EScribe
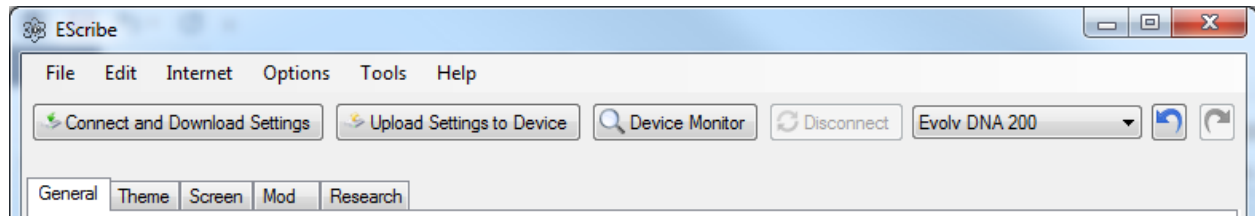

EScribe is a software package used to configure and modify the operation of your DNA 200. It requires a Windows PC and connects to your DNA 200 through the onboard USB port.

EScribe at a glance

Drop down menus:
File
Edit
Internet
Options
Tools
Help

Automated function buttons and connection status:
Connect and Download Settings
Upload Settings to Device
Device Monitor
Disconnect
Device selection drop down
Undo
Redo
Connection Status

EScribe tabs:
General
Theme
Screen
Mod
Research

EScribe does not have to be used to use your DNA 200 device, we have tried to make the defaults accommodate a wide range of use. It is a feature packed accessory that lets you change settings, customize, monitor and log real time operations, and update firmware.

EScribe and Firmware Update Processes

EScribe

EScribe automatically checks for updates each time it is opened on an internet connected PC. When an EScribe update is available a yellow box will appear along the bottom of the EScribe window.
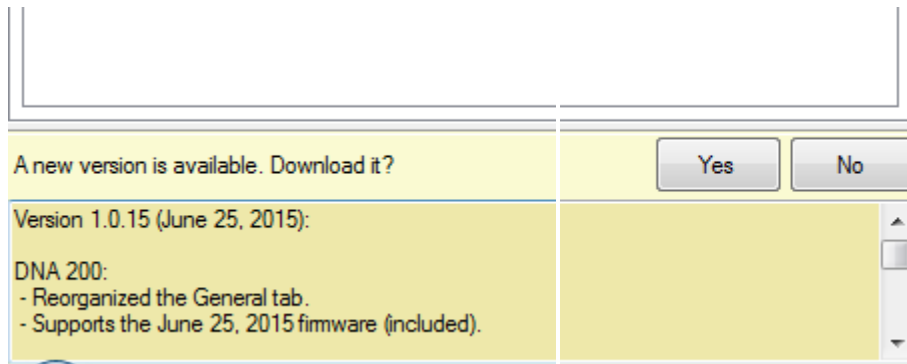

To install the update, click yes and follow the prompts. Once update installation is complete restart EScribe.

Firmware

Fimware updates are 'pushed' automatically to Escribe

Automatic firmware update

Click the blue "**Click here to update your device to Version**" when the **New firmware is available!** message appears in the upper left hand corner of the EScribe window and the firmware update will run automatically.
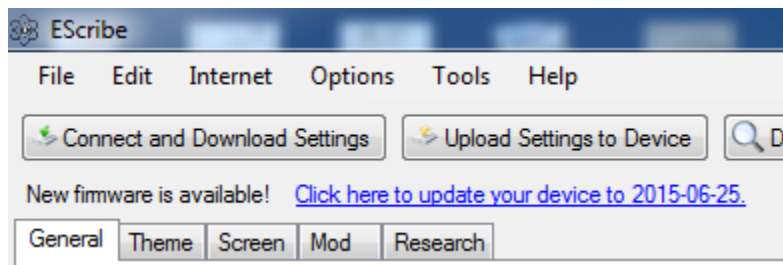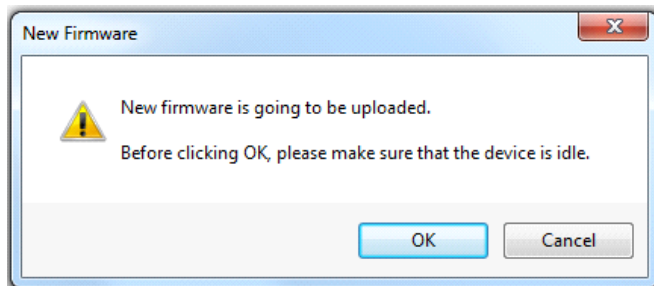

To update firmware manually (not recommended)

Select Update Firmware from the Tools menu at the top of the Escribe screen
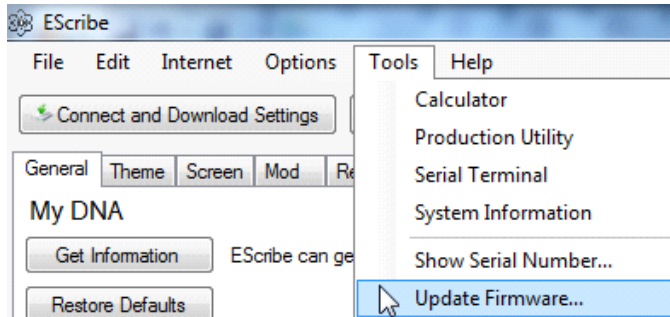
A diolog box will pop up telling you that new firmware is going to be uploaded and to please make sure that the device is idle.


Once you press ok EScribe will open a window so you can browse to and select the firmware update file.

Once you have browsed and found the firmware file, select it and click open. The firmware will automatically begin installation.
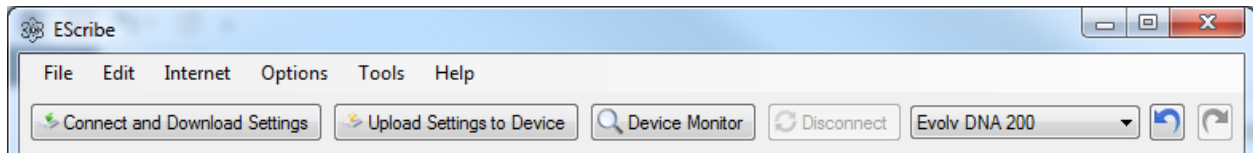
While EScribe is applying the firmware update a status bar showing the progress will be visible.
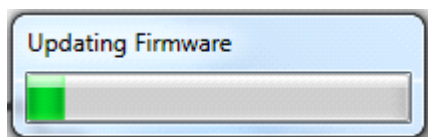
Once EScribe has completed the firmware update process, a dialog box will appear confirming the update.
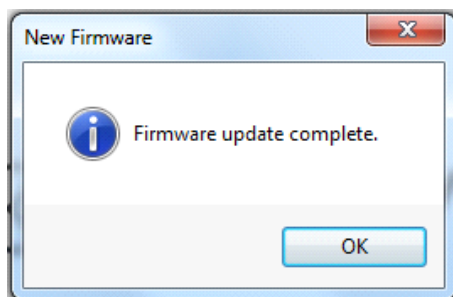
Automated Function Buttons and Connection Status

Connect and Download Settings: Connects a DNA 200 device to EScribe and downloads the device's settings to EScribe.

Upload Settings to Device: Uploads currently displayed settings to the connected DNA 200 device.

Device Monitor: Opens the Device Monitor.

Disconnect: Disconnects the connected DNA 200 device from EScribe.

Device selection drop down: Used to select different DNA 200 devices if you have more than one connected to your computer.
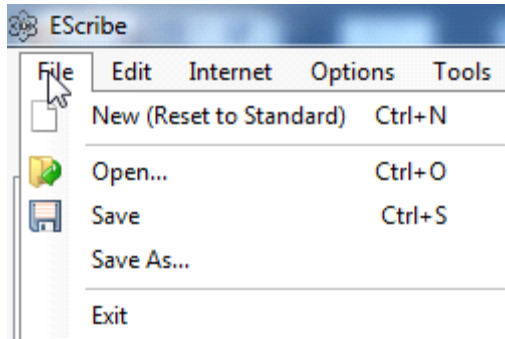
Undo: Undoes recent changes

Redo: Redo recent changes

Connection Status: Indicates connection status of the attached DNA 200

Drop Down Menus

File drop down menu

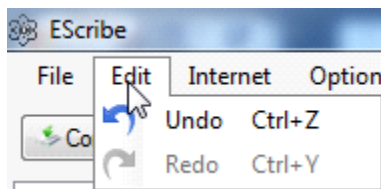**New (Reset to Standard):** Resets all settings back to defaults.

Open: Opens a previously saved settings (.ecig) file.

Save: Saves the current settings to a .ecig file.

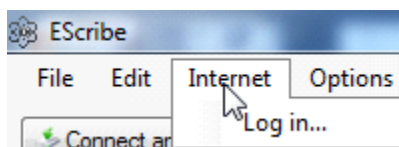**Save As:** For saving the current settings to a different location.

