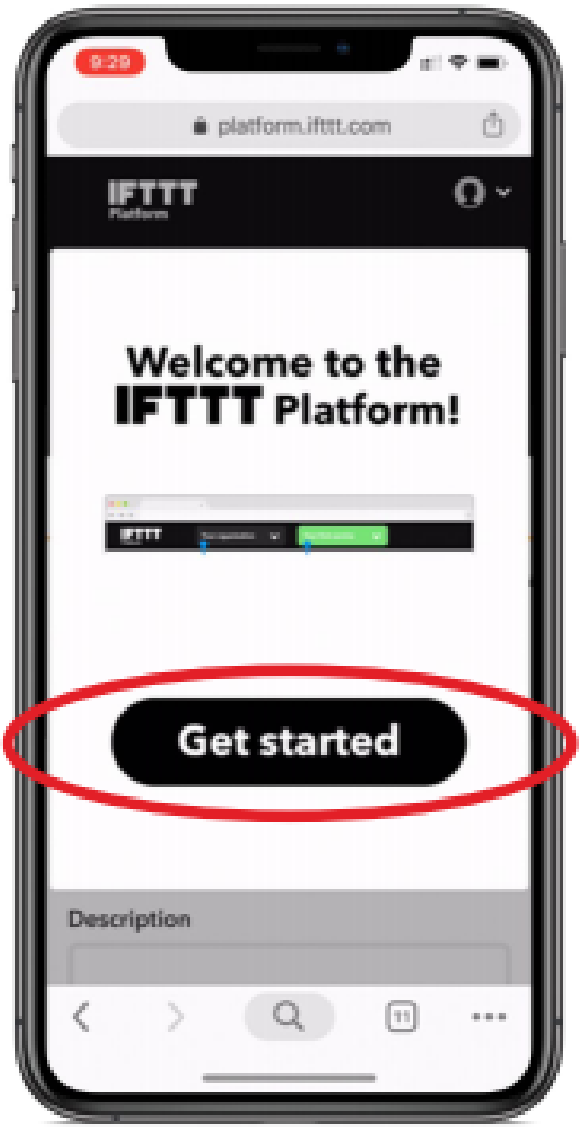
- SELECT "Get Started."





Next, you'll see this screen.

- SELECT "Get started."

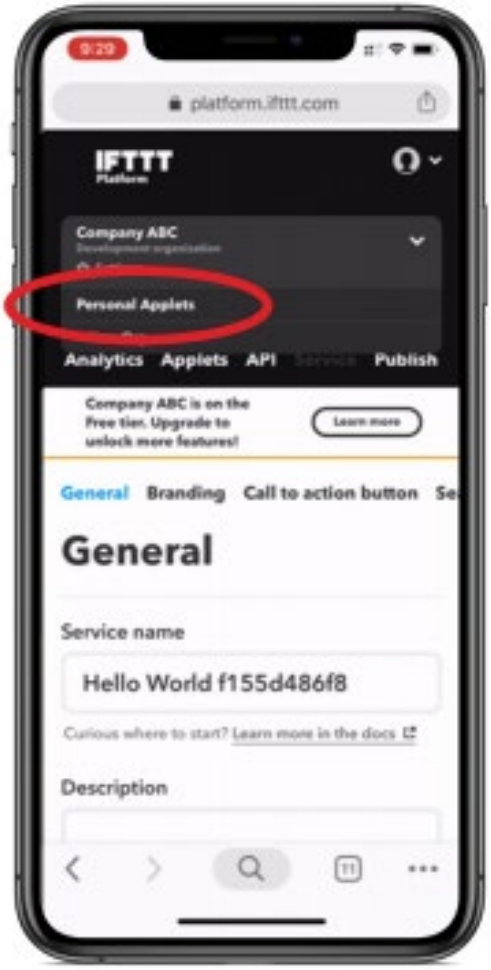


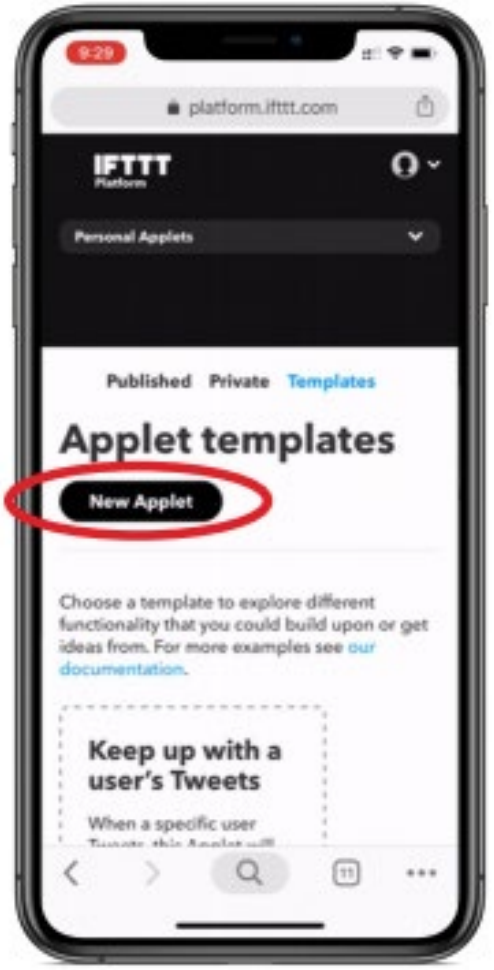
- In the top left corner of your screen, there is a drop down list which includes your recently created company name.

- CLICK drop down arrow.

- SELECT “Personal Applets.”

- On the next screen, SELECT “New Applet.”





