

REVISION HISTORY			
Revision	Description	Date	Author
1.0	Initial Release	1/24/2021	TDB

## Web Mountain Application Note

### RUC2 and Expert Alexa Features

Using the RUC2 with Alexa, the Echo Flex,  
And the Echo Motion Sensor



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## Introduction

The following application note was written and provided by RUC2 user Mark from Minnesota. Our thanks to him for the effort he put into this and for giving us permission to use it.

*Note: Alexa, Echo, and Flex are Amazon trademarked products.*

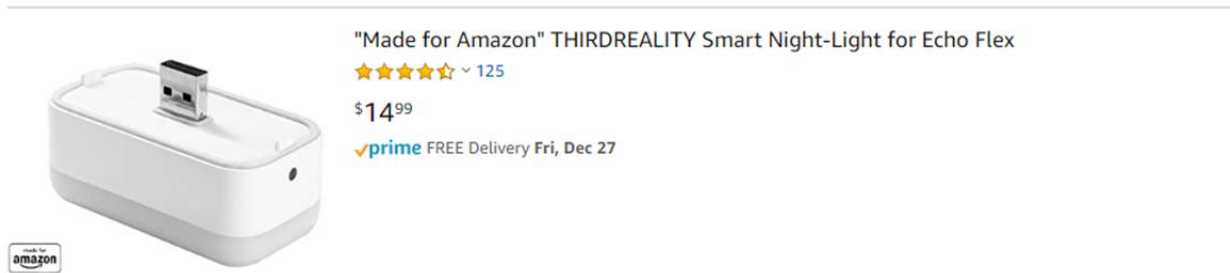
Two of the peripheral features of the RUC-02's connectivity with "Alexa" go beyond voice control. One is the ability to make use of the Echo Flex motion detector and the other is to take advantage of the Geofence system.

### The Echo Flex Motion Detector

The Echo Flex requires the Motion Detector add-on to function completely.



And



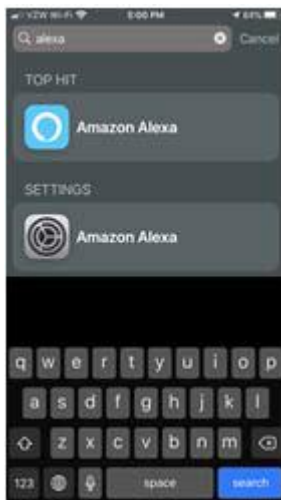
The two fit together using the embedded USB fittings:



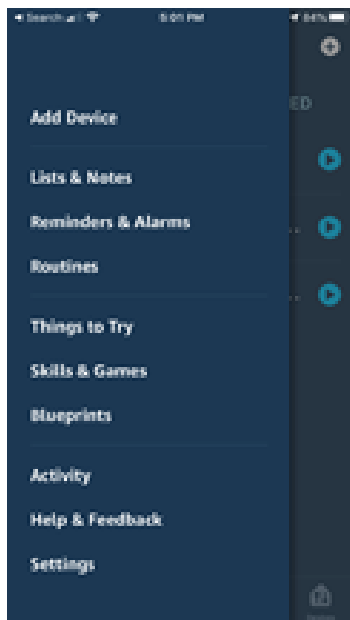
I had to install mine upside-down in the AC outlet because other fittings were in the way. It still functions:



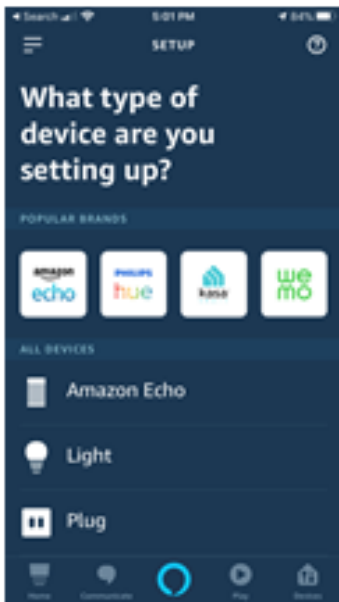
The next step is to add it to your Alexa devices by first launching the Alexa app:



