

# POCKET STRINGS

a Crow Hill presentation



## USER MANUAL

# WELCOME

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"The miracle is this: The more we share, the more we have."

— Leonard Nimoy

Welcome to pocket strings and if this is your first time with us, welcome to Crow Hill. We're a company set up to produce resources and tools and to protect, inspire, support and provide opportunities for music-makers the world over; regardless of your ability, background, means or ambition. We believe music is, and should remain a wholly human experience, one that is by far one of the most powerful forms of expression, escape, comfort and remembrance. Pocket Strings is the cornerstone of our ethos; A stunning string plugin designed both to eschew barriers-to-entry whilst also not making any compromise on the professional standards to which people have come to expect from us.

It doesn't stop here though. By being on our mailing list. Taking part in the forum, our weekly podcast and by subscribing to our YouTube channel we hope that your investment in us will be returned many times over.

Thanks for supporting us.

The Crow Hill Team.

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Pocket strings has been designed by a team of people who have been making orchestral plugins and virtual instruments successfully for many decades. Unlike other developers we are also working composers, musicians and producers. And unlike other composers! None of us went to music college or can read music.

We are thankful as a group that technology has enabled us in our ambitions to make music professionally. Whilst also learning our craft by an alternate means.

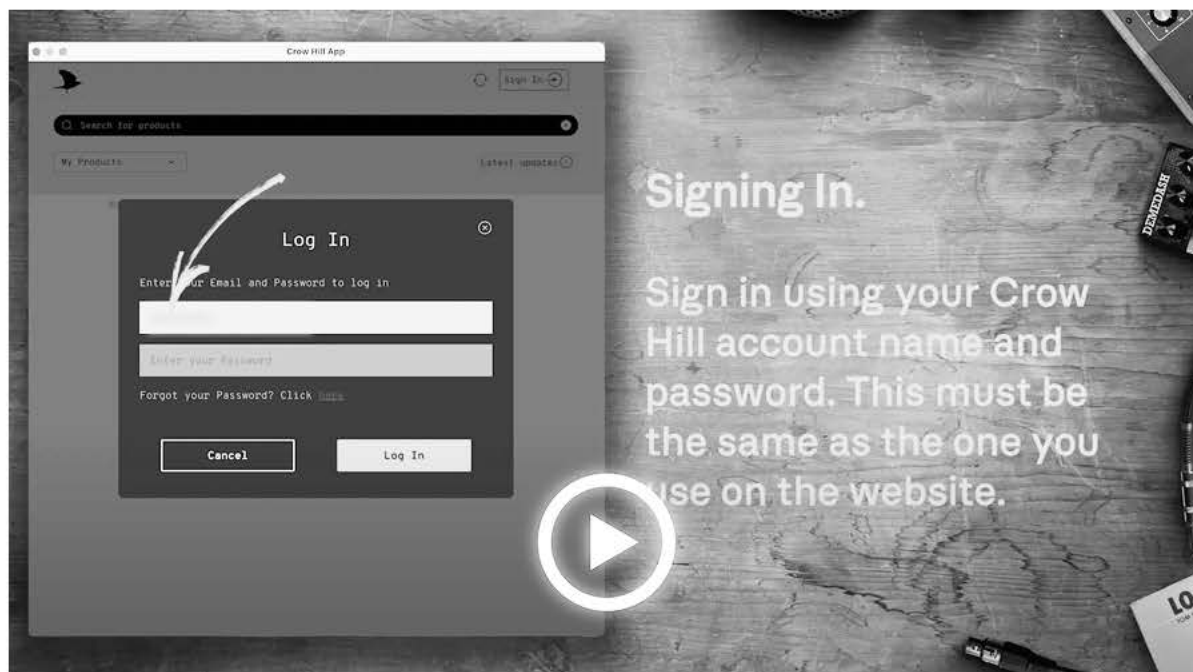
In this manual we will give you a quick guide through the many ways you can shape pocket strings to fit your workflow, experience or technical ability.

