HOW
TO DOWNLOAD & INSTALL

01. Get the Pulse app

Pulse is a fantastic app that makes it easy to download.

Simply go to pulsedownloader.com and click on the download button.

Pulse is free to use and works on both PC and Mac.

02. Get the Bohemian Cello Plug-in

Open the Pulse app.

Click on **Add a Product,** enter the code which you can find in your Pulse confirmation email.

Select Redeem.

Choose a folder to which you would like the installer to download into and select which OS (Windows or MAC).

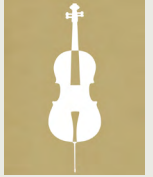Grab a cup of tea and patiently wait for the download to complete.

03. Run the installer

After the download is complete:

Windows will automatically start the installer, you can choose where to install the large sample files when you reach "Select content location" .

Mac will open the DMG and you need to open the PKG file, you can choose where to store the large sample files by clicking the blue folder icon when you reach "Installation Type".
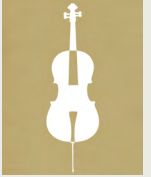
This is a large and densely packed plug-in, so the install may take a bit of time....

04. Once the install Completes

Open your favourite DAW and add the Bohemian Cello as you would any other plug-in.

The plug-in will ask for a one time activation, copy and paste the same code you used for pulse into the box and click activate.

Wait for the plug-in to do its thing, when the plug-in activates and you see the Bohemian Cello, if using Logic: RESTART THE PLUG-IN.

The Bohemian Cello will now be ready to play.

Installed to the wrong Hard drive? No worries, *which shows you how to move your samples to another hard drive.*

Come across any issues with the above? *where we go over alternative ways to get installed* *or visit our Help page Guide.*

CONTENTS

VIRHARMONICS VIRTUAL PERFORMER TECH

The virtual instrument that became a real boy

Creating music has never been so easy, with the help of our Virtual Performer, which is making split second decisions based on your playing input, inspiring you to write lyrical lines like never before, a Real Performance.
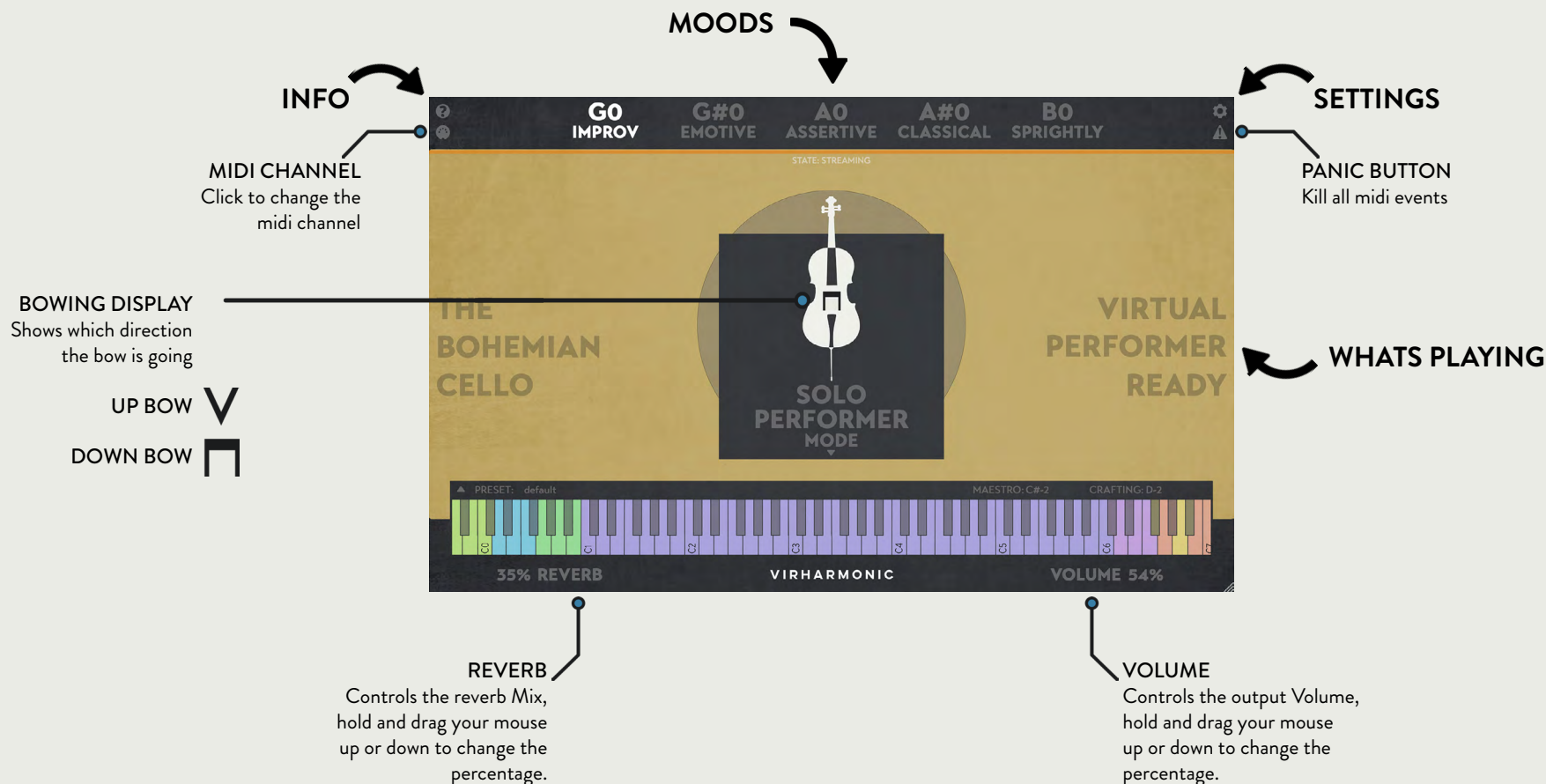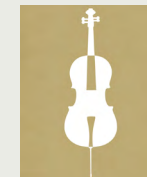
The Bohemian Cello was designed to free you to perform real Cello Performances fast, without the need to be a Cellist yourself.