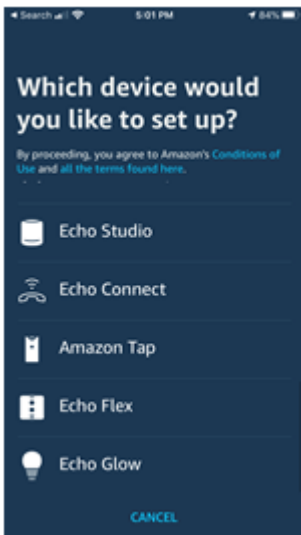
Click on "Add Device":



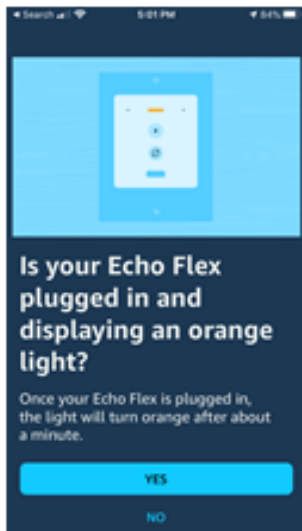
Choose "Amazon Echo" as type of device:



And then specifically "Echo Flex":

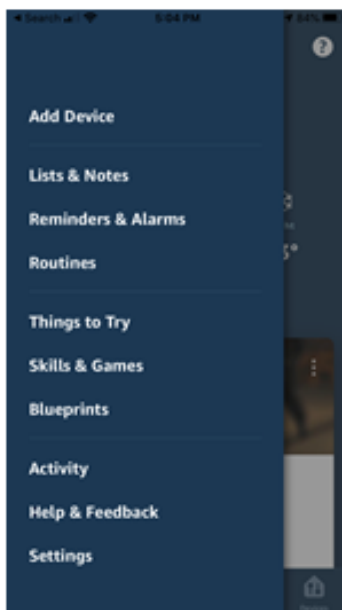


Presumably your Echo Flex is plugged in and displays an orange light:

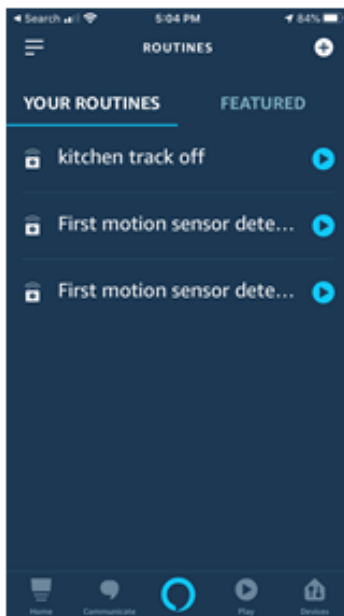


“Locking in” the existence of the Echo Flex does not take long.

Making it function for you involves creating a “Routine”:

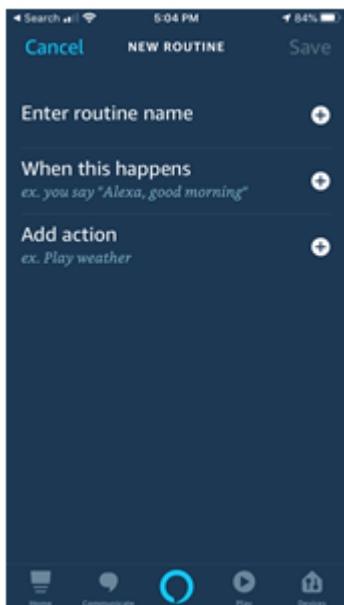


You may already have a list of routines. The “+” sign lets you create one for the motion detector:



This involves a three-step process:

- 1) Routine Name
- 2) Identify the trigger, which Alexa calls “When this happens.”
- 3) Add action.



Alexa has good manners:



For instance, “kitchen tracks on” could be a name:

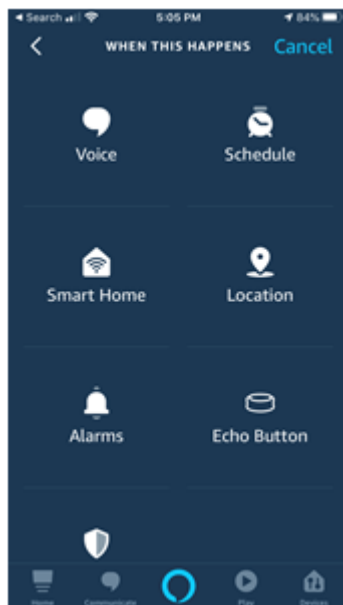


For the trigger, there is a “+” sign that lets you browse all of your existing device powers:





Select "Smart Home."

