UltraProffie ZERO
Apprentice's Guide

UltraSaber Controls

- **Short click**: toggle POWER
- **Long press:** toggle background TRACK
- **Double-click:** activate PRESET control
- **Double-twist with button pressed:** activate PROFILE control
- **Double-tap with button pressed:** switch STEALTH / COMBAT

Pixel presets

1	Solid Green	11	Hump Flicker	21	Stable Unstable
2	Solid Red	12	Saw Blade	22	Split Blade
3	Solid Arctic	13	Audio Flicker	23	Anger
4	Solid Orange	14	Surging Pulse	24	Rolling Pulse
5	Solid Lime	15	Power Surge	25	Smoke Blade
6	Solid Bane	16	Omni Color		
7	Solid Sunrider	17	Rainbow		
8	Solid Hot Pink	18	Lava Lamp		
9	Solid Blue	19	Thunder Storm		
10	Solid Violet	20	Gradient		

Analog presets

1	Solid
2	Shimmer
3	Fast Pulse
4	Audio Shimmer
5	Real Pulse
6	Morph

Motion Effects

Momentary effects triggered by motion

- **Smooth swing**
  Swing the saber in any direction.
- **Clash**
  Hit the blade anywhere.
- **Stab**
  Slide firmly along the blade axis.
- **Force**
  Twist back-and-forth around the blade axis to use the Force!

Choreographic Effects

Persistent effects controlled with the button

- **Drag**
  With the BUTTON pressed, HIT THE GROUND with the tip of your saber. Effect ends when you release the button. Only operational in Earth-like gravity.
- **Melt**
  STAB HORIZONTALLY with the BUTTON pressed to concentrate The Force at the tip of your saber!
- **Lockup**
  When two sabers collide, the clash of energies might lock them to each other. Trigger a CLASH with the saber POINTING UP and the BUTTON pressed, and you'll activate the Lockup. Effect ends when you release the button.
- **Lightning**
  Your saber can absorb Force Lightning if it's prepared for it! Keep it horizontal and SHAKE it with the BUTTON pressed until you hear it arming. Next CLASH will trigger the Lightning effect, which you can end with an ample SWING. Disarm with a short SHAKE at any time.