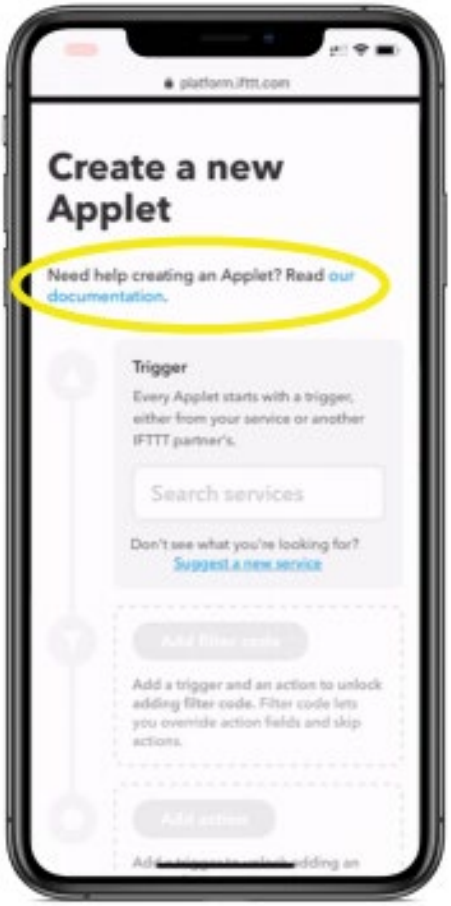
Step 2

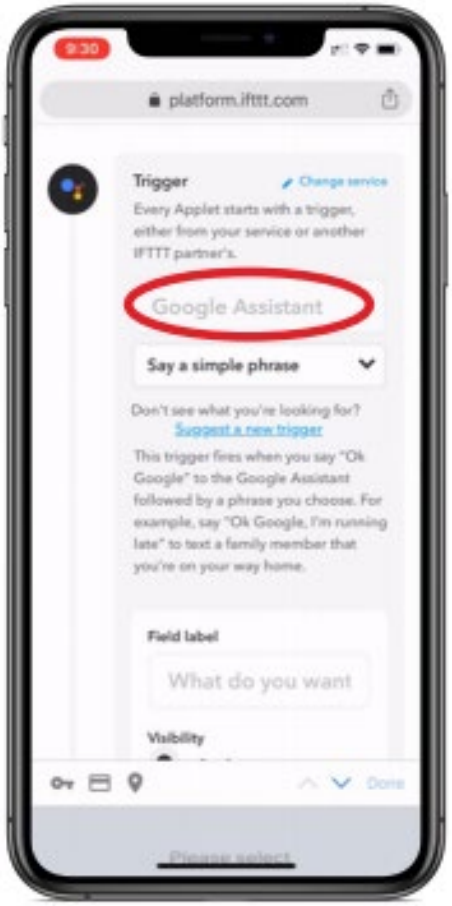
You will be directed to the “Create a new Applet screen.”

Note: Please reference IFTTT’s linked documentation located on this page for additional support with creating IFTTT Applets. **

- In the Trigger field, SEARCH for your desired service. In this exercise, we are using Google Assistant.

- SELECT the type of phrase you’d like to use to trigger your services.

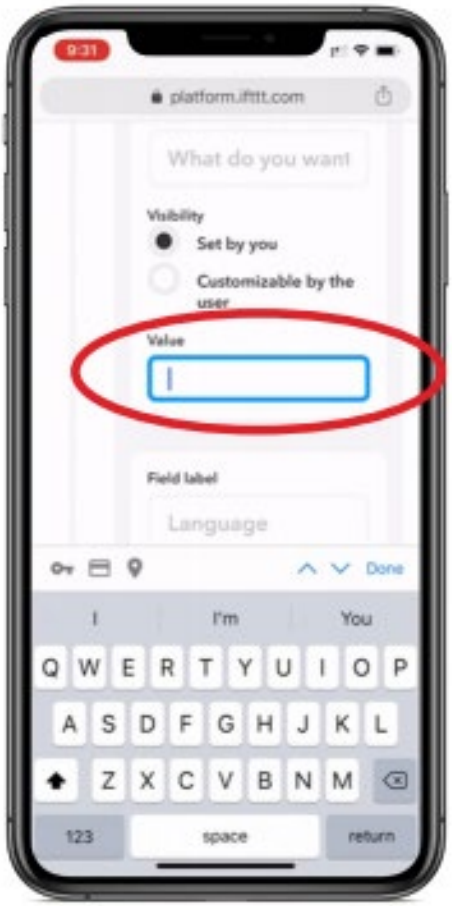


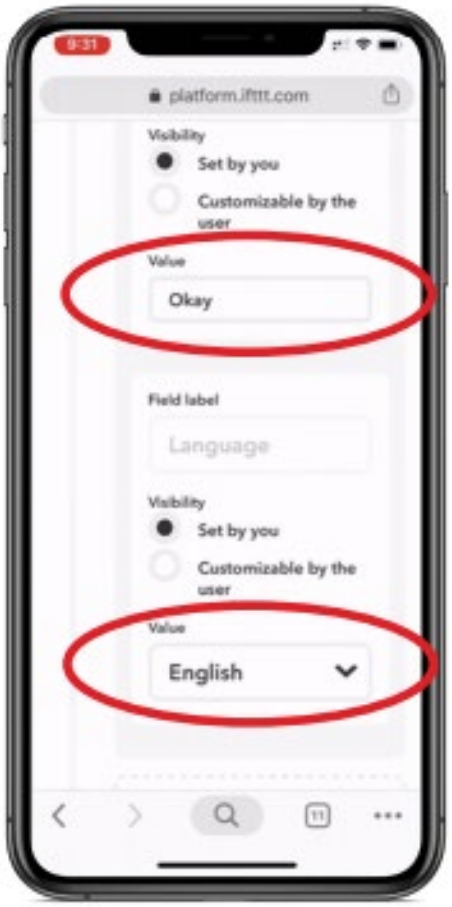


- SET your command phrase for your desired trigger service (i.e., Google Assistant).

