

# Emotional CELLO

by Harmonic Subtones  
Kontakt Instrument



## Quickstart



# MANUAL 1.2.0

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## Epilogue

**HARMONIC SUBTONES or:**

### **THE UNUSUAL ASPECTS OF AN USUAL SUSPECT**

While we were looking at the harmonic highs and the subtonical lows of sample libraries in our daily work as composers, we realized that there weren't any solostrings on the market that were inspiring, easy to play or at least convincing - even after a huge amount of deep forensic programming. After having edited a plenty of commercial library patches to our personal liking we thought: „why not record the solostrings ourselves?“

So we started recording our own samples. Over a long period of time we recorded new samples again and again with different recording approaches trying to find a good way to capture a natural, emotional tone that has a musical flow when used as samples in a Kontakt patch. At least we found an approach to capture samples in a musical context that conserves the musical expression of the player.

We also wanted to have the intimacy of the instrument's sound as if it was recorded in our personal recording room.

We aimed for an intimate sound on one hand, but on the other hand a sound flexible enough to be blown up for orchestral use. We were searching for a variety of expressions and articulations that do really merge to a cohesive instrumental performance.

But that was just half of the story: we were listening to a lot of modern Cello instrumentalists to be inspired with new and unusual sounds, which we then tried to capture with our recordings: The unusual aspects of an usual suspect.

Now after hundreds of hours of recording, editing, revision and optimizing we present you a very comprehensive virtual instrument, that can be played with ease - out of the box - but also can be tweaked when digging deeper into the functions. It can cover a variety of musical styles and a broad range of musical settings and tempos.

And most important it has that unique, one-of-a-kind, harmonic-subtones-attitude.

Be inspired!





## The library structure:

The **Emotional Cello Library** consists of **3 true legato masterpatches** with 16 articulation keyswitches for the Emotional Cello and the Sulponticello and 5 articulation keyswitches for the Harmonic Cello. The masterpatches cover the main range of articulations. The complete library covers over 50 different articulations and variations.

### Masterpatches:

**Emotional Cello** with 16 articulations via keyswitch

**Sulpontcello** with 16 articulations via keyswitch

**Harmonic Cello** with 5 articulations via keyswitch

Accompanying the masterpatches you'll find the **2-dimensional sustain patches**, that offer crossfading between dynamic layers as well as crossfading between **Non Vibrato** and **Vibrato** or as the case may be **Normal** and **Sulponticello**.

There's also a separate **Pizzicato patch** and a **Cello - Percussion patch**.

With these patches you can most likely cover 90 % of all cellistic tasks

Besides the masterpatches the library contains single patches including articulations that aren't covered by the masterpatches.

### **Single patches:**

7 accented articulations, like **fortepiano**, **accented portato** etc.

8 different sustains like 5 dynamic layers **Espressivo**, 4 dynamic layers **Non Vibrato**

3 distortion levels of **Sulponticello**, **Harmonics**, **Flautando**

13 different Shorts like **Spiccato**, **Spiccatissimo**, **SP Spiccato Riccochet**, **SP Riccochet**, **Power 5th Spiccato**, **Spilegno**, **Ghoststrokes** etc.

6 different Pizzicatos like **Vibrato Pizz**, **Non Vibrato Pizz**, **Plectrum Pizz**, **Legno Pizz**, **Harmonic Pizz**

8 different **phrased Espressivos**

4 different effectual sustains like **Tremolo normal & sulponticello**, **morbid**, **undulating**

3 different effect patches like **Thunderous scratch**, **Tremolo Gliss**, **Tango Gliss**

*see list page 18*

### **A single patch is sometimes simply enough**

While the three masterpatches are the workhorses, giving you instant access to almost every playing style that you might expect for a cello performance, the single patches let you select exactly one articulation at a time. These are **non legato** instruments.

But don't let that fool you. A single patch is sometimes simply enough.

We want to encourage you, to take the time to skip through the single patch folders. A lot of those patches work perfect with their „simple beauty“. And there are some articulations that are very special.

Have a look at „Morbid Pad“, „Undulating“, „Spilegno“, „Cello Tremolo XFade Norm-Sul-ponti“, „Flautando Espressivo“ and the „Sulponticello 5 layer XFde sustain“ to name a few of the very unique patches, that aren't easy to find anywhere else.

