

# Strum Master

## USER MANUAL



Created by Lorraine Li, Jonathan Ng, Heather Tian, Sitara Visram, and Alison Wong

## About the Instrument

The Strum Master is a modified MIDI guitar that is able to play major and minor chords of the 12 semitones in an octave scale. Before using The Strum Master, please read this user manual in full to ensure safe use and handling. This manual provides instructions for all functions of the instrument.

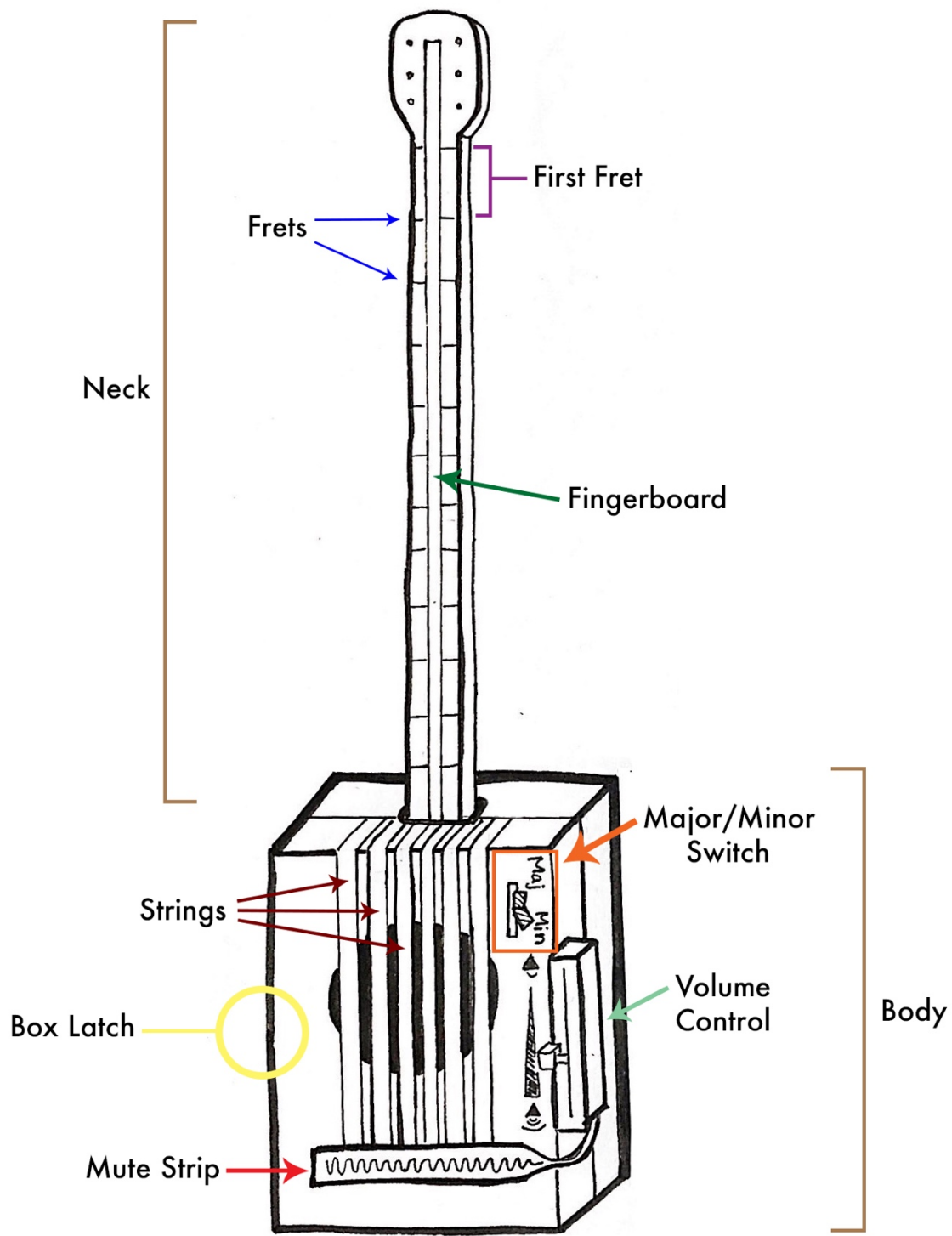
## General Safety Instructions

 **IMPORTANT! READ BEFORE USE**

1. Use the instrument only as described in this manual.
2. Do not submerge any part of the instrument and keep away from water.
3. Do not use the instrument in a wet environment or on any wet surfaces, for example, near a swimming pool or sink.
4. Do not leave the instrument plugged in when not in use.
5. Keep the instrument away from heat sources and radiators.
6. Wash hands after use of the instrument as some parts may be toxic or contain chemicals that should not be consumed.
7. If any wires or components become damaged, immediately unplug the instrument and bring to a professional before using the instrument again.
8. If you smell anything burning, immediately unplug the instrument and bring to a professional before using the instrument again.

