

Application Note

Using your smartphone to control UPB and other automation technologies through V57 RUCs and higher

Introduction

The Web Mountain RUC (Remote Universal Controller) can be used to control your lights and appliances using UPB, or Universal Powerline Bus, or other home automation technologies. The RUC can easily be setup to control these devices based on time of day, via triggered events, or from a webpage on your personal computer. Then the RUC makes it extremely simple to control your automation devices from your Android or iOS smartphone or tablet.

This application note will explain how to use a smartphone or tablet along with the RUC to control your lights and appliances.

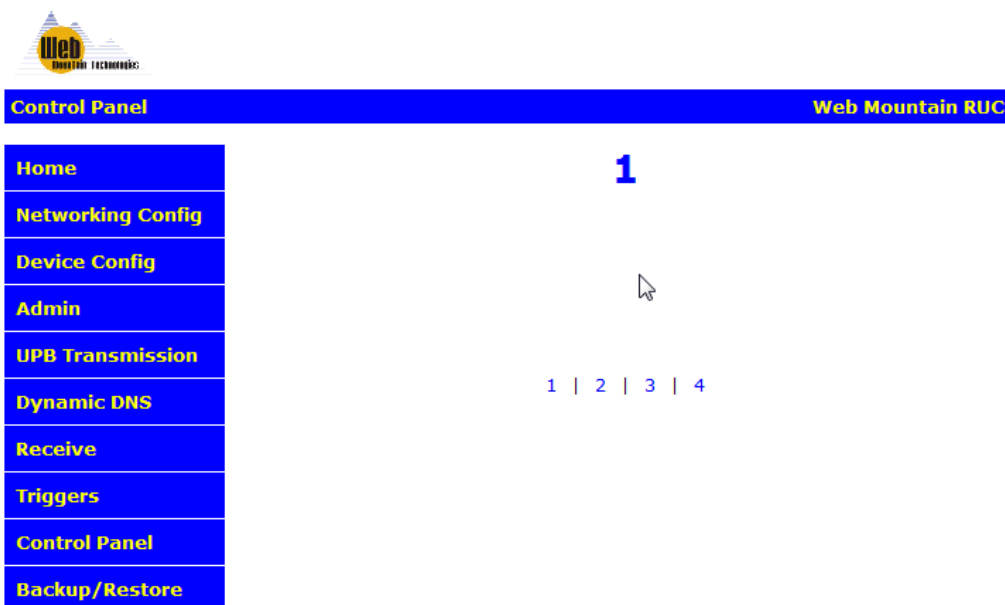
It is assumed that the reader has some familiarity with the desired home automation technology. If not, it is highly recommended that the reader perform the necessary research to gain this familiarity.

Procedure

The first step in setting up the RUC to work with the smartphone or tablet is to get the RUC setup to control devices.

NOTE: It is highly recommended that if you are going to use the RUC with your smart device, that you give the RUC a fixed IP address. This makes the address known and the RUC easily accessible.

While the RUC has many available user options, we are only concerned with the Control Panel functionality for this exercise. The Control Panel is a webpage on the RUC that can be accessed from any browser. This webpage allows the user to have a simple touchpanel like screen to easily control automation functions. When you click on the page for the first time, you will see the following:



To add buttons to this screen, you will use the Trigger screen, select Button as the Receive Command type, then use the Send Command box to determine what action will occur when the button is pressed.

Let's add a button that will Close the drapes associated with the ESI RQ motor that has an address of WBT.

On the Trigger page, select Button as the Receive command type. Select the page number (in this case, page 1). Select the button # (in this case, let's use button #1). Then, enter the text you want displayed on the button (in this case "Close Blinds").

Buttons are in two columns of 5 with button 1 being upper left, button 5 being lower left, button 6 being upper right, and button 10 being lower right. Buttons will only display once they are added using the Triggers page.

