WXM Radion Instructions.

Please follow the following instructions to update your WXM module to be compatible with your Radion lighting and to program your Radion lighting.

WXM Update

After updating the firmware of your Apex to revision 4.3, you will now need to apply a F/W update to your WXM module via the Webserver Interface.

1. On the top tool bar hover over “configuration,” then select “module setup”
2. Select your WXM module from the drop down menu
3. Select the “Update Firmware Radio” Button
4. Click “Submit Module Change”
5. You can observe the module update progression at the module list below

EcoTech RF Update

After updating the F/W to your WXM module, now you will need to update the RF module inside the WXM.

1. If not already selected, select the WXM module from the drop down menu
2. In the WXM Configuration, select the “ WXM RF Firmware Update”
3. Click “Submit Module Change”
4. After it shows complete, wait 10-15 seconds, then remove the WXM from the Aqubus and plug it back in. It should show:
   Rev1.11, RF Rev 1.2

Attach Radions to WXM

Now we will attach the Radions to the WXM. Upon doing this you will no longer be able to connect your lights to ESL without going through the connection manager. You will only be able to connect them to the WXM, not both the WXM and ESL simultaneously. Nothing will change in how you operate your Vortechs. To attach the Radions:

1. If not already selected, select the WXM module from the drop down menu
2. In the WXM Configuration, select the “Reset Radions” button. The lights will all flash , then go off
3. In the WXM Configuration, select the “Attach Radions” button. You will now see lights paired to the WXM module below and new outlets will be automatically added to your outlet configuration

Programming Radions

By no means is this a complete guide to programming your Radions, and the pending release of Apex Fusion will have a dramatic difference in the programming interface.

Once you've established communications with the Radion fixture(s), it's time to program your lights. Now would be a good time to add the new light outlet to your Dashboard (for instructions on how to do this, see the Comprehensive Reference Manual or visit the Neptune Community Forum at http://forum.neptunesystems.comand look in the Dashboard forum).

1. Test your fixture by turning your light outlet to ON. Your fixture should turn on with 100% intensity, all colors. If so, everything is working and you can set the outlet to OFF for now until it's programmed.
2. Defining your profiles will be the first step in programming and you do this from the Configuration> Profiles Setup web page. Your light fixture has multiple colored LED's. Each color can be independently controlled in terms of its intensity (0 – 100%). In addition, the overall intensity or brightness of the fixture can be controlled, again 0 – 100%. This is established using profiles. You can have up to 32 different profiles defined with the Apex controller. Using profiles, you can define a color assortment for midday and a different color profile for mornings or evenings. This can be thought of as "the how." Follow these steps:
    a. Select an unused profile (default names are PF1 – PF32).
    b. Change the default name to a unique profile name. Note that profile names are case sensitive!
    c. Select 'Radion' for the Control Type. You will see all the possible colors along with begin/end overall intensity and Ramp Time. We'll use these in just a minute.
    d. Begin entering your selected color intensities skipping those colors your fixture does not support.
        i. If there is not a color on your fixture, then adjusting the value will have no effect. I.E A Radion G2 doesn't have UV, but a Radion Pro does.
    e. 'Start Overall Intensity' and 'End Overall Intensity' are used to ramp your fixture up or down at the beginning of the day to simulate sunrise or at the end to simulate sunset.
    f. 'Ramp Time' is the duration of the ramp in minutes. For example, begin/end intensities of 30 and 100 with a ramp time of 60 will take your fixture from 30% to 100% over a 60 minute period.
    g. 'Update' to save.
3. Now we will program " when" the Radion will run these profiles.
    a. Select your newly created Radion outlet in configuration> outlet setup
    b. Select the "Advanced" for the control type.
    c. The configuration below assumes you've created three profiles named 'RampUp', 'Day' and 'RampDn'. Both of the ramp profiles have a Ramp Time of 120 minutes. RampUp starts at 20% and ends at 100%, RampDn just the opposite. The profile Day has a start and end intensity of 100 and a Ramp Time of 1 since there really isn't any ramp

Fallback OFF
Set OFF
If Time 08:00 to 10:00 Then RampUp
If Time 10:00 to 16:00 Then Day
If Time 16:00 to 18:00 Then RampDn

4. Adding Moonlights to your Radion
    a. Create a profile, name it 'moonlight'.
    b. Set all the color channels to 0 except Blue, Royal Blue, UV ect
    c. Set the begin and end intensities to 1 and the ramp time to 1.
    d. Then in your Radion(s) outlet configuration:

Fallback OFF
If Time 08:00 to 10:00 Then RampUp
If Time 10:00 to 16:00 Then Day
If Time 16:00 to 18:00 Then RampDn
If Time 18:00 to 08:00 Then moonlight

5. Adding Weather Events in your Radion
    a. Begin by creating a new profile using the 'weather' control type. Name this profile as you wish. The following fields are used:
        i. Light Maximum Intensity (%): the lighting intensity during periods other than cloudy – this could be sunny or simply overcast.
        ii. Cloudy light Intensity (%): the intensity of the lights during a cloudy period – this could be stormy if you use the light intensity to represent overcast.
        iii. Cloud Duration (MMM): the number of minutes for each cloudy period.
        iv. Cloudy Time (%): the percent of time that it will be cloudy. This is applied against the length of time you chose to run this profile. If you run this profile for 60 minutes with 75% cloudy time then cloudy time will be 45 minutes. With a 15 minute cloud duration in the example that would mean 3 cloudy periods over the 60 minutes.
        v. Probability of Lightning (%) : a metric which sets the frequency of a lightning strike during cloud cover. 0% means no lightning will occur and a 100% value means that lightning will occur almost continuously.
        vi. Lightning Intensity (%): the lightning white light intensity during a lightning strike. It can be set between 0 and 100%.
    b. Once you've defined your weather profile, you can incorporate it a variety of ways. The simplest is to just set some times during the day you want weather. For example:

Fallback OFF
Set OFF

If Time 08:00 to 10:00 Then RampUp
If Time 10:00 to 16:00 Then Day
If Time 16:00 to 18:00 Then RampDn
If Time 11:00 to 12:00 Then weather
If Time 17:00 to 17:30 Then weather