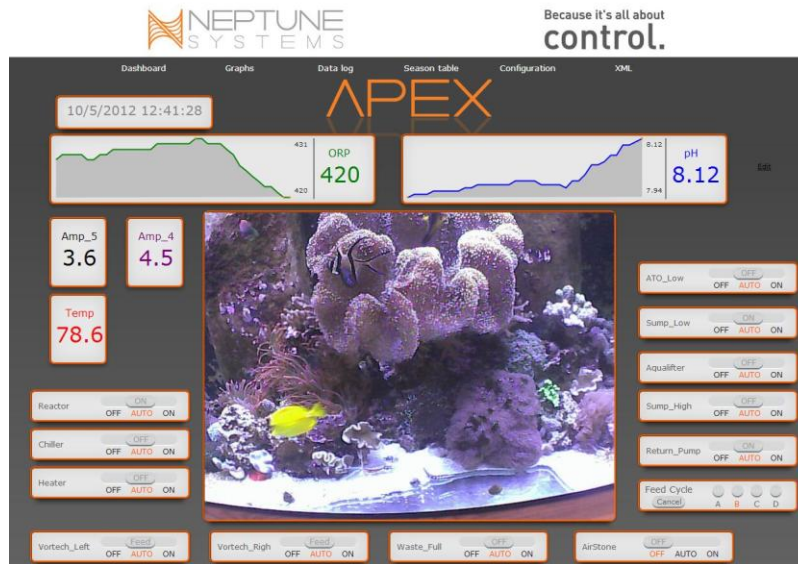


## Configuring the Dashboard

The new Apex Dashboard, released in the 4.20 version of the firmware brings a new dimension to tank control and automation. The Dashboard provides a graphical representation of your outlets, probes and switches. It even enables you to embed streaming video from a web cam.



The Dashboard is comprised of a *palette* and *tiles*. Your palette is like a blank canvas. Tiles contain the status of outlets, probes and embedded URL's. You can have up to 4 Dashboards on a controller. You access and configure them via your web pages on the Dashboard menu.



Initially, every outlet and probe will have a tile on the pallet. You then can configure your individual Dashboards by simply dragging tiles around. There's a virtual drawer called 'Unused Tiles' that contains any tile you don't want displayed. You can't delete tiles but you can store them in this "drawer" of Unused Tiles. Later if you want one of those tiles, simply drag it back to your palette.

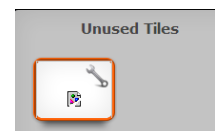
To begin configuring your Dashboard, click 'edit' on the far right of the pallet. When you do, the Unused Tiles tile will appear along with an option to save. Simply drag tiles around until you are satisfied with the look. Then save.

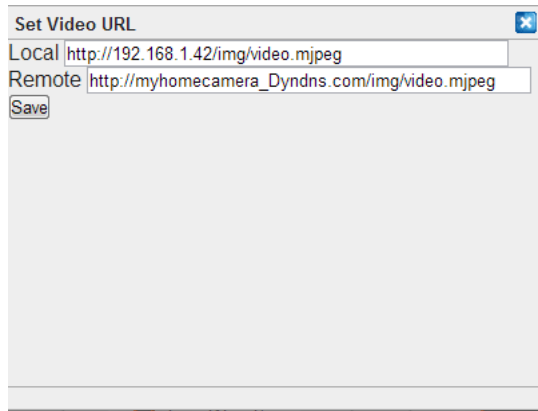


Note that with your probe tiles there will be a small wrench icon in the right corner. This gives you additional options. If you click the wrench it will toggle between expanded and compressed mode. In expanded mode you get the current probe reading and a graph of recent probe data. In the compressed mode you simply get the current probe reading. Probe tiles can consume a fair amount of space and this gives you flexibility in what you want to see.

### Embedding Streaming Video

The Dashboard has a special tile that is blank in the Unused Tiles. This tile can be configured with a URL of any web cam that can stream video in a MJPEG format with a URL. USB web cams typically can't stream video out to the internet. You'll need to get an IP enabled web cam.





To configure an IP Camera, simply drag the blank tile to the position on your palette that you want the video to appear. You will now see another wrench on that blank tile, this one on the left side. If you click on that wrench you will get an input screen where you can enter an internal and an external URL. This will be the streaming URL for your camera.

For a detailed discussion of internal and external addresses, see the Chapter on Networking. Essentially most home systems will have a different IP address for internal access and external access. This is true for your controller and it will be true for your web cam.

## Determining your streaming URL

Unfortunately there's no standard naming convention for streaming video URL's. Every camera manufacturer is different. There are some sources on the web where you can search for your camera and determine what the naming convention is.

One such source is <https://github.com/ingenuitas/SimpleCV/wiki/List-of-IP-Camera-Stream-URLs>.

Another is <http://www.bluecherrydvr.com/2012/01/technical-information-list-of-mjpeg-and-rtsp-paths-for-network-cameras/>.

When you think you have the proper syntax for your camera, you can test it in your browser. Just enter the full URL into an empty browser window. You might get prompted for a user name and password for your camera. If you get a video stream you're good to go. Just go back to the Dashboard tile and enter that complete URL. Don't forget to save.

## About Tiles

Your tiles are far more than just a graphical representation of whether your outlet is ON, AUTO or OFF. By clicking on a tile name when in normal mode, you will go directly to the Outlet Configuration for that outlet. This is a quick and easy way to verify or change your outlet program.

In edit mode, if a tile has a wrench displayed, there are other things you can do with that tile. Probe tiles can expand or compress. Your video tile will let you enter a URL. And clicking in a tile under the ON, AUTO or OFF words will change the state of that outlet accordingly.