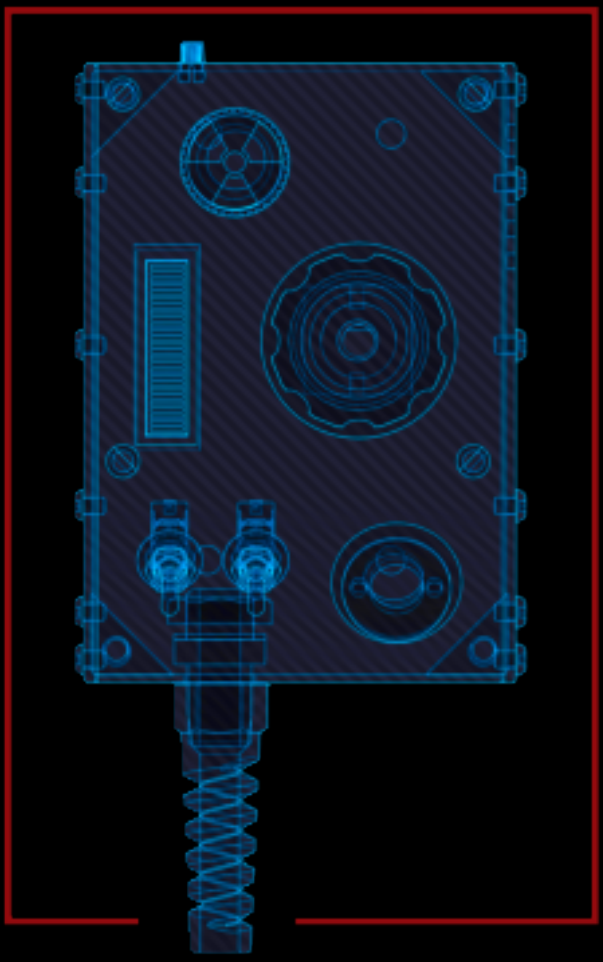
GPSTAR
Attenuator



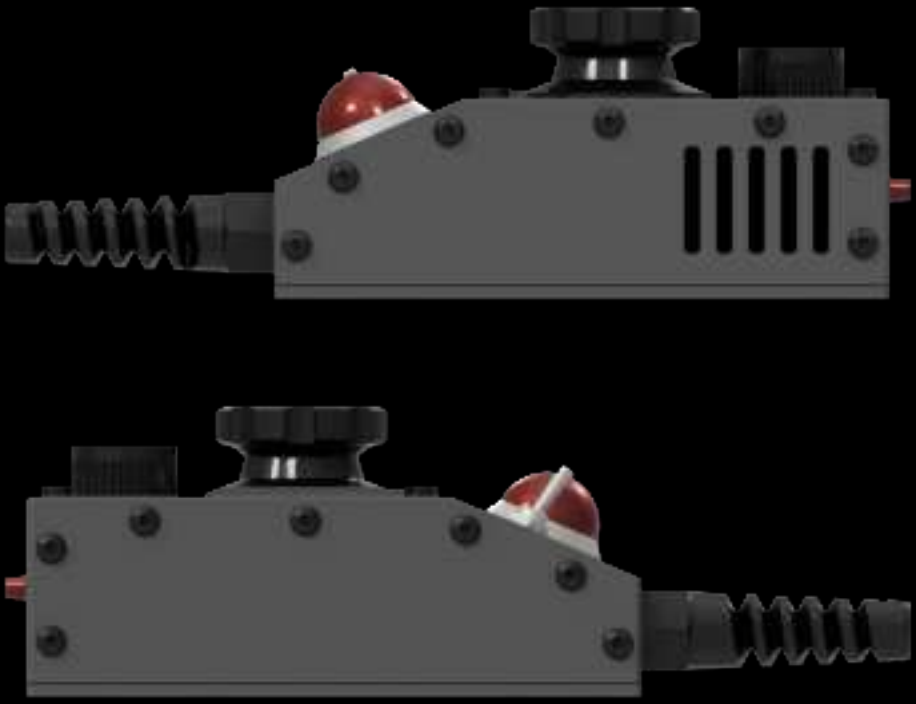
Operational Guide

GPStar Attenuator Operation Guide

The Attenuator device alters the magnetic field of the cyclotron inside of a Proton Pack. This allows the user to extend the time to ensnare an apparition by preventing an overheat safety event. Ahead of an overheat, the Attenuator will provide physical and audio visual cues as to the impending event. Attenuating will then cancel the warning and prevent the Proton Pack from overheating by manually adjusting the rate of feed of the positrons into the cyclotron, thus allowing for extended operational use.

