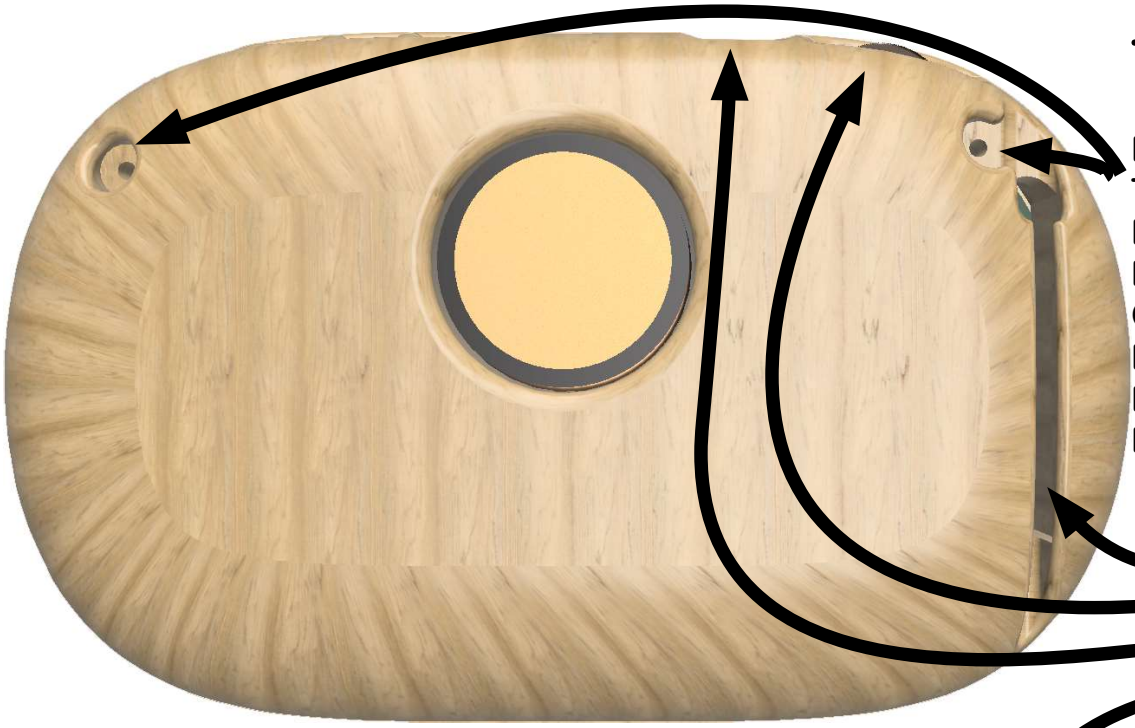
Care and feeding of your Stylish!