Now, select ESI in the Send command box. Select the port the ESI controller is connected to (normally this will be COM2). Then, in the ESI command box, enter WBTc (don't need the start or end characters). Before the Add Trigger button is clicked, the screen will look like this:

The screenshot shows a software interface for configuring triggers. It is divided into two main sections: 'Receive Command' and 'Send Command'.
In the 'Receive Command' section:
- 'Command Type' is set to '(B) Button'.
- 'Page #' is set to 1.
- 'Button #' is set to 1.
- 'Display Text' is 'Close Blinds'.
- There are radio buttons for 'Day', 'Night', and 'Both', with 'Both' selected.
In the 'Send Command' section:
- 'Command Type' is set to '(E) ESI'.
- 'Port' is set to '(2) COM2'.
- 'ESI Command' is 'WBTc'.
- 'Delay' is set to H: 0, M: 0, S: 0.
At the bottom of the form is an 'Add Trigger' button.

Click on the Add Trigger button and the trigger now shows up in the trigger listing like this:

14	Button	Page: 1, Button: 1, Close Blinds Both	WBTc E 2	Delete
				Edt
				Run

Now, click on the Control Panel page from the left menu, and the page looks like this:



- Home
- Networking Config
- Device Config
- Admin
- UPB Transmission
- Dynamic DNS
- Receive
- Triggers
- Control Panel
- Backup/Restore

1



1 | 2 | 3 | 4

Now, if the button is clicked from a browser accessing this page, the RUC will send out the ESI command WBTc on COM2, causing the blinds to close.

Up to 10 buttons can be added on each of the four pages.

Notice that the page is labeled "1". This can be changed. Left click on the "1" on this screen, and a popup window will appear. In the text box in this popup, you can enter in the desired text for this page, for example, Kitchen, or Living Room, or Exterior. Here's a screenshot of the text box with the selected label of Living Room.

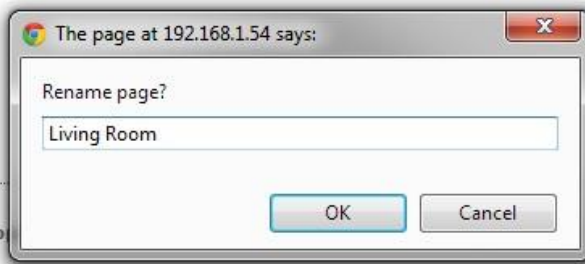


- Home
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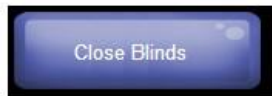


After clicking OK, here is the revised Control Panel page (the browser page will need to be refreshed in order to see the changed label):



- Home
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Living Room



Living Room | 2 | 3 | 4

Notice that the label also changed on the bottom of the page while the other pages are still shown with their page numbers.

Just repeat the procedure above and add buttons wherever desired. To navigate among pages, just click on the labels on the bottom. For example, to go to page 3, click on the “3”.

Another example. Let’s add a button that turns on a floor lamp using UPB. The trigger would look like this:

Receive Command	
Command Type: (B) Button	Page #: Den Button #: 4 Display Text: Floor Lamp On <input type="radio"/> Day <input type="radio"/> Night <input checked="" type="radio"/> Both
Send Command	
Command Type: (L) UPB Link (1) COM1	UPB Command -OR- NID: 18 LID: 4 CMD: (A) Activate Delay H 0 M 0 S 0

This would add button # 4 to a page called “Den” that would send a UPB command NID = 18, Link 4 Activate when the button is pressed.

Continue to setup as many of the 40 buttons (4 pages times 10 buttons per page) as you wish.

Setting up the Smartphone or tablet

By using the Control Panel, and the WMT freely available Universal Home Automation Controller app, there is a way to make the RUC work with your smartphone or tablet. The smartphone will act as simple user interface, and when buttons are pressed on the screen, a signal is sent to the RUC which tells the RUC that a button has been pressed and to take a specific action, such as turning on a light.

Ok, now that you have the RUC’s Control Panel configured, we can setup the smart device. Here is the procedure for setting up the app on your smart device.

The smartphone or tablet is set up completely on the device. Nothing is done via a computer.

- 1) Go to this link from your Android smartphone / tablet (or search for “home automation controller” in the android market) - <http://market.android.com/details?id=com.webmtn.android.app>.
- 2) For the iPhone / iPad, go to <https://itunes.apple.com/us/app/universal-home-automation/id639479362?ls=1&mt=8>.