Exit: Closes Ecribe.

Edit drop down menu

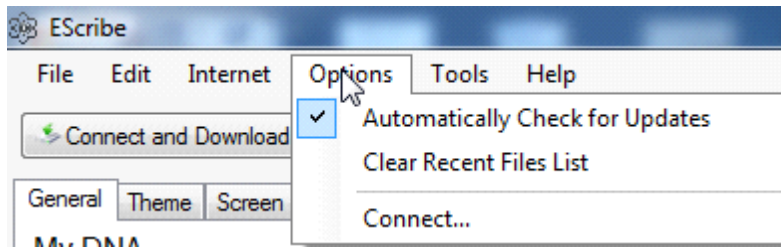

Undo: Undo recent changes.

Redo: Redo recent changes.

Internet drop down menu

Log in: Log in or register to connect to the Evolv server for the Production Utility tool and other features. You can register at http://my.evolvapor.com.
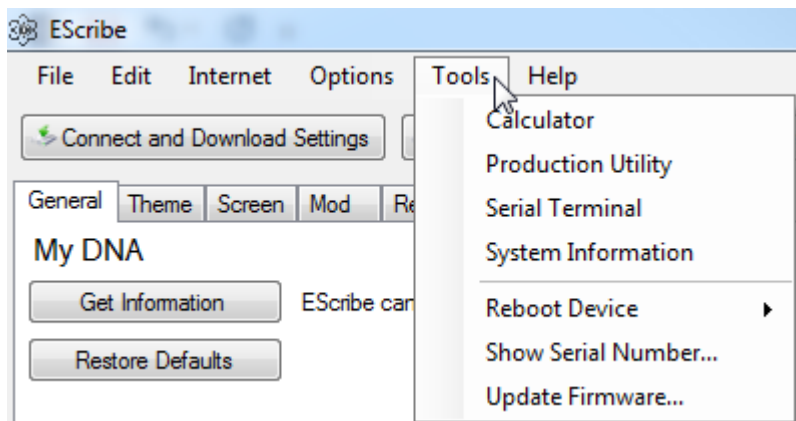
Options drop down menu

Automatically Check for Updates: If checked, EScribe will automatically check for a newer version of EScribe each time EScribe is opened.

Clear Recent File List: Clears the recent file list in the file drop down menu.

Connect: Connects a DNA 200 device to EScribe.

Tools drop down menu

Calculator: Tool for inputting equations.

Production Utility: For use by manufacturers and modders. Uploads device specific settings to the attached DNA 200 and tests functionality.
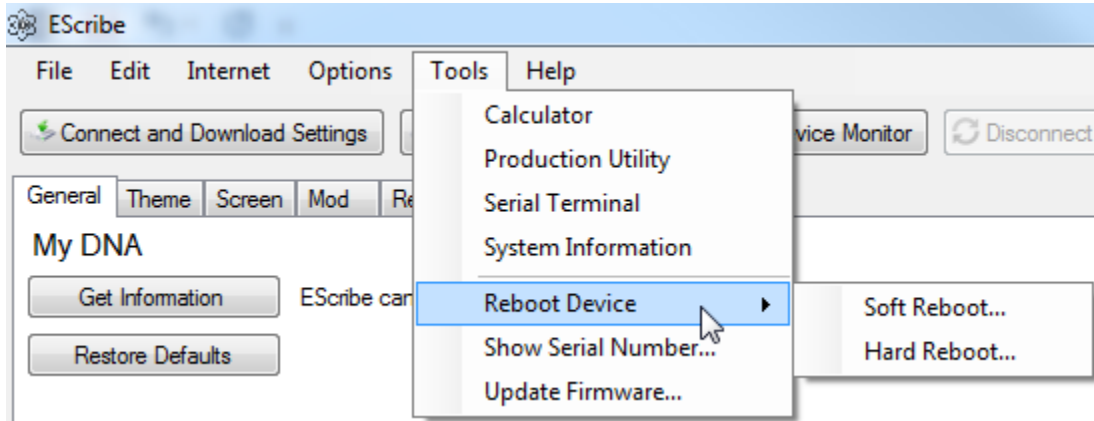
Serial Terminal: A terminal program specifically designed for command level communication with the attached DNA 200.

System Information: Opens the Microsoft Systems Information window which details the specific information of your computer.

Reboot Device

Soft Reboot: Performs a soft reboot on the DNA 200.
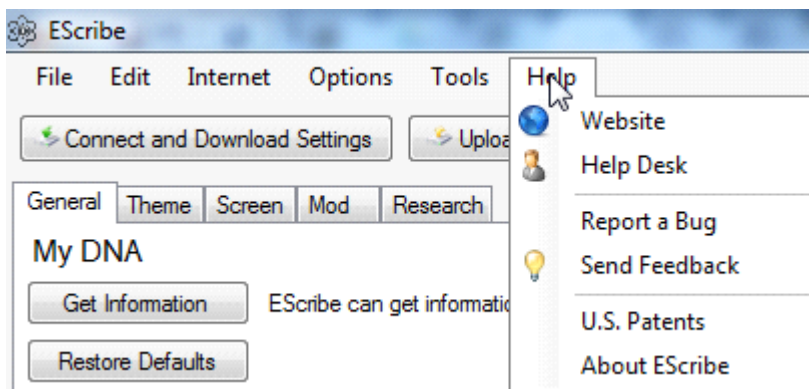
Hard Reboot: Performs a hard reboot on the DNA 200.

Show Serial Number: Shows the unique serial number of the attached DNA 200.

Update Firmware: Used to update the firmware on a DNA 200 device. The update process was detailed earlier in this document.
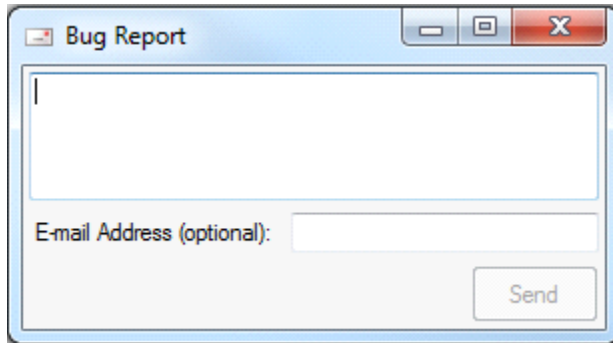
Help drop down menu

Website: Opens default internet browser to Evolv's web page. - http://www.evolvapor.com/

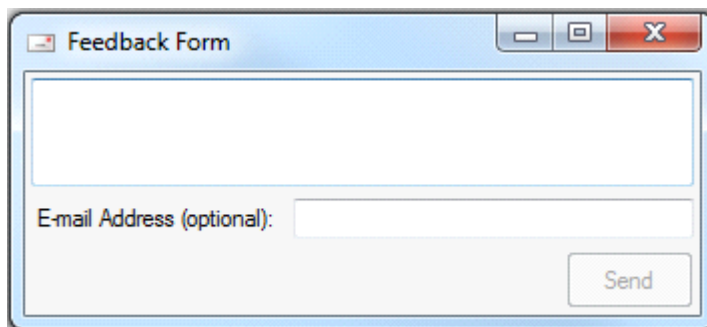**Help Desk:** Opens default internet browser to Evolv's help desk page.

This is Evolv's support/comment ticket submittal and review portal.

Report a Bug: Opens a Bug Report window to report possible EScribe bugs to Evolv.
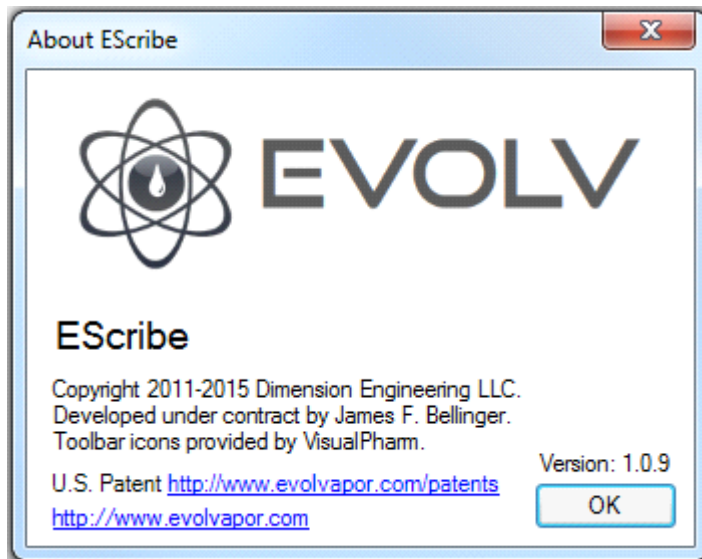
Send Feedback: Opens a Feedback Form window to report feedback about EScribe to Evolv.