## **Keyswitch patches - the overview patches**

To get a quick overview over the single articulations we have added keyswitch patches that are sorted after their articulation families:

Sustains, Accents, Shorts, Medium shorts, Pizzicatos

The info tab shows you the specific articulation

These patches are **not very elaborated** since they were designed for a quick overview for ourselves. But we didn't want to hold that back. The keyswitch patches can be very helpful for example when you are looking for the right accent, or the combination of different pizzicatos for your track and so on. These patches also work quite well as addition to the masterpatches.

### **Note: Stereo vs Mono**

*the library offers you the choice between 2 mono and a stereo version. Originally it was designed to be a mono library since very often you would record a solo instrument in mono. But we wanted to give you the choice. The two mono versions offer you a different sound because of the character of microphones used and because of the slightly different recording position by maintaining the same distance to the instrument.*

*The stereo patches work especially fine for all situations, where you use the cello as background (e.g. pads)*

## The Main GUI Page - A Quickstart:

The masterpatches contain the main articulations combined into one patch.

*TIP: Every control in the GUI can be assigned via midi-learn to your individual Midi CCs.*

The screenshot shows the main GUI for the 'Emotional Cello' patch. The interface includes a 'Key Switches' list on the left, a central 'Articulations' section with a 'Delicate' style selected, and a 'TRANSITIONS' section on the right. Various controls like 'Attack Type', 'Volume', 'Legato Trimming', 'Portamento Trimming', and 'Portamento Volume' are visible. Callout boxes provide detailed instructions for each major control.

**Callout Boxes:**

- Top Left:** Add an additional attack to non legato notes (points to 'Attack Type' knob).
- Top Right:** Adjust the volume of the attack notes (points to 'Volume' knob).
- Left Side:** Choose your playing articulation by pressing the assigned keyswitch or by clicking on the name (points to the 'Articulations' list).
- Right Side (Top):** Legato speed variation (points to 'Legato Trimming' slider).
- Right Side (Middle):** Choose legato speed (points to 'Legato Trimming' slider).
- Right Side (Bottom):** Choose portamento speed left: slow right: fast (points to 'Portamento Trimming' slider).
- Right Side (Bottom):** Trim the portamento volume (points to 'Portamento Volume' knob).
- Right Side (Bottom):** Choose legato or polyphonic playing (points to 'Legato' toggle).
- Right Side (Bottom):** Add round robin (points to 'eRR' toggle).
- Bottom Left:** Set your velocity splitpoint value for portamento below the actual shown number (points to 'Portamento Velocity' slider).
- Bottom Center:** Monitors the actual playing articulation and legato style (points to the 'Delicate' display).
- Bottom Right:** Set your velocity splitpoint value for bowchange legato above the actual shown number (points to 'Bow Change Velocity' slider).
- Left Side (Bottom):** Assign your dynamic control CC. By default it's CC1 (points to the 'Portamento Velocity' slider).

## The FX page:



Select your preferred timbre

Timbre ON / OFF switch

Saturation ON/OFF switch

Saturation level

*Note: Be careful with the saturation settings*

Expand the stereo image

Add some EQ

Room ON / OFF switch

Select type of room and control the amount of effect

Reverb ON / OFF switch

Select type of reverb and control the amount of effect

Setup your pitchbend range from microtuning to whole tone step

### There are 5 different timbres:

- HiFi
- Bright
- Warm
- Roomy
- 1940's Radio

### There are 3 different room settings:

- Scoring stage small
- Scoring stage medium
- Scoring stage large

### There are 5 different reverb settings:

- Classical Hall
- Amsterdam Hall
- Vienna Hall
- Small church
- Large church

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# Detailed Information:

## Masterpatches:

### THE EMOTIONAL CELLO

Basic functionality

The masterpatch contain the main articulations combined into one patch. These articulations can be chosen by keyswitch or by clicking on the names.



There are two types of articulations :

1. Shorts ( from G#-1 to B-0)
2. True Legato (C0 – B0)

#### The Legato Mode:

In Legato mode the script will automatically detect if you play legato or not. It chooses starting notes (originally played non legato) when playing non legato.

It chooses legato transition notes and innerphrase sustains when playing legato.  
All legato notes of the KSW C0-B0 are connected with transition notes.

The Legato articulations have 3 different legato – transition – types :

1. **Bowchange Legato:** Two notes were played legato by changing the bow direction while moving from the first note to the second.
2. **Finger Legato:** Two notes were played legato by putting on / or releasing one finger on the fretboard while moving from the first note to the second.
3. **Portamento:** Two notes were played legato by sliding the finger up or dow from the first note to the second.