We understand for many of you a manual like this will be like us teaching you how to suck eggs. However there are many spicy Crow Hill treats and new ways of working that may be less familiar to you so hope even a brief scan of this manual will help you get even more out of your investment.

We are here to help and support you on your journey so do become part of our network by taking part in the many opportunities we offer. Bookmark [thecrowhillcompany.com](http://thecrowhillcompany.com) and we look forward to seeing more of you in the future.

# INSTALLATION

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Installation of Crow Hill products couldn't be easier courtesy of our dedicated installer app.

Make sure you have this downloaded as you will require this to install Glass Strings.

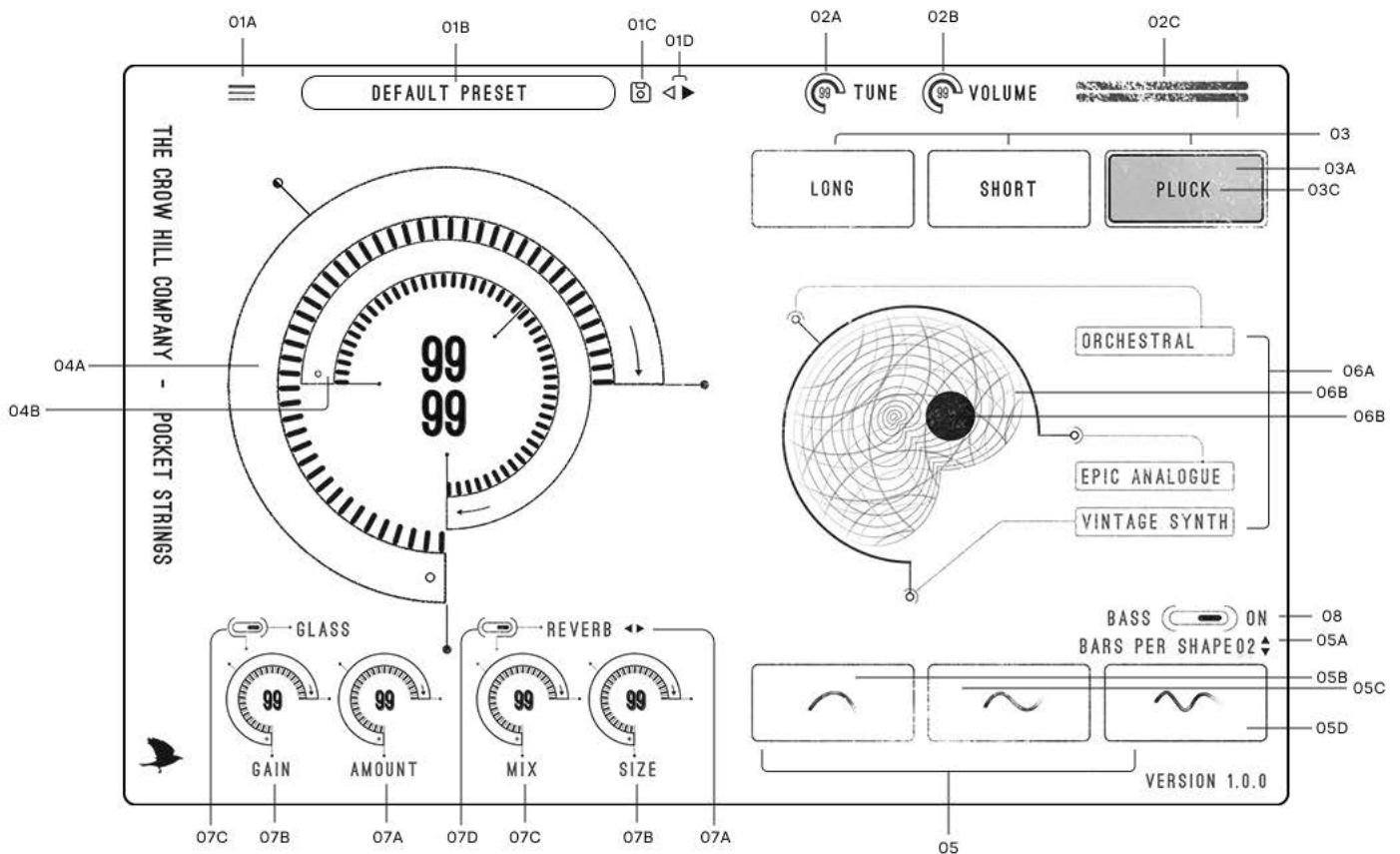
We've also prepared a simple overview of how the app works but also a suite of quick installation guides specific to your choice of DAW.

