SwitchDoc Labs

OUR WEATHER

OurWeather
Installing the Blynk App

December 2018
Version 1.2

Blynk

Table of Contents

What is OurWeather? 3

Installing the Blynk OurWeather App 5

What is Blynk 5

Step by Step Install (for iPhones – Android is very similar) 5

Installing the Blynk Authentication Codes into OurWeather 12

Using the Blynk OurWeather App 13

Main Screen 13

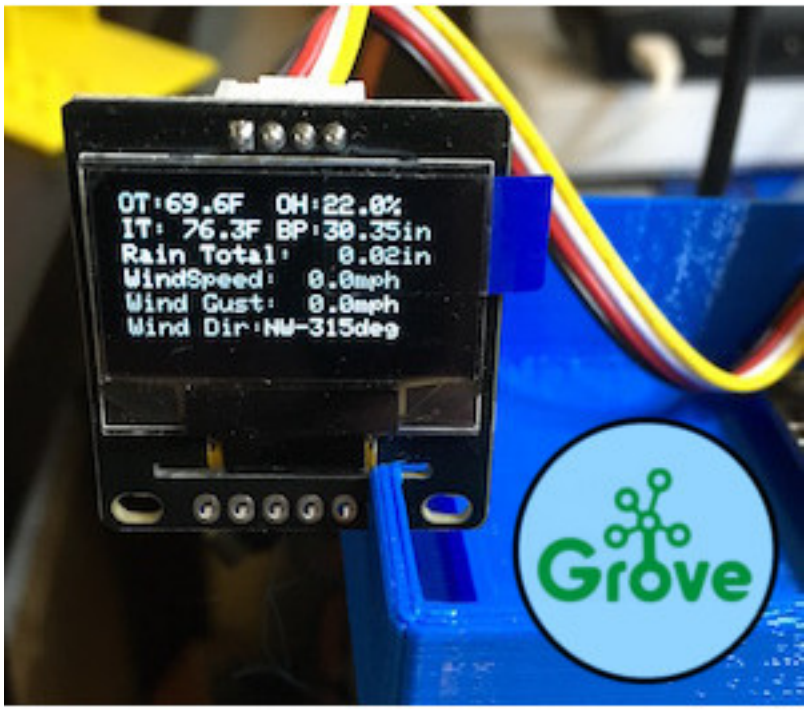
Status Screen 15

Solar Screen 16

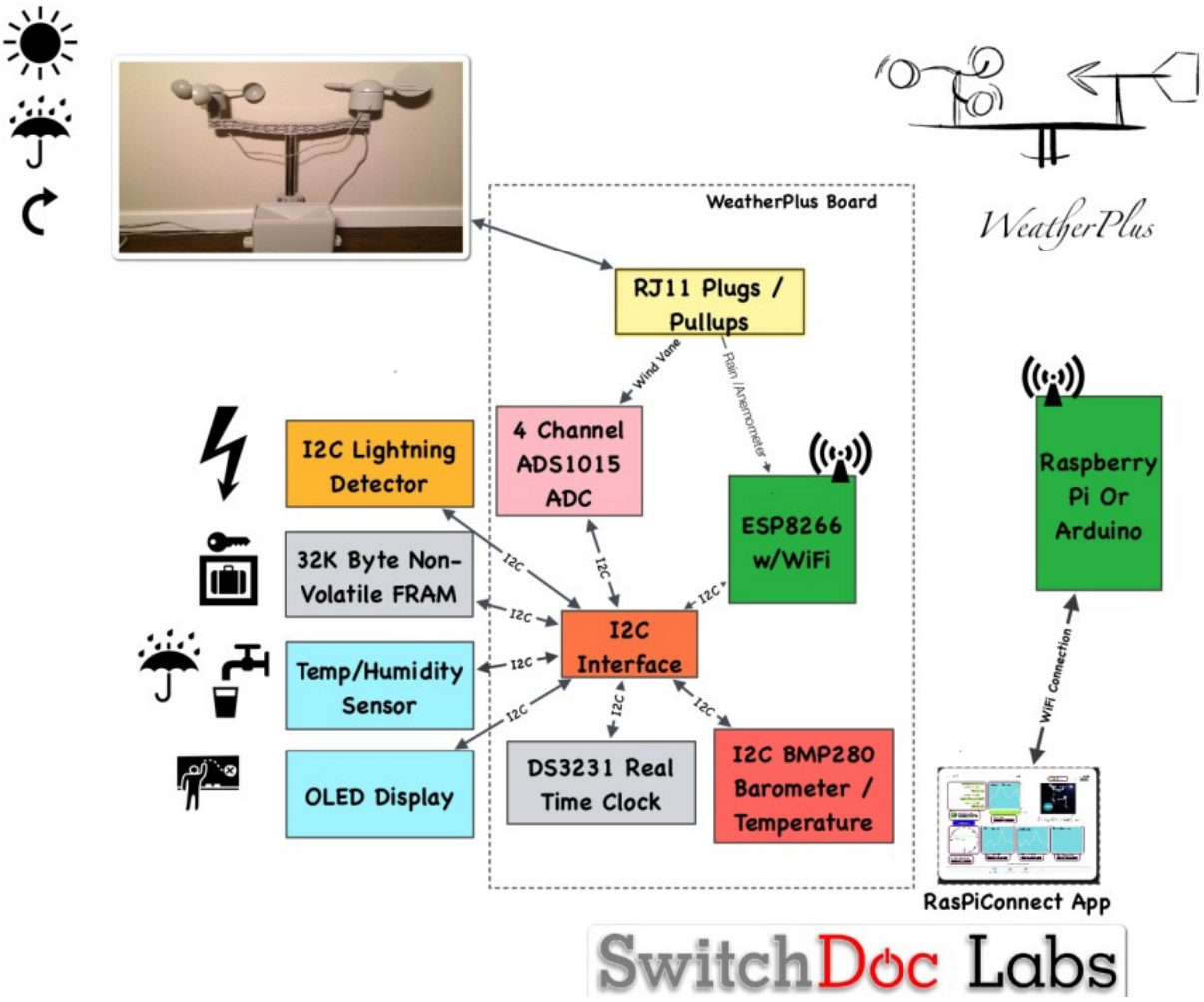
Support 16

Disclaimer 17

What is OurWeather?



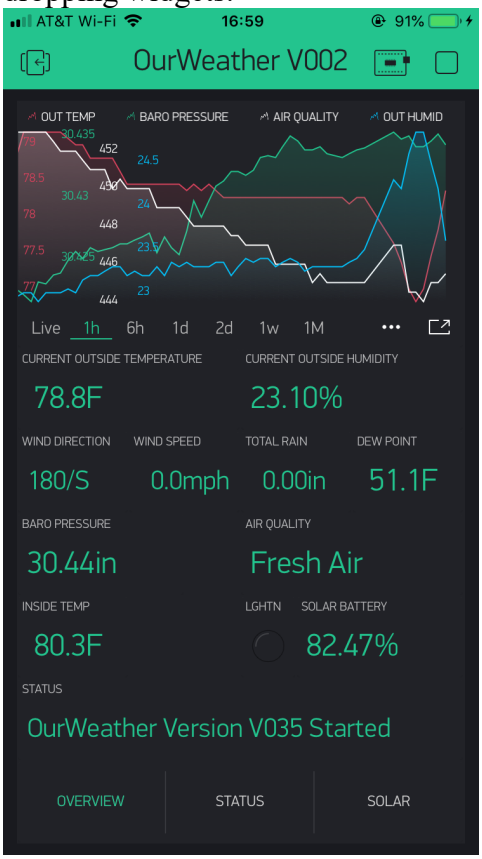
OurWeather is an ESP8266 based connected weather station containing 7 different sensors that will teach about electronics, software and the weather. It contains all the sensors and wires to make a fully functional, WiFi weather station. No software programming is required, it works right out of the box. However, if you want to change the way OurWeather works, add your own software or do something entirely different, we have the Open Source software available. And what is one of the coolest features of OurWeather? **Building the kit requires NO SOLDERING. It uses Grove Connectors.** It is all plug and play based building, with a full step-by-step photograph based instruction manual. It is a safe and educational way to learn about weather, electronics and science topics. You can watch our successful kickstarter video here: https://youtu.be/pw6hSNSQnsM


