Application Note
Using a Chumby / Sony Dash / Insignia Infocast as a Tabletop Controller to control UPB and other automation technologies through the RUC
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. While there are simple UPB tabletop controllers, there has been a desire expressed for very user friendly, extremely simple, and very attractive tabletop controllers to control UPB and devices. Recently, there have been a class of personal network appliances (PNA) introduced that can be used as these types of controllers. These devices are the Chumby Personal Internet Viewer and related devices, including the Sony Dash and the Insignia Infocast Displays.

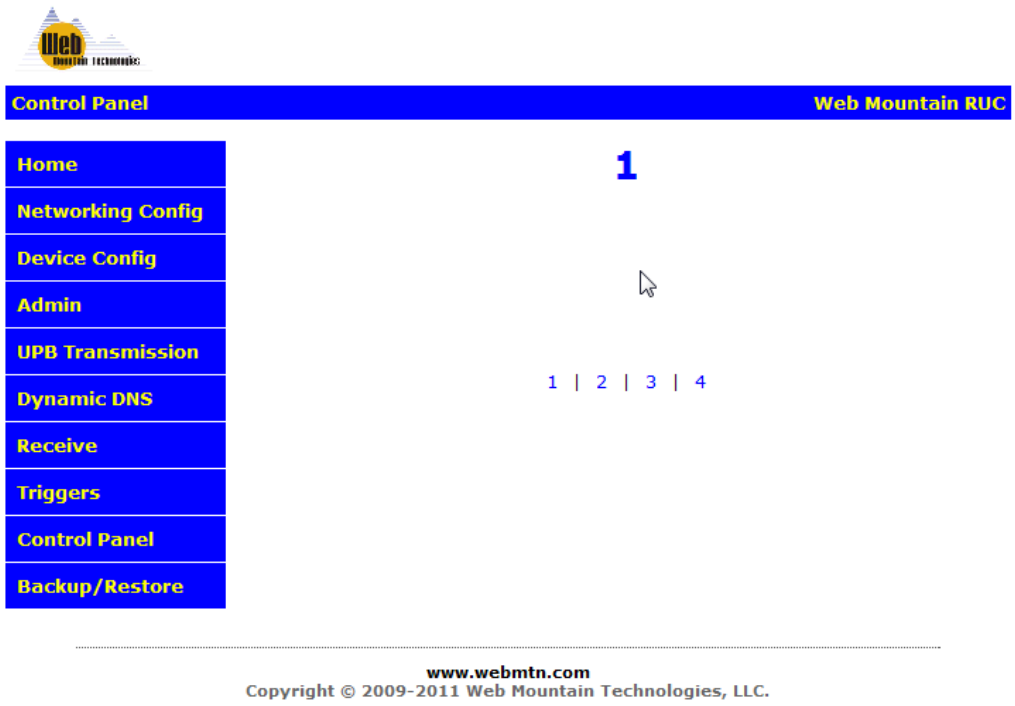
This application note will explain how to use one of these PNAs along with the RUC to control your lights and appliances.

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 and the PNA is to get the RUC setup to control devices. **NOTE:** It is highly recommended that if you are going to use the RUC with the PNA, that you give the RUC a fixed IP address. The PNA needs to know how to communicate with the RUC, so a fixed IP address will allow the PNA to always know how to contact the RUC.

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:



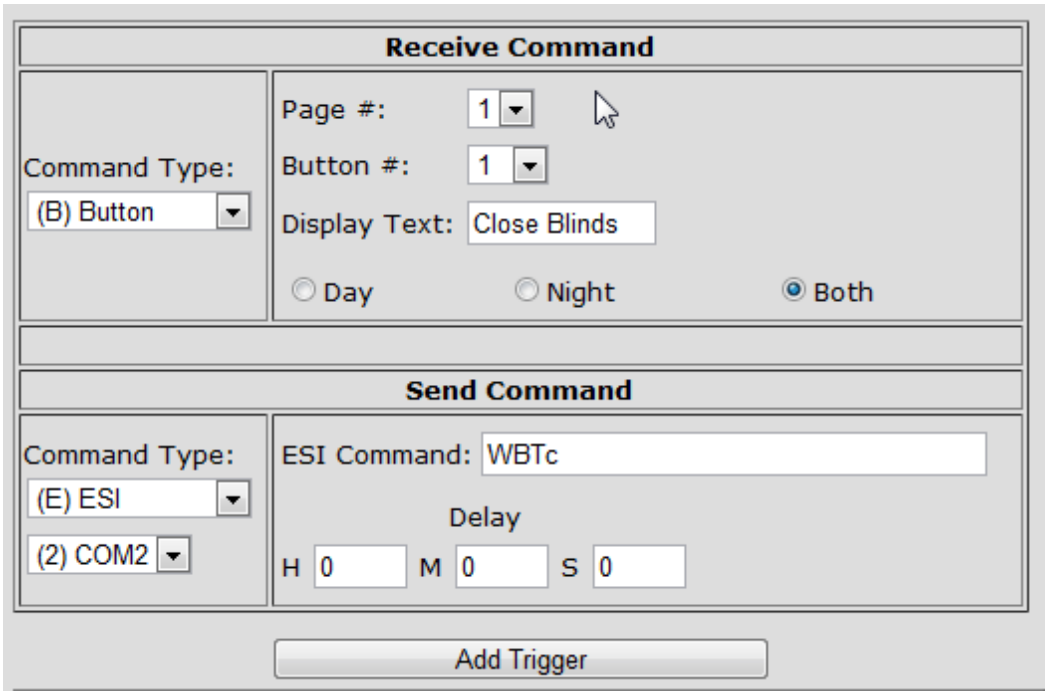
To add buttons to this screen, you will use the Trigger screen, select Button as the Receive Command type, then use the Send Command box to determine what action will occur when the button is pressed.

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").

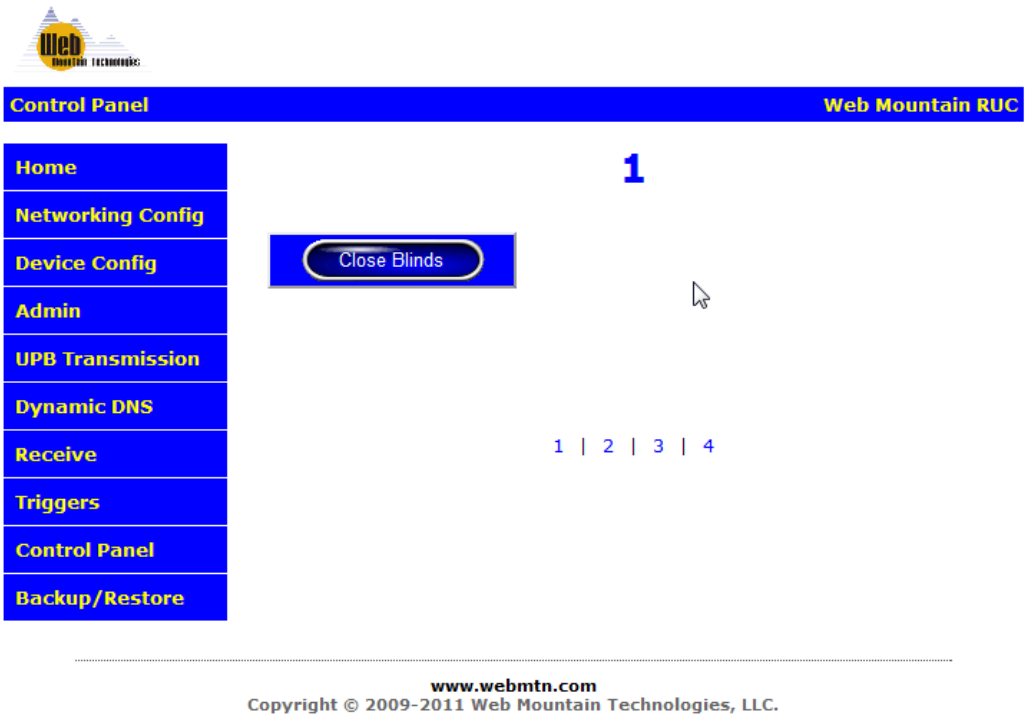
Buttons are in two columns of 5 with button 1 being upper left, button 5 being lower left, button 6 being upper right, and button 10 being lower right. Buttons will only display once they are added using the Triggers page.