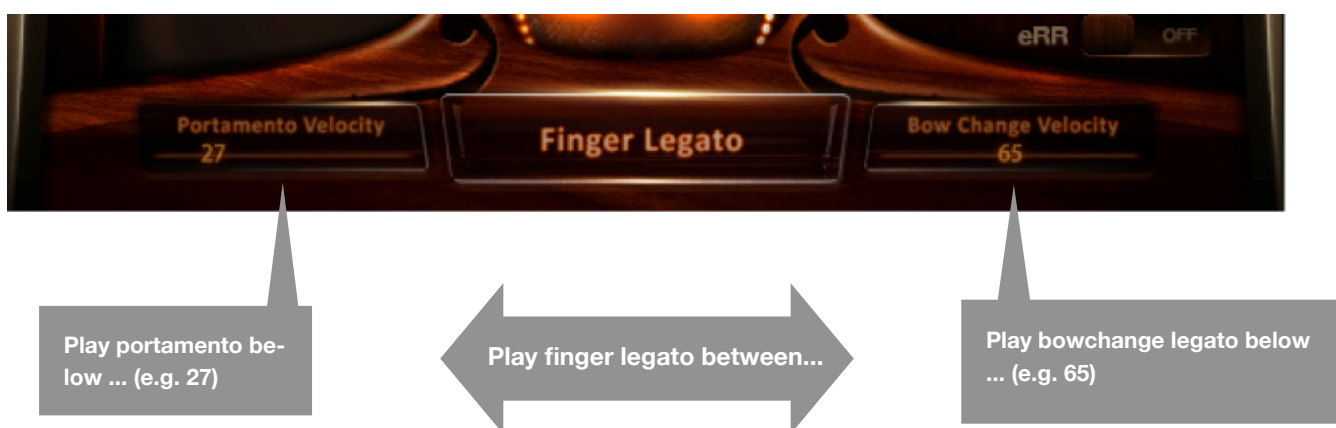
The different legato styles are addressed by velocity when playing legato:

**High** velocity triggers **bowchange legato**

**Middle** velocity triggers **finger legato**

**Low** velocity triggers **portamento**

The **trigger switch point** can be set with the faders in the **transition velocity windows** on the bottom left and right of the user interface:



**Portamento Velocity** : sets the highest velocity value of the portamento range from 0 – your choice.  
(The lowest velocity value for the Finger legato range is defined by this choice.)

**Bowchange Velocity**: sets the lowest velocity value of the bow change range from Your Choice to 127.  
(The highest velocity value for the Finger legato range is defined by this choice.)

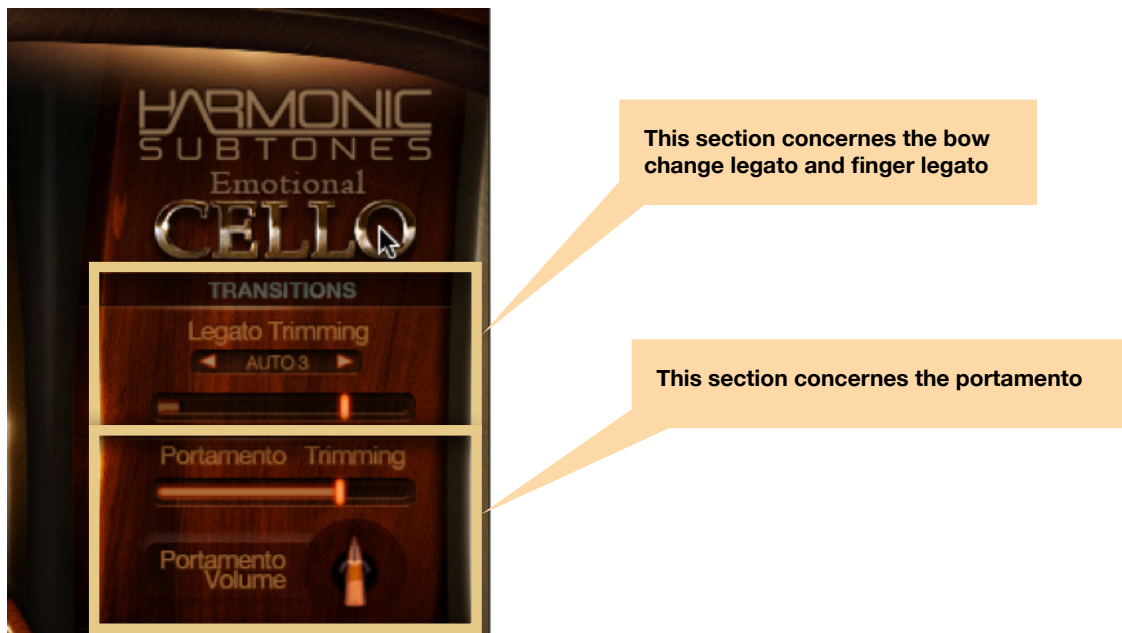
**Tip:**

*you can deactivate any legato transition type by changing the velocity ranges in these two windows:*