Screenshot of the Android website shown below:

The screenshot shows the Android Market interface for the 'Home Automation Controller' app. At the top, the 'Android Market' logo is on the left, and navigation links for 'ANDROID APPS' and 'BOOKS' are on the right. Below the header, the app's title 'Home Automation Controller' and developer 'Web Mountain Technologies, LLC' are displayed. A lightbulb icon represents the app, with a rating of 0 stars and an 'INSTALL' button. A 'RELATED' section lists 'Memo Widget (Note Widget)' and 'Zillow Real Estate'. The main content area features a 'DESCRIPTION' tab, a 'Tweet' button, and detailed text about the app's functionality and requirements. On the right, an 'ABOUT THIS APP' section provides metadata such as rating, update date, version, and price.

ANDROID MARKET · LIFESTYLE · HOME AUTOMATION CONTROLLER

Home Automation Controller

Web Mountain Technologies, LLC

★★★★★
(0 ratings)

INSTALL

RELATED

Memo Widget (Note Widget)
SUNJAE, LEE / LIFESTYLE
★★★★★ (1,846)
Free

Zillow Real Estate
ZILLOW.COM / LIFESTYLE

DESCRIPTION

Use this app in conjunction with the Web Mountain Technologies RUC-01 to control home automation devices using UPB, Zwave, X10, Insteon, ESI drapery Controllers, and almost any other home automation technology with a serial interface. This app allows the user to control lights and appliances with a simple touch of a button from their Android smartphone. This app also allows the user to control Ethernet IP based devices that can be managed using POST commands, such as thermostats.

In order to use this app, you will need the RUC-01(version 57 or higher), the appropriate serial interface unit for the technology you will be controlling, plus appropriate control devices, such as wall dimmer switches, lamp modules, appliance modules, and drapery motor controls.

For more details, see www.webmtn.com or contact us at info@webmtn.com

Visit Developer's Website >

Tweet

ABOUT THIS APP

RATING: ★★★★★

UPDATED: April 23, 2011

CURRENT VERSION: 1.0.0.1

REQUIRES ANDROID: 2.2 and up

CATEGORY: Lifestyle

SIZE: 61k

PRICE: Free

2) Click the install button in the upper right.

3) The phone will then tell you that this app requires permissions. It only shows "Network Communication: Full Internet Access". This is because we communicate to the RUC via a network. Accept these permissions.

4) The app will begin installing. When it is done, open the app (Universal Home Automation).

5) Here is the website for the iOS device. Install the app as you normally do.

Universal Home Automation

[View More By This Developer](#)

By Terry Bolinger

Open iTunes to buy and download apps.



Description

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[Terry Bolinger Web Site](#) > [Universal Home Automation Support](#) >

[...More](#)

View In iTunes

This app is designed for both iPhone and iPad

Free

Category: Lifestyle
Released: May 02, 2013
Version: 1.0.15
Size: 3.9 MB
Language: English
Seller: Terry Bolinger
© TDB Partners, LLC
Rated 4+

Requirements: Compatible with iPhone 3GS, iPhone 4, iPhone 4S, iPhone 5, iPod touch (3rd generation), iPod touch (4th generation), iPod touch (5th generation) and iPad. Requires iOS 5.0 or later. This app is optimized for iPhone 5.

Customer Ratings

We have not received enough ratings to display an average for the current version of this application.

Screenshots

iPhone | iPad



6) The first time the app runs, it will show a disclaimer. Read, then click OK.

7) Now, the app will show the settings page, or go to your Settings. New in this version is the ability to setup the app to work automatically when either local or remote.