To achieve realism, we recorded an unprecedented amount of samples for a solo instrument, but managing all this by loading individual patches would be slow and cumbersome and stifle inspiration. This is where the virtual performer comes in, controlling all the varied legatos, bow types and emotive expressions as you play, all from one patch and all in real time.

This is not your usual Virtual Instrument, this is a Virtual Performer.

Ondrej Pochyly
Director
Virharmonic

MAIN
INTERFACE

MOODS

INFO

SETTINGS

MIDI CHANNEL
Click to change the midi channel

PANIC BUTTON
Kill all midi events

G0 IMPROV	G#0 EMOTIVE	A0 ASSERTIVE	A#0 CLASSICAL	B0 SPRIGHTLY

STATE: STREAMING

BOWING DISPLAY
Shows which direction the bow is going

THE BOHEMIAN CELLO

VIRTUAL PERFORMER READY

WHATS PLAYING

SOLO PERFORMER MODE

UP BOW V

DOWN BOW Π

PRESET: default   MAESTRO: C#-2   CRAFTING: D-2

35% REVERB   VIRHARMONIC   VOLUME 54%

REVERB
Controls the reverb Mix, hold and drag your mouse up or down to change the percentage.

VOLUME
Controls the output Volume, hold and drag your mouse up or down to change the percentage.

INFO
When activated, hover over any function and a brief explanation will appear.
Click the ? to deactivate the on-screen info boxes overlay.

MOODS
Choose between 5 different play moods. These are keyswitches and can be changed while playing.

SETTINGS
Takes you to the back of house of the Virtual Performer.
Here you can assign articulations, choose and adjust Reverb and space, tweak the fine controls and look through the performer guide.

WHATS PLAYING
When playing, this shows you the Status (standard playing or Crafting), articulation, and the Dynamics.

SAMPLE STREAMING

STATE

The bar across the top of the user interface shows the streaming/loading state of the plug-in. By default the plug-in is set to background streaming and will load direct from drive any notes you play, storing the notes in memory.

Orange pulsating bar: Live streaming

Orange solid bar: Standby mode (default state)

White pulsating bar: Loading all samples into memory. This can only be activated by clicking the **load all samples** button found in the setting tab **Fine controls**.

**White Solid bar:** All samples have been loaded into memory

Red pulsating bar: All samples are being purged from memory. This can only be activated by clicking the **purge all samples** button found in the setting tab **Fine controls**.
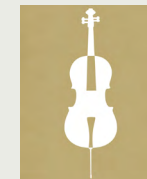
The default streaming state gives you the optimal performance from the plug-in. If however you experience constant drop outs in sound, your hard drive may not be fast enough to live stream.

The solution is to either place the .Blob files (which contains all the samples) onto a faster hard drive or deactivate streaming by loading all samples. Loading all samples will take some time to fully load.