- SET the default value for how Google responds.

- SET your desired language (English, French, Spanish) and the corresponding visibility.



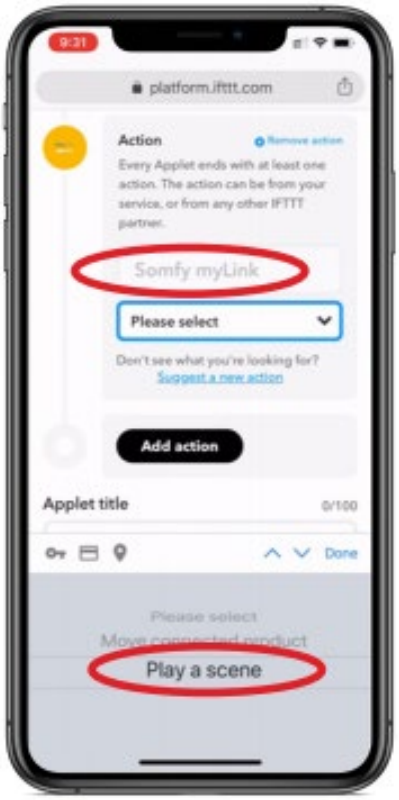


Next, let's find our service Applets.

- SELECT "Add action."

- In the search field, TYPE "Somfy myLink."

- In the drop down list, SELECT "Play a scene."

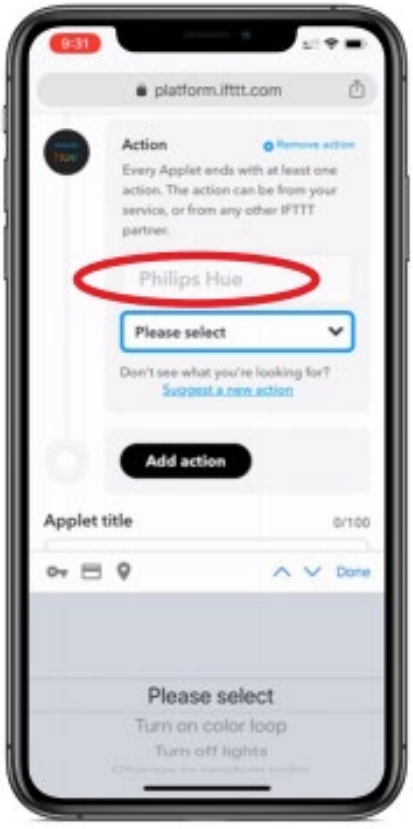


Let's add Phillips Hue lights to this Applet.

- SELECT "Add action."

- In the search field, TYPE "Phillips Hue."

- In the next drop down list, SELECT which function you'd like this service to perform in your Applet.

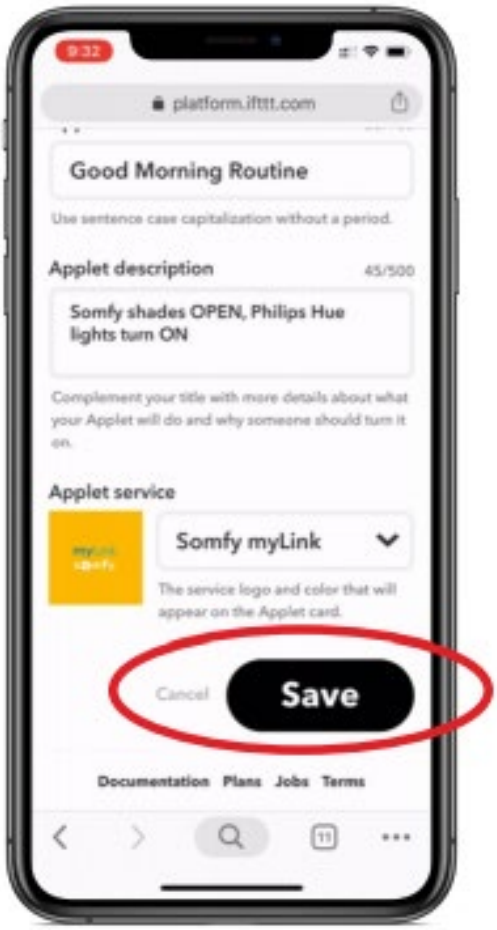


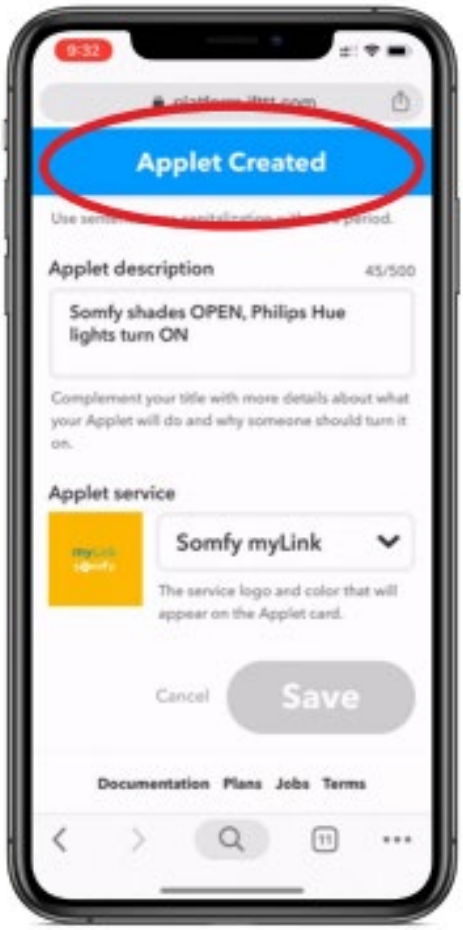
Let's confirm our services.