WeatherPlus Board
RJ11 Plugs / Pullups
Wind Vane
Rain /Anemometer
4 Channel ADS1015 ADC
I2C Lightning Detector
32K Byte Non-Volatile FRAM
Temp/Humidity Sensor
OLED Display
ESP8266 w/WiFi
I2C Interface
DS3231 Real Time Clock
I2C BMP280 Barometer / Temperature
I2C
Raspberry Pi Or Arduino
WiFi Connection
RasPiConnect App
WeatherPlus
SwitchDoc Labs

Installing the Blynk OurWeather App

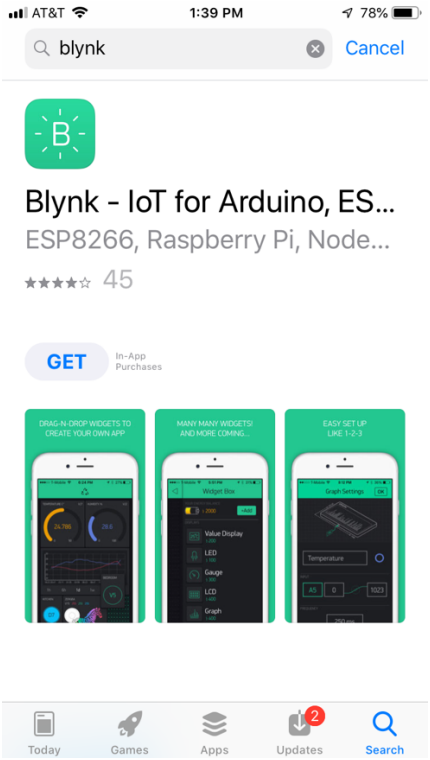
What is Blynk

Blynk is a digital dashboard for your iOS or Android device that allows you to easily build graphical interfaces by dragging and dropping widgets. Blynk runs on iOS and Android apps to control Arduino, Raspberry Pi and the likes over the Internet.
It's a digital dashboard where you can build a graphic interface for your project by simply dragging and dropping widgets.

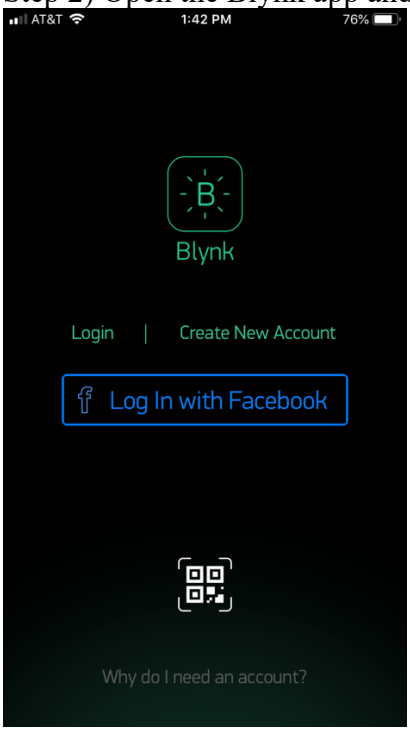


Step by Step Install (for iPhones – Android is very similar)

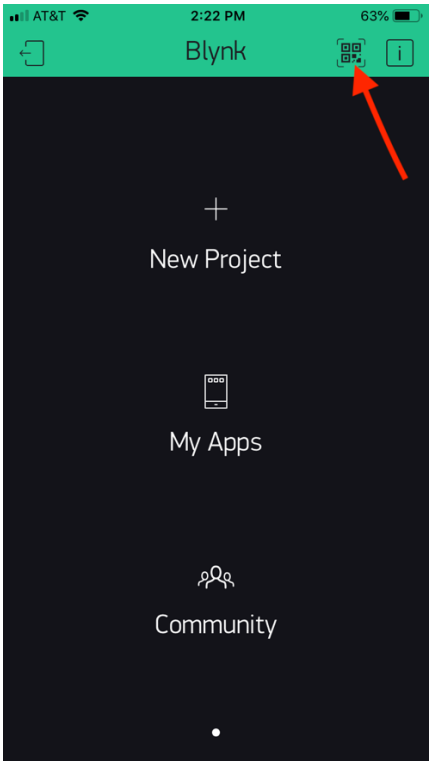
Step 1) Install the Blynk app on your mobile phone