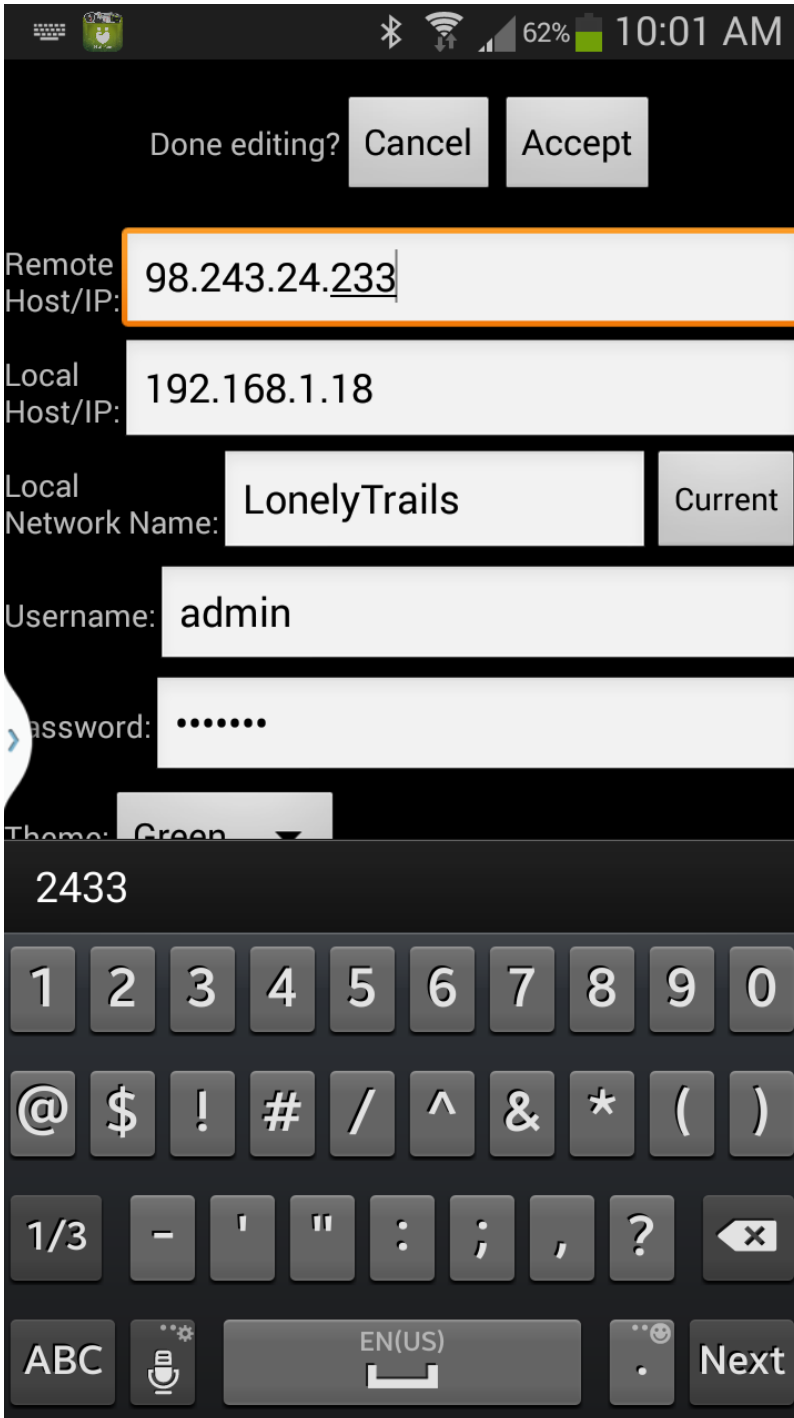
a. In the first line, Remote Host/IP, enter in the IP address or DDNS host name used remotely. For the Remote IP address, you can go to www.ipchicken.com and use the address provided at that site. This is the IP address your ISP gives to your router. If you're using any other port than 80 (default), enter it in at the end of the IP address or DDNS address, i.e., 98.243.24.233:8760.

b. On the second line, Local Host/IP, use the IP address on your local LAN. Typically, this is going to be 192.168.xxxx.xxx. Again, if you use a port other than 80, make sure to add it after the IP address.

c. Next, pick the wireless LAN network name you use at your home or residence. If you have your smartphone connected to this WLAN at this time, just click the Current button, and the app will populate this field for you. Now, when the Smartphone or tablet is connected to this wireless LAN, the app will use the address specified in the LOCAL field. For any other connection mechanism, the app will use the Remote field information. Now you no longer need to manually update the settings fields depending on how you're connected with your smartphone.

d. In most cases, you can leave the username and password. These are the default values for the RUC. If you have changed those, then you will need to change this configuration to match your new values.

