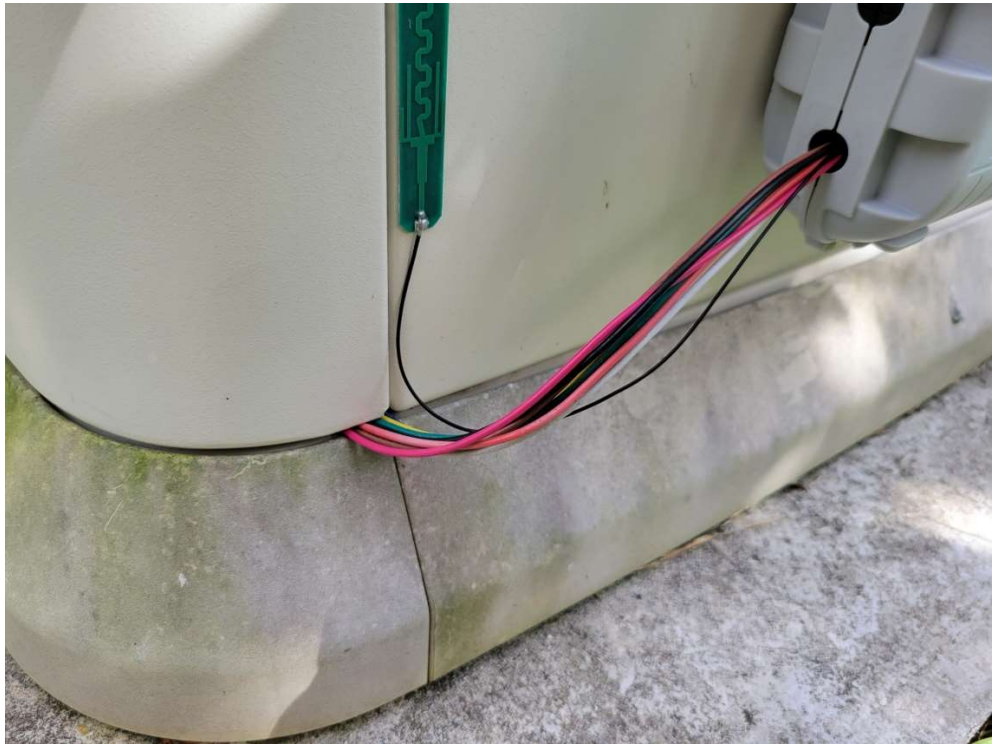
PintSize Me LLC - Generator Kits v2.8+

If you have a question or aren't sure, stop and contact us before continuing. Pictures are welcome since without pictures we can't see what you see. You can contact us by replying to your order or shipping confirmation emails or through the form on our site. We frequently respond within an hour during the day; however, please allow up to 4 business hours for us to reply. Depending on your question we may need time to do research, recreate the problem or setup, develop new instructions, or take photos of an example to answer your question. We also have no clue what level of knowledge an individual may have, so we may ask questions you think are dumb simply because we need to cover all the bases since everyone has different skill sets and knowledge bases.

Preparation:

- If your unit is not assembled, scroll to the bottom for the assembly information.
- If you did not get a pre-loaded unit, follow the GenMon instructions on how to setup your micro-SD card and get all your installs done before proceeding to the physical installation steps.
- If you have an injector, set GENPWR to the ON position, otherwise set to OFF.
- BUCK should be set to ON unless you are going to run the Pi directly with USB power or PoE. If BUCK is set off GENPWR should also be set off.
- You can power up and configure your WiFi inside with a USB cable (micro-USB for Pi 3 and Pi Zero 2, USB-C for Pi 4 and 5), or you can do so after powering it up at the generator.
- The enclosure does have neodymium magnets inside it that line up with the neodymium magnets on the base plate. Neodymium magnets have an extremely strong pull force for their size, do NOT try to pull the Pi directly up off the magnets as you will likely dislodge the magnets from the enclosure. Instead, slide it down or to the side half an inch to separate the magnets and then lift it off.
- Enclosure prep:
    - If you got the enclosure, be sure to thoroughly clean and dry the generator enclosure area where you will be placing it. Pollen and dirt greatly reduce the effectiveness of adhesives.
    - Below is a picture of how the cable can be run. The enclosure is on the back panel and the cable is running under the side panel where the battery can be accessed on units with an Evolution 2 controller. Your install location may need to differ based on the design and orientation of your enclosure. Just be sure that your Molex cable has a low point so water cannot follow it to electronics.



