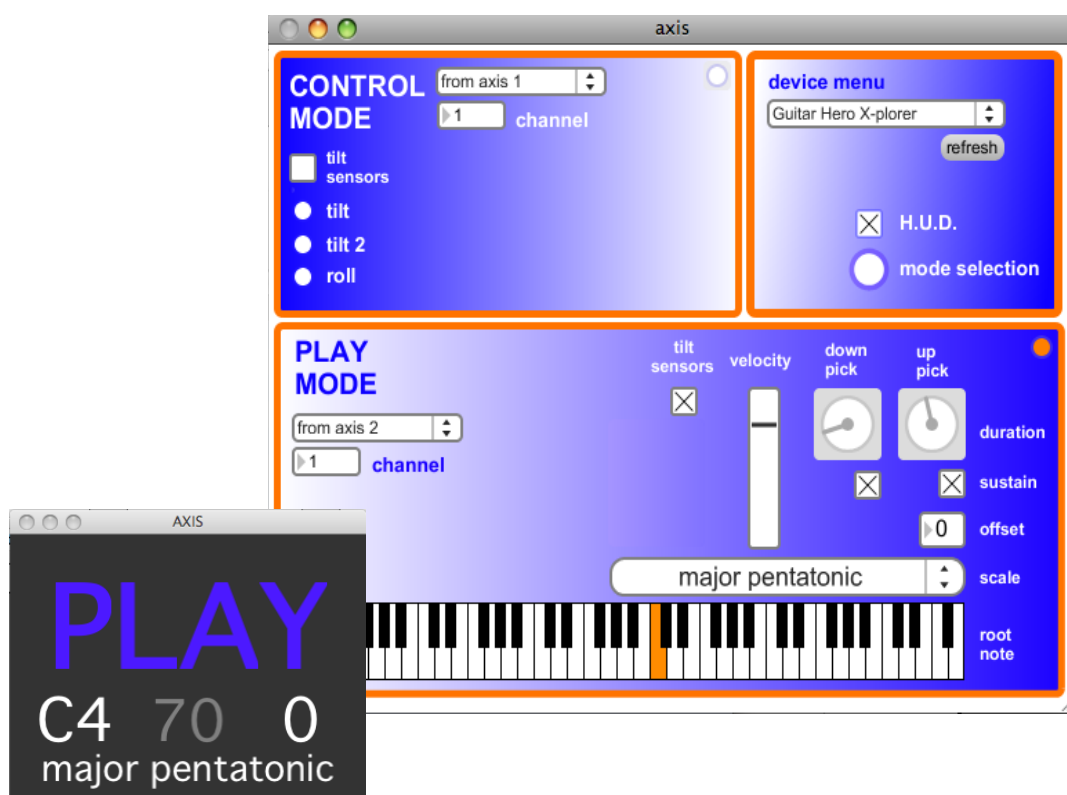


AXIS



USER MANUAL

version 1.0

Introduction

AXIS allows the Xbox Guitar Hero controller to be played as a musical instrument whilst simultaneously controlling MIDI capable software to trigger samples, loops or effects.

Requirements

- Windows XP/Vista or Mac OS X
- Xbox Guitar Hero controller
- MIDI capable software or hardware
- Quicktime or Quicktime Alternative
- LoopBe (if running windows)

Installation

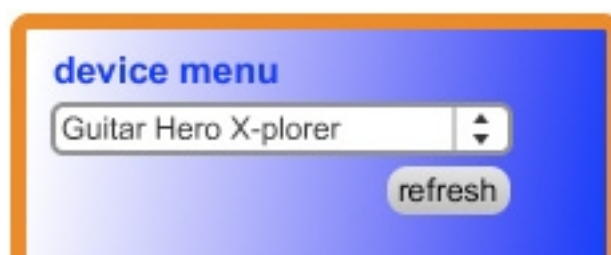
Extract AXIS to your hard drive.

Install the Xbox drivers for your operating system.

- If you're running windows with an active internet connection, you'll be prompted to install the drivers when you first plug in your Xbox controller.
- Windows users will also need to download and install LoopBe from:
<http://www.nerds.de/en/loopbe1.html>
- If you're running OS X you can download the Xbox driver from:
<http://tattiebogle.net/index.php/ProjectRoot/Xbox360Controller/OsxDriver>

Getting Started

- Make sure your Xbox guitar is connected.
- Open AXIS.
- Select "Guitar Hero X-plorer" from the device menu.



MIDI Settings

- In Windows, with LoopBe installed, select "LoopBe Internal MIDI" as the MIDI input in your desired software.
- In OS X choose "from axis 1" as your MIDI input.
- By default, CONTROL MODE outputs to MIDI channel 1 and PLAY MODE outputs to MIDI channel 2.