U.S. Patents: Opens default internet browser to Evolv's patent and trademark web page. - http://www.evolvapor.com/patents/

About EScribe: Opens the About EScribe information box.

DNA 200 Settings Tabs

Tool Tips

Placing the mouse cursor over the setting option will bring up the description for that option.

General Tab

Get Information: Click to see information about the attached DNA 200.

Restore Defaults: Restores all settings in all tabs to manufacturer defaults.

Profiles: The DNA 200 allows you to save and select between eight groups of output settings. Each group of output settings is called a Profile. To switch between profiles on the device, put the DNA 200 into Power Locked mode by pressing and holding both the up and down buttons for two seconds. From power locked mode, to cycle between profiles, double click the Up or Down button. To select the displayed profile, press the fire button.

Each profile contains an output power setting and a maximum temperature setting. These can be adjusted on the device, and will be saved when a different profile is selected. Additionally, the resistance lock setting and value for each atomizer is saved in the profile, which can alleviate temperature inaccuracies stemming from attaching atomizers before they have completely cooled. Many more output settings, including the coil material and preheat settings can be adjusted on a per-profile basis using the Escribe PC software.

Evolv recommends setting up one profile for each atomizer that you regularly use with the DNA 200. It is much faster to switch profiles than it is to set up the settings for the atomizer again.

Theme

Name: Display name for the preset.

Custom Screen: Add a screen graphic for this preset.

Settings

Power: The power for this preset.

Temperature: ON/Off - The temperature limit for this preset. (F/C)

Ohms Locked: If the connection to your atomizer is not stable or if you find the measured resistance drifts with time, it may be desirable to lock the atomizer resistance.

If you connect a temperature-sensing coil…

Atomizer Analyzer: EScribe can be used to analyze your atomizer's resistance stability. It will measure the atomizer's resistance in real time.

Coil Material: Your selected coil material (Nickel 200/Custom).

Nickel 200: This is the default, for using Nickel 200 wire.

Custom:

Custom coil wire material can be added by manually manipulating the data points of the material profile, loading a CSV file, or inputting the materials temperature coefficient of resistance.

Move/Resize: Allows you to move/resize points on the material profile.

Split: Add data point to curve.

Delete: Delete data point on curve.

Load CSV: Load a discharge curve CSV file.

Save CSV: Save a discharge curve CSV file.

Special: input the materials temperature coefficient of resistance.

If you connect a temperature-sensing coil...
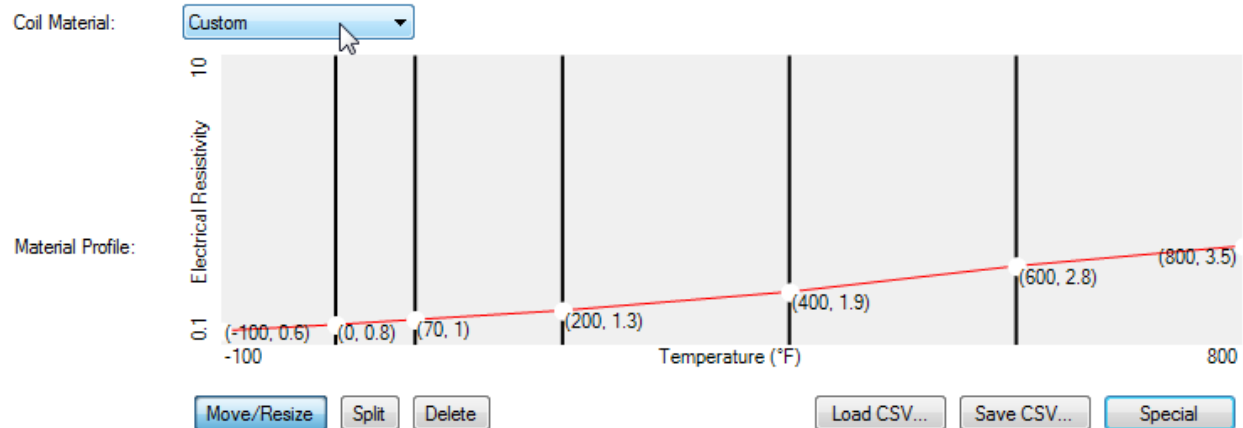
Coil Material: [Custom ▾]

Material Profile:

(-100, 0.6) (0, 0.8) (70, 1) (200, 1.3) (400, 1.9) (600, 2.8) (800, 3.5)

-100   Temperature (°F)   800

[Move/Resize] [Split] [Delete]   [Load CSV] [Save CSV] [Special]

Temperature Coefficient of Resistance (Approximation)
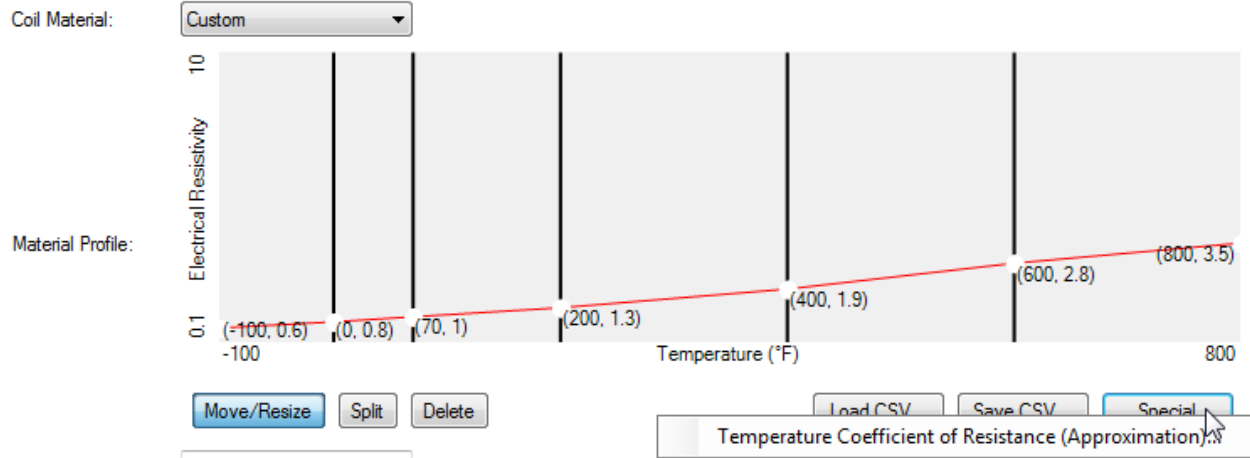
Temperature Coefficient of Resistance   [X]

α (K⁻¹ at 20°C): [   ]
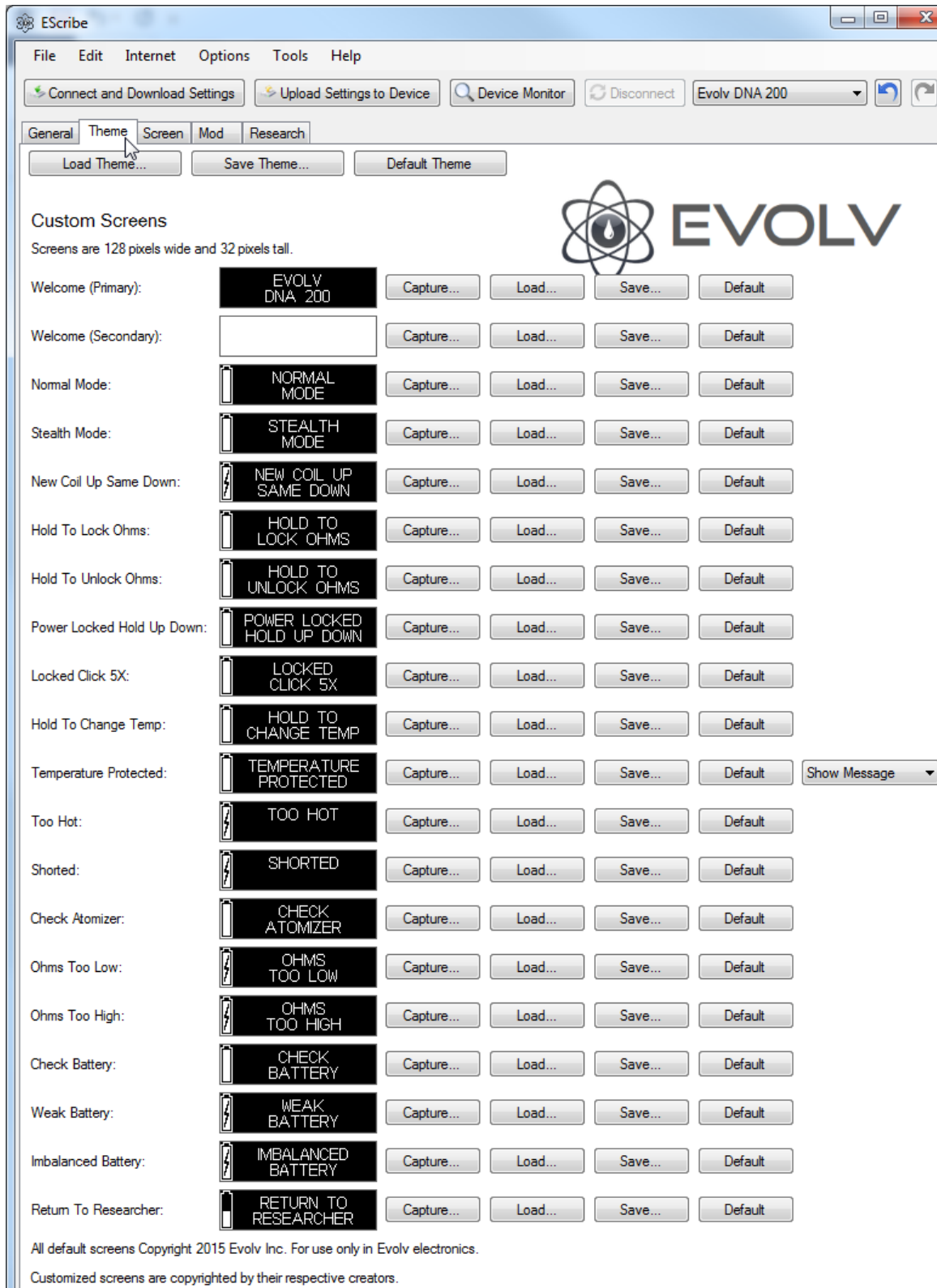
[OK]   [Cancel]