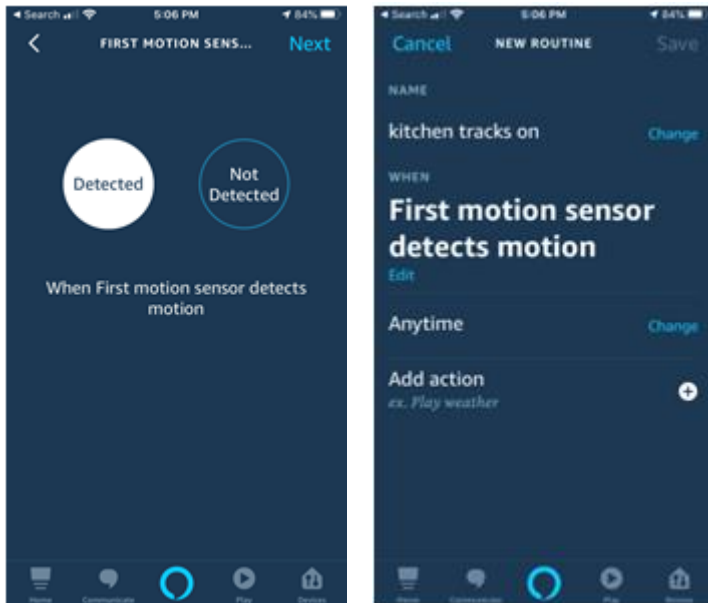


Then choose the name of your motion sensor as the device:

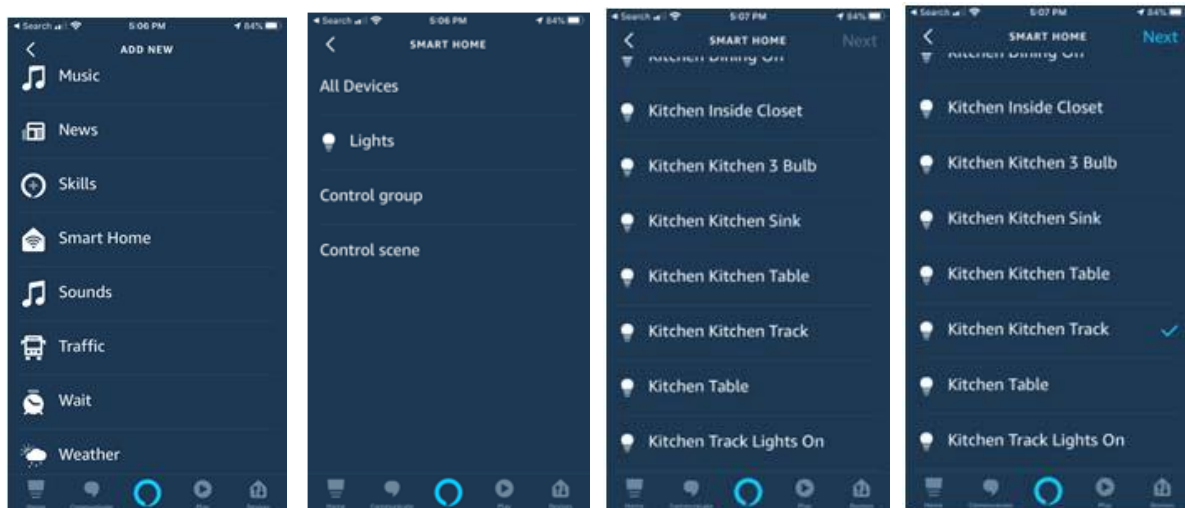


Then decide whether you want to create an action when it detects motion or when it has not detected motion for a specific period of time:

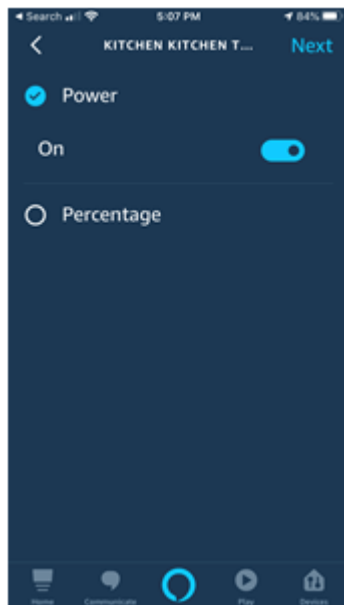
In this example the choice is “detects motion.”