Blaster Hybrid

Your saber can be converted into a Blaster. The Blaster Hybrid must be preliminary charged, then disarmed in order to resume saber functions:
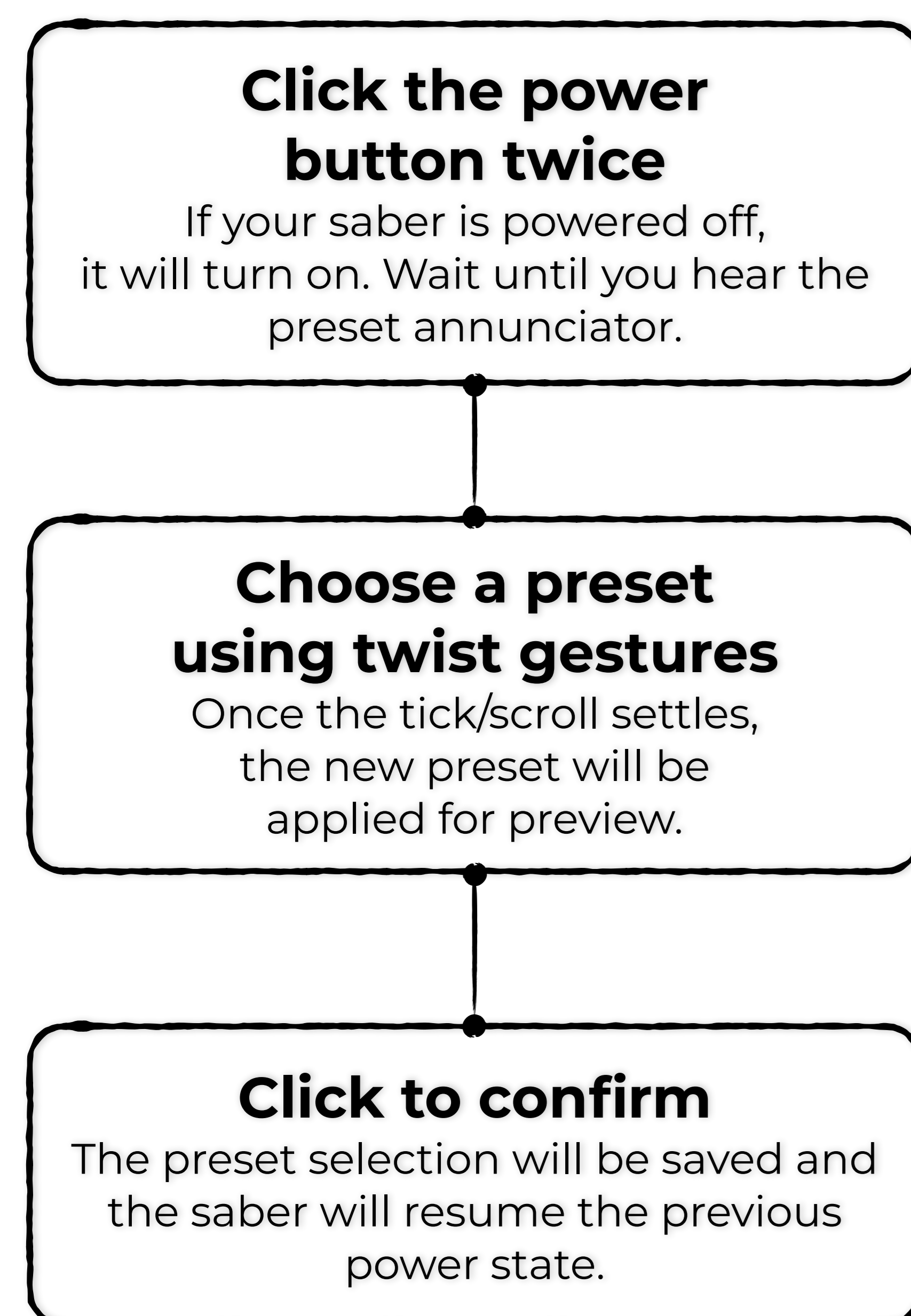
- SHAKE your saber CONTINUOUSLY until the charging sound ends in blasts. The Blaster Hybrid has been activated!
- The button is now your trigger - CLICK to blast!
- Disarm with a short SHAKE at any time.

Combat vs. Stealth Mode

In COMBAT mode you can use the saber at full power. In STEALTH mode you can only use up to 1/3.14 - this saves energy and makes your saber hardly detectable by others around.

- To switch between Combat and Stealth modes, hold the hilt still and TAP it (not the blade!) TWICE, with the BUTTON pressed.
- The volume and brightness of Combat and Stealth modes are individually adjustable through the Profile Control.

Preset Control

Click the power button twice
If your saber is powered off, it will turn on. Wait until you hear the preset annunciator.

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Choose a preset using twist gestures
Once the tick/scroll settles, the new preset will be applied for preview.