STATE
Displays how the plugin is streaming the samples
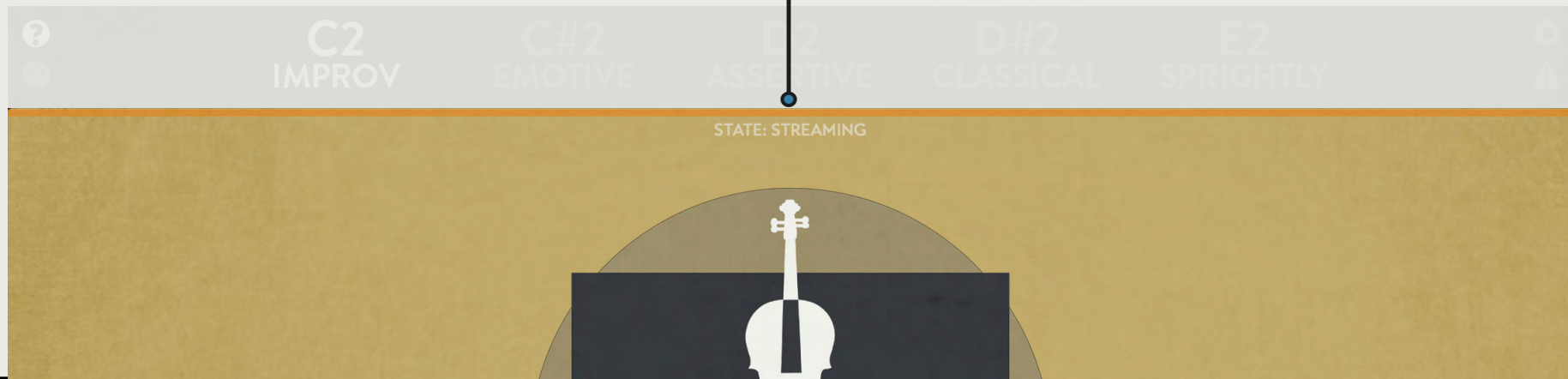
PERFORMER
MODES & MAESTRO

PERFORMER MODE
We have numerous modes to choose from:

Solo or second cello are used as single instrument instances.

Trio and Chamber will play all notes with 3   or 5 cellos.

Div Trio and Div Chamber will be voicing chords with natural divisi. This can occur **only when Maestro is on** which will auto activate , else they work the same as normal Trio or Chamber, *(Maestro will remain on when you switch out of Divisi mode).*
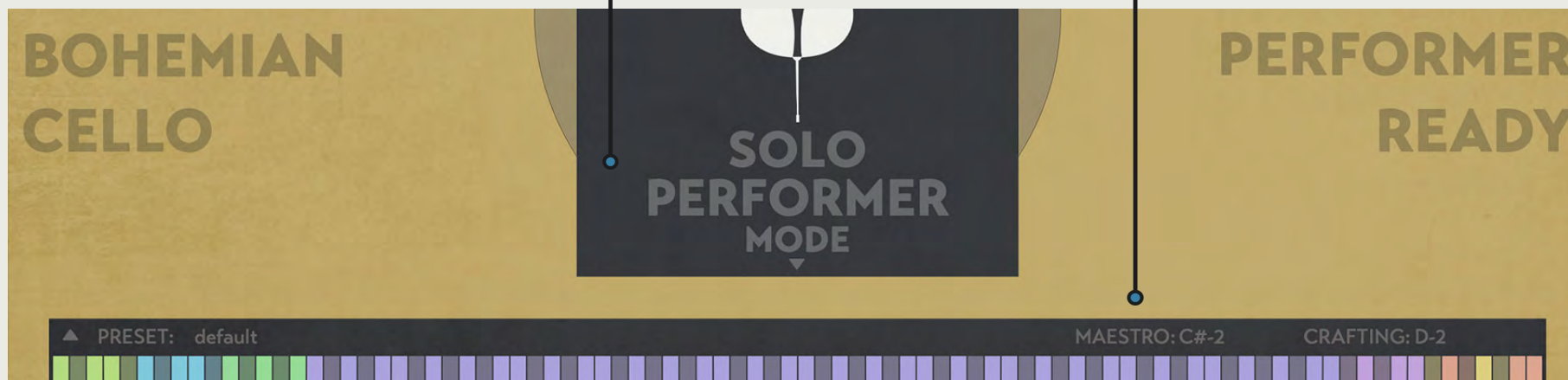
MAESTRO > C#-2 + CC assignable with right click
Switches the Bohemian Cello into Poly-Legato mode. Force-Keys and Key-Switches can still be used but are not displayed on the interface while Maestro is active.
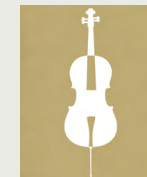
Moods also affect the Play Style of Maestro. Bowing is not displayed when Maestro is on and is replaced with the Maestro Icon

PERFORMER MODE
Displays which play mode is in use, click to open the drop down menu

MAESTRO
Press the assigned key-switch to Activate Poly-Legato

BOHEMIAN
CELLO

SOLO
PERFORMER
MODE

PERFORMER
READY

PRESET: default

MAESTRO: C#-2   CRAFTING: D-2

CRACKING

CRAFTING > D-2 + CC assignable with right click

When crafting is enabled, you can blend any Forced on bow type / Articulation with our legatos.