Step 2) Open the Blynk app and create an account

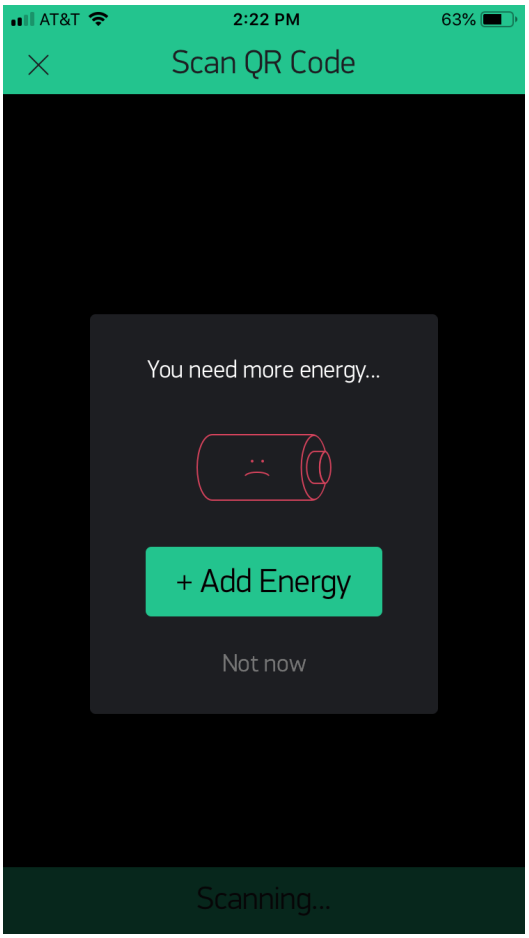


Step 3) Now click the button to scan a QR (see arrow)

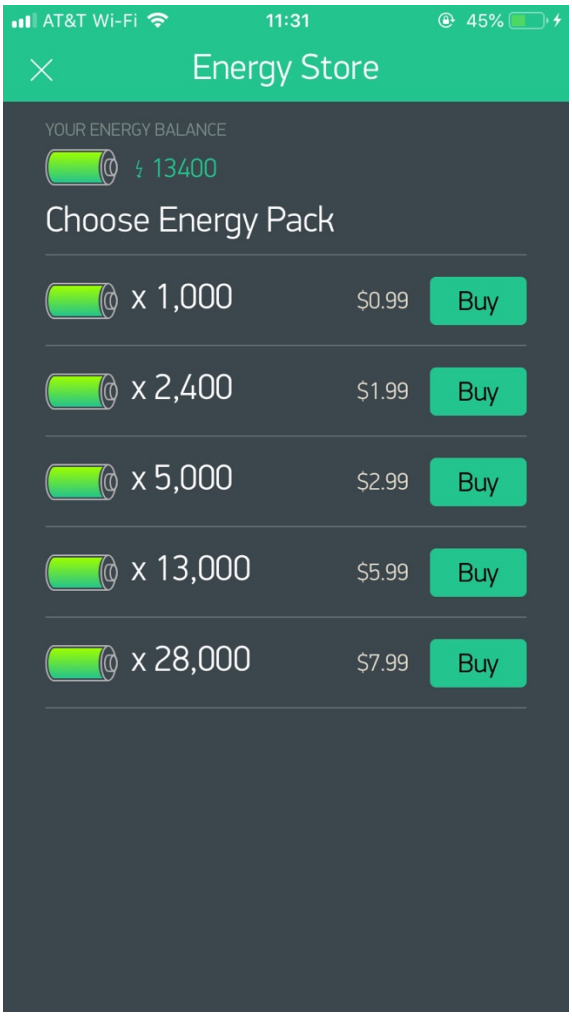

AT&T
2:22 PM
63%
Blynk
New Project
My Apps
Community

4) Scan the QR Below (this is OurWeather V002), you will then see the screen below the QR code