Also, if you check the box “Automatically get button text” (actually checked by default), the app will use the button labels you have setup on the RUC. If you uncheck this box, you will have the ability to rename the buttons and pages. Just recognize that even if you rename the buttons, the buttons, when pressed, will do the same function as how they are programmed on the RUC. The following graphic shows you the settings page:



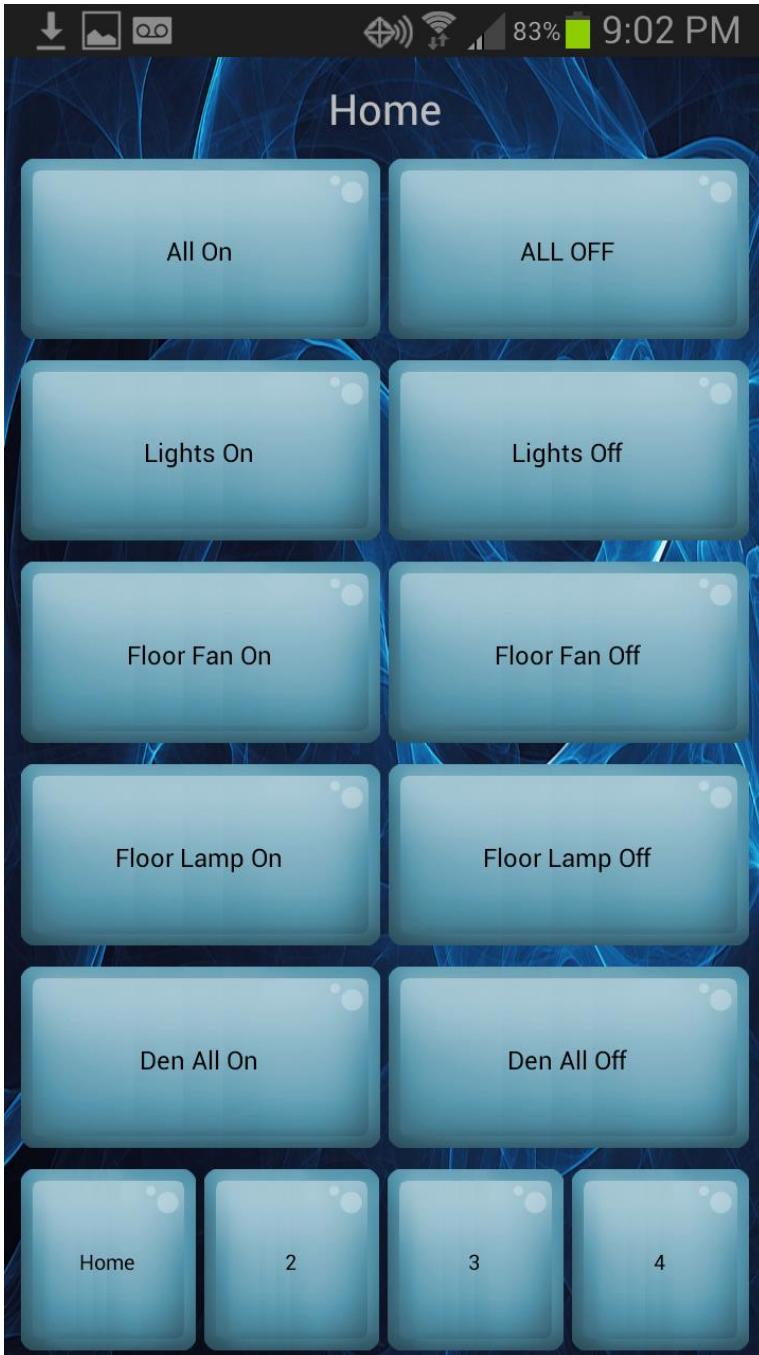
Also, notice that you can pick the color theme from blue, green, or red.