For example* when you force Arcs and crafting is on, you will hear an interval between the notes played if you either overlap or play within the bowchanged time* after the release.

This can be usefull for further evolving and personalizing the performance as well as adding more variety.
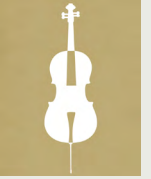
Shorts will act as overlays over the legato notes.

Crafting Button can also be right clicked and assigned to CC.

If you stuggle to get the timing right to perform a Bow-changed Legato, try amending the Release Delay settings found under the Fine Control Tab.

CRAFTING
Press the assigned key-switch to activate or right click to CC assign
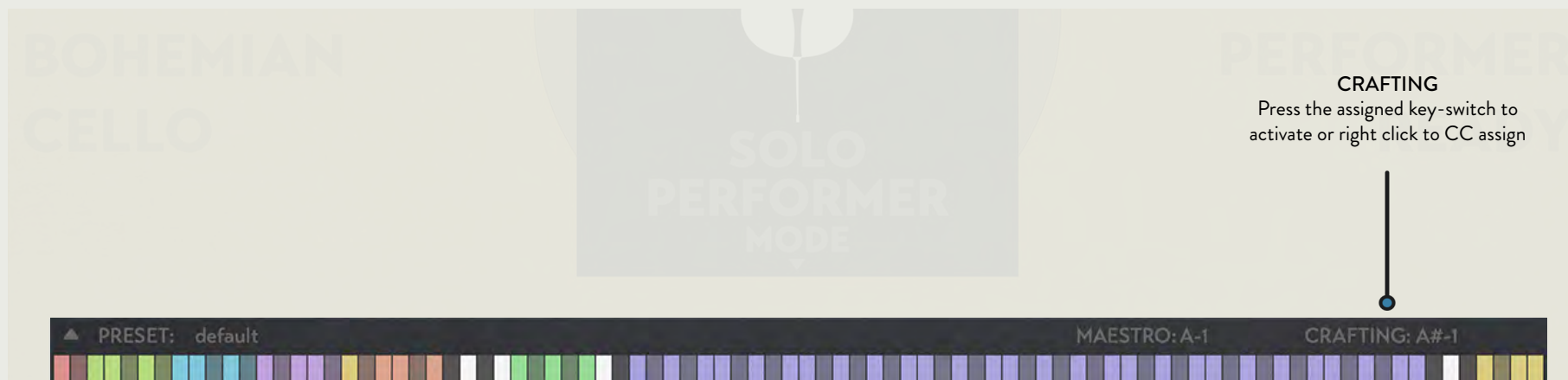
SETTINGS
ARTICULATIONS

TABS
Click to change through
the different tabs

KEY COLOR
Click to assign a different color, will amend
colors on the virtual plug-in keyboard

ARTICULATIONS	REVERB & SPACE	FINE CONTROL	PERFORMER GUIDE	
longs 🟢	shorts 🔵	legatos 🟣	bowing 🟡	extended 🟠
A-1 ARC	D0 STACCATO 🔓	C#6 ¼LEGATO	F#6 LASTING BOW	B6 RUN/TRILL
A#-1 MID ARC	D#0 SPICCATO 🔓	D6 ½LEGATO	G-1 DOWN BOW	C7 PONTICELLO
B-1 SUSTAIN	E0 PIZZICATO 🔓	D#6 WHOLE LEGATO	F-1 UP BOW	G#6 SUL TASTO
C0 MARCATO	F0 RICOCHET 🔓	E6 BOW CHANGE	A6 AUTO RE-BOW	G6 HARMONICS
C#0 DIMINUENDO	F#0 COL LEGNO 🔓	F6 PORTAMENTO	A#6 TREMOLO	E-1 NON VIBRATO

KEY ASSIGN
Click to assign a new
key.

ARTICULATIONS
For indepth articulation info, see page 11 onwards

PADLOCK
*Click to switch between:

🔒 Key-Switch (key latches on)   🔓 Force-Key (unlatched, hold key to stay on)

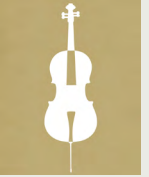*Only shorts can switch between Key-Switch and Force-key

ARTICULATIONS
This displays all the available articulations in the Bohemian Cello, they are seperated into columns:
• Longs contain Arc, mid Arc, sustain, marcato & diminuendo.
• Shorts contains Staccato, spiccato, pizzicato, ricochet & col legno.
• Legatos contains Quarter, half, whole, bow change & portamento.
• Bowing contains Lasting bow, up bow, down bow, auto re-bow & tremolo.
• Extended contains Run/trill, ponti cello, sul tasto, harmonics & non vibrato.