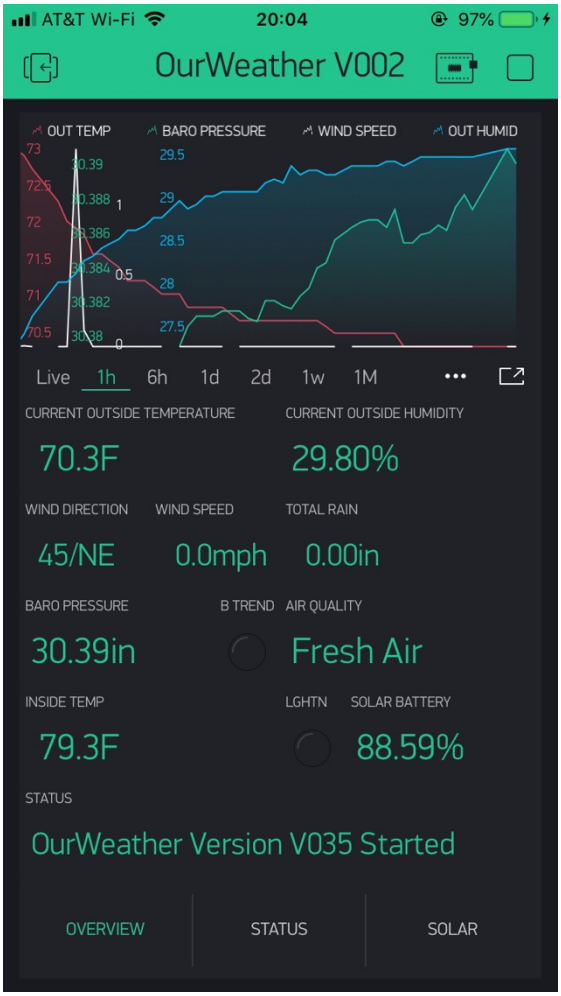
OurWeather V002



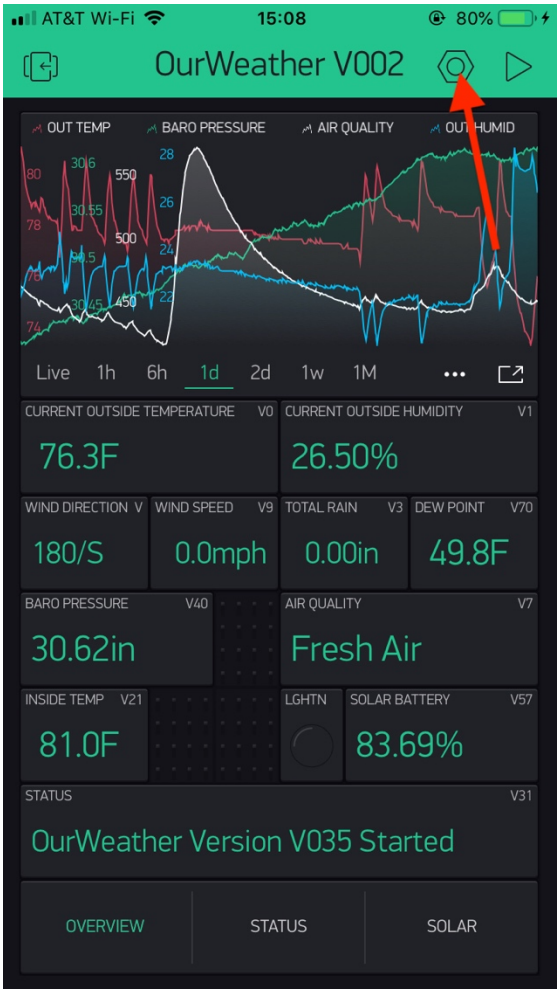
Step 5) Add Energy. OurWeather V002 requires a total of 7700 Blynk energy. You start your account with 2000, so you need to purchase 5700 Blynk Energy. As of this writing, it will cost $5.99. It varies.