Then it is time to “add action” which occurs subsequent to the detection of motion. Choose from among your list of skills, many of which have been generated by the RUC-02. In this case the choice is from the group of available lights from the Smart Home category:



In this instance, the choice is “Kitchen Track,” a set of lights that respond to a UPB link.

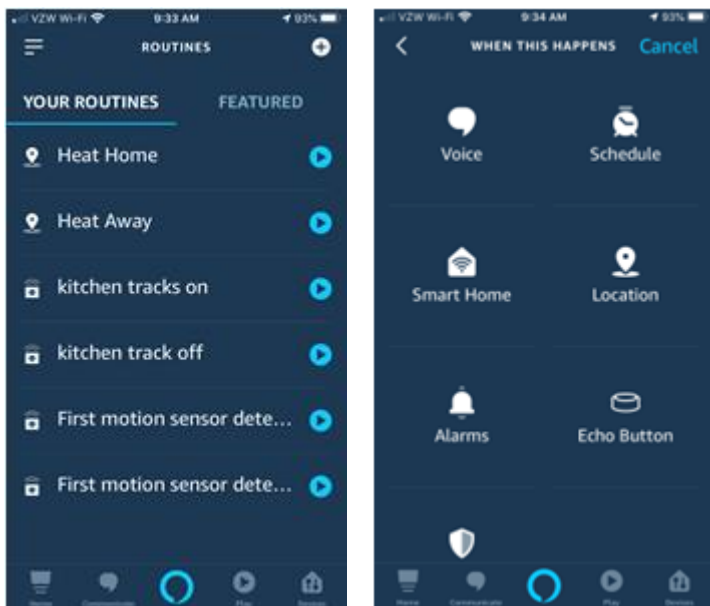


The action can be to power the device on or off or on at a certain percentage if the lights are dimming capable. Finally, save the Routine after checking your choices.

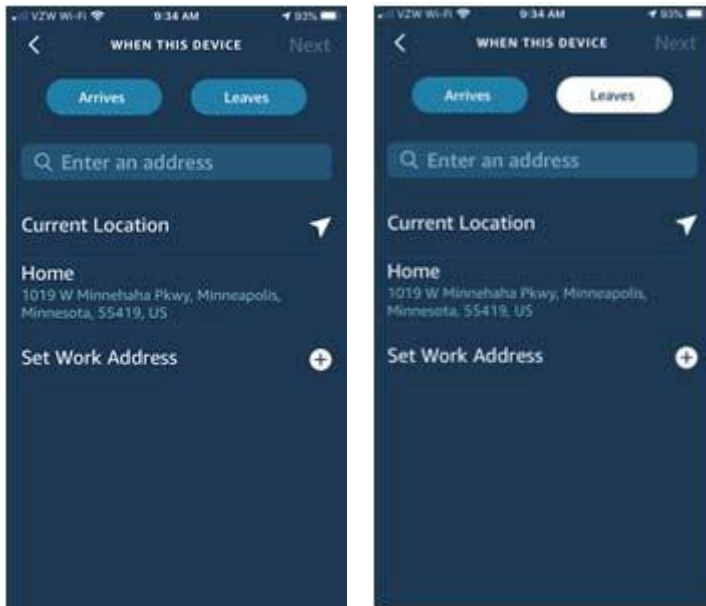


### GeoFence Capabilities

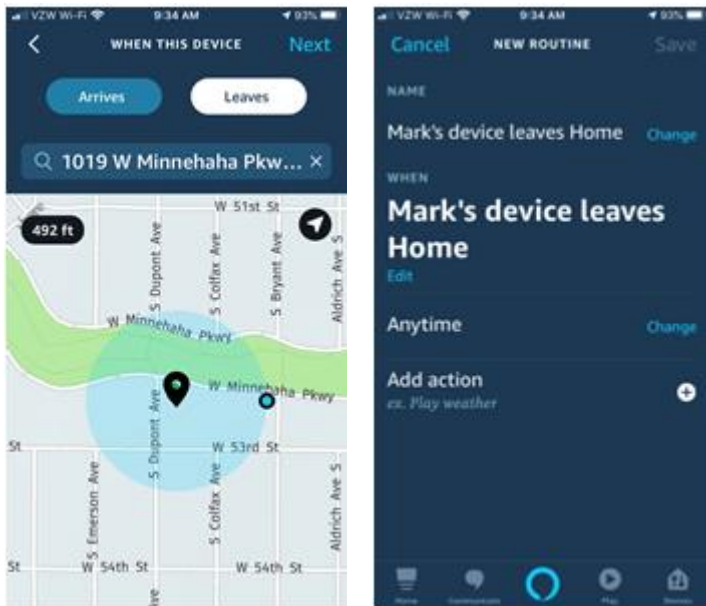
A similar procedure allows for the use of Alexa’s Geofence capabilities. Again, start with Routines and use the “+” link to add a Routine.