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:



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

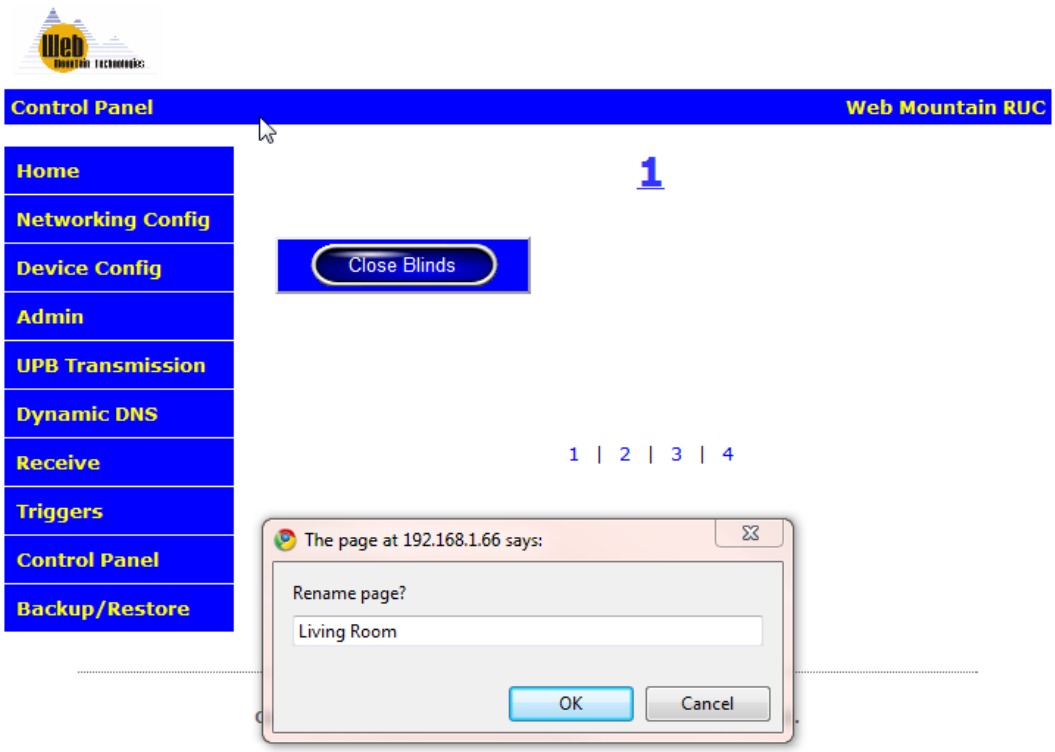
Now, click on the Control Panel page from the left menu, and the page looks like this:



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.

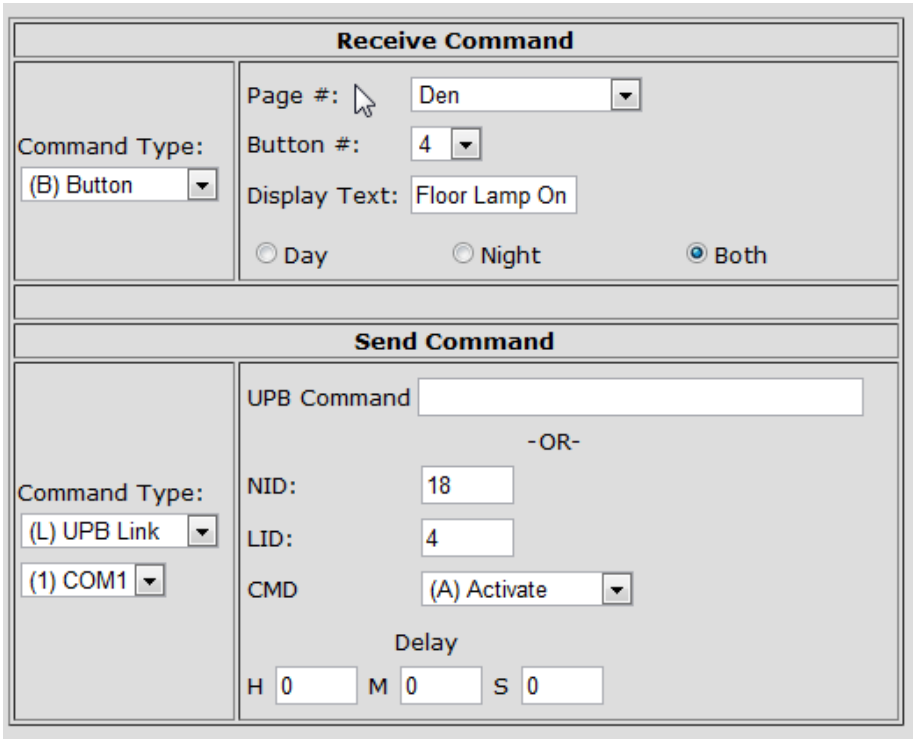


After clicking OK, here is the revised Control Panel page (the browser page will need to be refreshed in order to see the changed label):

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:



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.

