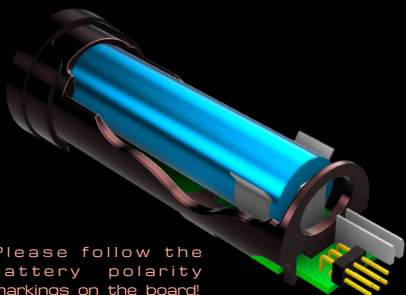




The New

OBSIDIAN SOUND BOARD

Apprentice's Guide



Please follow the battery polarity markings on the board!

THE OBSIDIAN FAMILY

All Obsidian Sound Boards come mounted in a chassis and are powered from a single 3.7V, Li-Ion 18650 rechargeable battery. Besides sound, all variants can drive two high-power LEDs and, simultaneously, a 127-pixel string blade.

Variants USB3 and USB4 come with an USB port, allowing configuration through the Launcher software.

	USB port	Responsive Shimmer	Latched Lockup
ObsidianLite 1 built-in font 35 sec. audio memory	✗	✗	✗
ObsidianUSB3 1 rewritable font 75 sec. audio memory	✓	✓	✓
ObsidianUSB4 Up to 10 rewritable fonts 340 sec. audio memory	✓	✓	✓

BASIC OPERATION

Boot The boot effect runs when the battery is connected to the board. During boot the board performs a self-check and runs a visual and audio test - you should hear a sound and see the lights turning briefly on. After the boot is complete, the board will put itself in standby.

During boot the board auto-detects the presence of a string blade. If your saber is equipped with a string blade, make sure it is connected when you insert the battery.

Swing A swing motion of the saber will trigger the "Swing effect", which plays a randomly selected sound from the pack of up to 10 associated to the current font. No light effect is triggered by a swing.

Clash Hitting something with the saber will trigger the clash effect, which runs a series of flashes and plays a randomly selected sound from the pack of up to 10 sounds associated to the current font.

Power ON While the board is in standby, a short press of the button will turn it on. The board will run the "Power On" visual and audio effect, then it will go into idle mode.

Idle The idle mode is active as long as the board is turned on and it registers no motion or activity. In idle mode, the board will:

- ✱ Play continuously the "Idle Hum" sound
- ✱ Drive the blade light with a slight shimmer ("Idle shimmer")

Power OFF At any time, a long press of the button will trigger the "Power Off" effect and then will put the board in standby.

The board can also power off automatically if:

- ✱ There was a long period of inactivity (timeout)
- ✱ The battery is empty. Before going into standby for lack of power, the board will warn you about the state of the battery through audio signals ranging from 1 beep at 50% battery to 5 beeps at 5% battery.

ADVANCED OPERATION

Lockup Ancient knowledge reveals how lightsaber interactions generate chaos: when two lightsabers touch each other for more than a split second, they become unstable, their inner structure begins to crumble, sound and lights go crazy and the blades tend to stick to each other, locking the fighters in a deadly trap: The Lockup.

With an Obsidian Sound Board, it is easy to experience the fearsome Lockup: when in Idle mode, press the button shortly and you're in Lockup mode: press it again and you're back in Idle mode.

There is only one way to break a Latched Lockup - with a Release motion. Only from a regular Lockup you can resume Idle with a short press of the button.

Responsive Shimmer By default the idle shimmer runs on a fix tempo, configurable through the Launcher software. If set to "Responsive", the tempo will be automatically driven by motion: it will increase with each swing and clash registered and will decrease with each second of inactivity. When left unused for a long time, the shimmer will eventually reach its minimum value and that will cause the board to enter standby mode.

Latched Lockup With the new Obsidian Sound Board you can easily choreograph a lockup-release sequence during combat. Here's how it works:

1. In Idle mode, press the button and keep it pressed about half a second, until you hear a crack, then release the button. Now you're in "Latch Mode" and the blade will flicker discretely to signal this. At this point you can still cancel Latch and go back to Idle, with another short press of the button.
2. Execute a clash to trigger the Latched Lockup.
3. Break the Lockup with an ample move - this will trigger the Release effect and then the board will go back to Idle.