Preheat Power: For temperature-controlled coils, the amount of power applied to preheat the atomizer coil.

Preheat Punch: Adjusts how aggressively the DNA 200 will preheat the coil.

Preheat Time Limit: The maximum amount of time to apply preheat power if set temperature is not reached.

Theme Tab

The Theme tab allows you to change or replace any of the status and error messages with images. Images must be 128 x 32 pixel monochrome bitmaps.

Load Theme: Load a saved .ecigtheme file.

Save Theme: Save a .ecigtheme file.

Default Theme: Loads the default theme.

Capture: Captures the currently displayed from the DNA 200.

Load: Opens a browse window to load an image from a file.

Save: Opens a Save As window to save the current image to a file.

Default: Sets the image back to the Evolv default.

Screen Tab
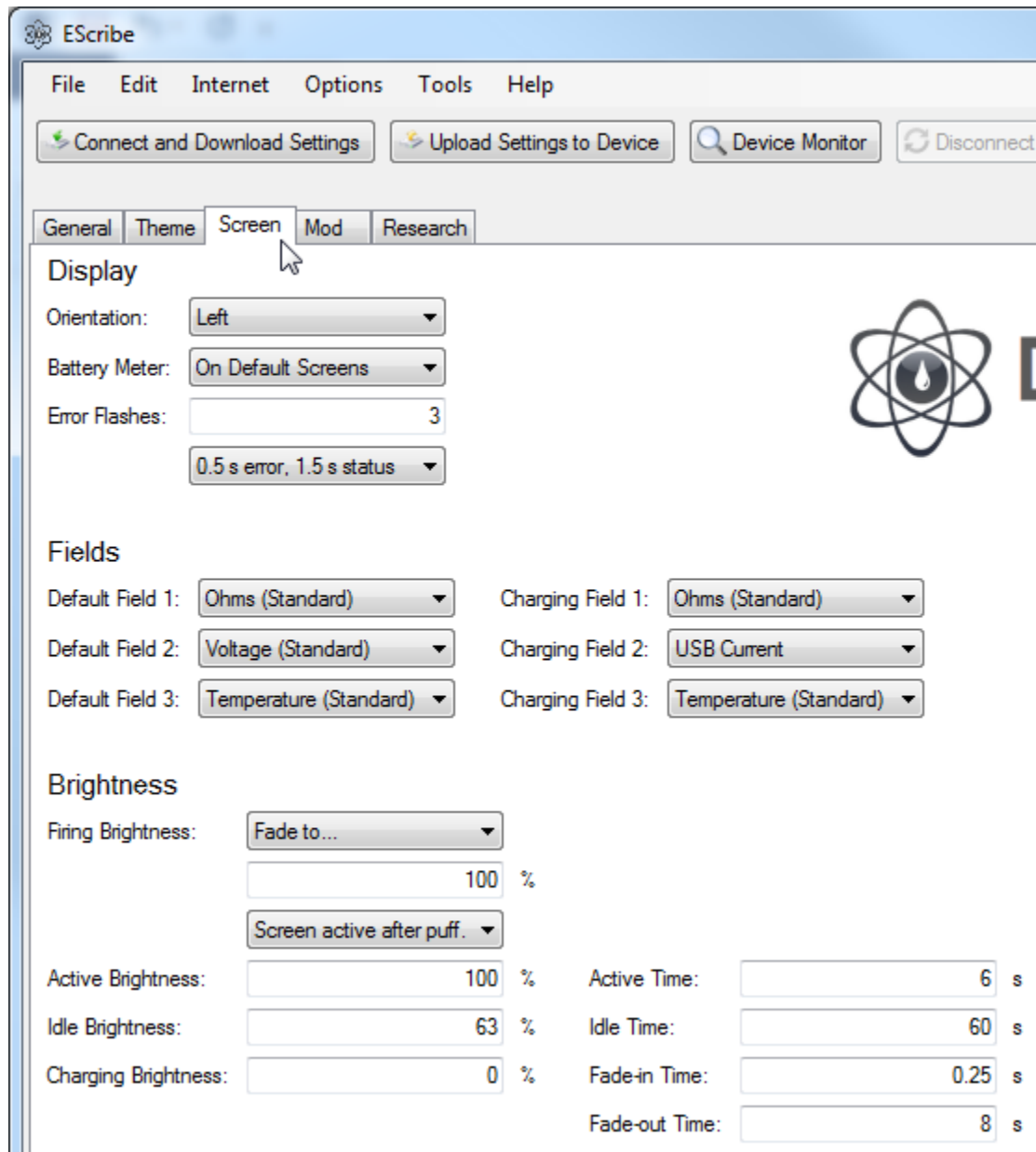
The Screen tab allows you to change the characteristics of the screen.

Display

Orientation: Changes the screen orientation for left to right.

Battery Meter: Allows you to choose which screens display the battery meter.

Error Flashes: The number of times to flash control errors such as Weak Battery, and the proportion of time they should be displayed on-screen.

Error Flashes Drop Down: Allows you to change between 0.5s error/1.5s status, 1.0s error/1.0s status, Show error only.
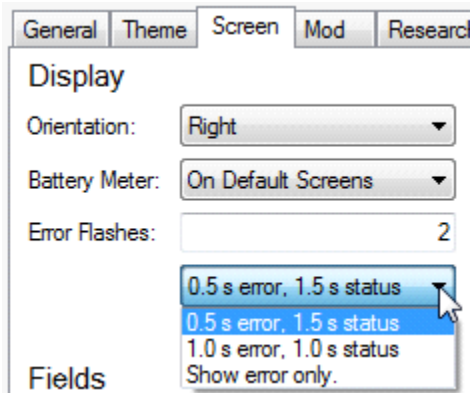
Fields

Default Field 1: Appears on the upper-left of the screen.

Default Field 2: Appears on the middle-left of the screen.

Default Field 3: Appears on the bottom-left of the screen.

Charging Field 1: Appears on the upper-left of the screen when charging.

Charging Field 2: Appears on the middle-left of the screen when charging.

Charging Field 3: Appears on the bottom-left of the screen when charging.

Default and Charging Fields have several customizable options, selected via the drop down menus.
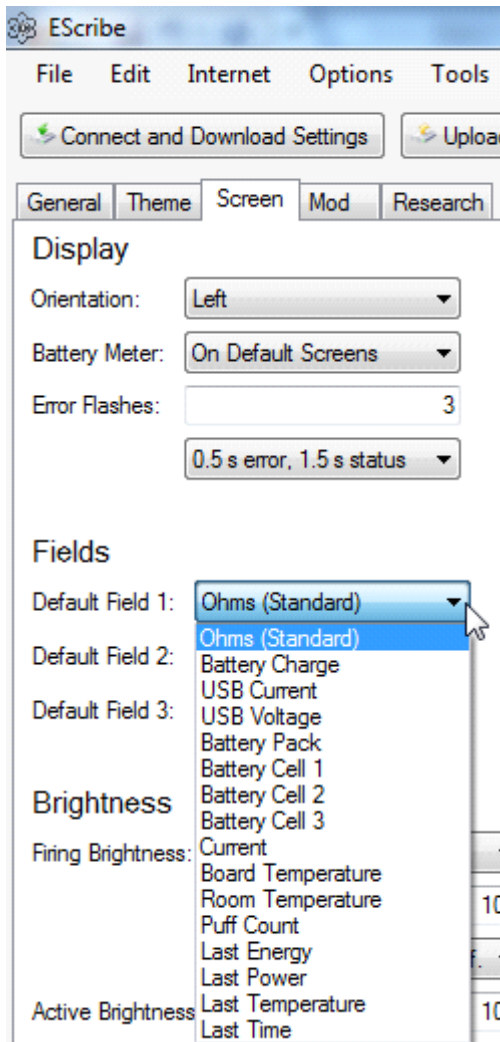
The Standards for Default Fields are:

Ohms: Atomizer resistance.