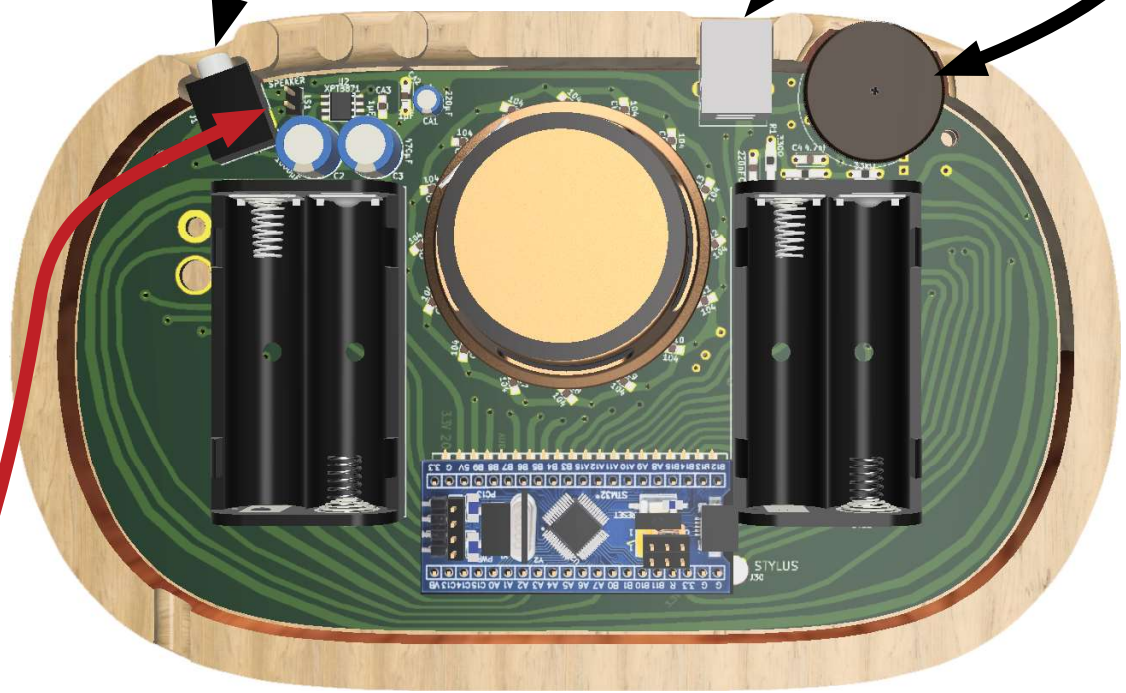
Belt-Buckle Music Synthesizer

TO CHANGE BATTERIES

Remove two screws on the back.
Turn over.
Remove the front.
Lift PCB carefully.
Change batteries on the bottom of PCB.
Replace PCB.
Replace top.
Replace screws.



