

Using the RUC-02 with Amazon Alexa Quick Start Guide

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Web Mountain Technologies, LLC, is a Colorado entity that develops, markets, and sells home automation products based on the advanced powerline technology known as Universal Powerline Bus, or UPB.



Please Read This Before Setting up Alexa with your New RUC2

1 Introduction

Congratulations on your purchase of a Web Mountain Technologies RUC-02. This controller is a state of the art controller mainly intended for use with a residential UPB (Universal Powerline Bus) network. UPB is a home automation protocol that enables the sending of messages over a residential powerline network for the purpose of controlling and monitoring devices.

The RUC-02 also provides the necessary interface and capability to control the UPB devices in your network using your voice by using the Amazon Alexa voice interface with Amazon Echo devices. This document provides the information necessary to setup your network to use the RUC-02 with the Amazon Alexa ecosystem.

2 Setup and Other Details

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The Web Mountain RUC2 has been updated to allow it to control UPB devices using Amazon Alexa for voice control. Your RUC2 must be registered with Web Mountain before it can be connected to Alexa. And, all UPB devices must be setup using Upstart and the UPE file transferred from Upstart to the RUC2 prior to connecting with Alexa.

Registering your RUC2 with Web Mountain for use with Alexa:

Your RUC2 will have a unique port number (1xxxx), and a unique password for the wmtruc user. These two pieces of data must be registered with our wmtecho site before you can connect to Alexa. If you change your wmtruc user password, then we need to know that new password before we can register you. In most cases, your RUC2 will already be registered using the wmtruc default user password.

Setup your UPB network, then transfer the UPE file to the RUC2.

Setup your UPB network as normal and as desired. A couple of hints about this.

First, the Alexa capability will use the room names and devices names you setup in Upstart. You can't change those within the Alexa app or within the RUC2. You can only change those within Upstart. For example, if you provide a room name for a device such as "Master Bedroom" and a device name for a device such as "Lamp", then the command Alexa will recognize will be "Turn on Master Bedroom Lamp" Or "Turn off Master Bedroom Lamp". You want to think your naming conventions through before finalizing the network design. You don't want a long string for the room and device names, plus you want something easily remembered. For example, you might not want to use a room of Bedroom 1 and device Right Lamp, or "Turn on Bedroom 1 Right Lamp". Instead, use Todds for the room name and Lamp for the device name, or "Turn on Todds Lamp".

One word of caution – **DO NOT** use quote marks (") for any names in Upstart. The quote marks will break the export to the RUC unit. Actually, don't use quote marks, apostrophes, or

ampersands (actually, don't use any punctuation symbols) for any naming within the RUC either (Buttons, etc).

Export your UPB Network to the RUC-02:

Once you have the UPB network designed and programmed as you want it, then go to the circle with "UPB" inside it in the far upper left corner of the Upstart main screen, and click on SAVE AS, if this file has never been saved before, or click on SAVE if you are editing an existing file. Then, once the file is saved, click on the circle again, and select Export, Export to WMT RUC. Assuming you're on the local LAN, and your RUC is connected and accessible, in the top box, "Export to Local RUC", enter the IP address and password for the wmtruc user on your RUC unit, then click Begin Export. After some time, it will show that this activity has completed.

Note: For large networks, this can take multiple minutes.

If for some reason, the Export doesn't work, there is an alternative method. Once you have your UPB network designed as you want it, make sure you Save the UPB file. Then, within Upstart, click on the circle at the top left, then select Export, then Export to File (UPE). Save the UPE file to your computer somewhere. Now, go into the RUC's user interface, select the menu item Export Upload. Click on Choose File, then browse to the location where you stored the UPE file on your computer, click on it, then click Open at the bottom right. You'll see a spinner on the Export Upload page that shows its working on the Export. Once it finishes, you'll get a popup window saying "Done". **Again, for large networks, this can take multiple minutes.**

Now, to verify that the export worked, open a browser on any PC or mobile device on your network, and navigate to the home page of the RUC (just type in the IP address of the RUC on your local network, ie, 10.0.0.12 or 192.168.1.12). Enter in the user (either admin or wmtruc) and the appropriate password. Then, click on the Triggers menu item on the left hand side of the page.

Note: For large networks, it might take a minute or so to refresh the Triggers page to show the devices in the dropdown.

In the Send Command box at the bottom, next to DID, use the dropdown where it says "Other Device" and verify that you can see all of your devices as identified in Upstart. If so, the Export was successful.

Now, go to your mobile device and follow these instructions to set up the Alexa app (assumes you've already downloaded the app to your device and that you've already setup your Echo device and have it linked to your Amazon account):

NOTE: You can also perform most, if not all, of the steps below using the Alexa website on a PC – alexa.amazon.com. Just visit this site, login with your credentials, and then follow the same steps as below. The PC version actually gives you a few more options and might be easier to use.

1. Open the Amazon Alexa app
2. Sign in and follow directions to setup the app
3. Tap the menu button (☰) at the top left-hand corner
4. Tap "Skills"
5. Type Web Mountain in the search bar



6. “Web Mountain Voice Control for UPB” should pop up. Click on the skill listing.
7. Click on the Enable button (Requires account linking)
8. Log in to the RUC Account page using the Remote access port assigned to your unit (10xxx) and the password for the wmruc user (provided with your RUC2 unit). Click Proceed.
9. Click on the “x” in the upper left corner to close out this window.
10. A new popup window will appear - click on Discover Devices.
11. Once discovery is complete, you will see a listing of your devices. The names above the words “Web Mountain are the terms you will use for voice control, ie, Guest Light. Guest is the room while Light is the device – these are the names you used to setup your network in Upstart.

3 Troubleshooting

Amazon Alexa might give you an error response, “Device x is not responding, please relink the skill”. Before relinking, first try repeating the voice command. Oftentimes, the voice command will work on the second try – the Echo device either didn’t capture the command properly, or the command information didn’t get transmitted properly into the Amazon network.

There is anecdotal data indicating that the quality of the wifi connection can make a difference as to the frequency of these error messages. In the worst case, you might have to relink the skill.

Now, just let the RUC2 sit there and work! If you have any questions, contact Web Mountain at 303-627-1856 or sales@webmtn.com.

You could get other error responses – for example, “ Sorry, I can’t communicate right now” or “Sorry, something went wrong”. In these cases, the first step to try is to verify that the RUC and Echo can reach the Internet. Ask the Echo about your local weather and verify it provides a response. If so, the Echo does have Internet connectivity. Next, using a browser on your PC or mobile device, verify you can reach the RUC-02 at it’s remote access port – enter into the URL bar www.wmtremote.com:10xxx where the 10xxx is the remote access port for your RUC unit. You should get a challenge for the user name and password for the unit.

The Amazon Alexa ecosystem is a cloud based system. As such, there are multiple places where something can go wrong. Even so, the functionality works very well. But, since Alexa is cloud based, it is imperative that you have an Internet connection and a good, stable wifi network. If you have no internet, the system won’t work. If you have a poor connection, or if you have a poor wifi network, you will experience disconnects and error responses, and will have to occasionally relink the Alexa app.

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