## Components of the Strum Master

The following diagram shows the labelled components of The Strum Master. This may be useful as a reference as you read through the manual.



## How to Setup (with Computer)

To setup the Strum Master before you start playing, follow these steps:

1. Download a MIDI reading platform (i.e.: GarageBand) onto the computer that you wish to connect The Strum Master to. Select the Strum Master as the source of MIDI output.
2. Open the box latch to attach the included microUSB cable to the Teensy3.5 found inside the box. Connect the other end of the cable to the computer via USB connection.
3. Close the box and secure with the latch. Ensure that the cable is slotted through the hole at the bottom of the fingerboard and that the box is able to close securely.
4. When you are finishing playing with the instrument, unplug all wires and disconnect from the computer. Store the instrument in a safe and dry environment to maintain its condition and quality.

## How to Play

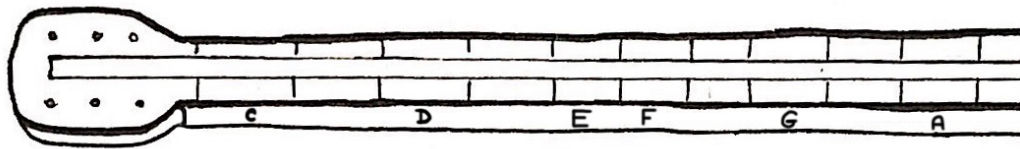
Once the Strum Master is plugged into the computer, follow these steps to play the instrument:

1. Orient the Strum Master so that the fingerboard is on the left side and the strings are on the right side. The correct orientation can be confirmed by looking at the "Maj" and "Min" text on the Major/Minor Switch.
2. On the fingerboard, use one hand to choose the note/chord that you wish to play by pressing down on the strip.
3. While holding down the desired position on the fingerboard, use your other hand to brush across or tap the strings to produce sound. If there is no sound, check to make sure the instrument is set to maximum volume on the slider or change the volume setting on your computer.
4. To switch between the major and minor setting, press the Major/Minor switch. The side of the switch that is parallel with the box is the activated setting.
5. As you play, the volume can be adjusted using the Volume Slider and the Mute Strip can be used to stop the sound.

## Features & Accessories

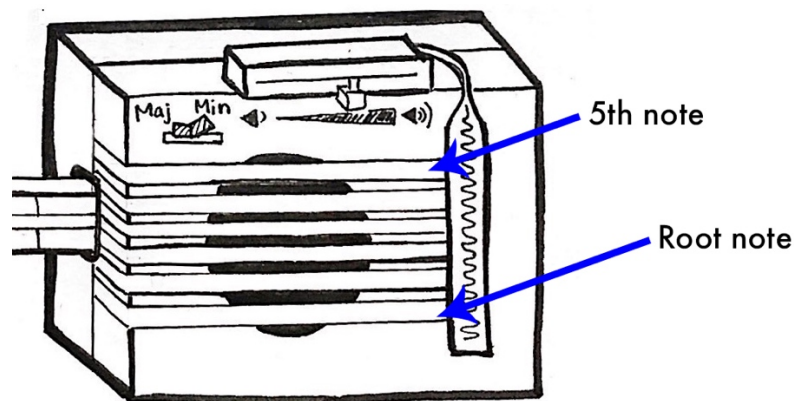
### 1. Fingerboard & Frets

The fingerboard and frets on the neck of the Strum Master determine the pitch of the notes that will be played. If the first fret is held down, the instrument will produce a C chord. The same happens when no fret is held down. Each fret ascends by a semitone (i.e. second fret: C#, third fret: D, etc.). As a reminder, there are labels on the side of the Fingerboard for the base notes (i.e. C, D, E, F, etc.) as seen in the diagram below.



### 2. Strings

There are six strings found on the body of the Strum Master. Depending on the fret that is held down on the fingerboard, each string will sound a different note of the desired chord. The string that is closest to your body will always sound the root note of the applied chord and the string that is furthest away will always sound the fifth note of the applied chord. These two strings ascend by semitones as you change positions towards the body of the Strum Master.



### 3. Major/Minor Switch

The Major/Minor Switch is found on the body of the Strum Master. Switching between the major and minor setting changes the notes that will sound when the strings are touched.

#### 4. Volume Slider

The Volume Slider is found on the body of the Strum Master. Moving the knob on the slider adjusts the volume of the sound outputted by the instrument. The volume symbols on the body denote the maximum volume and minimum volume.

#### 5. Mute Strip

The Mute Strip is found on the body of the Strum Master. Applying force on any part of the strip will mute any sound coming out of the instrument. This feature is used as an alternate to palm muting on a real guitar.

## Contact

If you have any further inquiries or in the case that any issues may arise, please contact [info@strummaster.com](mailto:info@strummaster.com) for more information.