SETTINGS
REVERB & SPACE

TABS
Click to change through
the different tabs

STEREO WIDTH CONTROL
Adjust the stereo width of the Cello

WET & DRY
Adjust the wetness and dryness of the reverb

ARTICULATIONS   **REVERB & SPACE**   FINE CONTROL   PERFORMER GUIDE

< STEREO WIDTH CONTROL >

SPACE
Hall, chamber & studio

HALL

CHAMBER

STUDIO

ALGORITHMIC

CONVOLUTION

WET   DRY

75   100
%   %

MIX
35
%

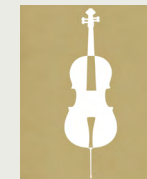BYPASS

BYPASS
Turns off built in reverb so you can use your own

REVERB TYPE
Choose between Algorithmic or Convolution

MIX
Adjust the overall mix between wet & dry, this is
also linked to the reverb control on the bottom left
of the interface

SETTINGS
FINE CONTROL

RELEASE DELAY
By how much the release is delayed by. Our performer delays the release to allow for easy bow changed legato. This parameter will determine how much is the delay on release after you release the note.

If you are a really accurate pianist, you may prefer short or tight release, but for all others we would recommend using Normal or Long delay as it increases the playability.

TABS
Click to change through the different tabs

ARTICULATIONS   REVERB & SPACE   **FINE CONTROL**   PERFORMER GUIDE

VELOCITY CURVE   RELEASE DELAY   PLAY 1st OR 2nd CELLO

VELOCITY CURVE
Adjust the velocity curve of your keyboard for the performer. Useful for adjusting or compensating keyboards natural behaviour.

Click the reset button to return to default setting.

LONG

NORMAL

SHORT

TIGHT

1st   2nd
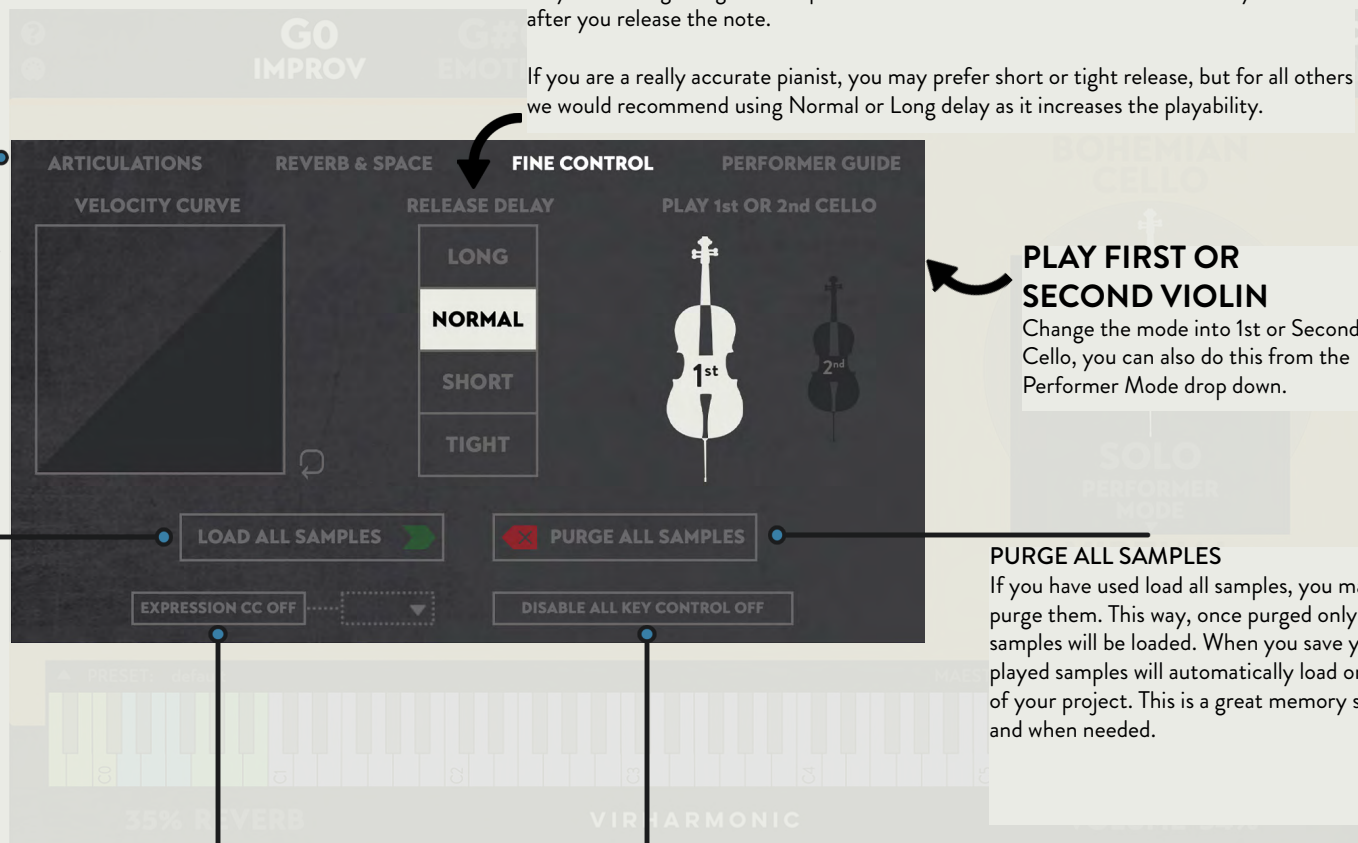
PLAY FIRST OR SECOND VIOLIN
Change the mode into 1st or Second Cello, you can also do this from the Performer Mode drop down.