- Create your Applet title and description.

- When finished, SELECT "Save."

Note: You'll see a blue banner showing your Applet has successfully been created.

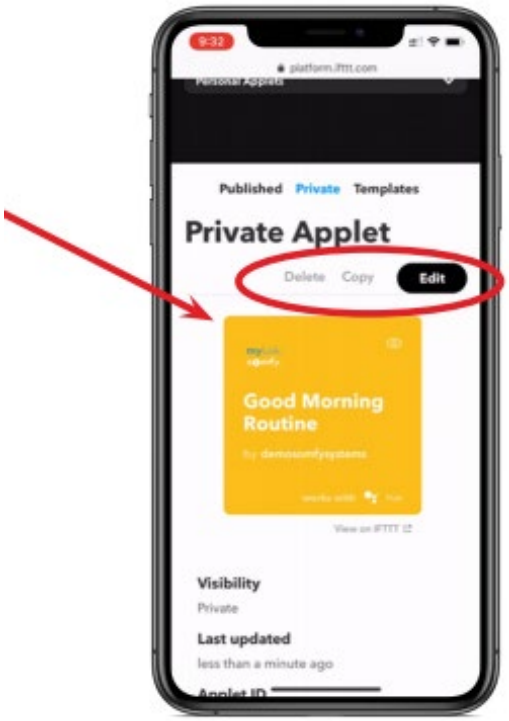




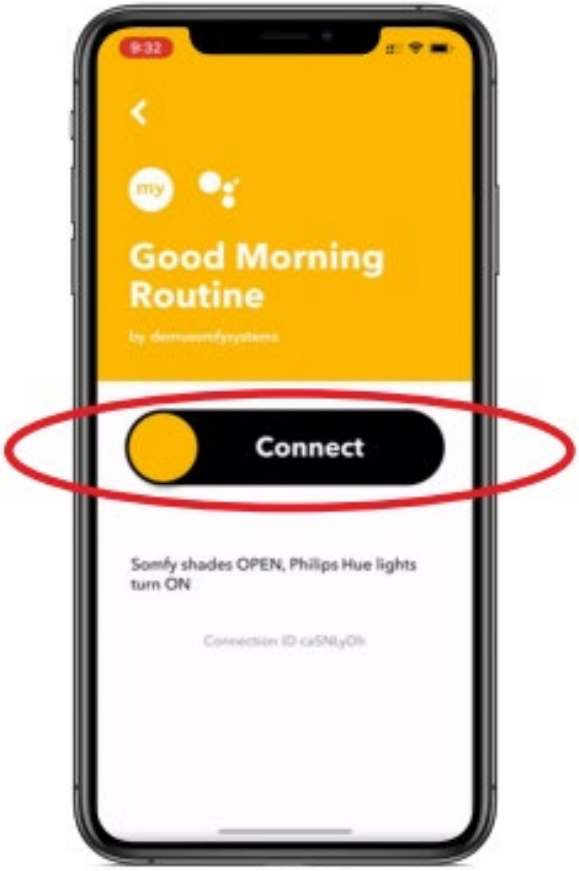
- Your newly created Applet will appear on the next screen.

- In this section, you can DELETE, COPY, or EDIT your newly created Applet as needed.