- Portamento only: move the Portamento Velocity slider to 127
- Finger legato only: move the Portamento Velocity slider to 0 and the Bow change Velocity slider to 127
- Bow change legato only: move the Bow change Velocity slider to 0

## Legato Speed: (legato transition speed)

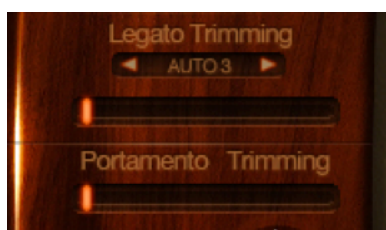
On the right side of the GUI below the „Emotional Cello“-logo you'll find the transition speed trimming.



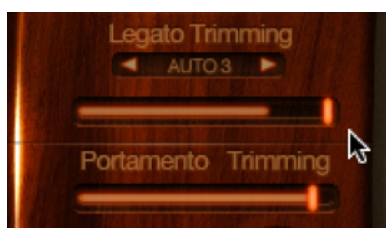
There are two options:

- **Legato trimming:** this affects the speed of **bow change - and finger legato**
- **Portamento trimming:** this affects the **Portamento only**

Drawing the orange bar to the left the legato gets slower



while drawing to the right, it will speed up the legato.



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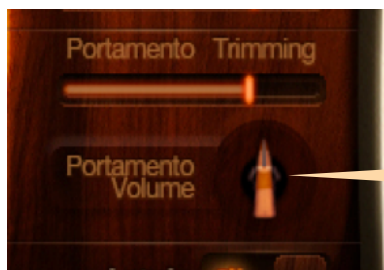
The **Legato Trimming** offers additional options:

**Manual:**

the legato speed is determined only by the manual setting of the speed slider.

**Auto 1 – 3:**

the legato speed is determined by the manual setting of the speed slider **and** the script will adopt your playing speed. Auto 1 is a very subtle variation while Auto 3 will speed up the legato more extreme when playing fast.



The Portamento Volume knob gives you the opportunity to attenuate the volume of the Portamento Transitions.

## The Keyswitch control area:

In the **keyswitch control area** on the left side you can choose your articulations by clicking directly on the articulation names or by using the assigned Keyswitch note on your keyboard.

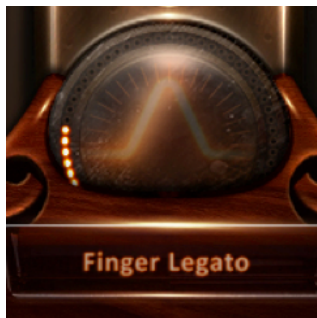


The articulations from G#-1 to B-1 are **short articulations** in non Legato mode and are responding to **velocity**.

The Articulations from C0 – B0 are **legato articulations** that don't respond to Velocity but to the continuous controller that can be assigned in the dynamic area.

By default the Keyswitch C0 will be active.

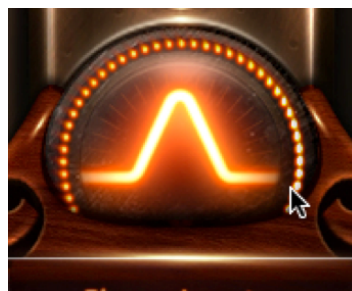
**There is one exception:  
The Vivid articulation does respond to velocity.**



The **articulation status monitor** shows the active articulation. It will also show which legato transition is used while playing. This control is for **monitoring only**.

## The „Dynamic Ring“

The Dynamic control area gives you the opportunity to define a controller of your choice for the dynamic sculping and dynamic crossfading where crossfading is appropriate. (KSW D#0, B0 = the „Xfade“ patches).



You can assign the controller of your choice by right clicking (MAC: control click) on the shining LED – Ring. By default the dynamic control is assigned to CC1

## The Attack mode area:

The **attack mode area** offers the opportunity to **add** an additional attack with round robin.



This attack is designed to only be added to notes that are played non legato.

When you have activated it in connection with a **legato - articulation** it turns off automatically when a **shorts – articulation** is chosen .

