



Headless electric guitar V3



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updated 5. 4. 2023 | published 5. 4. 2023

Summary

Third version of my steel core headless guitar design.

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This is the third version of my headless guitar design. The main improvements are the shape modification and the installation of a floating trem system.

I have uploaded the step files in case anyone is interested in customizing it (make sure to adapt it to the scale length of your neck).

The body is printed in 4 parts, to fit in a 220x220 bed, and bond together with a special silicone.

To ensure the guitar rigidity, I have placed a 10mm steel plate (I know it's thicker than needed), where the neck and bridge are bolted. Between them, I placed 5mm methacrylate plates glued together. I selected this material because it's light, rigid, cheap and very easy to manipulate.

For bonding the body and the steel plate, it's just a "pressure fit", designed to fit together after installing the bridge and neck.

The covers for the electronics cavity and steel plate use magnets, to make it easier to access.

For the headless configuration, a floyd rose locking nut is used as the head, bolted to the neck with M3 bolts and nuts.

The bridge is a cheap one purchased in [Aliexpress](#).

Printing settings:


- 0.32mm layer height
- 35% cubic infill and
- 3 perimeters
- No supports
- PLA


The main hardware used:


- Bridge:
<https://es.aliexpress.com/item/4000216172620.html?spm>
- Pickups (amazing sound for its price):
<https://es.aliexpress.com/item/1005003676113109.html?spm>
- The silicone used (it's a spanish brand, idk if it's sold in other countries):
<https://www.fischer.es/es-es/productos/quimica-de-la-construccion/sellantes-adhesivos-ms/ms-extreme-tack>

The budget for the project was around 160 euros.

Model files

 **STEP** 1 file

 **guitar-v3.step**

 **STL** 15 files



body-right.stl



single-pickup-joint-1.stl



long-steel-plate-cover.stl



single-pickup-joint-2.stl



upper-potentiometer-base.stl



lower-potentiometer-base.stl



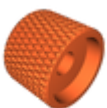
electronics-cover.stl



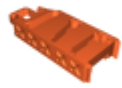
humbucker-pickup-joint.stl



switch-base.stl



knob.stl



body-center.stl



body-lower-left.stl



short-steel-plate-cover.stl



body-upper-left.stl



neck-spacer.stl

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