Standard Features

- Attenuate a Proton Pack to prevent over heating.
- Real time status updates of the Proton Pack and Neutrona Wand is shown on the Attenuator various LED indicators.
- Volume control, Music playback and navigation.
- Basic controls of a Proton Pack and Neutrona Wand.
- WiFi hotspot, allowing the use of mobile devices to navigate and control the functions of the Proton Pack and Neutrona Wand.



Operation

While not attached to a Proton Pack (standalone mode) the Attenuator will simply provide some lights and effects. The left toggle switch will turn on the bargraph animations while the right toggle switch will turn on the LEDs.

When the Attenuator is connected to your GPStar Proton Pack, it will provide extended functionality. Under normal use, the main dial will allow adjusting the overall volume, starting & stopping music tracks, navigating to the next track and adjusting the effects volume.

During an overheat warning, the Attenuator will emit sounds and vibrations in addition to lighting effects as the Proton Pack reaches a critical state. At this time, the operator can turn the primary dial either direction to attenuate the rate of positrons into the cyclotron. When done correctly, this cancel's the current warning and allows you to continue with extended operation. If the warning time is allowed to expire, then the Proton Pack will overheat and enter the venting sequence.

Attenuator Layout

- Attenuator Status: If any devices are connected to the Attenuator over WiFi, then it will turn green. When red, it means no devices are connected.
- Power Level: This is the current system power level of the Neutrona Wand and Proton Pack.
- Rad Indicator: Indicates the temperature status of the Proton Pack.
- System Mode: Displays the current system mode of the Proton Pack and Neutrona Wand.

- Left Toggle: Turns the pack on or off, similar to use of the switch under the Ion Arm
- Right Toggle: Turns the LEDs on the device on or off
- Main Dial - Long Press: Alternates between two modes of operation
  - Mode 1 (Default) - Indicated by a high buzzer tone
    - Main Dial - Short Press: Starts or stops the current music track
    - Main Dial - Double Press: Mutes or unmutes all pack/wand audio
    - Main Dial - Rotate: Adjusts the overall volume for pack/wand
  - Mode 2 - Indicated by a low buzzer tone
    - Main Dial - Short Press: Advances to the next music track
    - Main Dial - Double Press: Move to the previous music track
    - Main Dial - Rotate: Adjusts the effects volume for pack/wand

WiFi Connectivity

After connecting your Attenuator to your  GPStar Proton Pack and powering it on, you can connect to the WiFi hotspot generated by the Attenuator to control your Proton Pack, view status updates and or update settings.

1. Power up your Proton Pack.
2. Open the WiFi preferences on your mobile device and look for the WiFi network which begins with "ProtonPack_".
   - If this is your first time connecting to the Attenuator, use the default password "***555-2368***".
3. Open up a web browser and navigate directly to the following URL: http://192.168.1.2

WiFi Troubleshooting:

Some mobile devices tend to auto disconnect from WiFi devices which do not have an internet connection when it detects another WiFi device in the vicinity which does.

You may need to disable these features if you find this to be a problem. These are sometimes called "Intelligent WiFi" or other "Auto Reconnect" options on known WiFi networks saved on your mobile device.

WiFi Security

After connecting to your Attenuator over WiFi for the first time, it is recommended to change the default password of the WiFi. Scroll down to the bottom of the page to find the "Change WiFi Password" link.