Nevertheless it is possible to activate the **attack mode** when a short articulation is active. Then the attack mode will be present for all articulations and can be used as an **overlay** for the **keyswitch – short - articulations**

There are 4 **attack types** available:

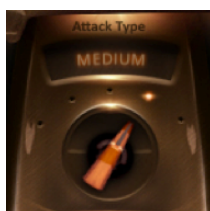
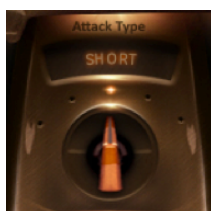
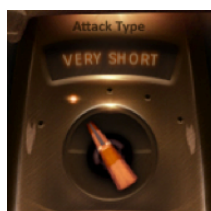
1. very short attack (spiccato attack)
2. Short attack (Staccato attack)
3. Medium attack (Portato attack)
4. Velocity mode attack (which is a velocity switched combination of all three previous mentioned)

1. spiccato

2. staccato

3. portato

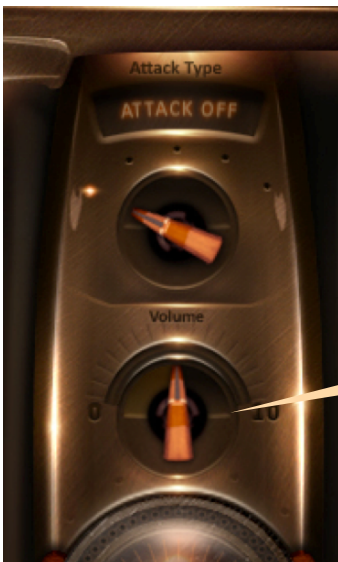
4. mixed 1-3



### Tip:

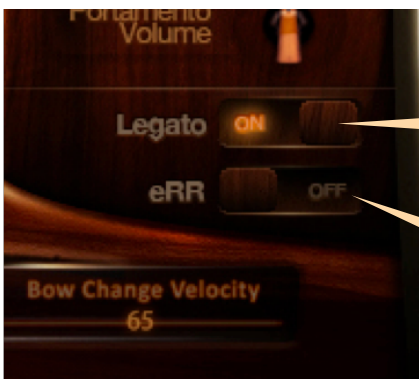
Assign the Attack type to the sustain Pedal (CC64) by midi learn. Everytime you need an additional or sharper attack you just have to push your sustain pedal and you get that extra grid.

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With the Volume controller you can adjust the attack note volume

### Additional Control buttons:



Legato On/Off Button: turns on or off the Legato mode.

When Legato mode is off, the transitions aren't active. Polyphonic playing is possible then.

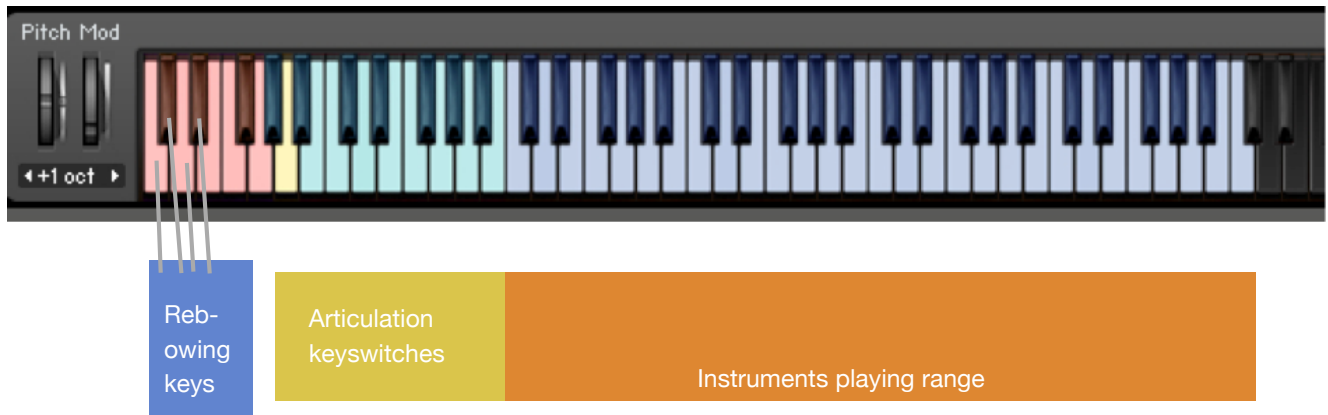
eRR is an additional Round Robin function, by utilizing the neighbouring zones.