Voltage: Output voltage.

Temperature: coil temperature.

The Standards for Charging Fields are:

Ohms: Atomizer resistance.

USB Current: Current (amps) supplied via USB connection.

Temperature: coil temperature.

Optional Selections are:

Battery Charge: Calculated battery charge Wh's.

USB Current: Current (amps) supplied via USB connection.

USB Voltage: Voltage supplied via USB connection.

Battery Pack: Battery pack voltage.

Battery Cell 1: Voltage for battery pack cell 1.

Battery Cell 2: Voltage for battery pack cell 2.

Battery Cell 3: Voltage for battery pack cell 3.

Current: Amount current (amps) being supplied to the atomizer.

Board Temperature: Temperature of the DNA 200 board.

Room Temperature: Calculated room temperature.

Puff Count: Number of puffs since last reset. Reset using the Reset Statistics in the Device Manager.

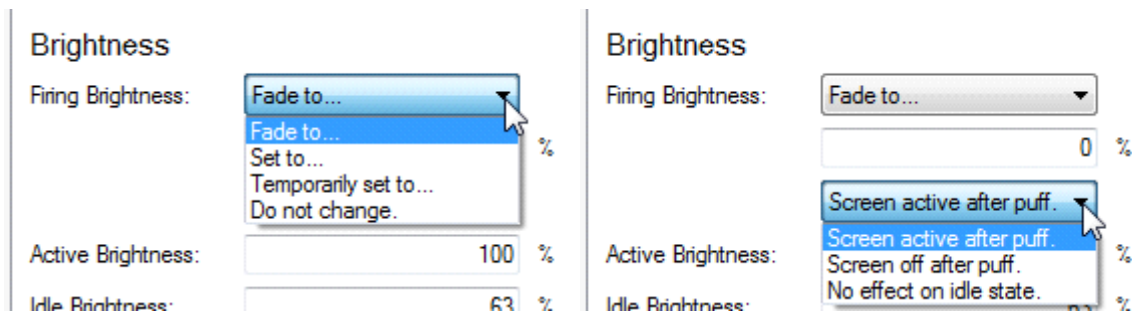**Last Energy:** Last energy output from the last puff (mWh).

Last Power: Average power output used in the last puff (watts).

Last Temperature: Average temperature from the last puff.

Last Time: Length of the last puff (seconds).

Brightness

Firing Brightness: The brightness when the DNA is being fired.

Firing Brightness Drop Down Menus

Fade to: Fades to the % Value while firing.

Set to: Immediately goes to the % Value while firing.

Temporarily set to: Fires with set parameters without affecting the DNA 200's previous state.

Do not change: No change while firing. Uses the Active Brightness value.

% Value: The screen brightness value used when using Fade to/Set to/Temporarily set to

Screen active after puff: After puff screen returns to the Active Brightness value.

Screen off after puff: Screen fades out right after puff.

No effect on idle state: Screen does not activate when fired once the DNA has gone into idle state.

Active Brightness: The brightness when the DNA has been recently fired or adjusted.

Active Time: The amount of time since firing before fading to idle brightness.

Idle Brightness: The brightness when the DNA has not been fired in a while.
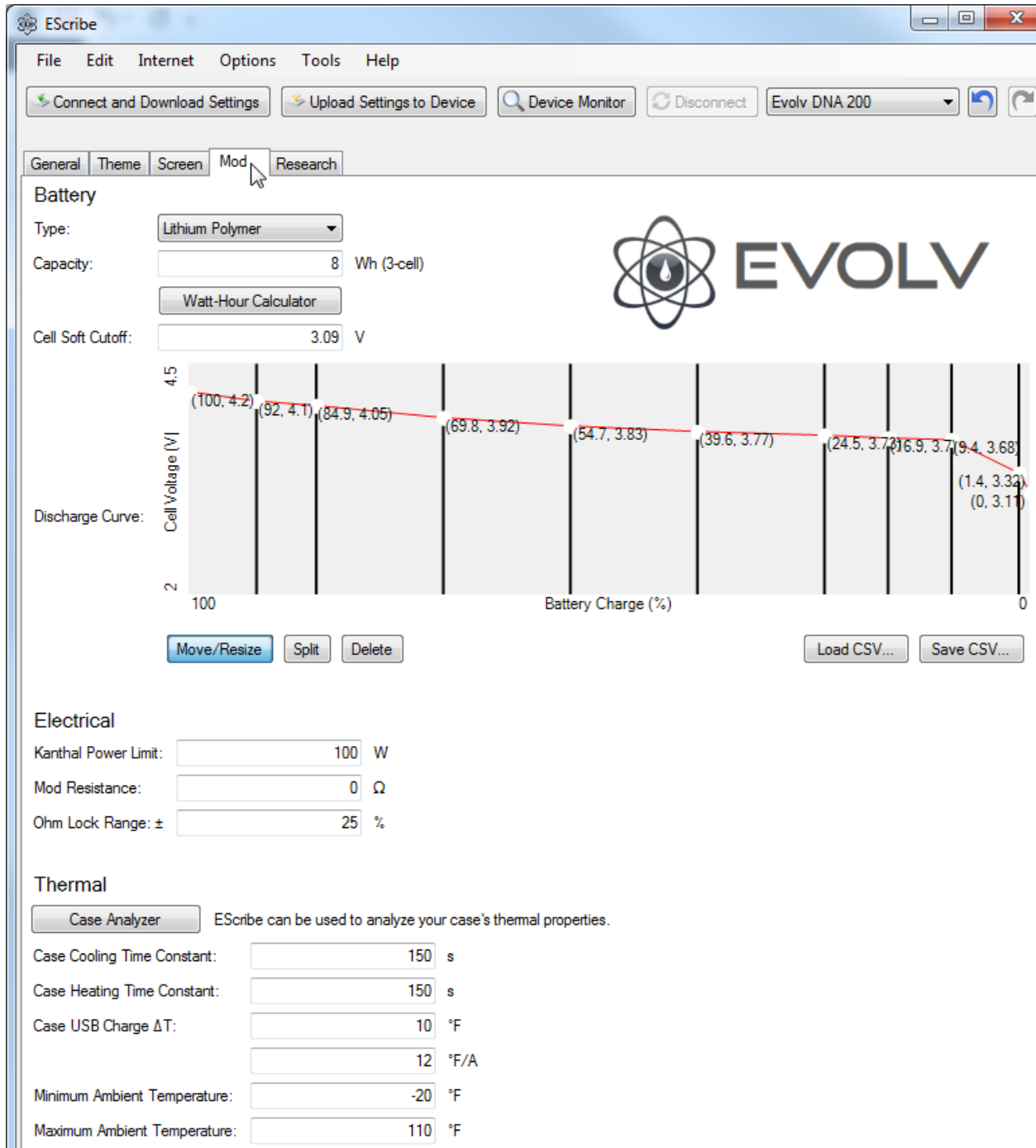
Idle Time: The amount of time since to remain at idle brightness before fading out completely.

Charging Brightness: The brightness when the DNA is charging and not in use.

Fade-in Time: The time to go from 0% to the 100% brightness brightness.

Fade-out Time: The time to go from the set 100% to 0% brightness.