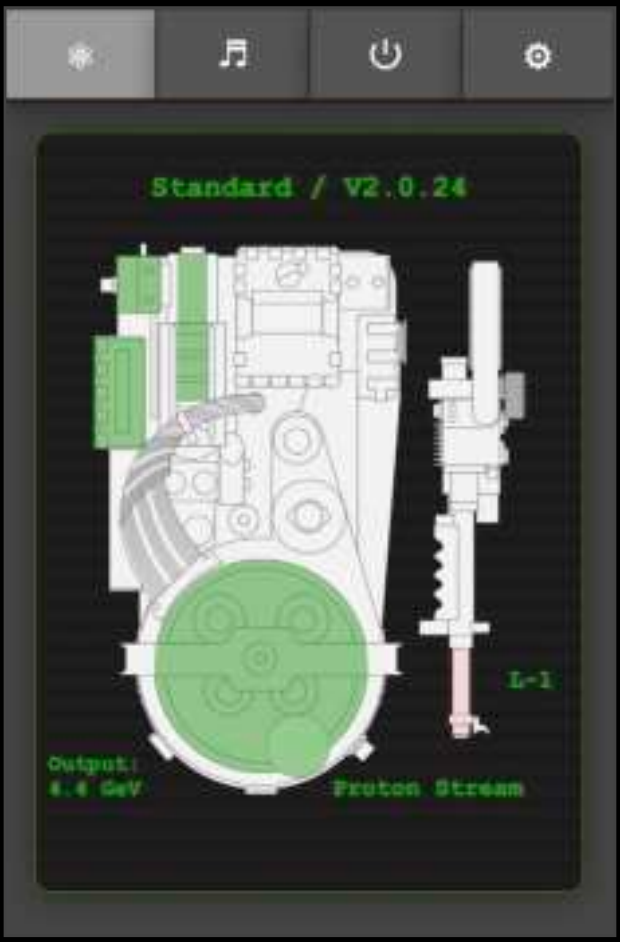
Forgot Your WiFi Password?

Please visit the gpstartechnologies.com support page for instructions on how to reset your Attenuator device with a standard mini usb cable.

Equipment Status

The equipment status information updates in real-time as you interact with the device.

If you see a "--" (dash) beside these values, it can indicate a potential communication issue. Simple refresh the page and or check your WiFi connection.



Audio Controls

Here you have full control of the master (overall) volume and to mute / unmute all devices. For playback of music, you can advance forward or backwards in the music queue. You can also select the specific track for playback from the selection field. Independent volume adjustment of the sound effects can be made, or the overall master volume can be adjusted instead.

Pack Controls

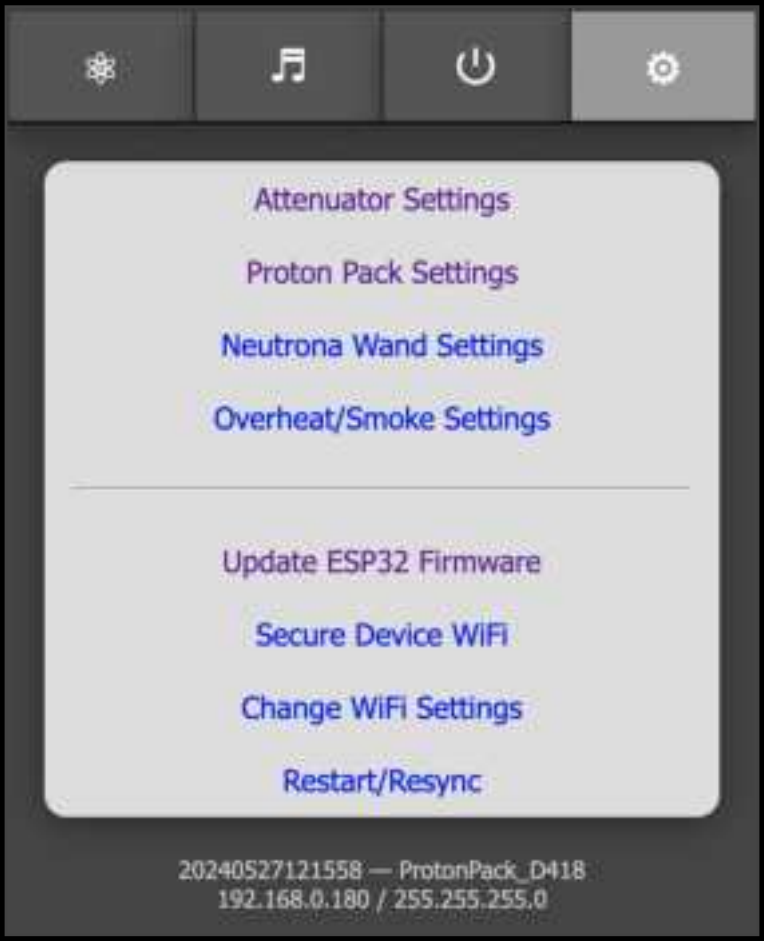
Controls are available on a per action or state basis. You have options to turn the Proton Pack on or off remotely. The options to vent or attenuate are only enabled while the devices are in a specific state.