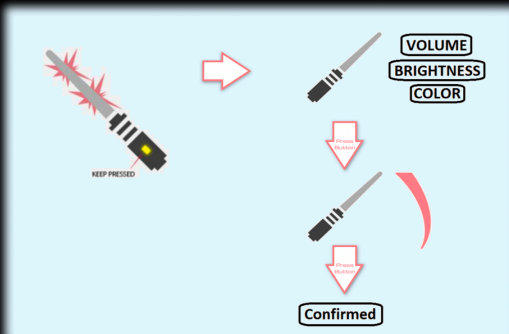
ON-BOARD MENUS

Configuration Menu

The configuration menu allows you to change the board's volume and brightness, and, if a string blade was detected at boot, also to change the current font's main color. It is triggered by double-tap on the hilt or the blade, executed with the button pressed.

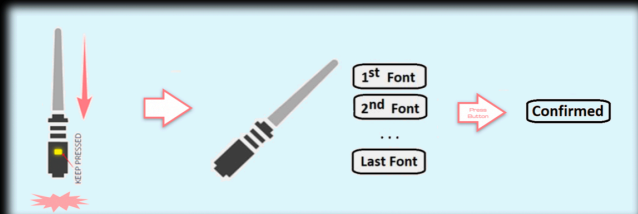
Navigation through the on-board menus is done by **point and click**: point the tip of the blade upwards / downwards to change the current menu option, then confirm with a short press of the button.

All on-board menus can be canceled at any time with a long press of the button.



Fonts Menu

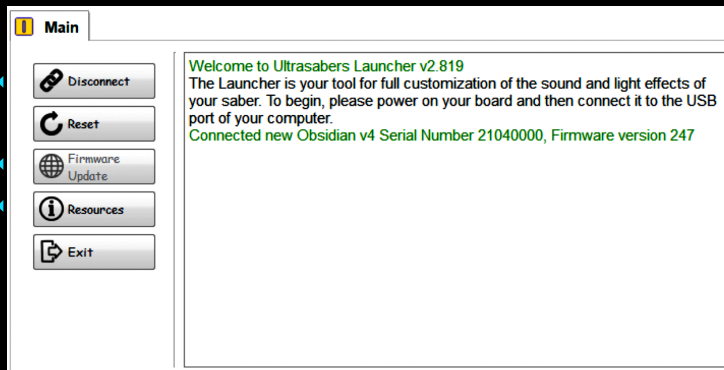
The Fonts Menu allows you to select the current font. It is triggered by a vertical stab motion, executed with the button pressed: hold the blade vertically: slide it downwards and stop it abruptly, for instance in your palm. Point and click to select the new active font..



THE LAUNCHER

Download and install

The Ultrasabers Launcher installation package is available for download at www.saberforum.com. It allows communication between a PC or MAC and an Obsidian USB3 or USB4 board, through the USB port.



Connecting the board

Install the software as administrator, then run it. Connect the board to the computer using a micro-USB cable, then press the button to power it on. The board should connect automatically, if not you can try connecting manually using the [Connect / Disconnect](#) button on the main page.

As soon as the board connects to the computer, the Launcher will switch to the Obsidian page, unless there is a firmware update available. The firmware is the code that operates the board, it is highly recommended to keep it up-to-date at all times, as it is continuously refined and improved. You can also check manually for updates at any time, using the [Firmware Update](#) button.

At first contact it might take a few minutes to connect, as the Launcher reads the content of the board. After that, it will connect in a few seconds.

General Settings

General settings are font-independent and are available on the bottom side of the Obsidian page.

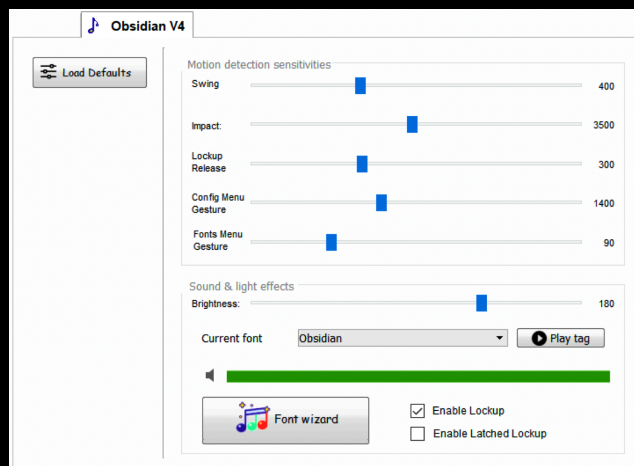
The [Brightness](#), [Master Volume](#) and [Current Font](#) can also be configured directly on the saber using the on-board menus. Enabling and disabling the [Lockup](#) and [Latched Lockup](#) can only be done through the Launcher software.

