



## Getting Started

Follow these instructions to monitor a system on SPLASH Monitoring:

1. Sign up for an Account on the Splash Monitoring web site <http://splashmonitoring.com/signup>. You will be emailed a confirmation, to which you must respond to activate your Splash Monitoring Account. Please note that due to "greylisting" on some mail servers this email can take many hours to arrive in your inbox.
2. Set up the hardware (STREAMbox, LAN Interface Devices, solar controllers, inverters etc.) according to the document entitled "Setting up your {hardware name}" which should accompany this document.
3. Go to the Splash Monitoring web site (<http://splashmonitoring.com/Security/login> ) and log in using the Login name (email address) you supplied in Step 1 above.
4. Click on the "Fingerprints" tab and enter the Fingerprint (the 25 character label found on the STREAMbox) into the box under 'Add a new fingerprint' and click the 'Add' button. If the Fingerprint has been added successfully you will see it displayed with an "Edit" button on the same page.
5. Click "Edit" and enter an optional nickname which will help you identify the Fingerprint this is usually associated with the location and/or function of the system. Enter the site's location and click "Find Location", then confirm the location by checking the box towards the bottom of the page. Lastly on this page, choose the scan frequency, this must match that set on the STREAMbox. See the setup document for your specific hardware. Click "Save" to complete this page.
6. Click the "Systems" tab and select your fingerprint in the drop-down menu under "Start monitoring a new system". Click the "Scan" button.
7. If the STREAMbox is successfully 'pushing' data to the Splash Monitoring web site you will see a "Stream Found" message together with the values from each of your solar systems (ie. controllers or inverters) displayed as "System 1", "System 2" etc. If you see 'No Stream Found' go to the 'Trouble Shooting' section of the Set Up document.
8. If valid data is displayed for your system, click the "Monitor This System" button.
9. Click on the "Systems" tab where you should see a "New System" displayed as a set of buttons across the screen.
10. Click on the "Upgrade" button and purchase the appropriate subscription by clicking the one of the "Pay Now" buttons. When you've completed the Paypal session you will need to navigate back to the SPLASH Monitoring Dashboard. If your subscription has been pre-paid, click on the "Free" button to claim it.
11. Click the "Settings" button and customise your site details and click on Save before choosing a preset. At the bottom of the page select a preset from the drop-down menu that most closely matches your solar system then click the "Use Preset" button. This will populate the remaining configuration parameters (Labels, Animation, Triggers, Graphs, Alarms etc.) with pre-defined values.
12. You may tailor your system by going back to the "Systems" tab, select the appropriate button and alter any values appropriate to your system. Alerts in particular are not always exactly what the user requires so you should review these if nothing else.
13. This is the basic configuration of your site complete and it should be viewable with current data in the Dashboard and Gallery by clicking on either the "Mobile" or "Animation" buttons.

# Combining Systems

The values from individual systems can be collated into a single combined system. For example multiple PV inverters serving a single building can be combined so that the data from each inverter is collated into a single system depicting the building as a whole. For this to be successful the individual sensors from each system must be identical. (ie if sensor 1 on system 1 is PV output voltage, then sensor 1 on system 2 must also be PV output voltage if these systems are to be combined and their combined data be meaningful).

Individual sensors can be combined using one of five methods: Sum, Average, Minimum, Maximum and Mode. For example, adding the voltages from individual inverters doesn't make sense, so you would probably take either the Average or the Mode of all combined voltages, whereas you would Sum the power output of each inverter to give a total power output for the building in this case.

It is possible to display a single sensor from an individual system on a combined system by having the sensor in a slot that is not used by any other system in the combination. For example, system 1 has a solar radiation sensor attached to slot 20 of the system, whereas systems 2 and 3 have nothing attached to this slot and therefore always produce a value of zero in slot 20. Therefore the Sum (or Maximum) of all slot 20s will reflect the value of the solar radiation sensor on the combined system.

To combine systems, enter your Fingerprint\* into the box under 'Start monitoring a new system' on the Splash Monitoring Dashboard, select a Fingerprint to scan from the drop-down menu and click the 'Scan' button:

- Click the "Include device..." check-box against each device you want to combine into a single system.
- Click the "Make Combined Systems" button. This will create a new system called "New System".
- Go back to the Dashboard and click the "Settings" button on the "New System" shown.
- Give this new combined system a unique System Name and URI and click Save.
- Go back to the Dashboard and click the Upgrade button for the new combined system and give it a subscription.
- Go back to the Dashboard and click the "Settings" button and select a "preset" if required.
- Go back to the Dashboard and click the "Labels" button, and select the most appropriate calculation method (AVG, SUM, MIN, MAX, MODE) for each sensor by clicking the drop-down menu next to its label.
- Click the Save button when done.
- Return to the Dashboard and check that the remaining settings are what you expect (Graphs, Content, Alerts etc.)
- If you want to set up more combined systems you'll need to return to the dashboard and re-scan your Fingerprint\* and repeat these steps for each one.
- Individual systems do not have to be set up and monitored for live data to populate combined systems. For large installations with multiple devices (eg. inverters), it may be best to leave them un-monitored to keep subscription costs down. If you only need to view the real time data for individual systems very occasionally you can scan your fingerprint in the Dashboard and view the data for each un-monitored system there.

\* Once you've manually entered a fingerprint it will usually pop up automatically in the fingerprint box after typing the first couple of characters. Otherwise you can save it to your clipboard by highlighting it the first time you enter it and press <Ctrl>c, then on subsequent scans paste it into the box using <Ctrl>v.