Mod Tab
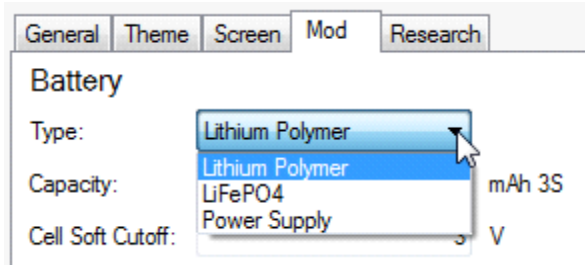

Battery

To gauge battery life and operate properly the DNA 200 needs some basic information about the battery attached.
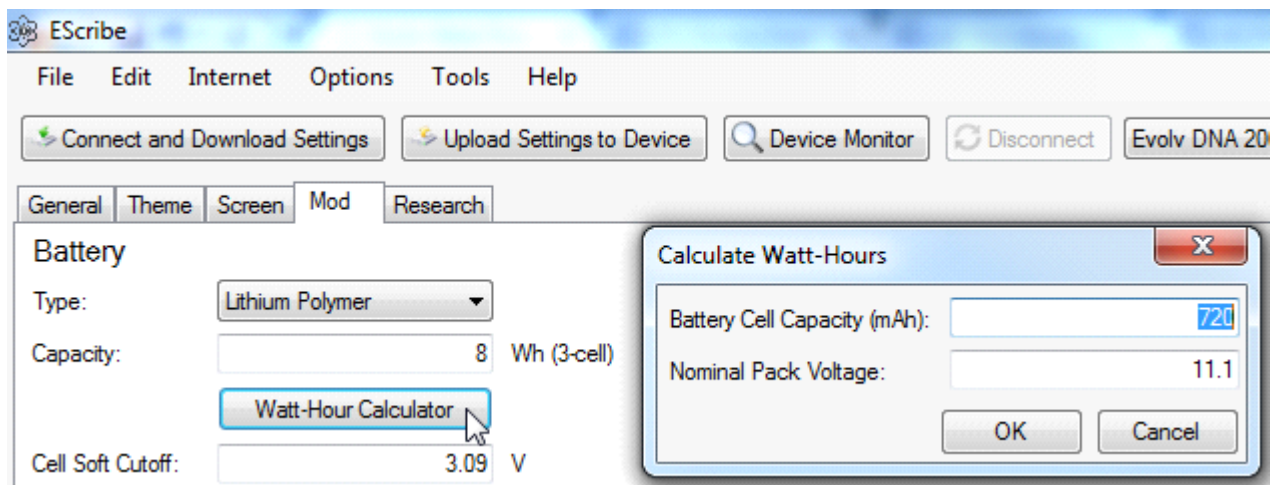
Type: The battery chemistry being used.
- Lithium Polymer
- LiFePO4
- Power Supply

Capacity: The battery capacity, in watt-hours, is typically written on the battery's pack.

Watt Hour Calculator: Tool to calculate Wh (watt-hours).

Cell Soft Cutoff: When the battery gets low, the DNA will prevent any cell voltage from dropping below this level.

Discharge Curve

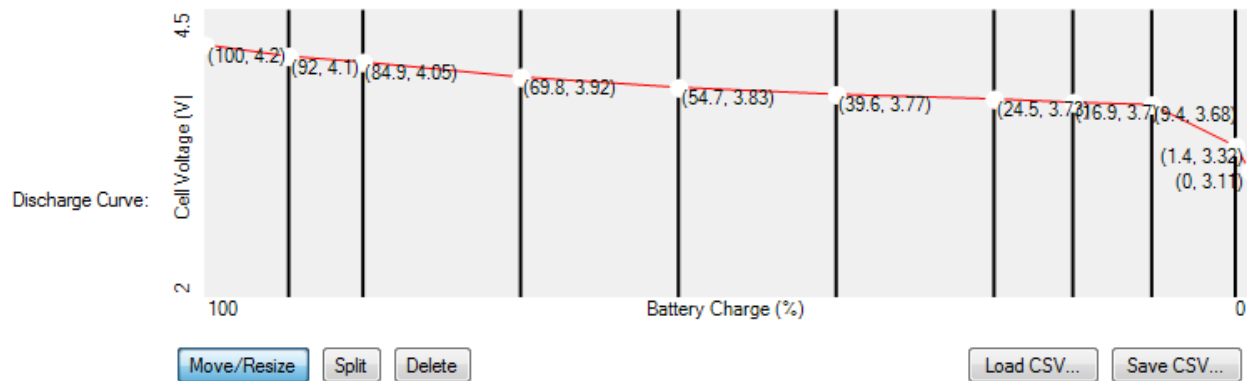Tool for manipulating the batteries discharge curve, if known.

Move/Resize: Allows you to move/resize points on the discharge curve.

Split: Add data point to curve.

Delete: Delete data point on curve.

Load CSV: Load a discharge curve CSV file.

Save CSV: Save a discharge curve CSV file.

Electrical

Kanthal Power Limit: The maximum allowed power level for non-temperature controlled coils.

Mod Resistance: The resistance of the mod.

Ohm Lock Range: ±: When the DNA is Ohm Locked, the maximum percentage difference in resistance that will still be assumed to be the same coil. We don't recommend increasing this.

Thermal

The Case Analyzer and/or Device Manufacture specific settings should be used to populate the data in the fields. Manual field entries are discouraged.

Case Analyzer: EScribe can be used to analyze your case's thermal properties. This should already be populated with the manufacturer's settings and will not need to be changed.

Case Cooling Time Constant: The time for the case to cool 63.2% of the way to a steady temperature.

Case Heating Time Constant: The time for the case to heat up 63.2% of the way to a steady temperature.

Case USB Charge ΔT: The amount of heating caused by USB battery charging.

Minimum Ambient Temperature: The minimum ambient temperature this device will ever be used in. Typically this will not need adjustment.

Maximum Ambient Temperature: The maximum ambient temperature this device will ever be used in. Typically this will not need adjustment.

Research Tab
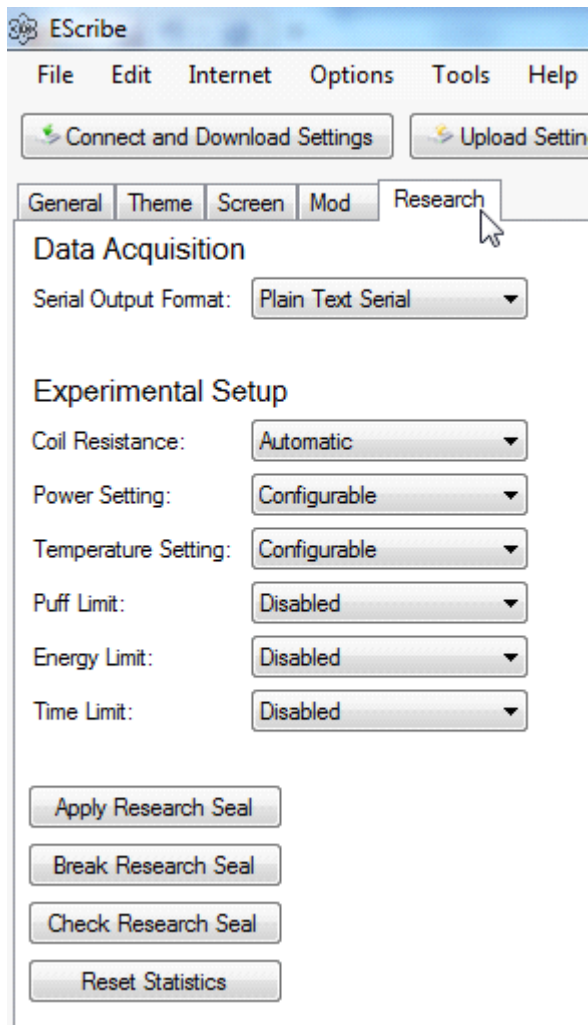
The Research tab is primarily for data logging or restricting the device for use in research.

Serial Output Format: Through the USB serial port, the DNA can either output data via plain text or a CSV-formatting.

Coil Resistance: In research situations, where the atomizer has a known resistance, this can be specified for more accurate temperature measurement.

Power Setting: The power level can be locked for research purposes.

Temperature Setting: The temperature limit can be locked for research purposes.

Puff Limit: After a designated number of puffs, the DNA can display a Return to Researcher message.

Energy Limit: After a designated amount of energy, the DNA can display a Return to Researcher message.