Preloaded Units - Configure WiFi:

- OS Login: username: “genmonpi”, password: “raspberry”, machine name: “genmon”. Change the password.
- Configuration Portal uses OS Logins, if you create a new login later that will also work for the Configuration Portal.
- GenMon Login: username: “genadmin”, password “raspberry”. Change the password in GenMon on the settings page.
- Option 1 (image below):
    - Option 1A: If you have a Pi with an Ethernet port, you can plug into your network and boot the Pi, then you should be able to access the portal internally with http://genmon:8000/, http://genmon.local:8000/ or if you have the IP address http://{ip}:8000/ and you would not need to use the hotspot.
    - Option 1B: Boot up the Pi, then press and hold the button on the HAT. It should immediately turn red, then after approximately 5 seconds it will turn white, this indicates the hotspot is activating.

- Connect your device to the “config” hotspot with a password of “genmon00” (that is 2 zeros). Many devices do not like hotspots without internet access and will automatically switch back to your internet connected WiFi, but typically if you connect 2 or 3 times in a row it will get the hint and stay connected.
- Once connected to the config hotspot, open your browser and go to http://10.42.0.1:5000/. It can sometimes take a minute or two for your device to cooperate with loading that page correctly since there is no internet connection.

- Configure:
  - When the portal loads:
    - Enter the username and password into the top 2 boxes on the page, default of genmonpi and raspberry, this is used to authenticate the other functions.
    - If your timezone is not correct, select your timezone and click Save Timezone – you will get a confirmation.
    - We recommend changing your password next to something you will remember, be sure you will remember it as we cannot recover it for you later and you would have to start over on the image. We can supply the current pre-loaded image for you to re-burn your micro-SD card if necessary. After changing your password you will get a response, and then you need to update the “Current Password” field at the top of the page.
    - Select your WiFi from the dropdown and enter your WiFi password/key, and then click Save WiFi. This will shut off the hotspot and connect the Pi to your WiFi. If your device does not appear on your network within 5 minutes you may need to try again.
  - The UPDATE function in the portal only updates the portal, it does not update the OS or GenMon. While new feature may be added over time, it is not important to keep this up to date unless you are needing one of those new features.

User name and password to use for all actions

User Name:

Current Password:

Select Time Zone:

Save Timezone

Current SSID: <none>

Select WiFi:

WiFi Password:

Save WiFi

Note: the fan setting only works with HATs and Pi 3/4. Pi 5 has its own built in fan management.

Fan PIN:

Fan Temp:

Set Fan Configuration

Machine Name:

Save Machine Name

New Password:

Confirm New:

Change Password

Current Version: 1.0.11

Available Version: 1.0.11

Update

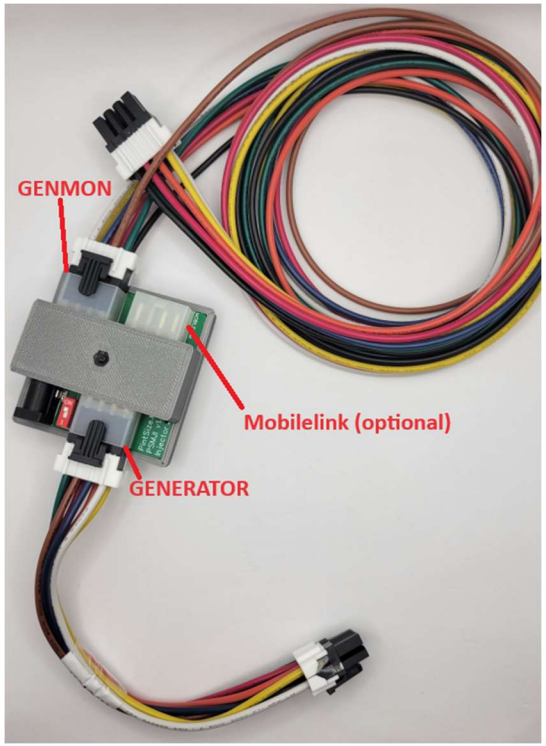
View Logs

Reboot

- Option 2 and fallback if Option 1 doesn't work.
    - Connect a display, keyboard, and mouse, use the OS UI to configure the WiFi credentials.
- You should now be able to access GenMon at http://genmon:8000/, http://genmon.local:8000/ or if you have the IP address http://{ip}:8000/.