Everything you'll need is located here:

**[thecrowhillcompany.com/crow-hill-app](https://thecrowhillcompany.com/crow-hill-app)**

# FRONT PANEL OVERVIEW

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## 01 PRESET WINDOW

- 01A PRESET BROWSER - Opens preset browser
- 01B CURRENT PRESET - Indicates preset selected
- 01C SAVE PRESET - Saves changes you have made to user location
- 01D PRESET TOGGLE - Advances to next / previous preset

## 02 MASTER CONTROLS

- 02A MASTER TUNE - Tunes whole instrument
- 02B MASTER VOLUME - Changes volume of whole instrument
- 02C METERING - Shows you when you overall output level

## 03 ARTICULATIONS / KEYSWITCHES

- 03A ACTIVE ARTICULATION - Shows articulation determined by 00A
- 03C ARTICULATION NAME - Articulation (Click to select)

## 04 PERFORMANCE CONTROLS

- 04A EXPRESSION - Attenuates your performance (defaults CC11)
- 04B TIMBRE - Crossfades dynamic layers or utilises dynamic filtering (defaults CC1)

## 05 AUTO EXPRESSION CONTROLS

- 05A BARS PER SHAPE - Determines length of auto expression shapes
- 05B SINGLE SHAPE - A single swell in expression
- 05C DOUBLE SHAPE - As above but with two "shapes"
- 05D TRIPLET SHAPE - As above but divided into triplets of "shapes"

## 06 SIGNAL GRID

- 06A SIGNAL KEY - Displays how the 3 axis signal grid is arranged, click each name to snap to the labelled sound.
- 06B 3 X AXIS GRID - Within this grid you can mix between three signals
- 06C THE PUCK - The position of which will determine your signal mix.

## 07 REVERB

- 07A REVERB TYPE - Toggles Reverb Algorithm
- 07B REVERB SIZE - Adjusts time manipulation of the Reverb signal
- 07C REVERB MIX - 12 O'clock = 50/50 dry/mix
- 07D REVERB ACTIVATE - Bypasses or activates effect

## 08 GLASS DIAL

- 08A AMOUNT - Determines bandwidth of the effect
- 08B GAIN - Reduces / Boosts fundamental levels
- 08C ACTIVATE - Switches Glass control on or off

# DON'T FEAR THE BASICS



This will take two minutes to get your head round. So please, no fear!

You're playing a bowed stringed instrument on your keyboard. Keyboards don't behave like bows so there are two very standard technological hacks that make playing a bowed instrument from your keyboard sound realistic.

**PERFORMANCE CONTROLS** - Violins, cellos and alike don't naturally sound great. If you've heard any child play one you will have a trauma bond with the instrument. What makes a virtuosic performance is continuous modulation of the quality of sound, the dynamics, bow pressure and speed, vibrato etc. You don't have to worry about that. We've curated a way of altering the expressiveness or changes in timbre required to make strings sound good and therefore "real". We recommend using a mixture of MIDI expression (MIDI CC11) which is basically an internal volume control. What makes strings differ most from keyboards is their ability to totally transform the quality of the sound during the duration of the note. Where as a keyboard is designed to operate hammers that can't really do anything to the sound after they've done their job of hammering.

