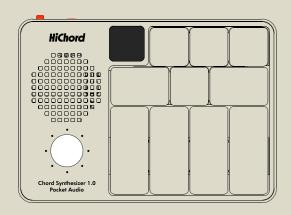
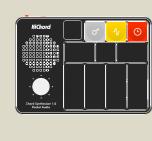
# WELCOME TO HIGHEOFE

DIRECTORY

HiChord Manual Firmware Rev1.4

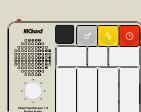


**START** 

































DRUM MODE **AUTODRUM MODE** 

HOME

**HOW IT WORKS** 

**GETTING STARTED** 

**CHORD BUTTONS** 

NASHVILLE NUMBER SYSTEM

JOYSTICK

**CHANGE KEY** 

**CHANGE OCTAVE** 

**CHANGE BPM** 

**INVERSIONS** 

**CHANGE SOUND** 

**EFFECTS** 

**ARP MODE** 

MIDI

**LOOPER** 

RANDOMIZER

**UPDATE FIRMWARE** 

WARRANTY

TECH SPECS.

#### **HOW IT WORKS**



HiChord is built to simplify and accelerate harmonic exploration.

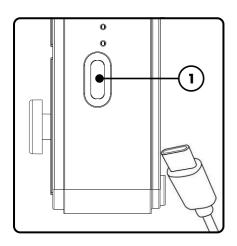
It has seven chord buttons that are automatically mapped to play chords that naturally work together in the current key.

The Chord Modification Joystick lets you alter chord qualities on the fly—major, minor, sevenths, suspended voicings, and beyond—while three menu buttons give you streamlined access to keys, octaves, waveforms, effects, and rhythmic patterns.



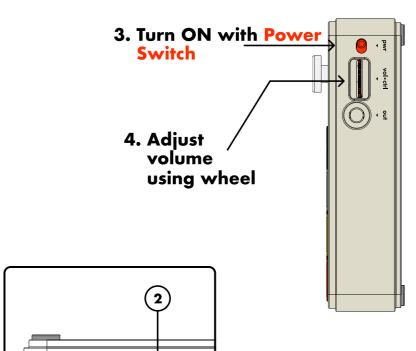
### **GETTING STARTED**





#### 1. charge via USB-C.

There is a USB-C to USB-C cable provided in the HiChord box :)



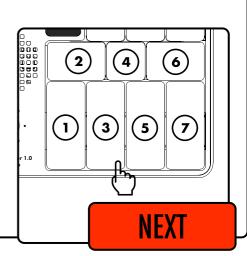
2. plug into Headphones, speaker, or recording device using 3.5 mm audio output (AUX). Or use built-in speaker.



# **CHORD BUTTONS**

HiChord features 7 Chord Buttons mapped according to the **Nashville Number System**, allowing for easy transposition and chord progressions. Each button plays a chord that naturally fits with the others in the set, so no matter which buttons you press, the chords will always sound good together. These chords correspond to the diatonic chords of a major scale, making it easy to stay in key.

- Button 1: Tonic (I) (MAJOR)
- Button 2: Supertonic (II) (MINOR)
- Button 3: Mediant (III) (MINOR)
- Button 4: Subdominant (IV) (MAJOR)
- Button 5: Dominant (V) (MAJOR)
- Button 6: Submediant (VI) (MINOR)
- Button 7: Leading Tone (VII) (DIMINISHED)



BACK

# NASHVILLE NUMBER SYSTEM

The Nashville Number System simplifies chord playing by using numbers (1-7) to represent the diatonic chords in a scale. Each number corresponds to a chord function, which remains consistent no matter the key. This allows instant key changes while maintaining familiar chord relationships.

The Nashville Number System ensures chords sound natural together and simplifies switching between keys, making it ideal for live play and composition.

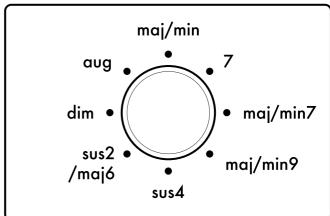
BACK

# CHORD MODIFYING JOYSTICK

**DIRECTORY** 

Use the Chord Modifying Joystick to transform the character of any chord in real-time. Simply hold a Chord Button, then tilt the joystick to select your desired chord quality—major, minor, seventh, suspended, augmented, diminished, and more.