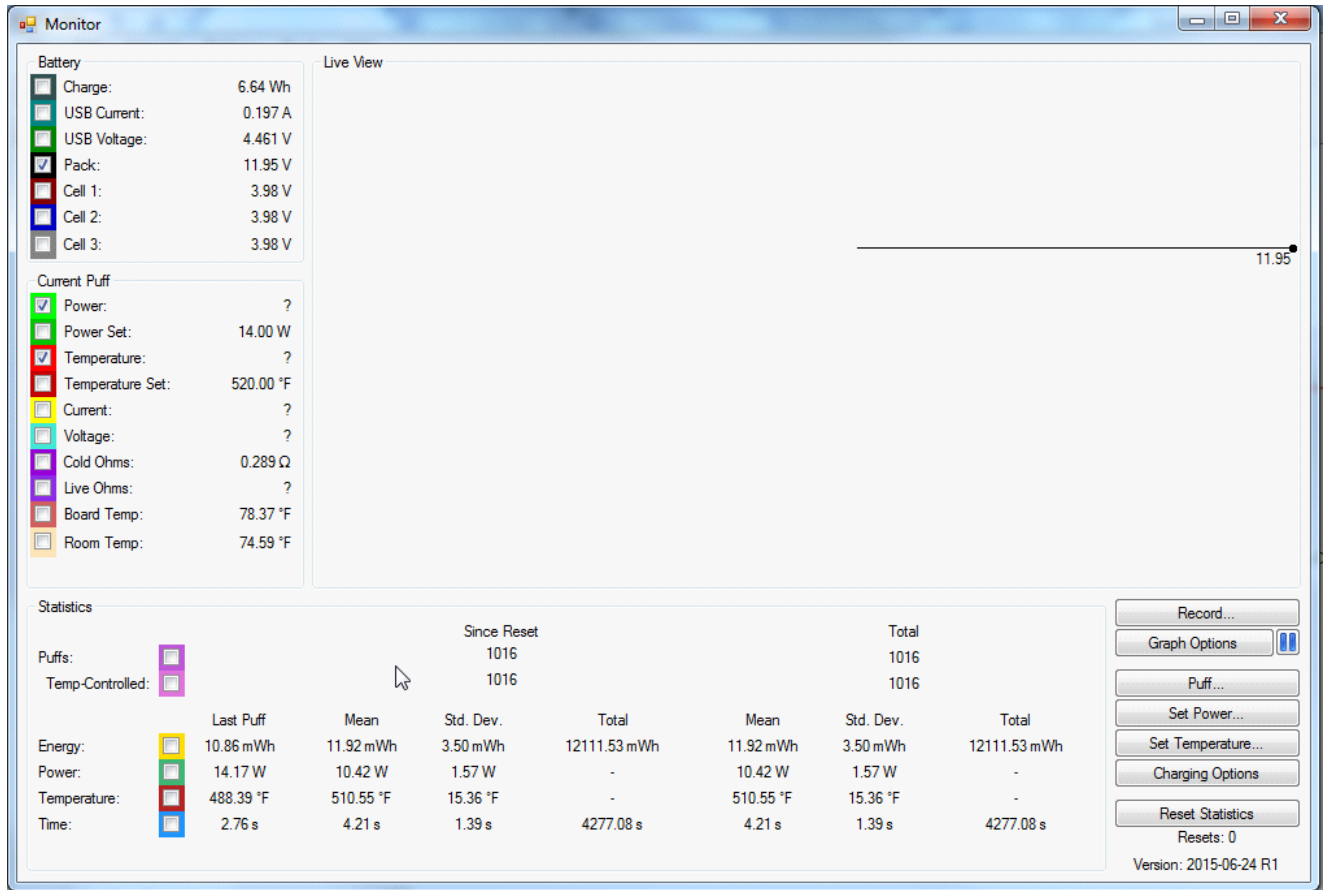**Time Limit:** A use time parameter can be set.

Apply Research Seal: A password protected research seal can be set.

Break Research Seal: Breaks the research seal.

Check Research Seal: Checks to see if research seal is intact.

**Reset Statistics:** Resets statistics.

Device Monitor

Device monitor allows the user to manipulate and monitor many of the parameters of the DNA 200 from a single screen.

Device Monitor Buttons (bottom right)

Record: Opens a Save window to name the .csv file that will be created. Once you hit save the Device Monitor will record all live data until the stop recording button is pressed. Once you pressed the stop recording button the .csv file you named will be saved to the location you selected.
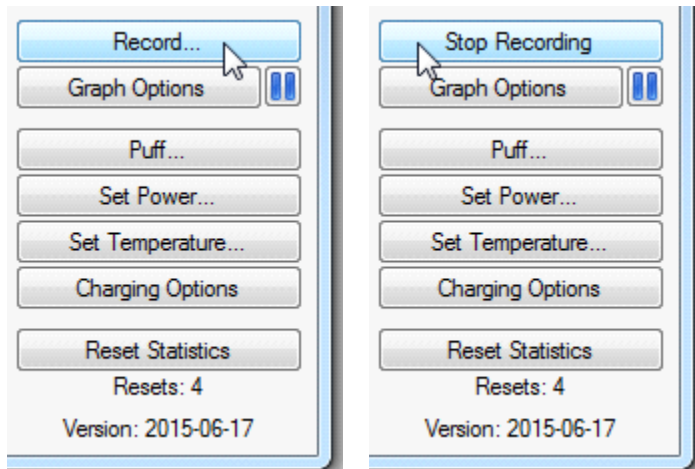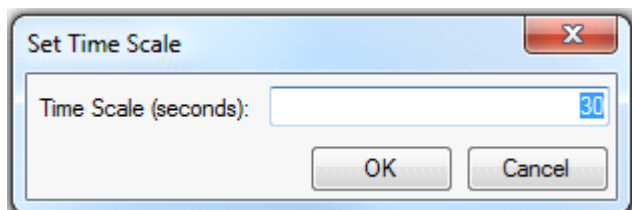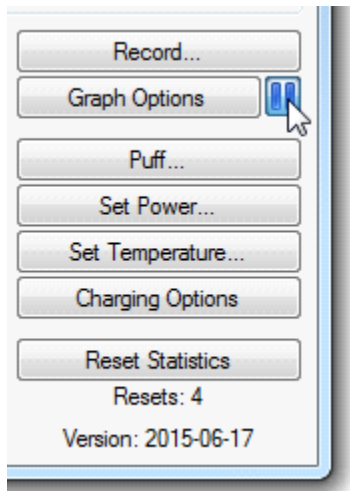

Graph Options
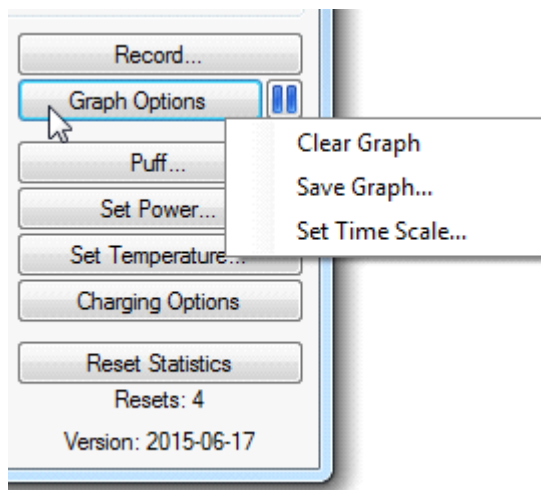
Clear Graph: Clears the current Live View display.

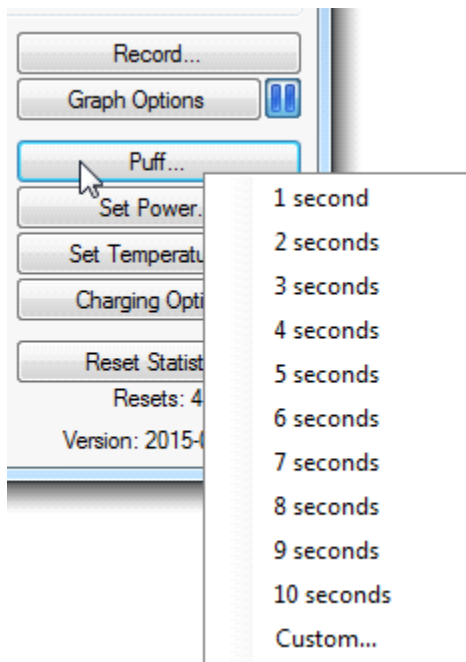**Save Graph:** Opens a Save window to save the current Live View display as a .png image file.

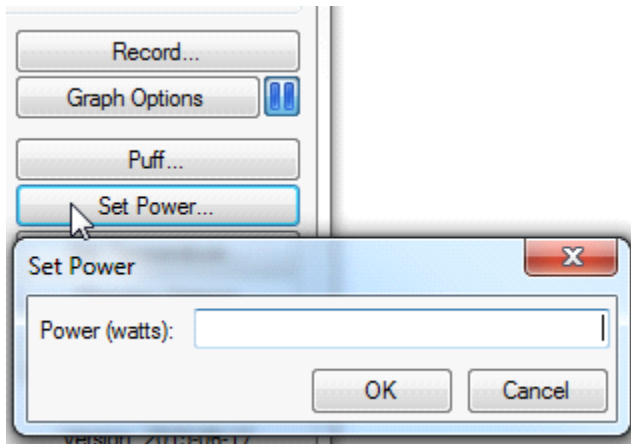**Set Time Scale:** Allows you to set the graph time scale.

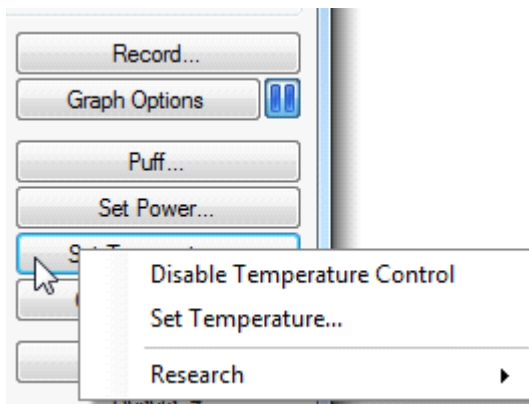**Pause Button:** Pauses the current Live View display for you to evaluate or save.