LOAD ALL SAMPLES   PURGE ALL SAMPLES

EXPRESSION CC OFF   DISABLE ALL KEY CONTROL OFF

LOAD ALL SAMPLES
Once pressed, the library will load all samples of the Cello into upper memory. With our streaming and live loading, you may never need to use this, but if you are on a 7200 RPM or 5200 RPM and are experiencing drop outs when playing, you can either relocate the samples (*blob files) to an SSD or use Load All Samples and not use the live streaming.

PURGE ALL SAMPLES
If you have used load all samples, you may also like to purge them. This way, once purged only the played samples will be loaded. When you save your project, played samples will automatically load on the opening of your project. This is a great memory saving tool if and when needed.

EXPRESSION
Activates Expression control to an assigned CC. This way you can add additional volume curves to your cello playing if and when needed.

Expression control occurs pre-reverb, so reverb is not affected by using expression control (compared with Automation in your DAW).

DISABLE KEY CONTROL
Disables all force keys and Key switches. The Cello will listen only for the playable range.

This is useful for when you are playing other instruments and don't want to accidentally trigger the Cello Key-switches.

SETTINGS
PERFORMER GUIDE
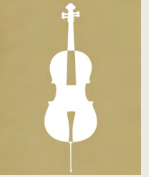
TABS
Click to change through
the different tabs

PERFORMER GUIDE TABS

7 WAYS TO CONTROL THE
VIRTUAL PERFOMER

ARTICULATIONS	REVERB & SPACE	FINE CONTROL	PERFORMER GUIDE

1/ CONTROLLING THE VIRTUAL PERFORMER   2/ NAVIGATING THE INTERFACE

1 MOOD

The mood you have selected overrides the entire virtual performer play style. Moods are controlled via key-switch.

MOOD DESCRIPTION
TABS

IMPROV   EMOTIVE   ASSERTIVE   CLASSICAL   SPRIGHTLY

2 VELOCITY

3 ON BOW

Ideal for all tempos and a great way to start playing with our Virtual Performer.

4 BOW CHANGE

Improv will offer the most variety in selecting our on-bow legatos, as well as utilizing all variations of our Bow-Changed Legatos to allow the player to be always in phrase.

5 BOW TYPE

6 MODES & MAESTRO

This mood is very expressive yet flexible, ideal for mid tempo pieces.

7 CRAFTING

ARTICULATIONS
MOODS & LONGS
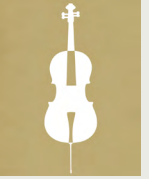
MOODS

IMPROV - G0
Ideal for all tempos and a great way to start playing with our Virtual Performer.
Improv will offer the most variety in selecting our on bow legatos, as well as utilizing all variations of our Bow-Changed Legatos to allow the player to be always in phrase.
This mood is very expressive yet flexible, ideal for mid tempo pieces.

EMOTIVE - G#0
Offering the softest of our moods, ideal for the slower paced pieces in lower dynamics.
Leaning towards a feathery performance with a nice but not over pronounced slur and slower paced legatos, whilst still allowing for faster paced parts.

ASSERTIVE - A0
The most aggressive of our moods, always opening the beginning of the phrase with a Marcato.
Leans heavily towards faster legatos and is ideal for faster paced energetic pieces in higher dynamics.

CLASSICAL - A#0
Classical brings about a very assertive Cellist, playing using mostly fingered Legato.
Ideal for faster mf to ff phrasing.

SPRIGHTLY - B0
For aggressive fast runs. Sprightly utilizes Spiccato overlay on top of short bowed and slurred runs legato.
The result is fast paced dynamic playing suitable for runs and fast melodic repetitions.
Other Articulations and Force-keys are disabled on this mood. For crafting by hand, please use any other mood.