STYLUS HOLDER
VOLUME / POWER
USB
HEADPHONE JACK

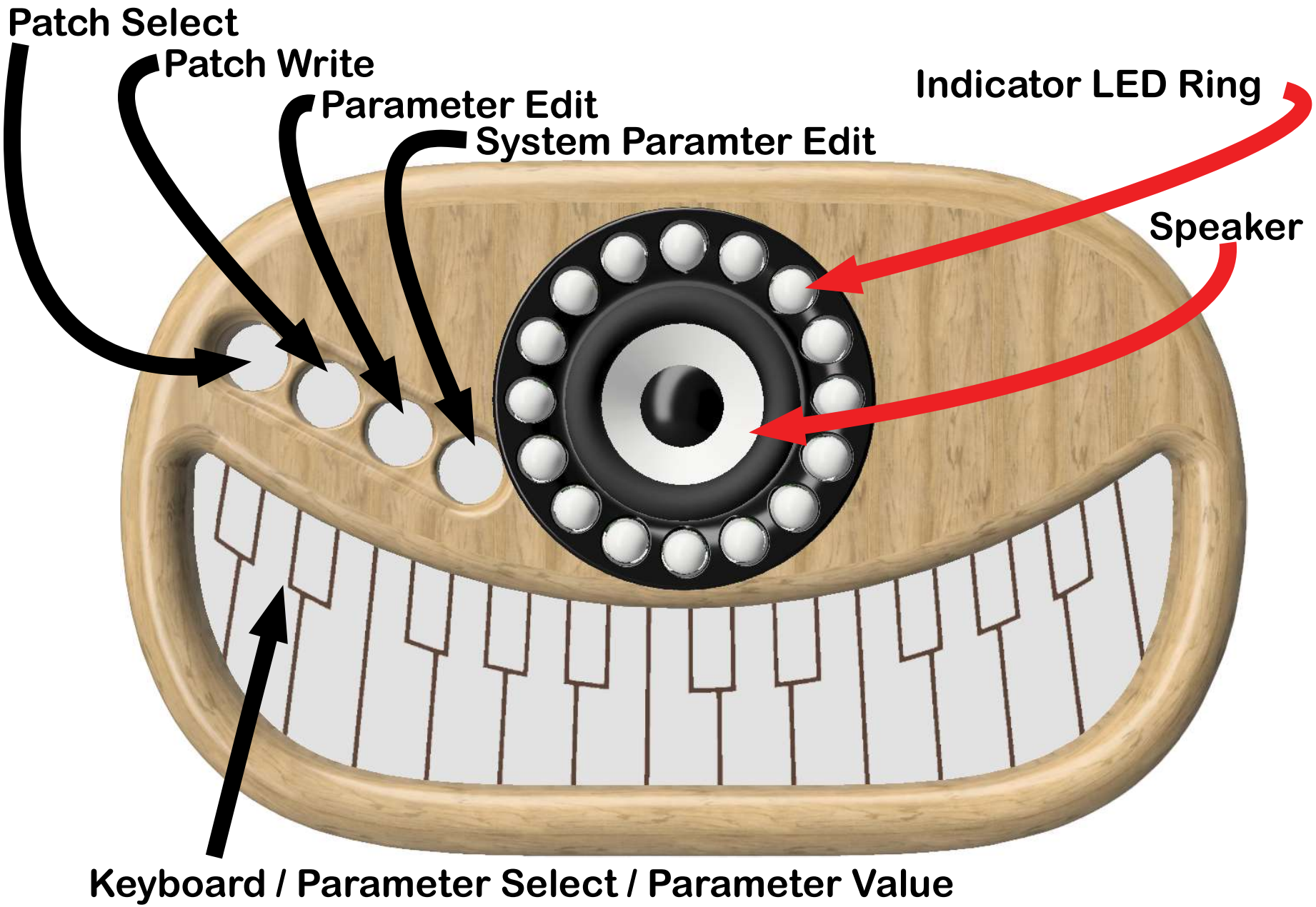


May emit high-pitched sounds if USB power is used when batteries are not installed, so please always have batteries installed.

Amplifier may overheat with prolonged use, so let it rest sometimes.

SPEAKER WIRE GOES HERE

CONTROLS


Patch Select
Patch Write
Parameter Edit
System Paramter Edit
Indicator LED Ring
Speaker
Keyboard / Parameter Select / Parameter Value

CONTROLS

PATCH SELECT - Loads a sound to play on the keyboard from memory.
Tap once and the LED ring flashes BLUE
Tap on the keyboard to select a sound to load
The new sound will play.
Tap on different keys until you hear the sound that you want to load.
Tap PATCH SELECT again to keep playing that sound.
Tapping any other button will abort and use the previously selected sound.
BLUE flashing light will stop to indicate PATCH SELECT mode is no longer active.
You can now play the keyboard normally.

PATCH WRITE - Writes the current sound to a different slot in memory.
Tap once and the LED ring flashes RED
Tap on the keyboard to select a sound to overwrite.
The sound currently in the selected slot will play.
Tap on different keys until you hear the sound that you want to overwrite with the current sound.
Tap PATCH WRITE again to overwrite that sound with the current sound.
Tapping any other button will abort and use the previously selected sound.
RED flashing light will stop to indicate PATCH WRITE mode is no longer active.
You can now play the keyboard normally.