As you move the joystick, HiChord instantly reshapes the chord.



BACK

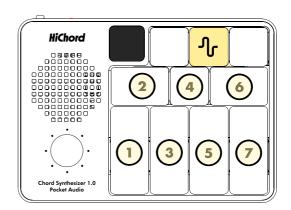
# **CHORD INVERSIONS**



Chord inversions let you rearrange a chord's notes to create smoother transitions, more resonant voicings, and subtler changes in musical character. Simply hold a Chord Button and press the 1 key to cycle through available inversions.

#### **INVERSION**

press chord button + 1/2 to invert



BACK



# **CHANGE KEY**

**DIRECTORY** 

← → change key
↑ ↓ change octave

Q

Press of and scroll Left (←) or Right (→) to select a new key. This instantly transposes all chords to the new key.

# **CHANGE OCTAVE**

Press or Down (↓) to lower the overall octave.

#### CHORD BUTTON OCTAVE

Set each chord's buttons octave independently. Hold a Chord Button and press of to lower its octave, or to raise it.

BACK

# **CHANGE BPM**

**DIRECTORY** 

Press  $\bigcirc$  and use the Left ( $\leftarrow$ ) and Right ( $\rightarrow$ ) controls to select a faster or slower tempo (BPM).

### **CHANGE SOUND**

Select from various **waveforms**—such as sine, saw, square, triangle, and more expressive instrument-inspired tones—and fine-tune the overall character using onboard filters and **effects**.

Experiment with different **voice counts** and waveform combinations to craft your own signature sonic textures. Each chord can use 2 oscillators per voice, up to 10 Oscillators per chord.

Press and to create a new randomize all variables to create a new sound.

# **WAVEFORMS**

**DIRECTORY** 

↑ change sound / waveform

SAW
Bright and buzzy, the saw wave is rich in harmonics. Perfect for lush pads and cutting leads.

Pure, round, and fundamental. Ideal for mellow basslines, gentle melodies, or layering subtle warmth.

SQUARE Hollow and woody, the square wave offers a balanced tone. Great for classic chiptune sounds, warm leads, and rhythmic pulses.

# **WAVEFORMS**

**DIRECTORY** 

TRIANGLE

Soft and smooth, a triangle wave provides a gentle quality suitable for flutes, pads, and delicate melodies.

WURLI

Evocative of a Wurlitzer electric piano, this waveform adds a vintage, soulful character and gentle keys-like timbre.

**PIANO** 

Modeled after acoustic piano overtones, this waveform offers a percussive attack with warm harmonic resonance.

RANDOMIZE

Let HiChord surprise you! Automatically generate a new waveform and tonal setup for fresh inspiration.

Press and to create a new randomize all variables to create a new sound.

**BACK** 

# **EFFECTS**

Press 1 to open the Sounds & Effects menu.

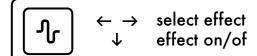
Use the Joystick Left/Right ( $\leftarrow/\rightarrow$ ) to cycle through different effects.

The currently selected effect is shown on the display as < EFFECT NAME >.

Use Joystick Down (1) to turn the currently selected effect On/Off or cycle through its available modes or presets.

#### **EFFECTS**

#### **DIRECTORY**



ADSR

Shapes how chords start, hold, and fade by adjusting Attack, Decay, Sustain, and Release.

Press Joystick Down to cycle through: LONG, SHORT, SWELL, PLUCK, TOUCH, SUSTAIN.

LFO

Adds subtle or dramatic periodic modulation to pitch. Press Joystick Down to switch between: LOW, MED, HIGH, OFF.

GLIDE

Smoothly transitions pitch when changing chords. Press Joystick Down to toggle: ON, OFF.

# **EFFECTS**

#### **DIRECTORY**

**VERB** 

Adds space and depth, simulating different acoustic environments.

Press Joystick Down to toggle: ON, OFF.