Vent: This can only be triggered remotely when in the "Super Hero" mode and while the Pack State is "Powered".

Attenuate: When firing, the Cyclotron State must be either "Warning" or "Critical".

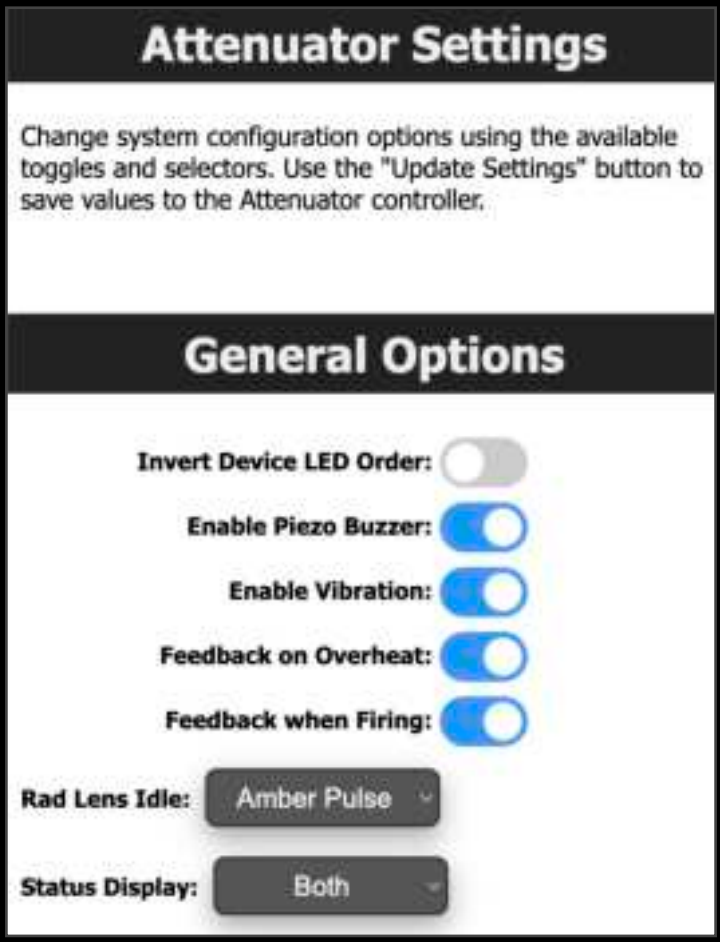
Preferences / Administration

This menu allows you to update the WiFi password, update the firmware of the Attenuator, restart or resync the system and adjust various settings of your Proton Pack and Neutrona Wand.



Attenuator Settings

Set options related specifically to the Attenuator, such as when the vibration motor or buzzer may be used to provide physical feedback during operation.