*Tip: Due to CPU performance only turn this on, if you really need it . By default this is set to „Off“*

## Hidden functions:

### The Rebowing Function:

Besides the normal bowchanges that you hear automatically within each enduring sustain note the **rebowing function** allows you to perform an additional bowchange via keyswitch (C-1 to D#-1). While holding down a note you can „re-bow“ this note by playing the rebow keyswitches from C-1 to D# -1. This momentary keyswitch will repeat the actual enduring note with an audible bowchange noise at the beginning. Since there are several bow change sustain notes available note repetitions can be performed very authentically.



*Tip: This is a great feature for phrases with note repetitions and if you want to control bow changes rhythmically*

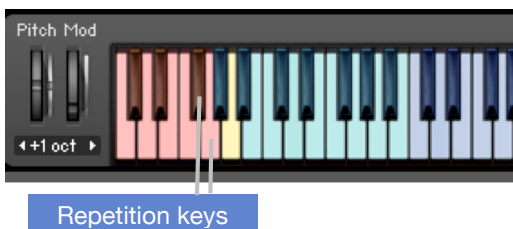
### „Add Vibrato“ - Crossfade keys:

The Add Vibrato-keys E-1 & F-1 work exactly like the rebowing keys but without an audible attack noise. These are designed to be used with the **non vibrato articulation**. These momentary keyswitches will add vibrato to the actual sounding note.



### Repetition keys:

The keys F#-1 and G-1 are **repetition keys**. While holding down a note you can repeat this note by playing the repetition keys.



*Tip: This is a great feature for rhythmical repetitions within the short articulations*

### The hidden CC13 function:

With the CC13 controller you can **add speed** to the tone body development.

- the tones come faster to the full body,
- with progressive vibrato, the vibrato comes earlier.

The **CC13 function** helps you to let the Cello react faster to your phrasing.

## Release Tails

Whenever you have played a note and release it you will hear a short tonal noise sounding like releasing the string or relieving the bow. This might be disturbing when holding a sustain note until the sound is completely decayed. Therefore you can **adjust** the **volume** of the **Release samples** with Midi Controller **CC 16**. This Midi CC is fixed.

## The FX Page



### The Timbre Impulse Response :

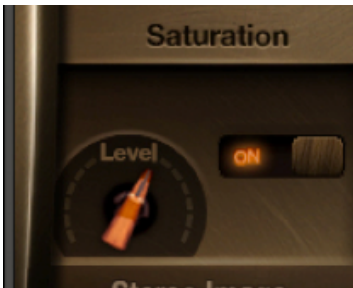
The Timbre Impulse is like a mastering EQ snapshot but can also contain room information.

We offer 3 mastering snapshots that contain EQ and some other analog hardware processing:

*Hi Fidelity, Bright, Warm*

There is an impulse called *Roomy* which is in fact a re-miking of a studio room and a little gimmick: *1940's Radio*.

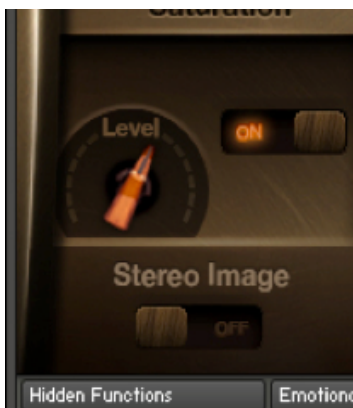
Timbre Impulse can be turned **off** for the raw sound



### Saturation:

with saturation you can strengthen and colour the sound of the Cello. But be careful when turning up. This would result in a distorted Cello - sound.

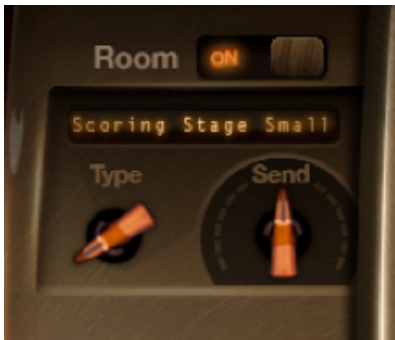
Saturation can be turned **off** for the raw sound



### Stereo Image

with Stereo image you can enrich the stereofield of the instrument. It is especially useful for the pad-alike-sounds in the single patches.