LONGS

ARC - A1
A sustained note with Crescendo and a very soft start. Ideal for longer opening notes.

MID ARC - A#-1
Similar to Arc but with faster Crescendo and Diminuendo towards the end. The Mid Arc climaxes in the middle. More suitable for mid phrases or faster paced pieces.

SUSTAIN - B1
Level dynamic sustain, suitable for mid phrases or faster bow changes.

MARCATO - C0
Sustain with a sharp and immediate attack, ideal for faster paced parts or escalation of dramatic emotion.

DIMINUENDO - C#0
A sustain with gradually decreasing volume, currently the longest bow.
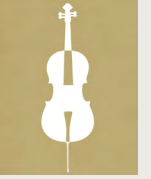Ideal for end of phrase.

STACCATO - D0
Short, sharp detached note, often used in works of Vivaldi and Mozart.

SPICCATO - D#0
Short notes using a bouncy bow, gritty and great for atmospheric writing or fast runs.

ARTICULATIONS
LEGATOS & BOWING

LEGATOS

QUARTER LEGATO > C#6

A form of on bow legato that uses purely fingered or string changed legato with a short note after the transition.
Ideal for faster pace emotion or if no slur is desired.

HALF LEGATO > D6

The most expressive of all legatos, with a mid length bow after the transition.
Featuring fingered as well as pronounced slurs with dynamic variation. Ideal for expressive parts.

WHOLE LEGATO > D#6

Whole Legato, the slowest of all the legatos featuring both fingered and slurred in lower dynamics.
Offers the longest on bow sustain after transition and is ideal for quiet and emotional playing.

BOW CHANGE LEGATO > E6

Forcing bow change will mean that every new overlapped note will use bow changed legato instead of on bow.

PORTAMENTO > F6

Is a slide between a note and a new note on overlapped legato. The force key needs to be pressed, like with all others, prior to the transition (new note overlap).
This legato should be used rarely.

BOWING

LASTING BOW > F#6 + CC assignable with right click

When switched on will prolong the bow length following a Legato. Can be Key-switched on or off and also CC assignable by right clicking on the Lasting Bow.

UP BOW > F-1

Manually force the bow direction up, by holding down this force key, overriding the Virtual Performer.

DOWN BOW > G-1

Manually force the bow direction down by holding down this force key, overriding the Virtual Performer.

AUTO RE-BOW > A6 + CC assignable with right click

When on, the cellist will automatically rebow. We recommend to always have Lasting bow or Auto-Rebow on. When Lasting Bow is on It will overwrite the automatic rebowing even if Auto-Rebow is on. Once you turn off Lasting bow, the Auto-Rebowing will continue, if this function is enabled.

TREMOLO > A#6

Really fast repetition of the same note. Can be triggered by either really fast note repetition or by forcing on Tremolo force key.

ARTICULATIONS EXTENDED

EXTENDED

RUN/TRILL > B6
Fingered or string changed on bow legato, ideal for fast moving notes.

PONTI CELLO > C7
Almost a haunted sound produced by playing very close to the bridge.

SUL TASTO > G#6
Very gentle, but thinner sound, produced by playing over the fingerboard further away from the bridge than usual. Ideal for very gentle and low dynamic parts.

HARMONICS > G6
Technique that delivers Overtones. It has almost a whistling sound quality to it. Often used to create ethereal feel.

NON VIBRATO > E-1
None vibrato bow strokes. None vibrato does not support auto re-bowing or the lasting bow functions, thus each note will finish at the end of the bow. However, it has true re-bow samples available, so you can re-bow manually by replaying the note and it can also be played as an on-bow or bow-changed legato when forced.

OTHER

MAESTRO > C#-2 + CC assignable with right click
Switches the Bohemian Cello into Poly-Legato mode. Force-Keys and Key-Switches can still be used but are not displayed on the interface while Maestro is active.

Moods also affect the Play Style of Maestro. Bowing is not displayed when Maestro is on and is replaced with the Maestro Icon.

The Key-switch for Maestro is not physically clickable on a midi keyboard as we ran out of available keys to assign it to, you can either use CC or swap the key-switch with another less used articulation.

CRAFTING > D-2 + CC assignable with right click
When crafting is enabled, you can blend any Forced on bow type / Articulation with our legatos.

PERFORMER MODE > On screen selectable + CC assignable with right click
Select modes by using the on screen drop-down menu or cycling through using CC assign.

!DIVISI MODE WILL AUTO ACTIVATE MAESTRO!

- SOLO
- SECOND SOLO
- TRIO
- CHAMBER
- TRO DIVISI
- CHAMBER DIVISI

EXPRESSION CC > Activate in Fine Control Tab
Expression is deactivated by default, unless activated manually.