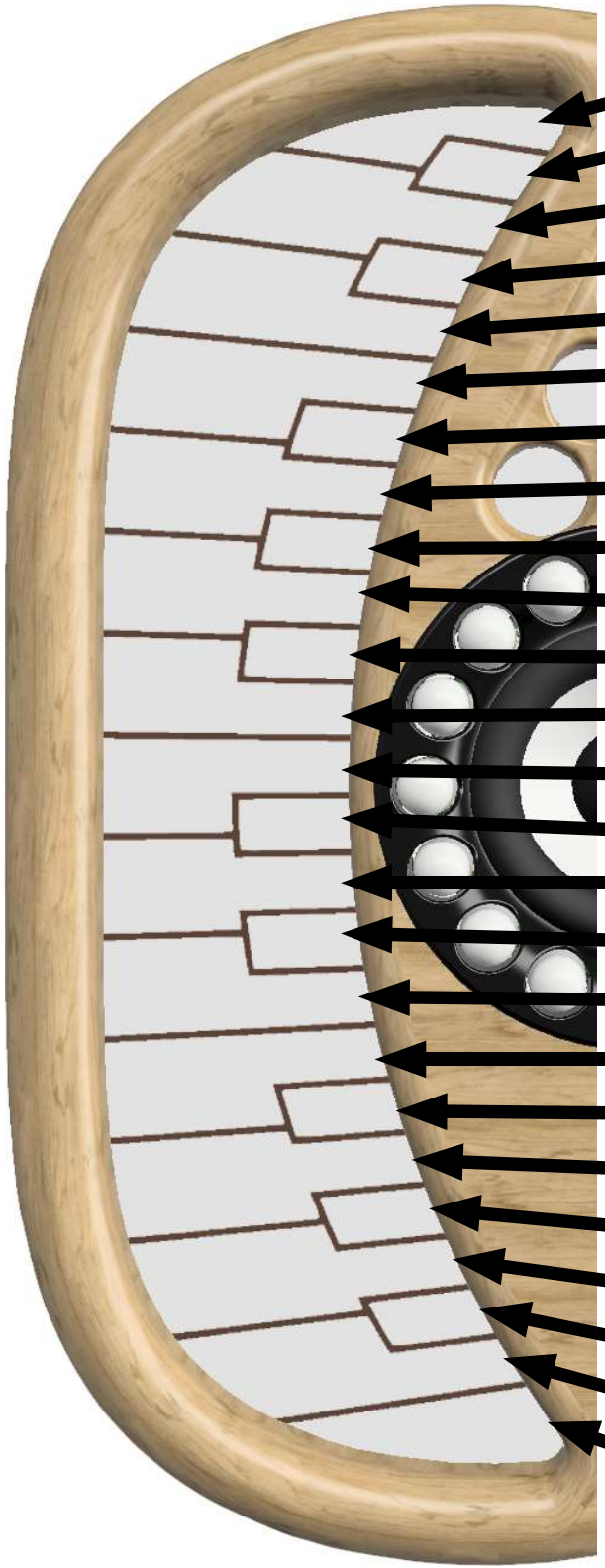
CONTROLS

PARAMETER EDIT - Changes parameter values of the current sound.
Tap once and the LED ring flashes GREEN on the left side only
Tap on the keyboard to select a PARAMETER VALUE to change.
The LED ring will alternname between
- right half GREEN
- the PARAMETER NUMBER bargraph
- and the PARAMETER VALUE bargraph

Tap on the keyboard to select a new value for the selected parameter.
