TUBE DRUMS

Idea

Polycarbonate tubes with led lighting (attached to the sides) and piezo sensor pads (attached to top). Send electric sound signal through the music output when triggered (piezo sensors detect physical pressure).

Functioning

Piezo sensor (HIT)🡪 Processing unit 🡪 SD Card module 🡪 Audio output

Features

* No physical sound, rocks virtually
* Attractive LED lighting
* Energy efficient
* Sounds can be easily customized (using DAW)
* Maintenance free, unlike acoustic drums

Parts

* Processing unit
* SD Card reader module
* LEDs
* Transistors (to power up LEDs)
* Sound output port (aux-out)
* Piezos
* Wires, buttons etc.

Costing

* Electronic part ≈ ₹250
* Drum building material ≈ ₹300
* Final PCB ≈ ₹50
* Prototyping ≈ ₹5000

\*Here, pricing is done keeping the highest prices in mind. Actual prices may vary.