Physical Installation:

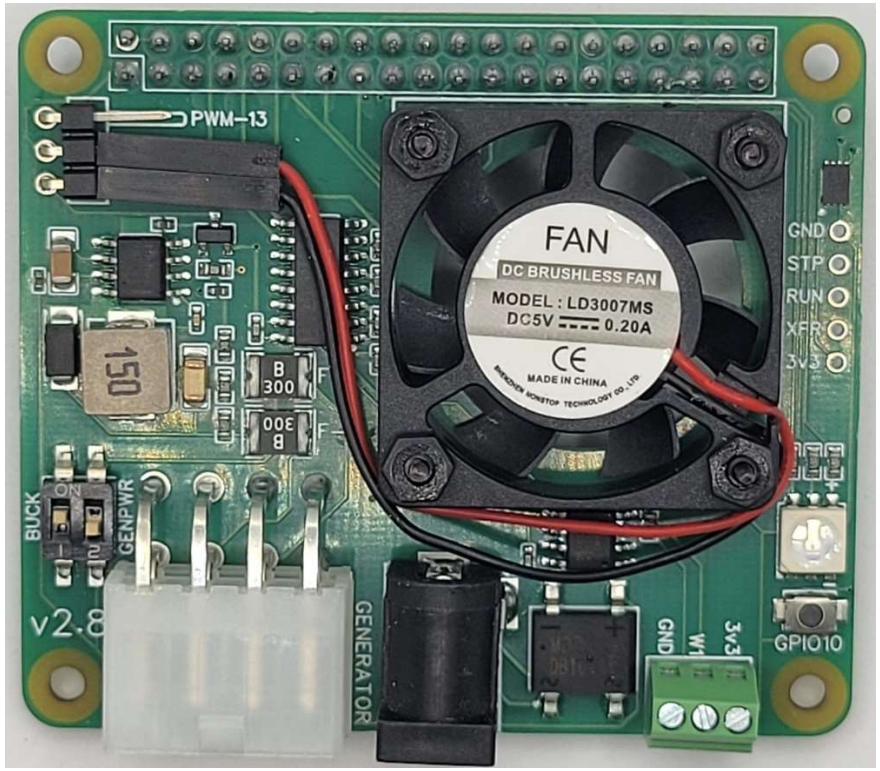
- If the generator's status light is RED stop and resolve that issue before continuing.
- Put the generator's mode switch to the MANUAL position to ensure it starts and let it run for 1 minute.
- Put the generator's mode switch to the OFF position and note any messages on the screen to compare with later. If there appears to be any errors present, stop and resolve those before continuing.
- Connect the power cord to the tightening posts on the battery terminals, red to red/positive, black to black/negative.
- If you have the injector (image below for help with the injector layout):
    - Set the red switch to the OFF position.
    - Connect the short Molex cable to the GENERATOR plug on the injector (next to the red switch).
    - Connect the long Molex cable to the GENMON plug on the injector.
    - If you have and want it connected, connect MobileLink to the MobileLink plug on the injector. If you have it, then you will be unplugging it from the generator.
        - **NOTE: Only RS485 MobileLink devices can be used at the same time as GenMon.**
    - Plug in the power cord.
    - Plug the short Molex cable into the generator.