Produces a rhythmic volume pulsing effect. **TREMOLO** Press Joystick Down to choose rate: 1/4, 1/8, 1/16, 1/16T, 1/32, OFF.

**FLANGER** 

Adds a sweeping, jet-like modulation to your sound. Press Joystick Down to toggle: ON, OFF.

**FILTER** 

Rolls off higher frequencies for a warmer tone.

Press Joystick Down to toggle: ON, OFF. When ON, use the Volume Knob adjusts cutoff.

BACK

### **EFFECTS**

#### **DIRECTORY**

DELAY

Creates echoes and repeats for spatial or rhythmic effects. Press Joystick Down to cycle through rates: 1/4, 1/8, 1/16, 1/16T, 1/32, OFF.

STEREO

Expands or narrows the sound's stereo field. Press Joystick Down to toggle: STEREO, MONO.

BASS

Adds a dedicated sub-bass oscillator set, one octave below the chord root, to enhance low-end frequencies.

- When ON: A sine wave sub-oscillator is added to the mix, creating a deeper and fuller tone.
  - When OFF: The standard oscillators remain unchanged.

Adjusts how many oscillators form each chord.

VOICES

Press Joystick Down to cycle: 1 OSC (monophonic lead), 2
OSC (light layer), 4 OSC (thicker chords), 8 OSC (lush stack).

BACK

#### **MIDI**

Connect HiChord to DAWs, hardware synths, and other MIDIcompatible devices via USB-C to send real-time note, chord, and rhythm data.

MIDI OUTPUT can be turned on in the EFFECTS menu. Press  $^{\bigcirc}$  and scroll Left or Right ( $\leftarrow/\rightarrow$ ) until you see <MIDI>.

#### Use Joystick Down (↓) to toggle MIDI On and Off.

- Chord Mode: Sends the full chord as a MIDI note group.
- Arpeggio Mode: Outputs individual notes of the arpeggio pattern in sequence.
- Repeat Mode: Sends repeated chord triggers at the set rhythm rate.

#### **MODES**

**DIRECTORY** 

t change mode

# **MODE: PLAY**

The default mode for playing full chords. Press the chord buttons to trigger harmonies instantly. Perfect for live playing or songwriting.

Press ① + ↑ to cycle through modes until MODE: PLAY is displayed.

**BACK** 

# **MODE: ARP**

Automatically arpeggiates chords, playing the notes one at a time in patterns.

Press (and then to cycle through modes until MODE: ARP is displayed.

Press ③ and then ↓ to cycle through the arpeggio rhythm rates: 1/4, 1/8, 1/16, 1/32, Swing and Triplet variations.

Press and then ÷ to generate a Random Arpeggio Pattern.

BACK

# **MODE: REPEAT**

Plays chords repeatedly at a set rhythm rate. Adjust the tempo and note rate to match your performance. Ideal for rhythmic chord playback.

Press ond then to cycle through modes until MODE: REPEAT is displayed.

Press ③ and then ↓ to cycle through the rhythm rates: 1/4, 1/8, 1/16, 1/32, Swing and Triplet variations.

# **MODE: DRUM**

Turns HiChord into a drum trigger, mapping percussion sounds to chord buttons for live play.

Press and then † to cycle through modes until MODE: DRUM is displayed.

- Chord Button 1: Kick Drum
- Chord Button 2: Snare Drum
- Chord Button 3: Closed Hi-Hat
- Chord Button 4: Open Hi-Hat
- Chord Button 5: Tom 1 (High Tom)
- Chord Button 6: Tom 2 (Mid Tom)
- Chord Button 7: Crash Cymbal

# **MODE: AUTODRUM**

Automatically triggers drum rhythms in sync with your set tempo, playing kick, snare, tom, crash and hi-hat sounds.

Press and then † to cycle through modes until MODE: AUTODRUM is displayed.

Drum sounds follow the rhythm rate and swing timing set for the current tempo.

Press ② and then ↓ to cycle through the rhythm rates: 1/4, 1/8, 1/16, 1/32, Swing and Triplet variations.

### **RANDOMIZER**

DIRECTORY

RANDOMIZE SOUND

press 1 then 🛨

Randomly adjusts oscillator settings, effects, and envelopes to create fresh, unexpected tones.