The parameter value will update (the bargraph will reflect this).
The sound will also play at key pitch with the new value.
Tap PARAMETER EDIT again to keep the change.
Tapping any other button will abort and use the previously selected value for the parameter.
GREEN flashing light will stop to indicate PARAMETER EDIT mode is no longer active.
You can now play the keyboard normally.

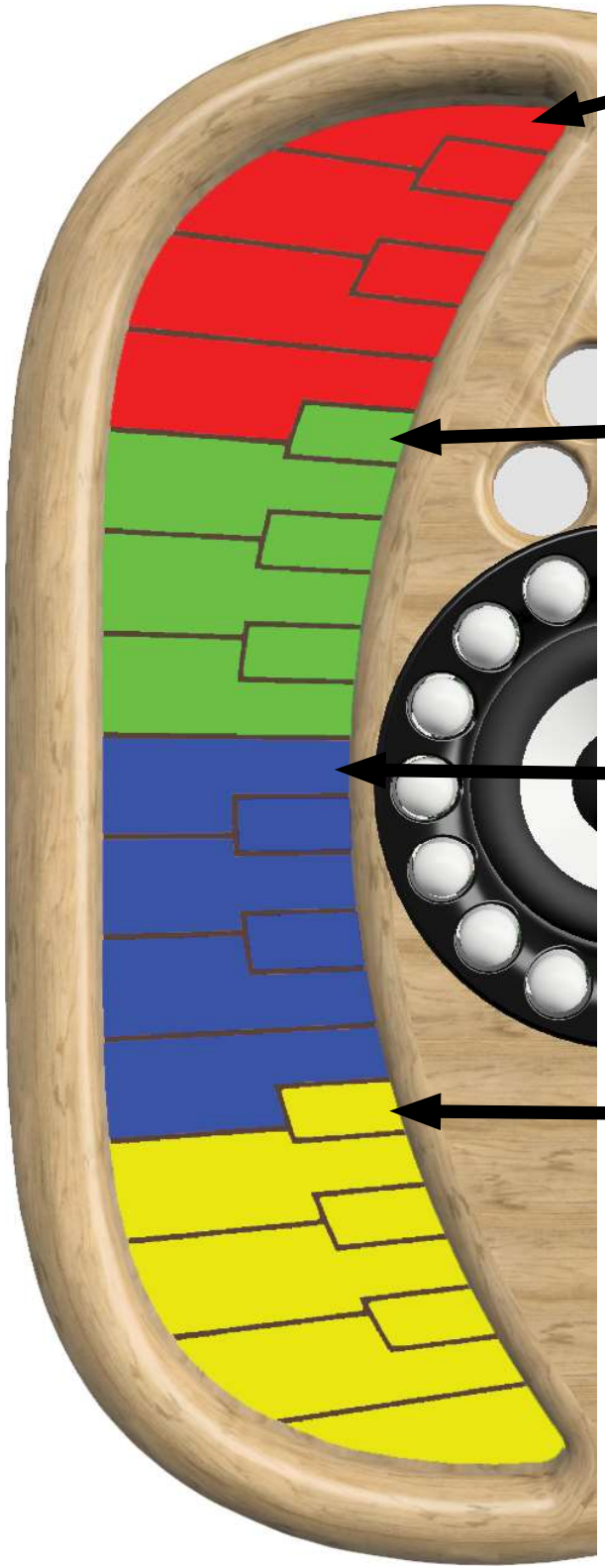
The mapping of PARAMETER VALUE to KEY is on the next page.