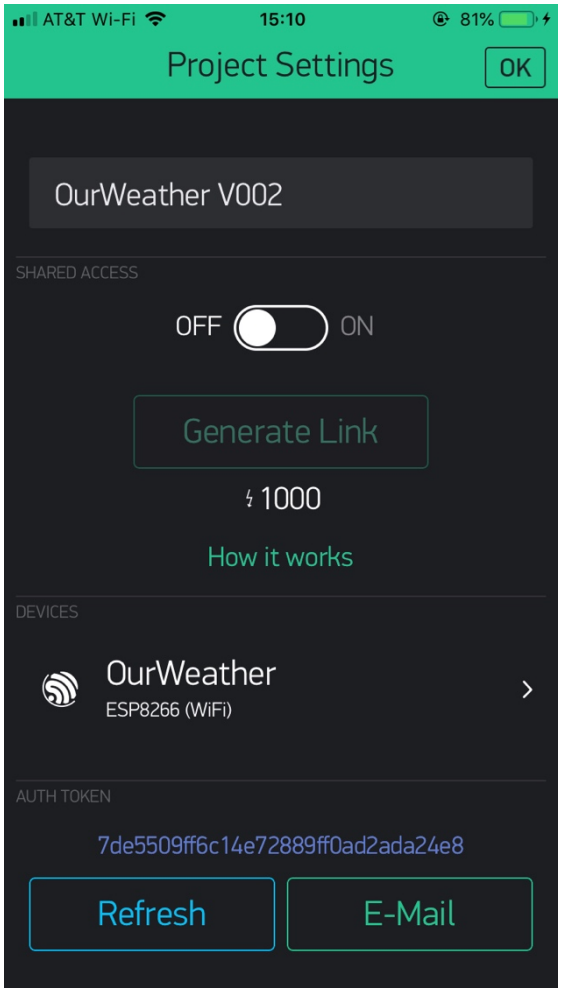


Step 6) Scan the QR code above again. You will now see the OurWeather on your screen. You can always check the version by at the title (as of V002, the version is included after “OurWeather” in the header below).



Step 7) Click in middle of the project to select the project. Then click the indicated button to go to project settings. Note: You can always see the App Version number of the project setting (V003). Now copy and paste or email yourself the authentication token (AUTH TOKEN) as we will be putting this in the OurWeather Admin Page in the next section. The one below WILL NOT WORK. You need your own.