**RANDOMIZE** 

**PATTERN** 

press of then 🛨

Generates a brand new arpeggio pattern, shuffling notes, timing and placement.

RANDOMIZE All

Randomizes all variables including key, BPM, inversions, waveforms, effects, and arpeggio patterns.

press 💿 then 🛨

For instant magic, go to ARP Mode and try RANDOMIZE ALL.

# **LOOPER**



Records and loops your chord progressions or drums for seamless playback and live layering.

- Record: Press Joystick Click (when not in a menu screen) to start recording.
- Stop/Play: Press Joystick Click again to stop recording and begin loop playback.
- Clear: Press Joystick Click again to stop playback and clear the loop.

# **RESET SETTINGS**

hold oʻ+ © for 5 sec

Returns HiChord to its default settings. Perfect for troubleshooting or starting fresh.

- Hold: Press and hold ( or ) + ( or 5 seconds.
- Confirmation: HiChord will restart to confirm reset.

All settings, including modes, effects, and mappings, will be restored to factory defaults.

# **UPDATE FIRMWARE**

Keep your HiChord up-to-date with new features, improvements, and fixes.

#### **How to Update:**

- 1. Enter DFU Mode: Hold + + together for 5 seconds.
- 2. Connect: Use the included USB-C cable to connect HiChord to your computer.
- 3. Update:
- Go to <a href="https://hichord.github.io/Programmer/">https://hichord.github.io/Programmer/</a>
- Click "Connect" and select "DFU in FS Mode".
- Click "Update Firmware" and wait for confirmation.

### TECH SPECS.

- Audio Output: Stereo 3.5mm jack
- Power Supply: USB-C 5V DC
- Dimensions: 160mm x 90mm x 30mm
- Weight: 250g
- Waveforms: Sine, Saw, Square, Triangle,
- Effects: Reverb, Delay, Flanger, Tremolo, Lowpass

Filter, LFO, Glide, Bass Boost

- Polyphony: Up to 8 oscillators
- Sampling Rate: 48kHz
- Display: OLED screen for settings and feedback
- Controls: 7 Chord Buttons, 3 Menu Buttons, Joystick with Click, Volume/Filter Knob

# **WARRANTY**

HiChord includes a 1-year limited warranty for manufacturing defects.

- What's Covered: Faulty components, material defects, or manufacturing errors.
- What's Not Covered: Accidental damage, misuse, unauthorized modifications, or wear and tear.

#### For claims:

- Contact support at hello@hichord.shop
- Provide your proof of purchase and a brief issue description.

# DoC (EU)



(EU) Declaration of Conformity Pocket Audio Corporation

Andrew Oliver 226-449-3841 hello@hichord.shop

This Declaration of Conformity is issued under the sole responsibility of the Manufacturer. I hereby declare that the product listed below has been designed, constructed with the appropriate conformity assessment requirements and, found in compliance with the following Standards and Directives:

Electromagnetic Compatibility Directive: 2014/30/EU, (EMC).

Standards: EN55032: 2015 + A11:2020,

EN55035: 2017 + A11:2020, EN55103-1:2009 + A1: 2012, EN55103-2:2009

ROHS2 Directive: 2011/65/EU.

WEEE Directive: 2012/19/EU.

List of Products: Portable Musical Synthesizer.

The object of the declaration described above is in conformity with the relevant Union Harmonization Legislation, with a list of the applicable CE marking directives and regulations the product complies with.

Manufacturer / Authorized Representative.

Name: Pocket Audio Corporation / Andrew Oliver

# DoC (US)

Date: Aug 20, 2024



(FCC) Suppliers Declaration of Conformity Pocket Audio Corporation Andrew Oliver 226-449-3841 hello@hichord.shop

I hereby declare that the following list of products has been tested and inspected and, are found to be in compliance with:

FCC Title 47, Part 15: 107 and 109: Unintentional Radiators: CISPR 32.

List of Products:

HiChord - Portable Chord Synthesizer

Supplier:

**Pocket Audio Corporation** 

Toronto, ON, Canada