A string blade takes a lot of power, if your saber is equipped with one, it is recommended to keep the brightness at the minimum desired level in order to preserve battery life.

Sensitivities

Motion detection sensitivities for [Swing](#), [Clash](#), [Lockup Release](#) and [Menu Gestures](#) can be independently configured on the top side of the Obsidian page. Each slider sets the detection threshold, so the lower this value, the more easily the board will respond to that motion.

The "right" settings are dependent on the saber mass and balance, but mostly on the personal style. It might be a good idea to tune them as soon as possible.

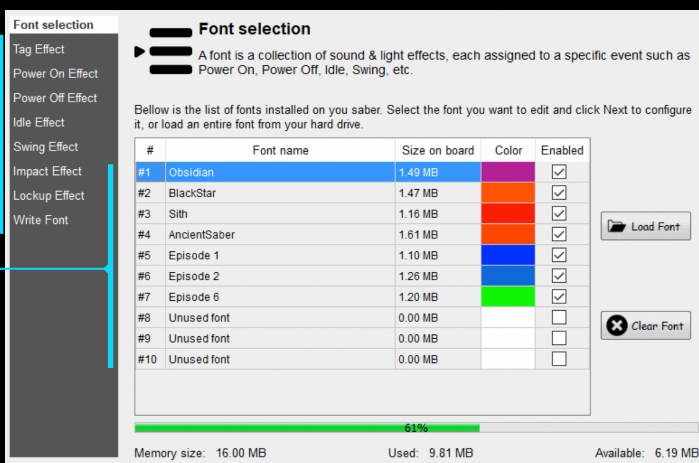


Sensitivities

General Settings

Fonts

A font is a collection of sounds and light effects that gives a distinct personality to your saber. Obsidian Lite and USB3 can store a single font, while Obsidian USB4 can store up to 10 fonts and switch between them at any time. Fonts are configured using the [Font Wizard](#) button on the Obsidian page.



Navigation Panel

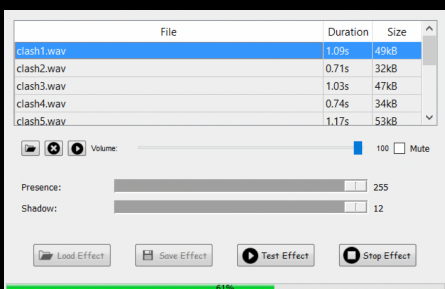
List of fonts loaded on the board

The font wizard consists of a set of 9 configuration pages that can be selected using the navigation panel on the left side or the Previous / Next buttons on the bottom side.

The [Font Selection](#) page is the first and most important one, because here is where you select the font to which all changes on the other pages will apply. Here you can select and preview the [blade color](#) and also [enable / disable](#) each font individually. The color setting only applies to the string blade, it has no effect if your saber is equipped with a fixed-color LED.

An entire font, including all the sounds and light settings, can be saved as a single ZIP file with the "Save Font" button on the last page and loaded from a ZIP file with the "Load Font" button on the first page of the wizard.

Changing the color or the enable state of a font on this page will update the board immediately. Changing any of the sound and light effects on the following pages requires the font to be rewritten in order to apply.



Sound files

Individual sound control

Light animation

Live test

Memory usage

Each of the following pages of the Font Wizard allows you to customise one of the effects that the Obsidian board can run. Here you can add and remove [sound files](#), set their individual [mixing volume](#) and configure the [light animation](#) parameters. Those parameters are specific to each effect, use the [Test Effect](#) button on the bottom side of the page to run a live test on the board and check how each of the parameters affects the animation.

On the last page you get an overview of the entire font and the button that initiates the transfer of all the font changes to the Obsidian Sound Board: the [Write Font](#) button.