PARAMETER EDIT



OSCILLATOR 1 WAVEFORM
OSCILLATOR 1 NOTE OFFSET
OSCILLATOR 2 WAVEFORM
OSCILLATOR 2 NOTE OFFSET
NOISE LEVEL
OSCILLATOR DETUNE
ENVELOPE ATTACK
ENVELOPE DECAY
ENVELOPE SUSTAIN
ENVELOPE RELEASE
FILTER RESONANCE
FILTER FREQUENCY
LFO WAVEFORM
LFO FREQUENCY
FUTURE
FUTURE
ENVELOPE TO FILTER
ENVELOPE TO PITCH
FUTURE
FUTURE
LFO TO FILTER
LFO TO PITCH
LFO TO VOLUME
FUTURE
LFO TO NOISE

OSCILLATOR 1,2 WAVEFORM



SAWTOOTH WAVE :
OCTAVE 1
OCTAVE 2
OCTAVE 3
OCTAVE 4
OCTAVE 5
OCTAVE 6

SQUARE WAVE :
OCTAVE 1
OCTAVE 2
OCTAVE 3
OCTAVE 4
OCTAVE 5
OCTAVE 6

TRIANGLE WAVE :
OCTAVE 1
OCTAVE 2
OCTAVE 3
OCTAVE 4
OCTAVE 5
OCTAVE 6

SINE WAVE :
OCTAVE 1
OCTAVE 2
OCTAVE 3
OCTAVE 4
OCTAVE 5
OCTAVE 6

LFO WAVEFORM IS THE SAME BUT NO OCTAVE

CONTROLS

SYSTEM PARAMETER EDIT - Changes a GLOBAL PARAMETER VALUE

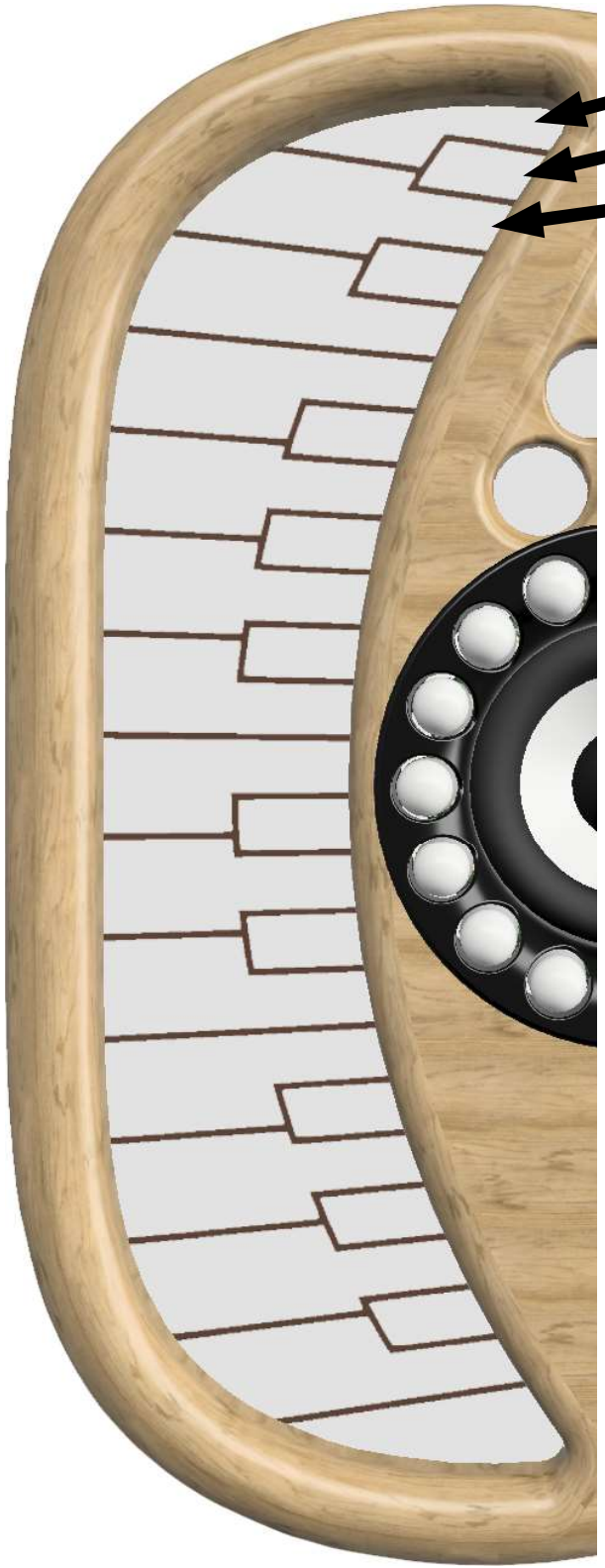
Tap once, and LED ring flashes YELLOW on the left side only.
Tap on the keyboard to select a GLOBAL PARAMETER to edit.
The LED ring will alternate between:

Right half YELLOW
SYSTEM PARAMETER NUMBER bargraph
SYSTEM PARAMETER VALUE bargraph

Tap on the keyboard to select a new value for the selected SYSTEM PARAMETER.
The SYSTEM PARAMETER VALUE will update (the bargraph will reflect this).
The sound will also play at key pitch with the new value.
Tap SYSTEM PARAMETER EDIT again to keep the change.
Tapping any other button will abort and use the previously selected value for the parameter.
YELLOW flashing light will stop to indicate that the SYSTEM PARAMETER EDIT mode is no longer active.
You can now play the keyboard normally.

The SYSTEM PARAMETER list on the next page.

SYSTEM PARAMETERS



LED BRIGHTNESS
COARSE TUNING (NOTE)
FINE TUNING (2 CENTS)
FUTURE

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CARE INSTRUCTIONS

Each wooden STYLISH! unit is a hand-assembled DIY creation!
Each unit is unique and will have character and eccentricities due to the nature of the wood, and the trials of construction.
Please appreciate these as beauty marks!

The 3D printed parts will melt if exposed to heat!
Do not leave STYLISH! in your hot car, in the direct sun, or in other hot places!