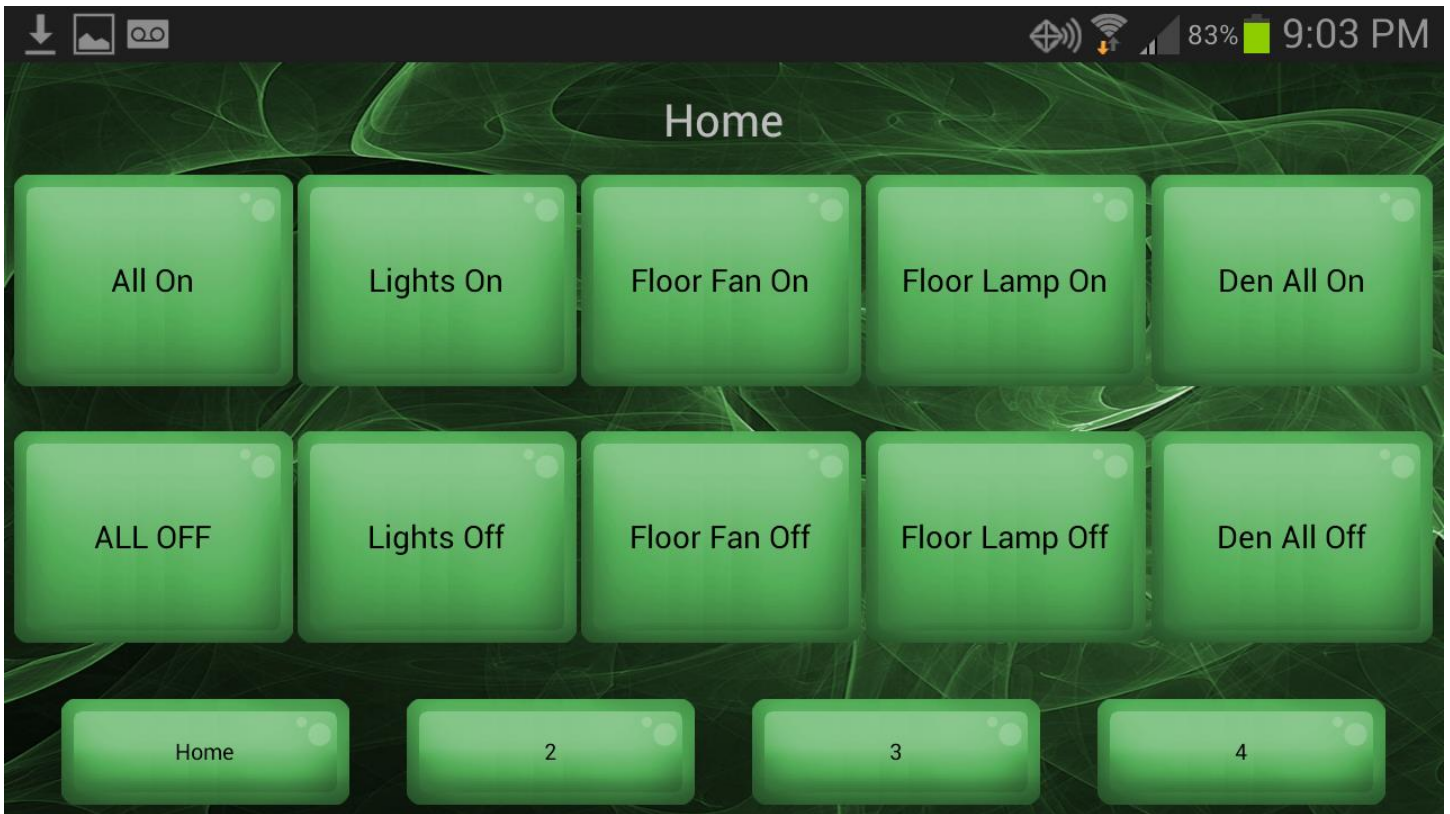
Click Accept.

8) You can enter the settings page again at any time by pressing the menu button on the app and choosing settings.

9) Any time (after the first time) you open the app it will return to the last control panel page you were on (without showing the disclaimer or the settings page).

Here are screenshots of what your app's screen will look like in the vertical and horizontal orientations:





To control your lights just press the desired button.

Have fun!

1/28/2014