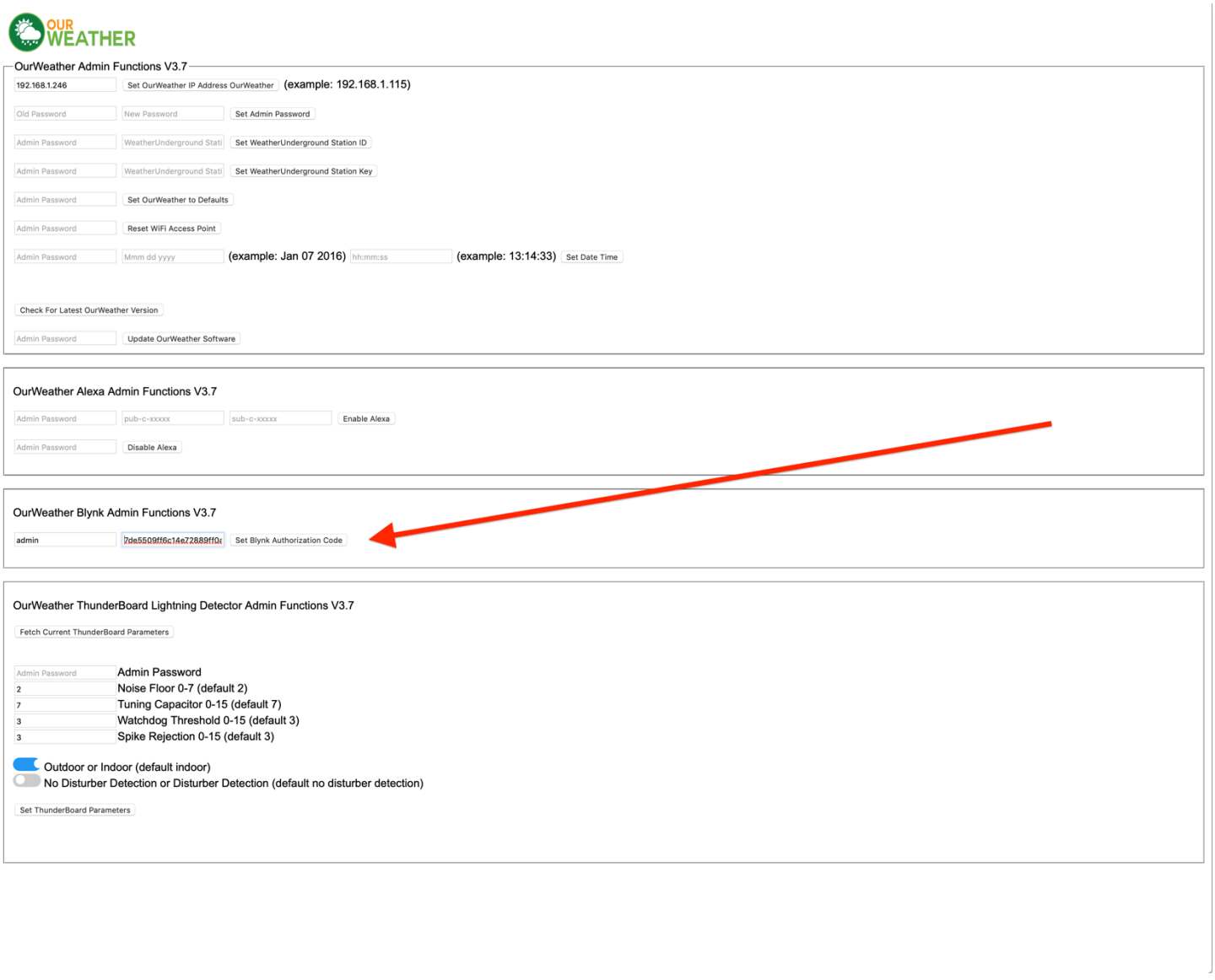


You have completed the Blynk OurWeather App installation.

Installing the Blynk Authentication Codes into OurWeather

The final step to connecting the OurWeather Software and Hardwar to the OurWeather App is to copy your Authentication Token (AUTH TOKEN above) to the OurWeatherAdmin page. NOTE: OurWeather needs to be running at least V035 of the OurWeather Software. For instructions on how to update, go to the OurWeather Page (https://shop.switchdoc.com/products/ourweather-complete-weather-kit) and download the Assembly and Operations Manual.

Step 1) Using a browser, go to http://www.switchdoc.com/OurWeatherAdmin.html



Step 2) Make sure you have the OurWeather IP Number in the top of the page. Check the OurWeather Assembly and Operations manual for details of how to do this. To Download, go to the OurWeather Page (https://shop.switchdoc.com/products/ourweather-complete-weather-kit) and download the Assembly and Operations Manual.

Step 3) Put in your Blynk Authentication Code into the field on the OurWeatherAdmin page as shown above. Your code will look something like “7de5509ff6c14e72889ff0ad2ada24e8”:. This code WILL NOT WORK. You need your own. Click the button Set Blynk Authorization code. Make sure you have your Admin password.

Using the Blynk OurWeather App

We will now go through a screen by screen discussion of the OurWeather App. This discussion is for SDL OurWeather V002. Once you have started the app in Blynk (by hitting the start button in the top right most corner of the app), you will start to see data after about 30 seconds.