Puff Button: You can select from the options or set a custom length and the Device Monitor will fire the mod for that length of time.
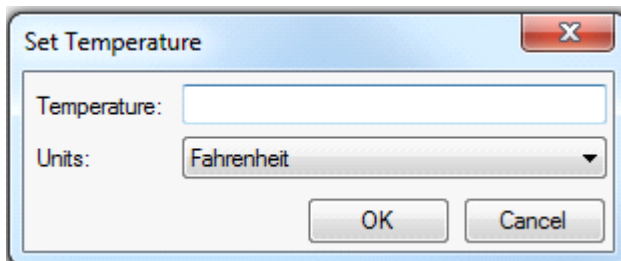
Set Power: Sets the wattage.
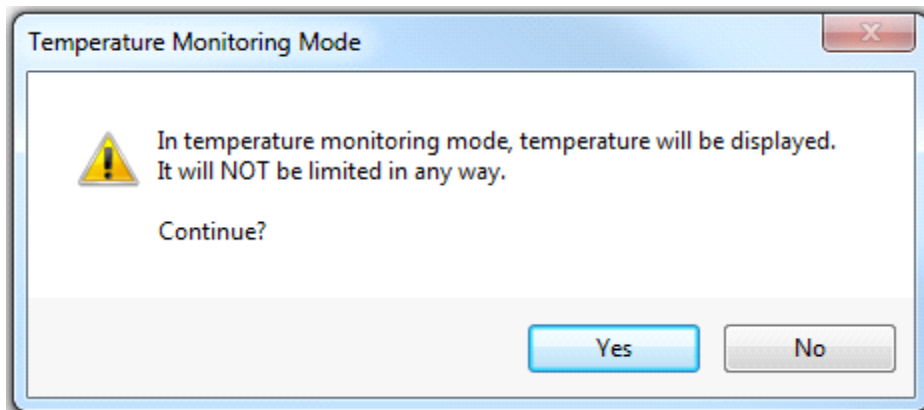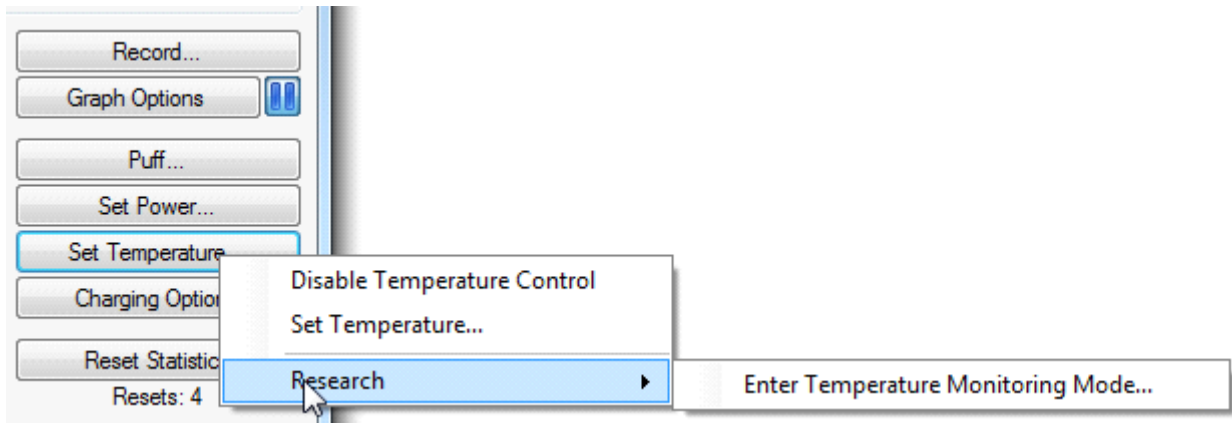

Set Temperature Options

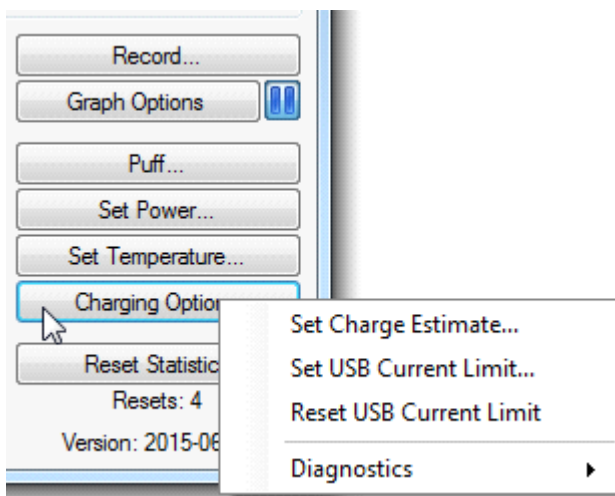**Disable Temperature Control:** Disables temperature control. Same as setting to off on the device.
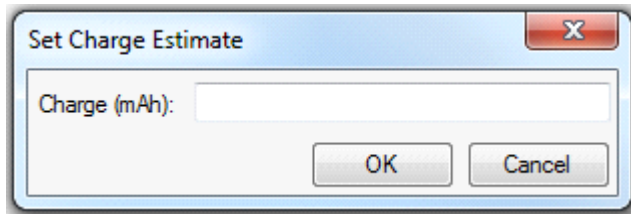
Set Temperature: Set the temperature.

Research: Enter Temperature Monitoring Mode.

Record...
Graph Options
Puff...
Set Power...
Set Temperature
Charging Option
Reset Statistic
Resets: 4

Disable Temperature Control
Set Temperature...
Research   ▶   Enter Temperature Monitoring Mode...

Temperature Monitoring Mode

⚠ In temperature monitoring mode, temperature will be displayed.
It will NOT be limited in any way.

Continue?

Yes   No

Charging Options

Record...
Graph Options
Puff...
Set Power...
Set Temperature...
Charging Option
Reset Statistic
Resets: 4
Version: 2015-06

Set Charge Estimate...
Set USB Current Limit...
Reset USB Current Limit

Diagnostics   ▶

Set Charge Estimate: Sets the estimated current mAh of the battery pack.
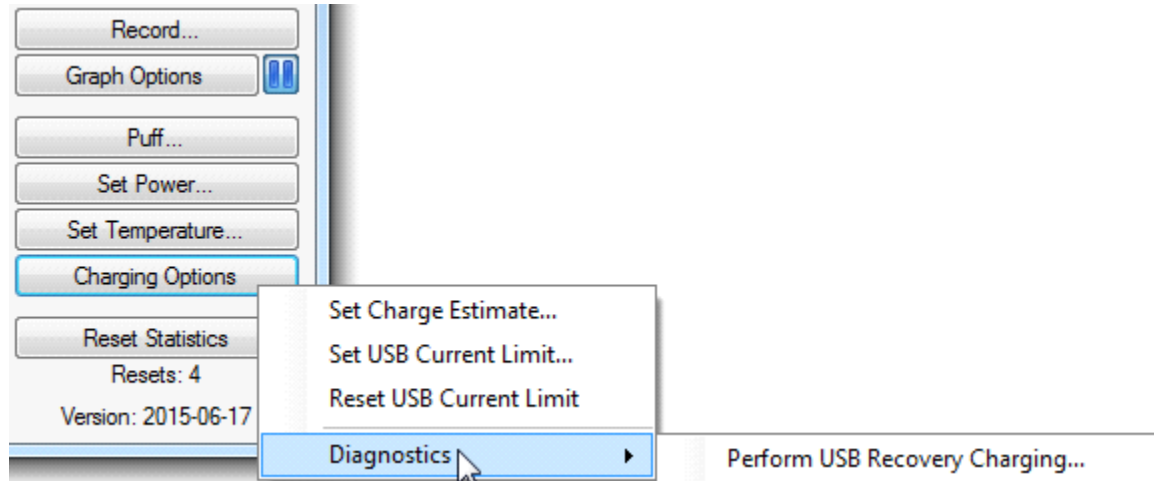

 Set USB Current Limit: Set a current (amp) limit for USB charging
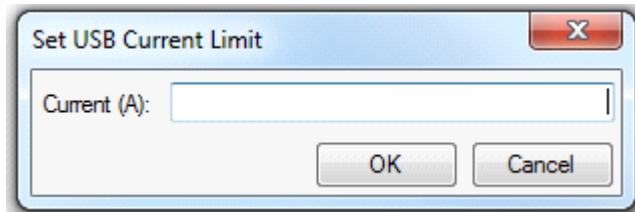
Reset USB Current Limit: Resets the USB charge limit to Evolv default.

Diagnostics

Perform USB Recovery Charging: Performs recovery charging if any of the battery cells get discharged below 2 volts. Must be logged in to Evolv server through EScribe so Evolv can record a recovery event**.**

Reset Statistics: Resets statistics.