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Click to confirm
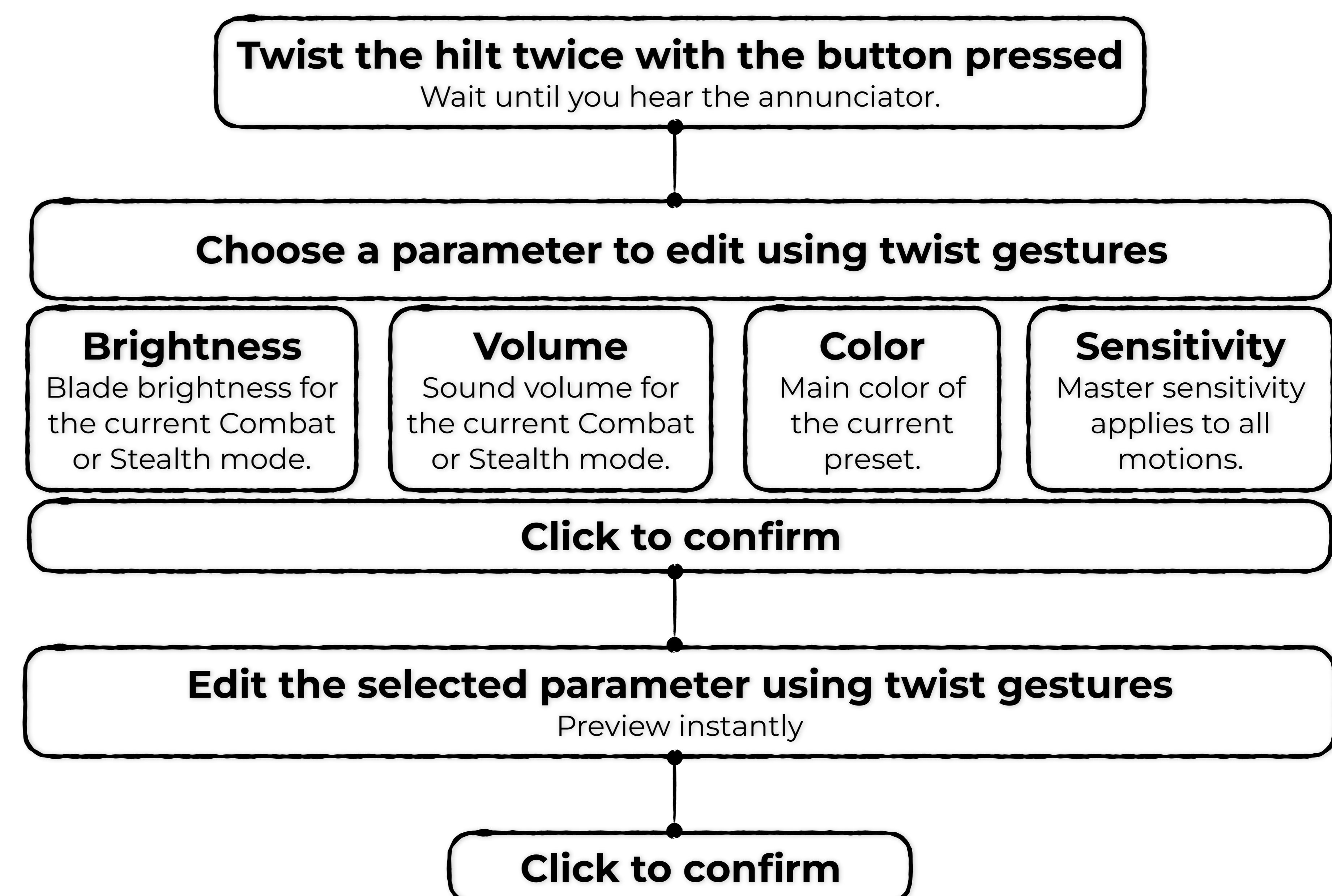The preset selection will be saved and the saber will resume the previous power state.

TWIST GESTURES

You navigate through Controls using twist gestures:

- Twist to the RIGHT until you hear a tick, to navigate one step FORWARD.
- Twist to the LEFT until you hear a tick, to navigate one step BACKWARD.
- TWIST in any direction with the BUTTON pressed to PAUSE navigation. As long as the button stays pressed, navigation stays paused.
- TWIST FIRMLY in any direction to start SCROLLING, either forward or backward.
- Twist in the OPPOSITE direction to STOP SCROLLING.

CONFIRM your option with a short click. CANCEL at any time with a long press of the button.

Profile Control

Twist the hilt twice with the button pressed
Wait until you hear the annunciator.

↓

Choose a parameter to edit using twist gestures

Brightness	**Volume**	**Color**	**Sensitivity**
Blade brightness for the current Combat or Stealth mode.	Sound volume for the current Combat or Stealth mode.	Main color of the current preset.	Master sensitivity applies to all motions.