Main Screen

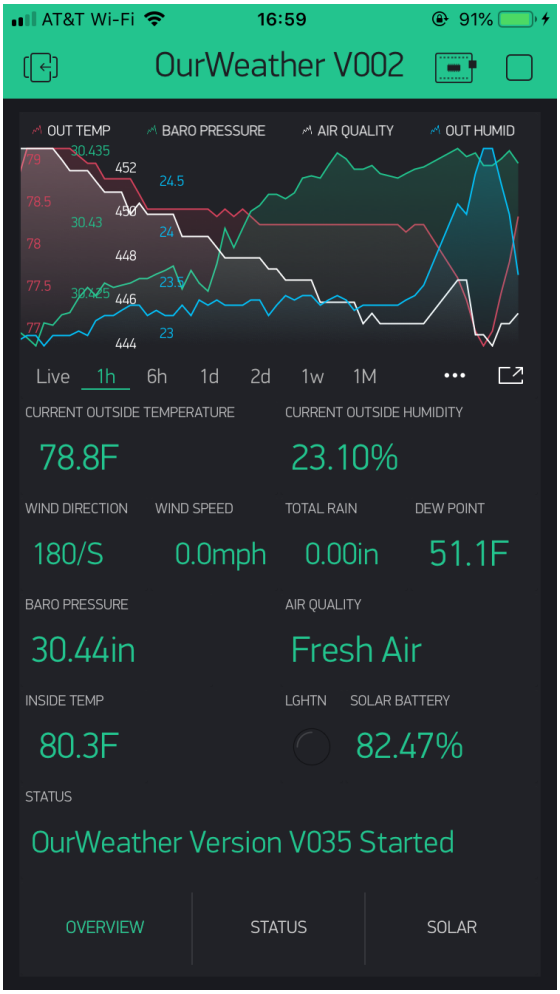


Chart – Displays Outside Temperature, Outside Humidity, Air Quality and Barometric Pressure. As you get more data you will be able to see more and more data on the screen. The button on the right bottom of the chart switches to landscape mode to see even more data.

If you don’t have the Air Quality extender, it will read zero. If you don’t have the ThunderBoard Lightning Detector, you won’t see any events from the ThunderBoard.

Status Screen

This screen shows the Status for the OurWeather system. These are:

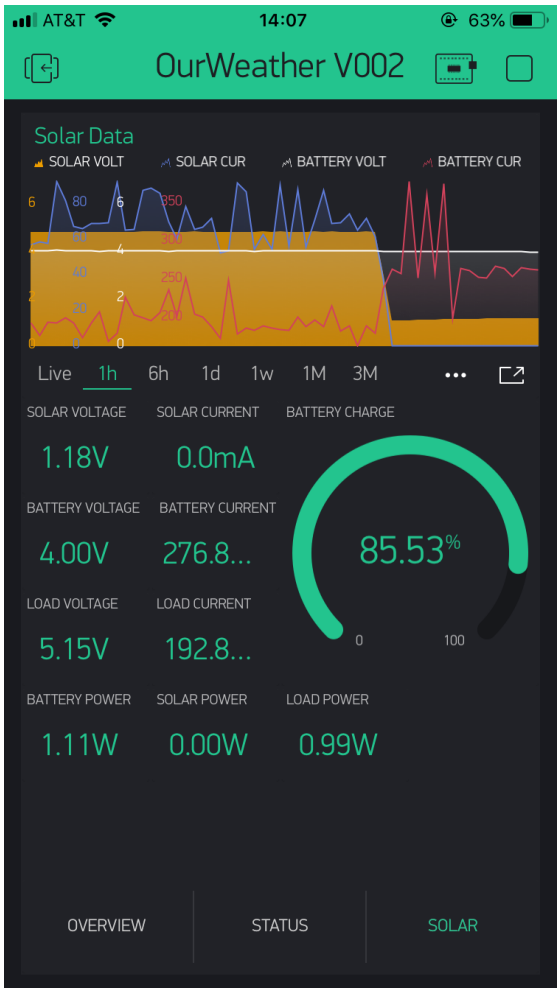
UNITS – Shows what Units (Metric or English)

LAST SAMPLE – Shows the time of the last weather data sample (in whatever timezone you have set your Raspberry Pi)

The terminal window at the bottom shows a running report of what the OurWeather system is currently doing. This is where you will see any lightning or noise events for the ThunderBoard Lightning Detector system.

Upon startup, OurWeather checks for what devices it finds and lists them on the Status Log.

Solar Screen



This screen shows you the current status of the optional solar power system connected to OurWeather. Voltage displays are in Volts, while all the current screens are in milliamps (mA).
The Battery Gauge is an estimate of the total available charge (not the total charge of the LiPo battery), but the charge available to the OurWeather system.

This screen really lets you see the solar power system in action.

Support

As with all SwitchDoc Labs products, technical support is given through the forums on forum.switchdoc.com
If you have issues that can be solved by our fabulous customer service department, please go to www.switchdoc.com and send your issues through our Contact page on the top menu.

Disclaimer

SwitchDoc Labs, LLC takes no responsibility for any physical injuries and possession loss caused by those reasons which are not related to product quality, such as operating without following the operating manual and cautions, natural disasters or force majeure.
SwitchDoc Labs, LLC has compiled and published this manual which covers the latest product description and specification. The contents of this manual are subject to change without notice.