Activates Expression control to an assigned CC. This way you can add additional volume curves to your cello playing if and when needed.

Expression control occurs pre-reverb, so reverb is not affected by using expression control (compared with Automation in your DAW).

MOVING SAMPLES TO
A DIFFERENT HARD DRIVE
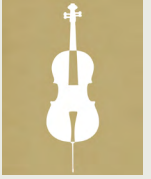
Create a new folder on the hard drive you wish to move the samples to (SSD is best)

Locate the samples .blob files:

Bohemian Cello_part1.blob
Bohemian Cello_part2.blob

These can be found:

MAC Default install location: *Library/Application Support/Virharmonic/Bohemian Cello*

WINDOWS Default install location: *ProgramData/Virharmonic/Bohemian Cello*

OR if you have selected a different install location during install, please go to that location and locate the .blob files

**YOU MUST PLACE BOTH .BLOB FILES IN THE SAME FOLDER**

Copy the 2 blob files to the new folder you have created, once copied over you can delete the original 2 blob files. **DO NOT DELETE THE FOLDER**, this must remain where it is. Do not delete any other files or folders.

Open the plugin in your Digital Audio Workstation (DAW) and the Bohemian Cello plugin will see that the samples folder has no .blob files present and will ask for you to locate the moved .blob files, it will then link to the new location and open.

INSTALL
TROUBLE SHOOTING

Cannot or will not use Pulse? Get in touch and we can provide alternative download links, but these will be very Large files, so Pulse really is the best option.
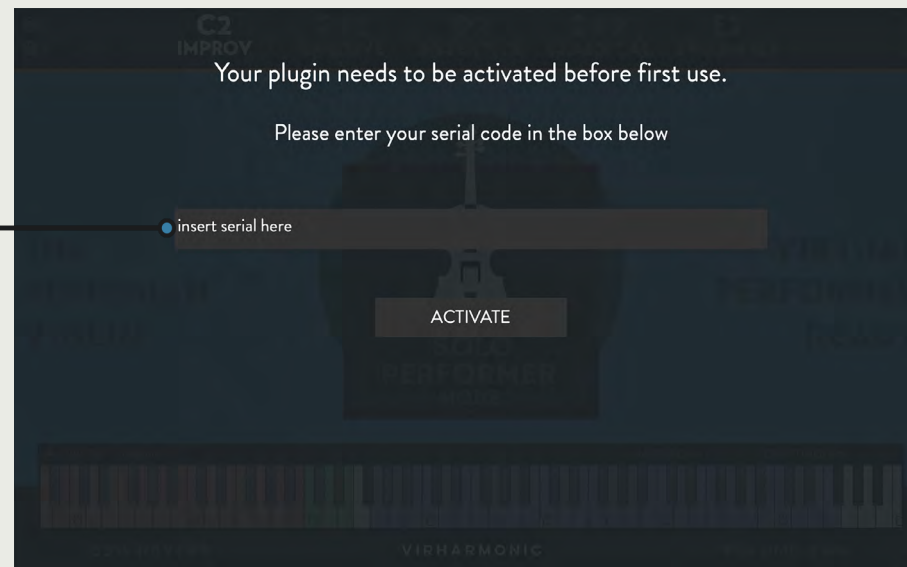
INSERT SERIAL HERE

There is no flashing text input cursor |

Simply copy your serial code, click the **insert serial here** and paste the code, then click Activate Once the activation is completed, **RESTART THE PLUG-IN**

Your plugin needs to be activated before first use.

Please enter your serial code in the box below

insert serial here

ACTIVATE

If the plug-in fails to communicate with the server, it will ask you to open the Gorilla Manager (A Gorilla Manager button will appear on the plug-in) and you can input your serial code there instead.

Each serial has 5 activations and can be used on up to 5 machines at the same time. If you use up all your activations, please contact virharmonic support for assistance.

If you are on MAC and are unable to enter the serial into the box, please check what OS version you are using.
The Bohemian Cello is compatible with MAC OS 10.14 onwards. Any version prior to 10.14 is not compatible and an OS update will be required.
If in doubt, please contact virharmonic support

CREDITS
& THANKS
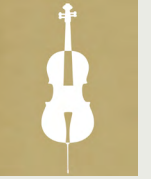
Ondřej Pochylý

HEAD DEVELOPER
CONCEPT, RECORDING,
SAMPLING, MAPPING, LOGIC

Alex Hyde

GUI, MANUAL,
SAMPLE CUTTER

Pavel Čadek

CELLIST

Jordi Cerezo

SCRIPTING & PROGRAMMING

Viktor Polančík

SAMPLE CUTTER

Additional Massive Thank you to the amazing team at Gorilla Engine for their assistance during the development of our plugin powered by their Gorilla Engine.