We also recommend use of timbral control, defaulted to MIDI CC1 and assigned to your modulation wheel (the one that doesn't bounce back on the bottom left of your keyboard). Professional composers usually program a pair of faders to control both of those. But don't fear. We have another solution for this if you feel this is beyond your cognition or dexterity (it's not as difficult as it sounds and is something you can pick up later).

**ARTICULATIONS** - Another character of the string band is that notes can be played very differently from the outset. The standard "articulation" is a long one where the string gradually comes to life and is sustained. The strings can be struck with the bow and muted with the left hand to produce short rhythmic shapes, we call these shorts. You can cheat and use these for fast passages too as the attack of the note gives an instant tone which suits fast passages. Finally the string can be plucked providing a different sounding instrument altogether.

As these styles of bowing are determined before the note is played we have organised them into selectable banks which can be designated either by clicking the techniques name in the user interface, or by assigning them to a MIDI toggle of your choice.

# FURTHER CONTROL

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**CUSTOM EXPRESSION** - We feel that one of the greatest blockers to using orchestral samples and plugins is the need to somehow control modulation of dynamic and timbral forms of expression via a fader system of some sort, **WHILST** playing!

We have addressed that by designing an all new auto-expression system that does this for you, in realtime, according to playing styles we have observed watching countless different string bands play.

We had noted that if you give a violinist say a single long note to play without any directions on loudness, how to express the note etc. That most players start quietly and build into the notes before returning to the quieter level prior to playing the next note.

We have taken these shapes and have developed automatic controllers that move the dials for you according to some simple settings you make on the front end.

The **"BARS PER SHAPE"** control determines the length of each shapes playback.

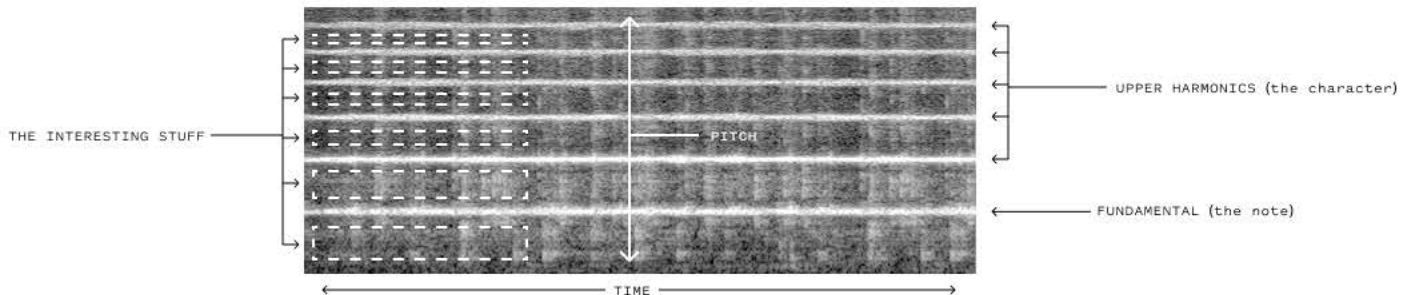
We have then provided you with 3 shapes which are subdivided by halves and triplets. Combining these with the "Bars Per Shape" function will provide you with a whole host of expression forms without having to worry about fader devices, pedals or wheels.

**SIGNAL GRID** - We love strings, live, recorded, real & synthesised alike. So why not have the best of all worlds?

While Pocket Strings features some of Britains finest musicians, 17 of them in fact - it also features another 2 players. A perfectly restored Yamaha® CS80 & a lush vintage ARP® Solina String Ensemble. These iconic instruments can be seamlessly added to your acoustic signal either by selecting their respective names in the user interface, or by manually moving the "puck" around the grid.