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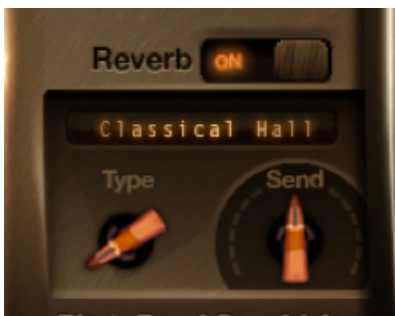


### The Room FX:

there are three different room **impulse responses**:

- scoring stage small
- scoring stage medium
- scoring stage large

These rooms can be selected with the *type* knob. With *Send* you can adjust the amount of room to your liking.



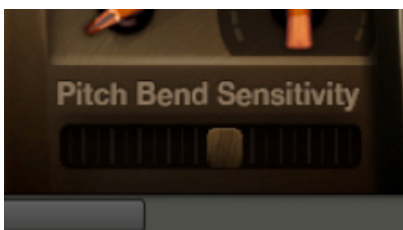
### The Reverb FX:

there are five different **reverb impulse responses**

- Classical Hall
- Amsterdam Hall
- Vienna Hall
- Small Church
- Big Church

These hallfx can be selected with the *type* knob. With *Send* you can adjust the amount of hall to your liking.

## Intonation control via pitchbend



### pitch bend sensitivity:

you can assign the range of the pitch wheel with this slider. The highest value on the very right is offering a wholetone for pitchbending.

### Tip:

the idea is to use the pitchwheel for **microtuning** and **intonation** purposes. Therefore the range of the pitchbend is limited to a maximum of a wholestep. When the slider is set to the middle or lower you have subtle distinctions for the intonation via pitchbend.

## List of Single Patches

### 01 Sustains

|                                |      |  |
|--------------------------------|------|--|
| 01 Espresso 5 Layer XFde       | Xfde | crossfading between 5 different layers of vibrato-sustains   |
| 02 NV 4 Layer Xfde             | Xfde | crossfading between 4 different dynamic layers of non vibrato-sustains   |
| 03 Flautando Espresso          |      | also often called sul tasto articulation with vibrato very soft and expressive sound                                 |
| 04 Flautando NV                |      | also often called sul tasto articulation without vibrato very soft sound. Good for layering chords                   |
| 05 Harmonic Sustain            | Xfde | Sustain of flageolets crossfading between non vibrato and vibrato  |
| 06 SPC Sustain 5 Layer XFde    | Xfde | Sulponticello Sustain crossfading between 5 layers from flautando to normal to 3 different sulponticello distortions |
| 07 SPC Sustain Distortion Xfde | Xfde | Sulponticello Sustain crossfading between 3 layers of different sulponticello distortions                            |
| 08 Dolce                       |      | a beautiful sounding dolce pp sustain  |

### 02 phrased medium short Espressivos

All the following patches were recorded in phrases of different tempos and contain expressive medium short notes. While the basic character is quite similar the different patches give you a variety of nuances, all with 2 Round Robins (RR)

|                                 |      |   |
|---------------------------------|------|---|
| 01 Großer Akzent Vib            | 2 RR | characterful strong sounding articulation. Good for melodies and chords |
| 02 Medium Short Espresso        | 2 RR |   |
| 03 Medium Short Espresso end    | 2 RR | originally an end note of a phrase                                      |
| 04 Medium Short Espresso pickup | 2 RR | originally a pick up note of a phrase                                   |
| 05 Medium Short Espresso start  | 2 RR | originally a starting note of a phrase                                  |
| 06 Short Espresso               | 2 RR |   |
| 07 SPC Medium Short Espresso    | 2 RR | articulation Sulponticello  |
| 08 SPC Short Espresso           | 2 RR | articulation Sulponticello  |
| 09 SPC Very Short Espresso      | 2 RR | articulation Sulponticello  |

### 03 Accented Articulations

|                         |      |   |
|-------------------------|------|---|
| 01 Fortepiano 1& 2      | 4 RR | combination of both fortepianos via velocity switch                     |
| 02 Fortepiano 1         | 4 RR | classical fp accent   |
| 03 Fortepiano 2         | 4 RR | classical fp accent   |
| 04 Großer Akzent Vib    | 4 RR | characterful strong sounding articulation. Good for melodies and chords |
| 05 Großer Akzent NV     | 4 RR | characterful strong sounding articulation. Good for melodies and chords |
| 06 Plain Saw Vello      | 4 RR | nasty and odd sounding Cello  |
| 07 Portato Accented NV  | 4 RR | good for strong fundamental notes and chords                            |
| 08 Portato Accented Vib | 4 RR | good for strong fundamental notes and chords                            |