Click to confirm

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Edit the selected parameter using twist gestures
Preview instantly

↓

Click to confirm

Energy Saving

- If left IDLE in Combat mode, your saber will eventually switch to STEALTH mode. Any saber action such as a swing or a clash will resume Combat mode.
- If left IDLE in Stealth mode, you saber will eventually POWER OFF.
- If there's not enough energy in your BATTERY to maintain the Force, your saber will automatically POWER OFF.
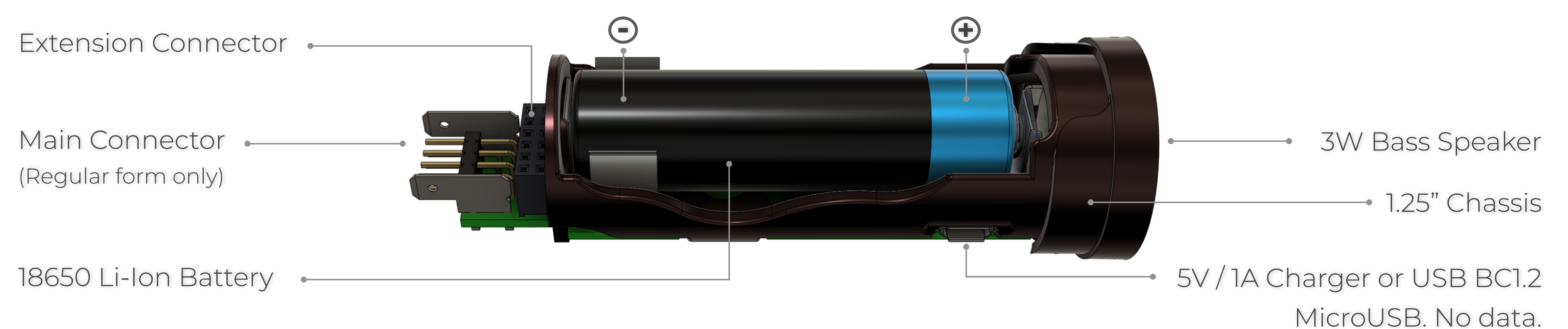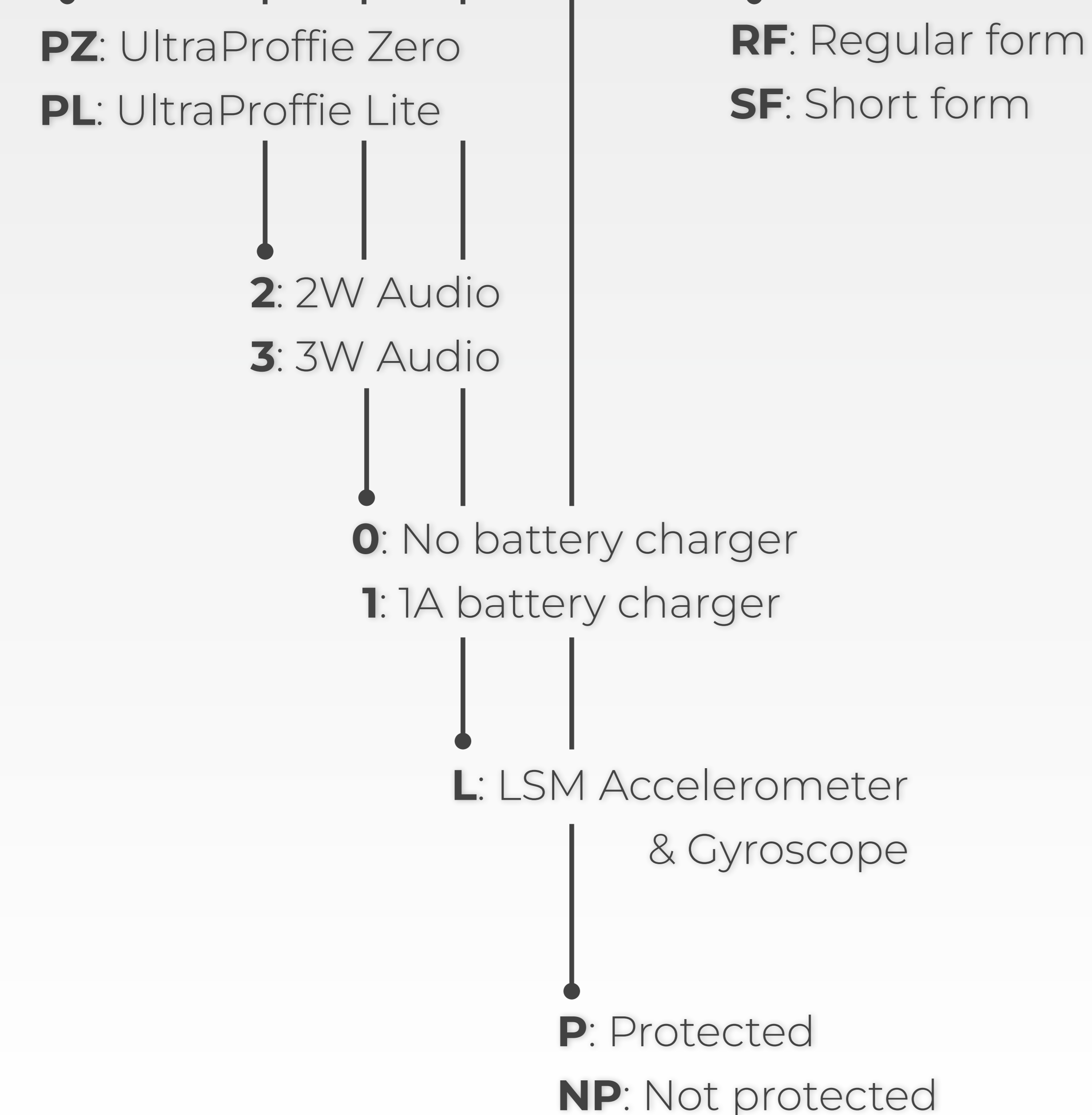
Maintenance