# THE GLASS DIAL

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One note: 17 musicians, 12 mics, 1 hall. Two notes: 34 musicians, 24 mics, 2 halls. Once you're doing 4 part harmony and adding the bass in for good measure you'll have 68 musicians 60 microphones and 5 halls. Whilst we process our signals so you don't get a build up unwanted information, the additive consequence of layering samples means that some frequencies can get out of control. Every room has a mode, every instrument has a wolf-tone and each mic has its own frequency response. The net result is frequency peaking and the only solution often is to reduce the bandwidth so that you don't send your mixes into the red. However if there is one thing that orchestras do really well, is bandwidth. Quiet to really loud, its what makes them such good storytellers. So we have a new innovative solution called "Glass" which has given the library its name.

The Glass controller attenuates how the "fundamentals" and "harmonic series" behaves for each and every note. Each control of each dial allows you to fine tune this to your arrangement and particularly the density of the sonic space you're operating in. Whether that be a rich arrangement or indeed a busy scene with traffic noise, room tone, dialogue, etc. Have you ever noticed how instruments like piccolos, flutes and vibraphones are difficult to control? They're either overwhelming or completely inaudible (possible exception to the piccolo). This is because they have a very pure and proud fundamental (the part of the sound that gives you the sense of pitch). It is perhaps why instruments with more complex harmonic characteristics are more common in scores. Pianos, strings, oboes and alike.

Glass control has two different controls for you to work with to get the best balance of note, character and interest. Used in extremes for smaller arrangements you can pass through a more glassy tone to something that feels a bit more scratchy. However in fuller arrangements or scenes you can expertly pick out phrasing and internal harmonic movements by boosting the instrument or voicing or section but reducing the fundamentals so you don't go into the red. Here's how the different controls effect the signal.

# TROUBLESHOOTING

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### **I Can't Hear Anything!**

As much as we all love John Cage, we are sure you want to hear your instrument. Included in each instrument are a few utilities that can be used to diagnose some likely causes.

Each plug-in has a combination of ways to control the overall volume.

- Ensure Expression (CC11) is at its maximum value.
- If included, check that the mixer controls are not set to -Infinity or muted (m).
- Check that your Master Output Volume is not set to its minimum value (-Infinity).

This can be quickly checked by looking at the Volume Meter, which should be moving while sound is passing through your instrument.

Still no luck?

If you have tried the above and still hear nothing, the onscreen MIDI keyboard can be directly played by Left-Clicking a piano key in the user interface.

If you can now hear the instrument then the issue is likely the connection between your MIDI keyboard and your workstation's associated track.

Ensure there are no loose connections, triple-check your MIDI input settings, and remember to arm your track.

### **Help! My Plug-In's interface is entirely blank.**

Don't worry. Looks can be deceiving, this means the plug-in is unable to locate the audio (.blob) files.

Ensure your external drives are connected and restart your digital audio workstation (D.A.W).

Unable to locate your .blob files, lost track of where you installed them, or had the misfortune of misplacing a drive? Simply open the plug-in and be guided on re-connecting the missing files, getting you up and running in no time.

### **How Do I Relocate My Instruments Audio Files?**

The simplest way to relocate your instrument's audio files (.blob) is to open your new virtual instrument plug-in in your D.A.W of choice. You will be automatically prompted and guided on how to re-connect the missing files. The new location will also be saved internally, so next time the instrument will know exactly where to look.

# APPENDIX - CREDITS



**Pocket Strings** wouldn't be possible if it wasn't for the efforts of these amazing, talented and generous individuals.

Leader: .....Greig Lawson  
Engineer: .....David Donaldson  
Contractor: .....Kobus Frick  
Conductor: .....Adam Robsinon

Producer & Development: .....Calum Minuti-Goold  
Tech Stack: .....Stephen Tallamy  
Editing: .....Kieran Greig  
Exec Producer / GUI Design: .....Christian Henson

All of us at Crow Hill would like to offer our sincerest thanks to all of the musicians who took part. Everyone at Clockwork Studios. The undying support of our family and friends getting this across the line.

But most of all, to you for buying it. Without you we wouldn't get to play with such a wonderful train set.

# APPENDIX - EULA

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