PLAY AND CONTROL MODES

AXIS has two modes – CONTROL MODE and PLAY MODE.

In control mode, when you press a button on the guitar, a midi message is sent. This is useful for navigating software such as Ableton Live or any software that reads MIDI. PLAY MODE allows you to play the guitar as a musical instrument.

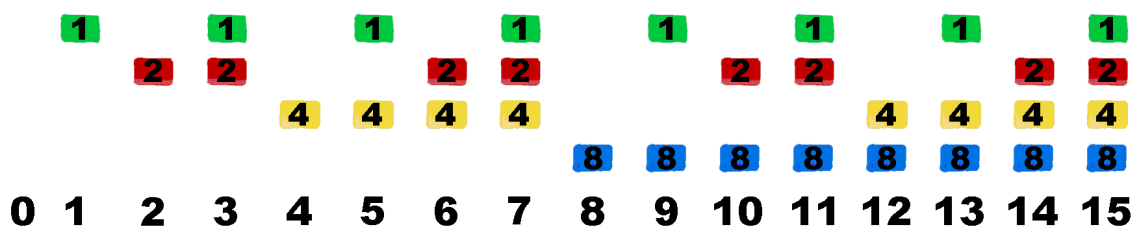
- In Windows you can switch between modes by pressing BACK+START.
- In OS X you can switch between modes with the Xbox button.

PLAY MODE

In PLAY MODE you play the guitar just as you would in the game, holding down combinations of fret buttons and strumming. The first four fret buttons, **Green**, **Red**, **Yellow** and **Blue** are used to build a binary scale. Each fret can be thought of as a number:

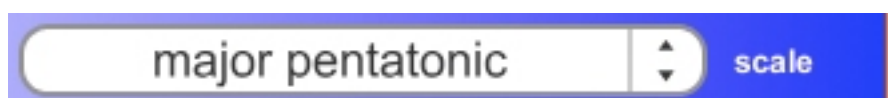
Green = 1
Red = 2
Yellow = 4
Blue = 8

By adding combinations of buttons you can get any number between 0 (no buttons) through to 15 (**G**+**R**+**Y**+**B**). The scale that emerges is:



A good way to learn the scale is by running it up and down over and over just like practising any other instrument.

Scales selected from the scale menu are superimposed over the binary scale. If you're unsure of which scale to pick, pentatonics are always a good bet.



You can choose the root note (key) from the root note keyboard.



The up-pick can be made to play a number of scale degrees above the down-pick allowing for rapid playing of 5ths, octaves or any other interval.

For example, if you are in C major and up-pick offset is set to 2, an open down pick will play a C, while an up-pick will play an E (two scale steps above).

You can set the up-pick offset from the offset number box.



You can change the duration of up-pick or down-pick notes independently. By default they are both set to "sustain" meaning the note will play as long as the strum bar is held. You can achieve palm mute effects with short durations.



The velocity slider changes the velocity of the outgoing MIDI notes, effectively controlling volume.



GUITAR SHORTCUTS

There are a number of guitar shortcuts you can use to change settings on the fly, without needing to touch your computer.

- Scale up/down: D-Pad Left/Right
- Root note up/down: ORANGE + GREEN/RED
- Up-pick up/down: ORANGE + YELLOW/BLUE
- Velocity up/down: BACK /START
- Mode select: Xbox button (OS X), BACK+START (WIN)

TILT AND WHAMMY

The whammy bar and three tilt sensors pump out MIDI CCs which can be used to control variable parameters. The guitars' three tilt sensors sit on two different axes:

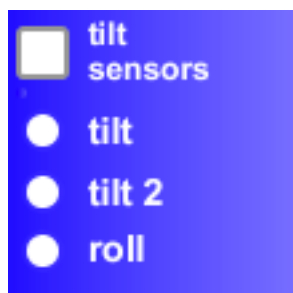
- Tilt 1 - move the neck up and down.
- Tilt 2 - like Tilt 1 but at the extremes with the neck straight up/down (OS X).
- Roll - keeping the neck parallel to the ground and rotate the top of the guitar forwards or back.

The output MIDI CCs are:

- Whammy CC1
- Tilt 1 CC2
- Tilt 2 CC3 (OS X)
- Roll CC4

MIDI MAPPING

When mapping either buttons or tilt sensors to parameters in software such as Live, it's important to turn the tilt sensors off to prevent drowning the program in MIDI CC messages.



With tilt sensors disabled, click the corresponding button to send a single CC message.

H.U.D.

To conveniently keep an eye on the current status of AXIS, you can activate the H.U.D. (Heads Up Display). This is a little window that displays the current PLAY/CTRL mode status, root note, volume, up-pick offset and scale.



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Go forth and shred!