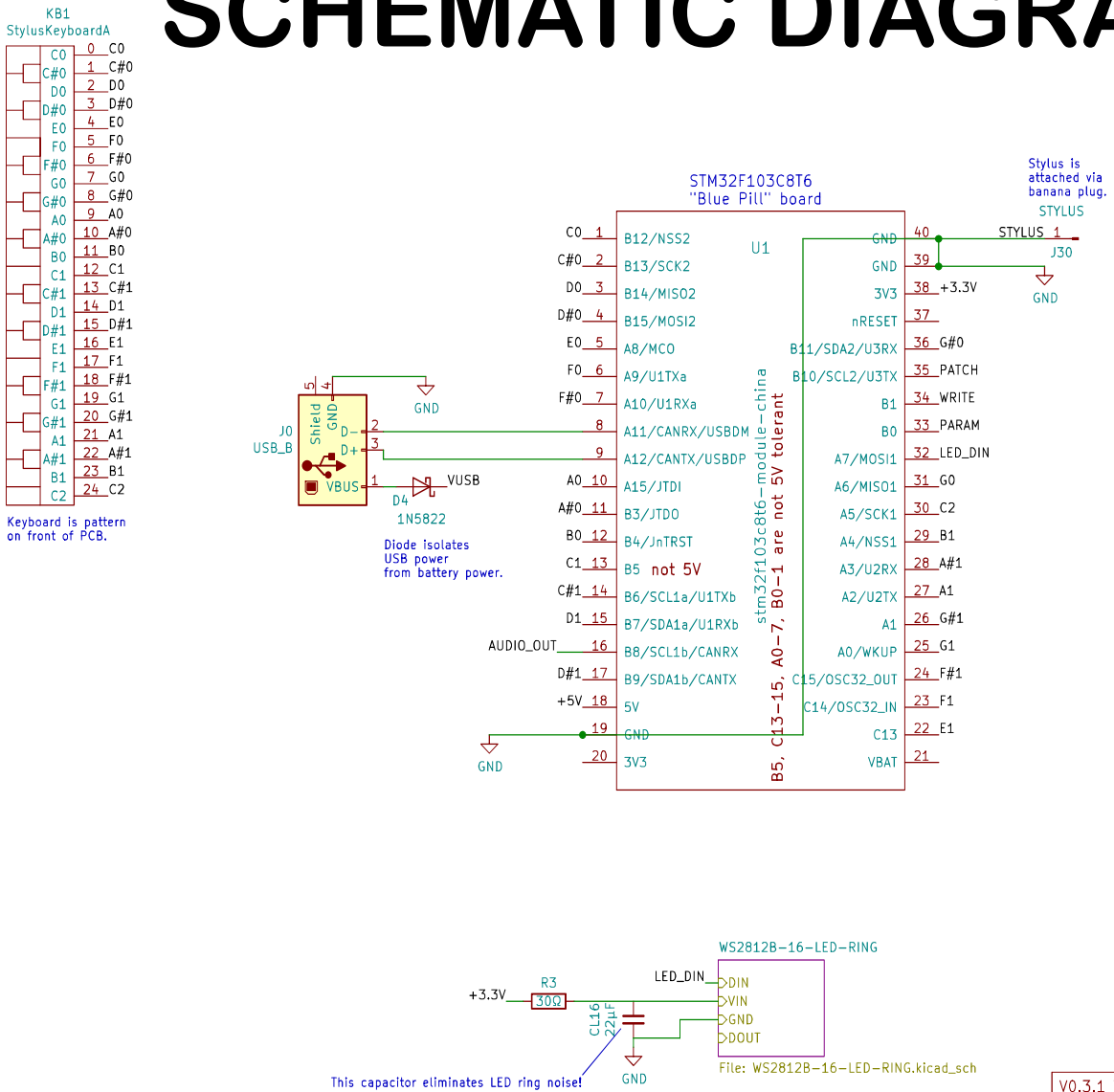
Stylish! is made of WOOD!

* **Although it is covered in a polyurethane varnish, it is probably not good to expose it to moisture!**
* **SCREWS CAN BE STRIPPED OUT IF YOU ARE NOT CAREFUL!**
  PLEASE TAKE CARE NOT TO OVER-TIGHTEN SCREWS!
* **WOOD IS SOFT AND CAN DENT and SCRATCH EASILY!**
  TAKE CARE NOT TO LET STYLISH GET SCRATCHED or DENTED!

The STYLUS wire is somewhat delicate! Please take care not to rip the wire out!

Take care when changing batteries to align screws with the holes in the printed circuit board (PCB) when putting it back together so as not to scratch the circuit board.

SCHEMATIC DIAGRAM



V0.3.1 T.B. Trzepacz 2019/5/16 Amp volume control change again.
V0.3 T.B. Trzepacz 2019/5/7 Amp volume control and power switch
V0.2 T.B. Trzepacz 2018/10/14 USB and headphone added. Diodes for buttons and power.
V0.1 T.B. Trzepacz 2018/2/19

SoftEgg

Sheet: /
File: Stylish-Belt-Synth - Full.kicad_sch

Title: "Stylish" Trucker Belt Stylus Synthesizer

Size: A4	Date: 2023-05-01	**Rev: 0.32**
KiCad E.D.A. eeschema (6.0.9)		Id: 1/2

STYLISH! The Trucker Belt Synthesizer was created by Timon at SoftEgg®.
http://www.softegg.com

More project details on Hackaday.io!
https://hackaday.io/project/160859-stylish

All hardware and software files are available on GitHub here:
https://github.com/softegg/Stylish-Trucker-Belt-Synthesizer
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