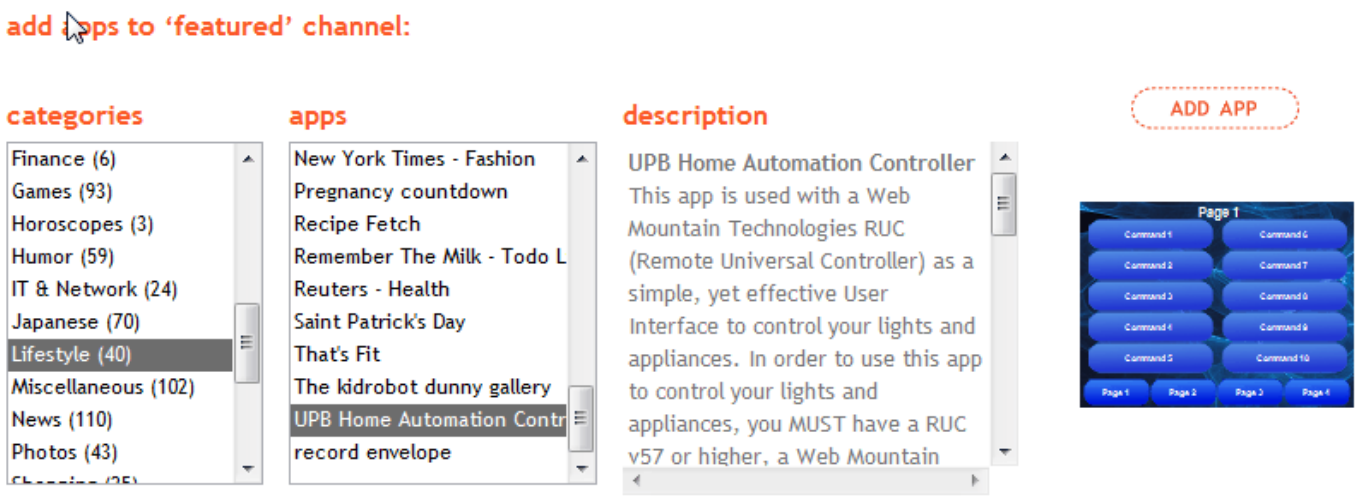
Continue to setup as many of the 40 buttons (4 pages times 10 buttons per page) as you wish.

Setting up the PNA

By using the Control Panel, there is a way to make the RUC work with a Chumby / Sony Dash Personal Internet Station / Insignia Infocast Internet Media Display or personal network appliance (PNA). The Chumby / Dash / Infocast units will act as simple user interfaces, and when buttons are pressed on their screens, 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 PNA device. If you have a new PNA, go through the process of setting it up using its instructions. Register the device, create a channel, and add any apps that you want. For example, I have an app that displays the daily Dilbert cartoon, the daily photo of the day from NASA, a weather app, a baseball score app (so I can keep up with my Colorado Rockies), and one or two more. Get everything else working the way you want it to before you add the Web Mountain UPB control app.

Now, you’re ready to add the Web Mountain UPB app. Click on Add App. Then, either search for “UPB” or go to the category “Lifestyle, then scroll down to UPB Home Automation Control as shown here:



Click on Add App. You will now see this screen:

So, now you need to provide the desired information. First, you might want to change the amount of time the app is displayed (Play app for). I typically use 15 seconds.

In the text box for host / IP, we highly recommend using the IP address of the RUC rather than the host name. We have found that some networks struggle with host names, and the actual IP address eliminates any confusion. This is the IP address of your RUC unit.

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.

Then, if you want the Chumby / Dash app to just use the same labels as you have on the RUC, put an X in the box labeled “Auto-load text from RUC?”.

Click on Submit and you’re done.

However, if you want to make the labels on the Chumby / Dash different than what you have on the Control Panel of the RUC, uncheck the box “Auto-load….” Then click on the Next button at the bottom. You will see this screen:

Now you can enter in the text you want on the buttons. You can also provide a different page name than what is used on the RUC Control Panel. Use the Previous and Next buttons to move between pages. Once you have everything labeled as desired, click on the Submit button and you’re done.

Recognize that even though you changed the labels on the buttons and pages, when these buttons are pressed, the action that will be done is the same as if you clicked on a button from the RUC Control Panel.

One thing – before you download this onto your PNA, go to the customize button on each app and set the amount of time you want each app to show for – I typically use 15 seconds.

Once you have everything configured, power down your PNA, wait a few seconds, then power it back up. It will download your changes and additions and you’re up and running.

To control your lights just press the desired button.

Have fun!

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