- **Next, CLICK on the Applet you've created.**

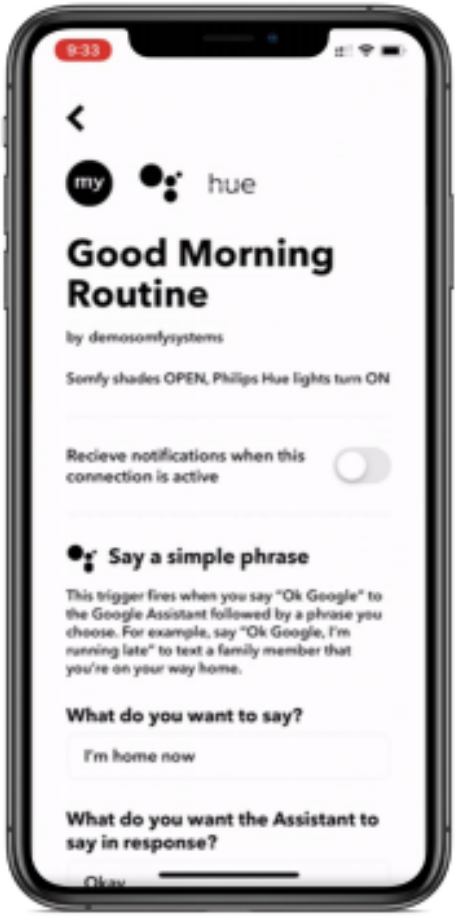


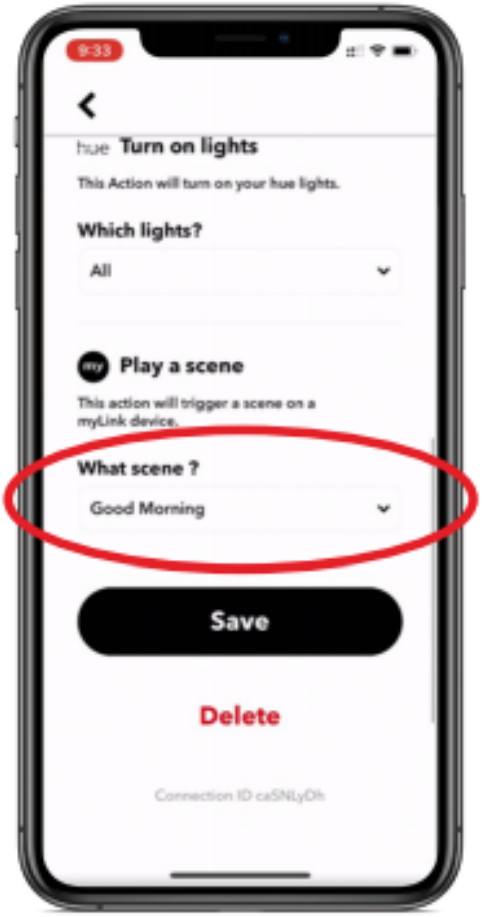
-> SELECT "Connect" to enable your Applet



On the next screen...

- For the myLink “Play a scene,” SELECT the scene.
- For Philips Hue, SELECT which lights to control, or you can choose All.
- SELECT “Save” when done.

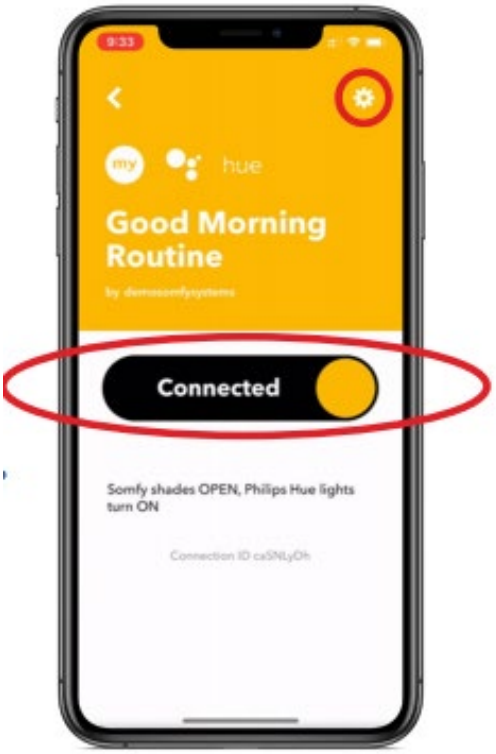




Your Applet is now “Connected!!”

- Give it a try!

The “Settings” button takes you to your edit routine page where you can view activity and check your Applets.



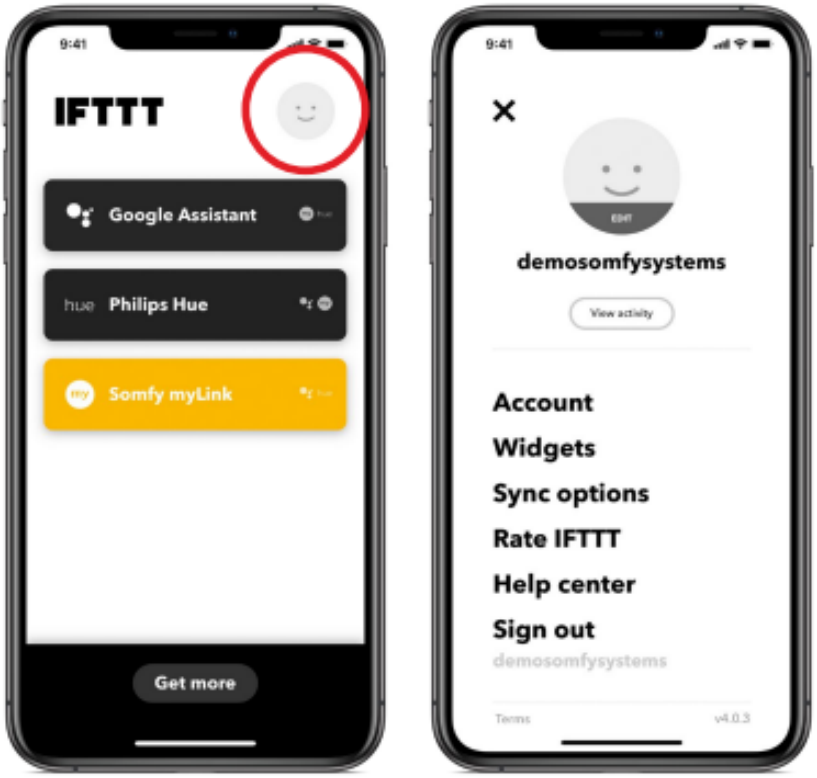
Using IFTTT Maker to create one trigger using multiple services.

For Your Information

- In the upper right hand corner you can find your email / account information.

- Any Applets you have created can be found on the home page (left screen—app only).

- In the IFTTT maker platform, any Applets created are located in the “Private Applets” section.



Integration FAQ

What do the different colors on the Link Pro LED indicate?

Blinking red to solid red indicated Link PRO is scanning for WiFi networks & will stop blinking when scan is complete. Rescan WiFi by clicking on setup button

Solid Green: Connect to the configured WiFi.

Slowly blinking Green: Link Pro is trying to connect to the configured WiFi network but cannot connect or has been disconnected

Quick Red Flash: Link PRO is transmitting using the 433MHz radio

Solid Amber: Firmware is being updated

Should I choose 2.4GHz or 5GHz for Link PRO?