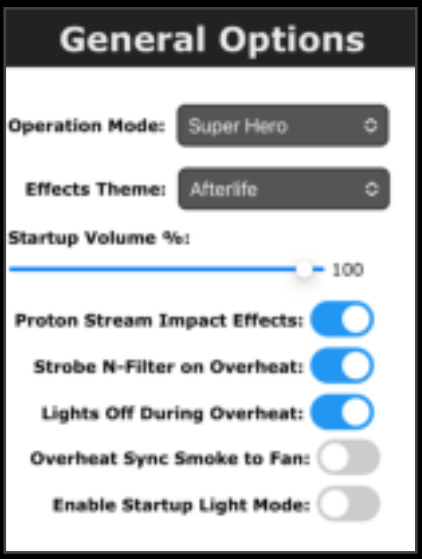


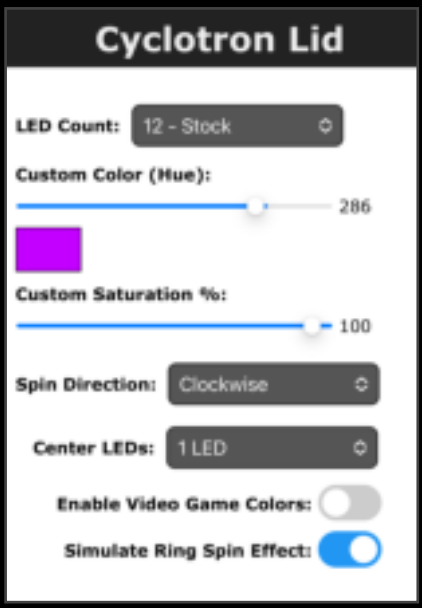
Music Track Listing Editor

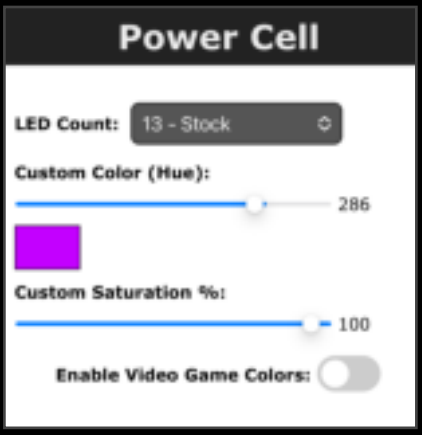
The ability to add a user-friendly track listing has been integrated into the UI. Song titles may be entered as 1 entry per line, in the order by which they are numbered on your microSD card in your Proton Pack and Neutrona Wand. The text is limited by bytes (max 2,000) not the number of lines, so to fit more entries into this text box you may need to use shorter song titles. This list of songs will be matched to each track number (starting from "500_" per the required numbering scheme).

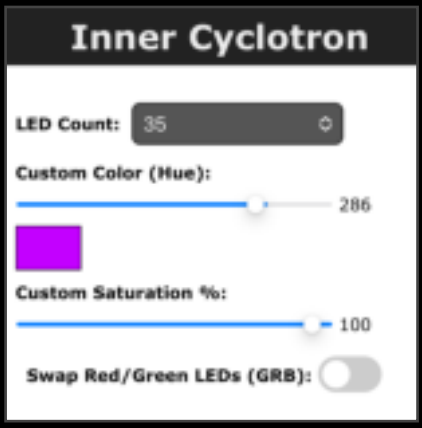
Proton Pack Settings

You can set changes such as the operational mode, effects theme, startup volume, cyclotron direction, LED counts and numerous other settings.



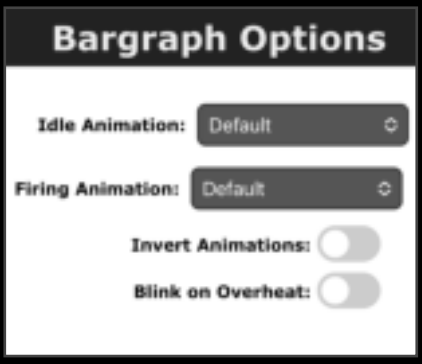


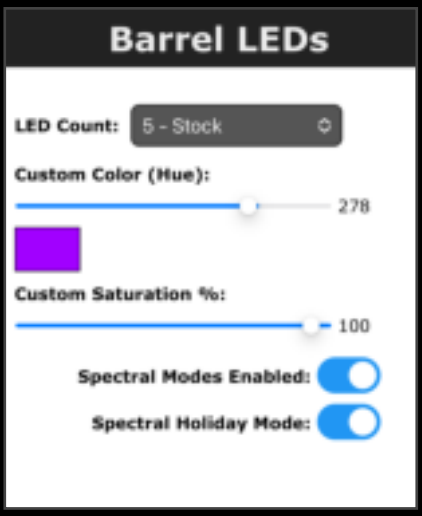




Neutrona Wand Settings

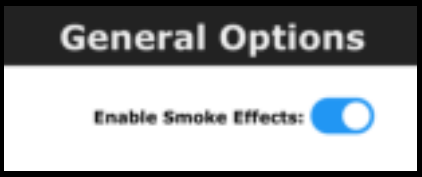
For the Neutrona Wand Settings, you can change the default firing modes, bargraph animations, enabling the special spectral modes, quick venting, vent light adjustment, cross the streams mode and various other specific settings for Neutrona Wands.