- If unused for more than a few weeks, remove the battery or recharge it periodically.
- Contact UltraSabers Customer Support at info@ultrasabers.com for authorized firmware updates.

Troubleshooting

Nothing happens when I press the power button.	→ Check the physical integrity of the board and wire harness. Check battery polarity - positive should go towards the speaker. Try replacing with a new and fully charged battery.
When I press the button the saber just plays a sound but doesn't light up.	→ The battery is discharged. Replace or recharge the battery.
The saber doesn't respond to any command.	→ Remove the battery, wait a few seconds, then reinsert the battery. Software glitches are rare but easily fixed.
Can't access the extension connector, it is sealed.	→ Your saber's warranty is still valid. Unauthorized access to the extension connector will void the warranty.
The hilt gets warm.	→ This is normal for certain installations. If it becomes uncomfortable, turn it off and let it cool for a few minutes. If it gets hot immediately after powering on: power off, let it cool, remove the battery and request technical assistance.
I need technical assistance.	→ Contact Ultrasabers Customer Support at info@ultrasabers.com

PZ 3 1 L P - RF

PZ: UltraProffie Zero
PL: UltraProffie Lite

RF: Regular form
SF: Short form

2: 2W Audio
3: 3W Audio

0: No battery charger
1: 1A battery charger

L: LSM Accelerometer & Gyroscope

P: Protected
NP: Not protected

Extension Connector

Main Connector (Regular form only)

18650 Li-Ion Battery

3W Bass Speaker

1.25" Chassis

5V / 1A Charger or USB BC1.2 MicroUSB. No data.

Technical Specifications

Supply Voltage	3.2 - 4.2 [Volts]
Supply Current	Maximum: 4.9 [Amperes] DC
Charging Voltage	4.5 - 7.0 [Volts]
Charging Current	Default: 0.85 [Amperes]; Maximum: 1.0 [Amperes]
Standby Current	0.2 [milliAmperes]
Audio Power	Maximum: 3 [Watts] RMS
Analog LED Channels	2
Pixel Channels	1
Processor	ARM Cortex M4, 256 [kBytes] Flash, 64 [kBytes] RAM - STM32L431 @ 80 [MHz]
Storage Memory	Single-font internal Flash
Data Interfaces	UART, I2C, SWD