- Choose 2.4GHz if the home construction is concrete, or multi-floor, or stucco walls.
- Choose 5GHz if single floor, no concrete or stucco walls and if the project has a high noise floor at 2.4GHz or many other networks such as Zigbee or large 2.4 WiFi deployments. For more information on this please consult with the RTSDESIGN GUIDE available at www.screeninnovations.com

Which SI Shade products can I control with Control4?

All SI Shade products including Nano and Zen 2 can be controlled with Control4

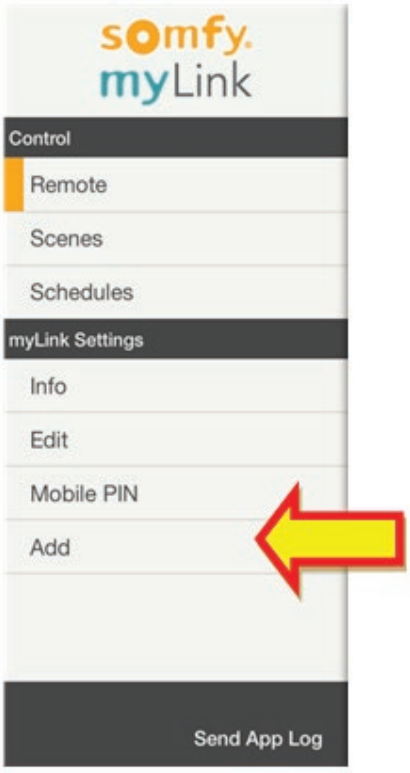
Which ports are needed for Link PRO control on my network?

- 55050
- 44040
- 40045
- 20000
- 44100
- 44200
- 1902

How do I update a Link PRO Network Settings to match my Control4?

In the myLink App Open the Menu

- Select ADD under “myLink Settings”



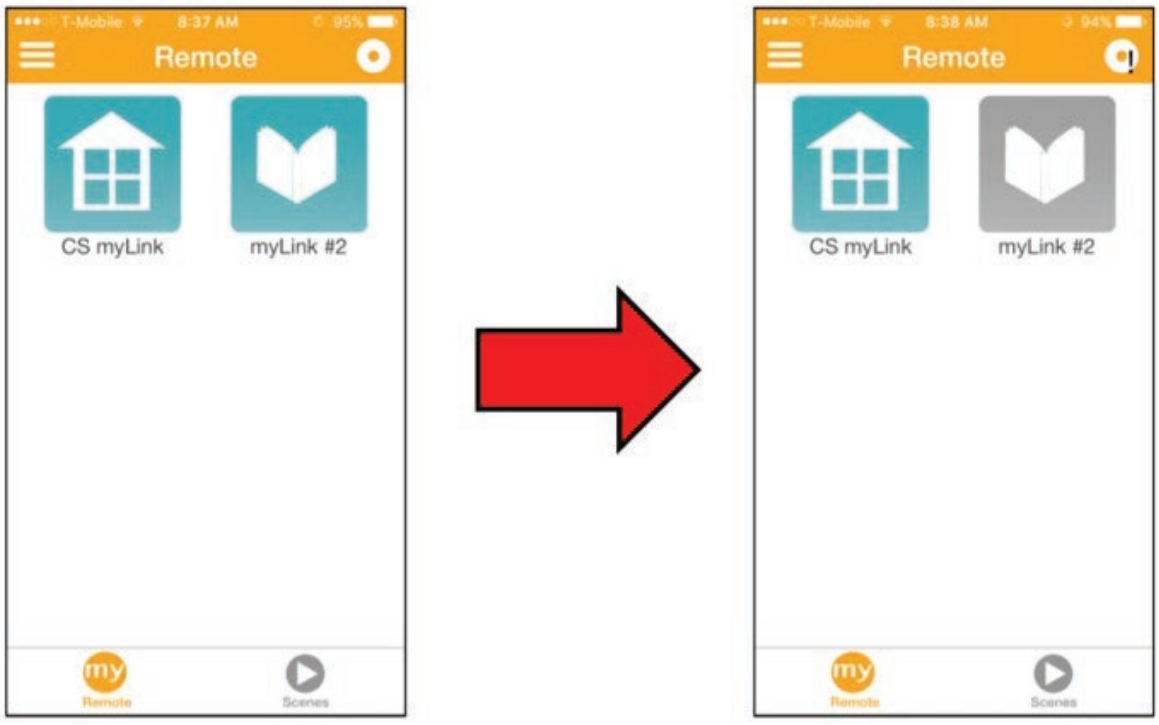
- Follow the instructions shown on your device to connect to your Link Pro
- After you select “Search for myLink”, you will need to select your network & current password for your network.

- Once you complete that and the Auto Configuration steps are finish, you will be asked if you would like to Erase or Continue.
- Select Continue, then you will see the icon for current Link PRO device.
- Select Next, then you will see all your current channels.
- Finally select Done as all your programming is still existing.