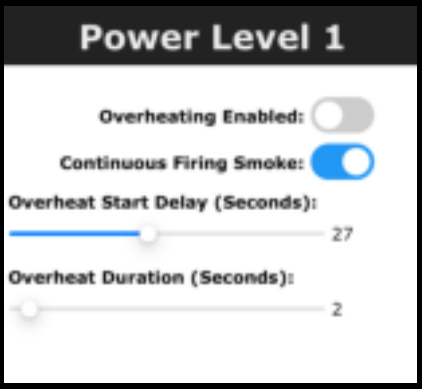


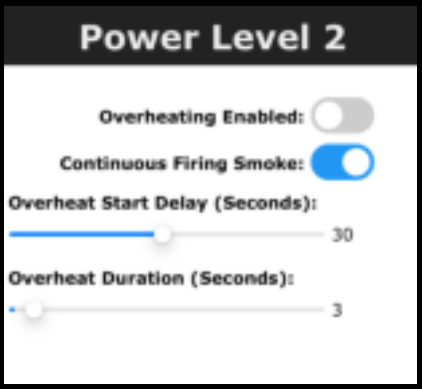


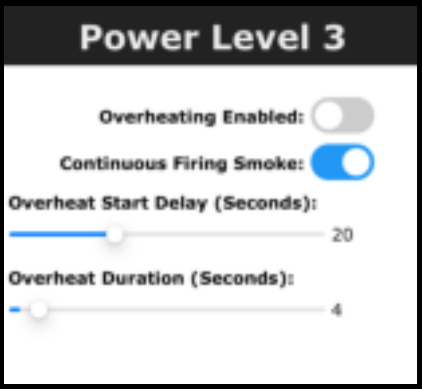
Overheat & Smoke Settings

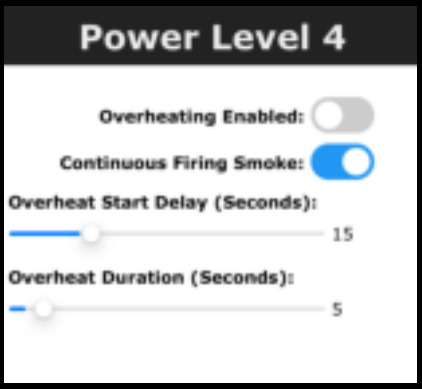
You can individually adjust the overheat and smoke settings for each power level.

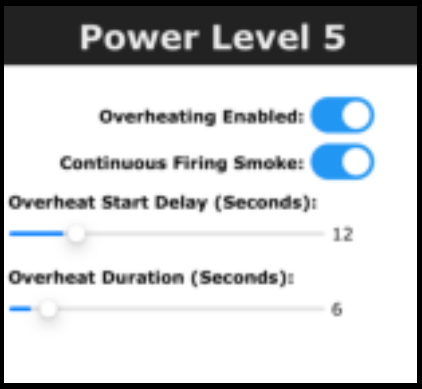












External WiFi Settings

It is possible to have your device join an existing WiFi network which may provide a more stable network connection.

1. Access the "Change WiFi Settings" page via http://192.168.1.2/ network URL to make the necessary device modifications.
2. Enable the external WiFi options and supply the preferred WiFi network name (SSID) and WPA2 password for access.
3. Save the changes, which will cause the device to reboot and attempt to connect to the network (up to 3 tries).
4. Return to the URL above to observe the IP address information. If the connection was successful, an IP address, subnet mask, and gateway IP will be shown.
5. While connected to the same WiFi network on your computer/ phone/tablet, use the IP address shown to connect to your device's web interface.

Firmware Updates

The Attenuator supports Over-The-Air (OTA) firmware updates.

Please visit gpstartechnologies.com to download the latest version.

1. With your Proton Pack and Attenuator powered on, navigate to the Update Firmware page on your mobile device.
2. Use the "Select File" button and select the downloaded firmware file that you downloaded.
3. The upload will begin immediately. Once at 100%, the Attenuator will reboot itself.

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Rev 2.0