### 04 Shorts

|                                  |      |  |
|----------------------------------|------|--|
| 01 Spiccatissimo                 | 8 RR | very crisp and hard spiccato   |
| 02 Spiccato soft                 | 8 RR | soft spiccato  |
| 03 Bumble Bee-Spiccatos          | 8 RR | spiccatos recorded at high speed with all imperfections  |
| 03B Bumble Bee-Spiccatos softATT | 8 RR | same as above with softer attack   |
| 04 long Bach Bow                 | 4 RR | basso continuo inspired „short“ note   |
| 05 Power 5th Spicc               | 8 RR | rocky power 5th spiccato   |
| 06 Riccochet                     | 4 RR | jete bouncing bow normal   |
| 07 Rota Spiccato VSW             | 4 RR | Nino Rota inspired long spiccato with vibrato. different nuances (see below) velocity switched |
| 08 Rota Spicc DnBeat Vib         | 4 RR | see above: originally played on a downbeat of a phrase   |
| 09 Rota Spicc Syncope Vib        | 4 RR | see above: originally played on a syncope of a phrase  |

## 04 Shorts cont.

|  |      |  |
|--|------|--|
| 10 Short Upbeat VB                         |      | see above: originally played on a n upbeat of a phrase   |
| 11 Spilegno C1-G2                          | 8 RR | hard hitted Spiccato with a col legno component played on lowest string only. Good for grooves   |
| 12 SPC Spiccato                            | 4 RR | Sulponticello spiccato   |
| 13 SPC Riccochet                           | 4 RR | jete bouncing bow sulponticello  |
| 14 Forty-one staccato ghostbowstrokes on C | -    | ghost note typed bowstrokes on open string with 40 repetitions. Good for rhythms and for adding rhythmical noises to your Cello groove |
| 14B Forty-one staccato ghostbowstrokes KSW | -    | see above. Keyswitches C0 - B0 let you tranpose the key.   |

## 05 Pizzicatos

|                                  |      |   |
|----------------------------------|------|---|
| 01 Mixed Pizz Cello Hi Snap      | 2 RR | a mix of non vibrato and vibrato pizzicatos with a snappy sound on high velocities  |
| 02 Pizz NV & Harm Cello          | 2 RR | pizzicato non vibrato with natural flageolet pizz on high register (C5, G5, D6 A6)  |
| 03 Pizz Vib & Harm Cello         | 2 RR | pizzicato with vibrato with natural flageolet pizz on high register (C5, G5, D6 A6) |
| 04 Harmonic Pizz Cello stretched | 2 RR | natural flageolet pizz stretched for chromatical and a range extended use           |
| 05 Pizz Cello snapped            | 2 RR | snappy sounding pizzicato   |
| 06 Plectrum Pizz Cello           | 2 RR | pizzicato played with a plectrum. Sounds a little asian                             |
| 07 Pizz Legno Cello              | 2 RR | pizzicato with a hitting bow on lowest string. more an effectual tonal sound        |
| 08 Pizz Legno Cello stretched    | 2 RR | see above but stretched to an extended range  |

## 06 Effectual Sustains

|                                    |      |   |
|------------------------------------|------|---|
| 01 Morbid Pad Cello                |      | sustain with a fragile tone. Very interesting pad sound   |
| 02 Undulating Cello natural tuning |      | very long sustains that change colour constantly. Good for musical tension. Original intonation   |
| 03 Undulating Cello tuned          |      | see above but tuned perfectly   |
| 04 CelloTrem Xfade Norm-SulPonti   | xfde | tremolo sustain with 2-dimensional crossfading between dynamic layers and also between normal and sulponticello. Sfz Tremolo accent on high dynamic level |

## 07 Effects

|                            |  |   |
|----------------------------|--|---|
| 01 Thunderous scratch on C |  | thunderous tremolo effect originally played on note c |
| 02 FX Cello                |  | a set of Cello glissando effects                      |
| 03 Tango Glisses           |  | pick up like upward fourth                            |

## Predefined Midi CCs

|       |   |                           |  |
|-------|---|---------------------------|--|
| CC 1  | dynamic control / dynamic crossfade control | assignable via Midi Learn |  |
| CC 1  | low pass filter to support dynamic fading   | fixed                     |  |
| CC 11 | volume control for all patches              | fixed                     |  |
| CC 13 | speed control for sustain samples           | fixed                     |  |
| CC 16 | release tail volume control                 | fixed                     |  |

*Note: all other controls can be assigned via Midi Learn !*

HARMONIC  
SUBTONES

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Thank you for using the Emotional Cello and enjoy the unusual aspects of the usual suspect.

*The Harmonic Subtones Team*

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