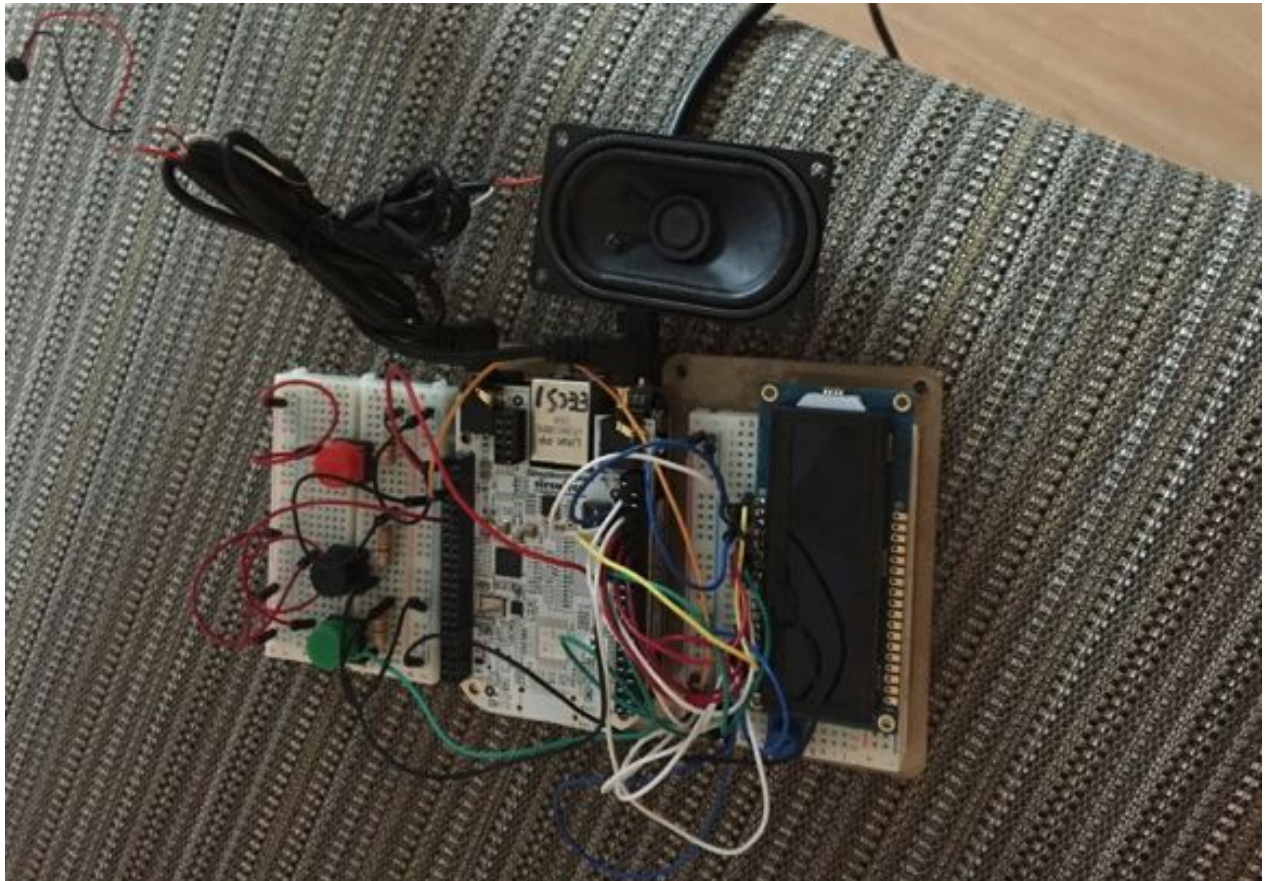


Bed Tunes Guitar Tuner and Recorder

User's Manual



DESIGNED BY: ILHAM HASNUL, BEN COOK, ANTHONY
SAWYER, QUENTON STEVENSON

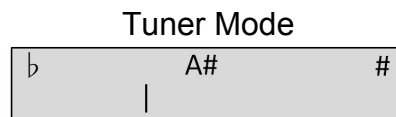
Introduction

The Bed Tunes device is a technology combining a guitar tuner and a recording system. This device detects tone and determines its frequency which is displayed to the user. The device also records the user's playing and allows playing back the recording.

Navigating the Guitar Tuner

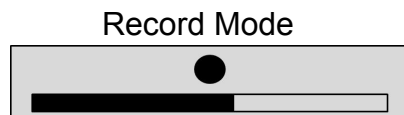
On this device, three buttons are installed - a black, green and red button. To turn the device on, hold the red button for 2 seconds. The tuner begins in the Tuner Mode (see below). Pressing the black button toggles the mode between Tuner Mode and Recorder Mode. In any of these modes, if the red button is pressed for 2 seconds, the device shuts off. While in Recorder Mode, pressing the On/Off (black) acts as a Record/Stop button. Pressing the black button a single time will begin recording sound, and pressing it a second time will stop it. Pressing the green button will play back the recording and play until completion. Pressing the green button while the recording is playing back will restart the playback.

Tuner Mode



In the tuner mode, the device will determine the pitch of the detected sound. The range of notes goes from B2 (below E2 - lowest guitar string) up to F4 (above E4 - highest guitar string). The LCD screen will print the semitone closest to the detected pitch. A bar at the bottom of the screen will show you what pitch is being heard relative to the displayed note. As the pitch played changes, the bar at the bottom of the screen shifts to the left or right. If the bar is to the right of the note, where the sharp sign is, the pitch is sharp relative to the displayed note. If the bar is to the left of the note, where the flat sign is, the pitch is flat relative to the displayed note. The flat symbol is at the left side of the screen, and the sharp symbol is on the right side of the screen.

Recorder Mode



In the recording state, the device records your sounds you produce through the microphone. The user gets a limit up to 3 minutes to record anything desired. It is then able to replay the sound the user produces through the built-in speaker. The user can only record up to three minutes at a time. The device only stores one file of audio data at a time. If a new audio data is recorded, it will overwrite the already existing file, which is forever deleted. The LCD screen shows "Recording Audio" when the device is recording the audio file, and shows "Playing Audio" when the device is playing the audio file.

User Recommendations

It is highly suggested that when using the device in each mode that the user is in a quiet environment. This precaution is to maximize tuner performance. The tuner will be able to correctly detect the notes and sounds designated to feed into the microphone of the device quickly and accurately. In the tuner mode, the microphone will detect one note at a time. In the recording mode, the microphone picks up everything that is played in the proximity. The device can be powered when connected to a desktop or laptop.