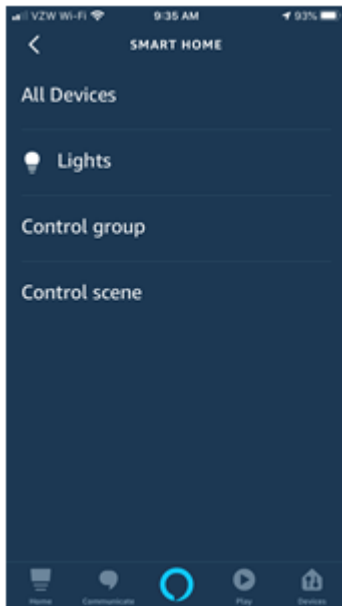
This time choose “location” as the triggering function. You will enter a location, which Alexa may already know, and then choose whether the trigger is your phone arriving at or leaving this location.



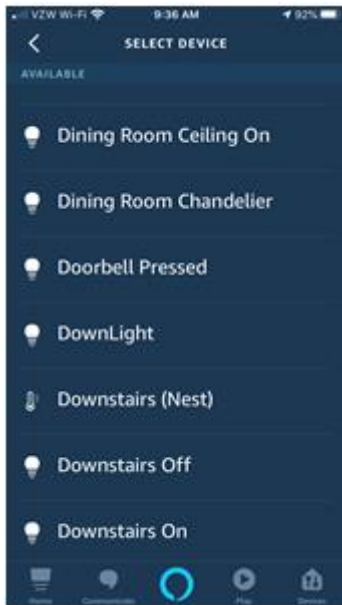
A map will be displayed to help guide you. In this case the choice is “device leaves Home.”



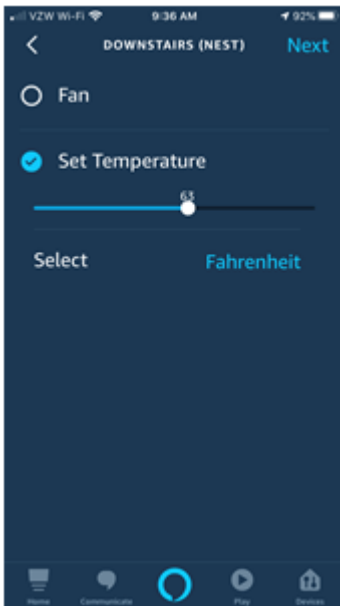
Then, like before, you add an “action” with the action “+” link.



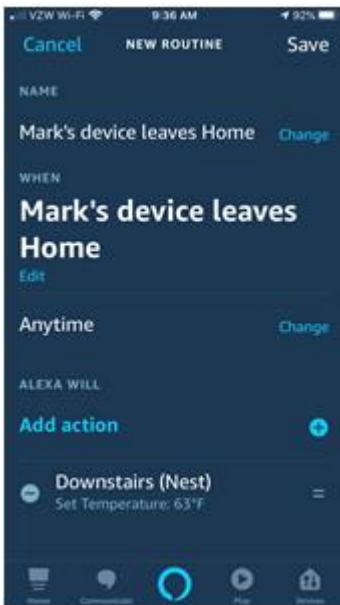
For this example, the Thermostat is found under “All Devices.” It may be tricky to find the device you are seeking. The Thermostat may be alphabetically under the name of its room, its own name or the word “Thermostat.”



Here it is found under “D” for “Downstairs Nest.”



One capability is to set the temperature upon the phone exiting the Geofence.



As with the Motion Detector situation, you then save the Routine. It is unclear to me where the Geofence boundary is or whether the user has the power to modify it. It might be the 492 foot distance shown on the map above.