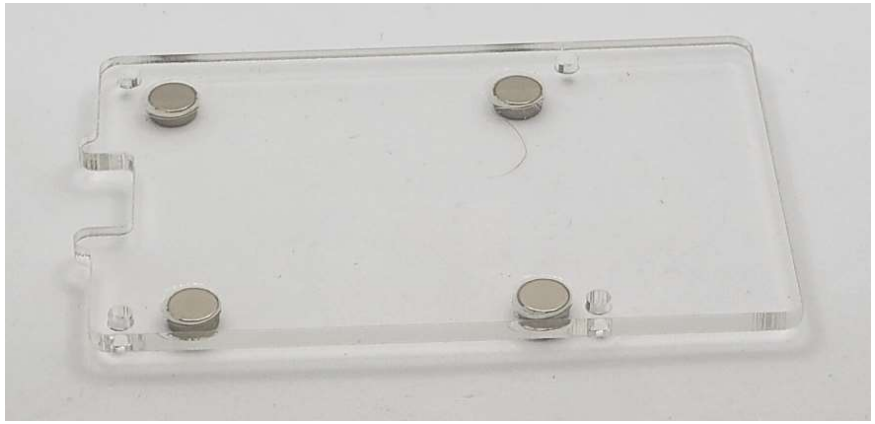
- Determine where you want to place the unit and how you will route cables.
- If you do not have an injector, connect the power cord and the Pi will begin to boot up.
- Plug in the Molex cable, if you have an injector the Pi should begin to boot up.
- Check the screen on the generator to make sure it is not displaying any problems.
- Set the mode switch to the AUTO position for normal operation.
- Close up the generator and if you have it the enclosure.

Kit Assembly:

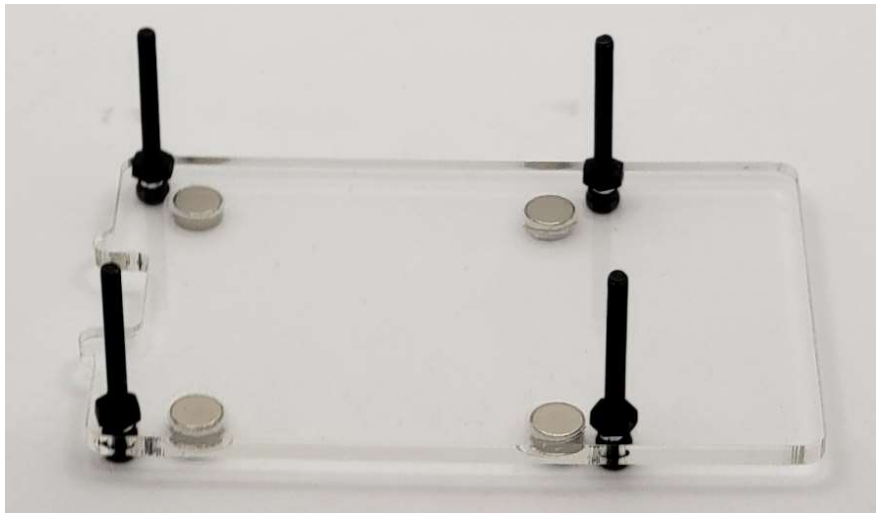
- Skip if you have a Pi Zero 2 or Pi 5 as a fan will not be on the HAT.
- Put the fan on the HAT by attaching the black wire to the bottom pin and the red wire to the middle pin, secure the fan with the 4 short screws and 4 of the nuts. The nuts do have 1 concave side, this is intended to be the side that you put on the screw first. Pressing against the screw is enough to have it not rotate so that you can get the nuts on. The fan label should be face up, but there is no left/right orientation on the fan, just whatever you are comfortable with for the wires.



- Now assemble get the base plate to begin the full unit assembly.



- Insert the long screws from the bottom of the baseplate (the side with the magnets). If you have a clear base plate, place a single nut on each and tighten, if your baseplate it not clear it has standoffs built in it. The nuts do have 1 concave side, this is intended to be the side that you put on the screw first. Helpful tip, get the nut started and then use a screw driver rather than trying to spin the nut all the way down, you can use a household power screw driver if you have one, a drill with the bit is NOT recommended, it's just too much power.



- Slide the Pi down onto the screws, in this case the USB ports will be to the right. Then slide the spacers down the screws. The Pi may scrape on the screws a bit as you do this, that's ok just don't force it so hard that you break it.

- Finally, carefully attach the HAT and then put on the last 4 nuts. You will need to manage both the 40 pin connector and all 4 screw posts at once.