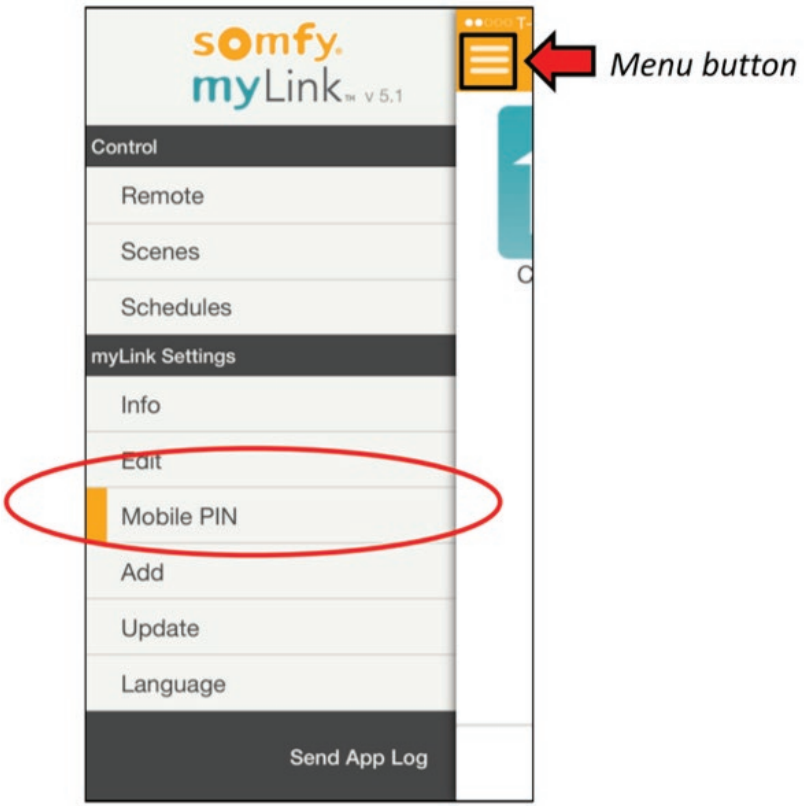
Once the first Link PRO has been successfully added, repeat the process to add the rest of the Link PROs.

How can I delete a Link Pro from the myLink app?

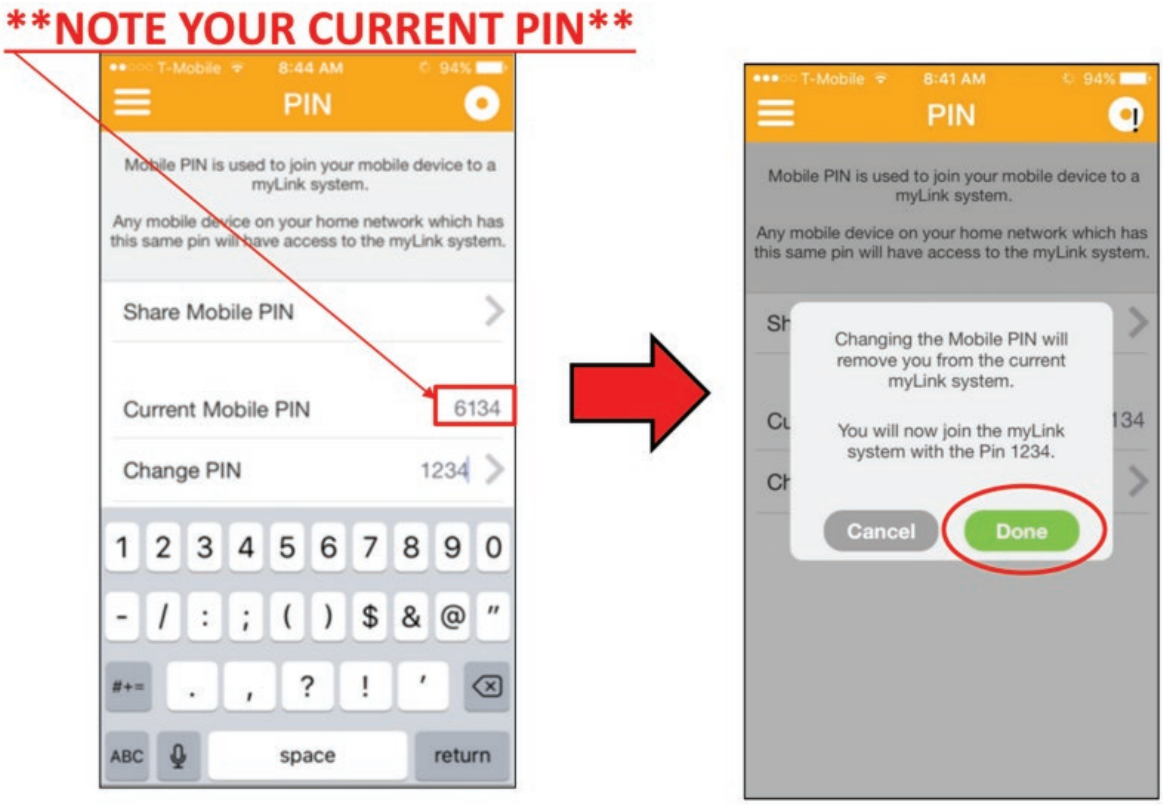
- Unplug Link Pro, and the Icon for it will go from Blue to Gray



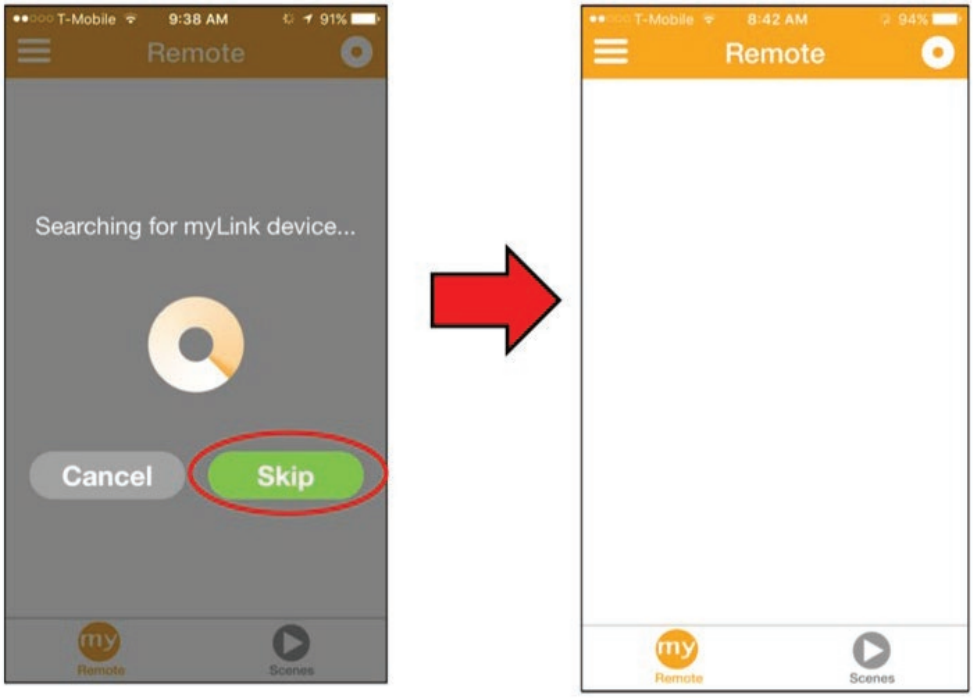
- Click Menu button, and select Mobile PIN.



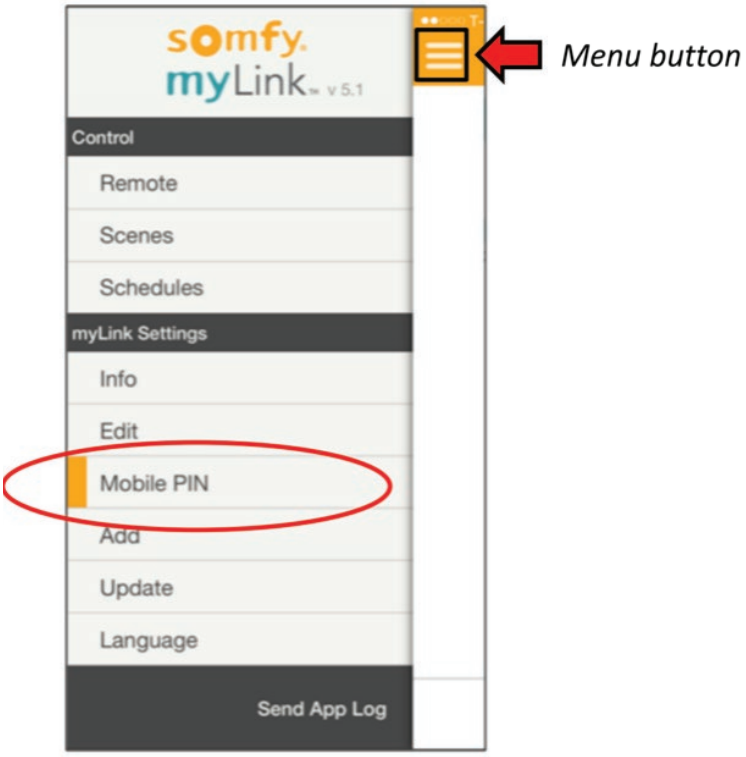
- Under “Change PIN”, enter random 4-digit number and select return. The select DONE



- Select Skip then you will see a blank page.

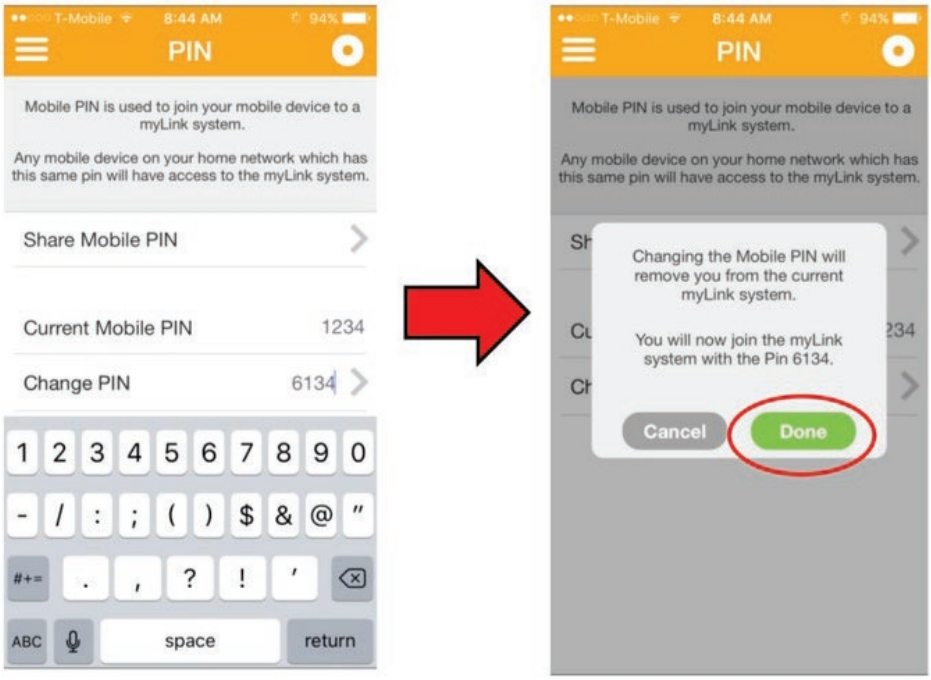


- Click Menu, select Mobile PIN.



- You will see that the current mobile pin is now the different number that you had just entered Under “Change PIN”, enter what your 4-digit PIN was, and then hit return.

Then select DONE. SKIP, then you will see a blank Remote page.



After selecting DONE, you will ONLY see your active Link Pro devices listed.

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