ARTICULATIONS

FEATURES - COLORS - TECHNIQUES

www.orchestraltools.com
Welcome to

**ORCHESTRAL TOOLS**

Enter a whole new world of orchestral colors, shades and inspiration. It is the nexus of innovative concepts, the magical shimmering ambience of the **Teldex Scoring Stage** and the **finest session musicians** from the world-famous and renowned orchestras of Berlin, that makes our collections to be the standard toolset of professional film composers.

**Orchestral Tools** is an ambitious project, driven by a few composers with their vision of **re-inventing orchestral sampling**.

We’re proud to present to you our compendium of first-class orchestral sounds, captured with the highest possible amount of detail, consistency and care. Over the past years we developed new techniques in recording samples to preserve the musicality of isolated notes with the highest degree of user control.

Innovations like the **Runs Builder**, **Playable Glissandi** and the **Adaptive Legato**, which is the most fluidly playable True Legato in the market, make our library collections outstanding achievements in sampling.

The following pages will give you a deeper insight in our extensive library packages. Never before has anyone ventured so deeply into sampling articulations in such an ambience. **Orchestral Tools** offers you a collection of sounds that will make you free in creating colorful orchestrations and compositions in every detail!

All the best,

Hendrik Schwarzer
composer and CEO of the Orchestral Tools sampling project
BST - Main Collection

SPECIFICATIONS

• First True Adaptive Legato (including 4 legato types: Slurred, Agile (scripted), Fast Runs and Portamento)
• Up to 24x RR Spiccatus
• Extensive collection of different short notes
• Playable Runs and pre-recorded octave runs (tempo synced)
• Smaller Sections for more definition and detail
• 4 Mic Positions + Concertmaster Mic
• Bow Stroke Control (soft, immediate, accented)
• Up to 3 different vibrato expressions
• Ostinato Arp Legato (fast leg 6RR and slow leg 3RRs True Legato)

• 268 GB of samples (129 GB NCW compressed)
• 24Bit / 48KHz Patches
ADAPTIVE LEGATO

Berlin Strings features the most fluid True Legato. The Adaptive Legato System analyzes your performance to choose between four different types of legato:

- Slurred Expressive Legato
- Fingered Legato (new for 1st Violins)
- Agile, Fast Legato (scripted)
- Fast Runs Legato
- Portamento

With velocity you have control over various captured bow stroke intensities (soft attack, immediate attack, accented attack). With the sustain pedal you can add a soft decay to end a phrase. These release samples have been specifically recorded.

Additionally, the faster you play the more blurred the intonation will turn out - like in a real string performance. These blurred intonation effects will be created by specifically sampled articulations.

SECTIONS AND THEIR SIZES

For Berlin Strings we decided to choose smaller section sizes to keep the definition and vibrato details in the sampled patches. Several crossfading techniques (dynamic layers, legato fade scripts, vibrato xfading) or playing more than one voice leads to a bigger and pad-like undefined string sound. With smaller sections we’re trying to take this effect into calculation to achieve a detailed, expressive orchestral string section.

Berlin Strings includes the following sections:

- 1st Violins (8 players)
- 2nd Violins (6 players)
- Violas (5 players)
- Celli (5 players)
- Basses (4 players)
### 1st VIOLINS

<table>
<thead>
<tr>
<th>Expression</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legato Slurred, Expressive</td>
<td></td>
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<tr>
<td>Legato Agile</td>
<td></td>
</tr>
<tr>
<td>Legato Fingered <strong>NEW</strong></td>
<td></td>
</tr>
<tr>
<td>Legato Playable Runs</td>
<td></td>
</tr>
<tr>
<td>Legato Portamento</td>
<td></td>
</tr>
<tr>
<td>Ostinato Arpeggio Legato fast</td>
<td>6RRs</td>
</tr>
<tr>
<td>Ostinato Arpeggio Legato slow</td>
<td>3RRs</td>
</tr>
<tr>
<td>Sustain Soft - Romantic Vib.</td>
<td></td>
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<tr>
<td>Sustain Soft - Without Vib.</td>
<td></td>
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<tr>
<td>Sustain Soft - Strong Vib.</td>
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<tr>
<td>Sustain Immediate - Romantic Vib.</td>
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<tr>
<td>Sustain Immediate - Without Vib.</td>
<td></td>
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<tr>
<td>Sustain Immediate - Strong Vib.</td>
<td></td>
</tr>
<tr>
<td>Sustain Accented</td>
<td></td>
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<tr>
<td>Sustain Expressive Dyn (Short expr.)</td>
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<tr>
<td>Sustain Expressive Dyn (Long expr.)</td>
<td></td>
</tr>
<tr>
<td>Spiccattissimo</td>
<td>4RRs</td>
</tr>
<tr>
<td>Spiccato</td>
<td>24RRs</td>
</tr>
<tr>
<td>Spiccato Exposed <strong>NEW</strong></td>
<td>6RRs</td>
</tr>
<tr>
<td>Staccato</td>
<td>7RRs</td>
</tr>
<tr>
<td>Staccato Bold</td>
<td>3RRs</td>
</tr>
<tr>
<td>Martele FFF</td>
<td>3RRs</td>
</tr>
<tr>
<td>Portato Short</td>
<td>4RRs</td>
</tr>
<tr>
<td>Portato Long</td>
<td>4RRs</td>
</tr>
<tr>
<td>Pizzicato</td>
<td>5RRs</td>
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<tr>
<td>Pizzicato Perc</td>
<td>6RRs</td>
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<tr>
<td>Tremolo</td>
<td></td>
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<tr>
<td>Tremolo Accented</td>
<td></td>
</tr>
<tr>
<td>Tremolo sfz</td>
<td>2RRs</td>
</tr>
<tr>
<td>Tremolo Pizzicato</td>
<td></td>
</tr>
<tr>
<td>Trills (HT/WT)</td>
<td></td>
</tr>
<tr>
<td>Trills (HT/WT) Accented</td>
<td></td>
</tr>
<tr>
<td>Trills (HT/WT) sfz</td>
<td>2RRs</td>
</tr>
<tr>
<td>Hook Trems</td>
<td>4RRs</td>
</tr>
<tr>
<td>Hook Trills (HT/WT)</td>
<td>4RRs</td>
</tr>
<tr>
<td>Repetitions 16th (slow/fast) TS</td>
<td></td>
</tr>
</tbody>
</table>

### 2nd VIOLINS

<table>
<thead>
<tr>
<th>Expression</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legato Slurred, Expressive</td>
<td></td>
</tr>
<tr>
<td>Legato Agile</td>
<td></td>
</tr>
<tr>
<td>Legato Playable Runs</td>
<td></td>
</tr>
<tr>
<td>Legato Portamento</td>
<td></td>
</tr>
<tr>
<td>Sustain Soft - Romantic Vib.</td>
<td></td>
</tr>
<tr>
<td>Sustain Soft - Without Vib.</td>
<td></td>
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<tr>
<td>Sustain Soft - Strong Vib.</td>
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<tr>
<td>Sustain Immediate - Romantic Vib.</td>
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<tr>
<td>Sustain Immediate - Without Vib.</td>
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<tr>
<td>Sustain Immediate - Strong Vib.</td>
<td></td>
</tr>
<tr>
<td>Sustain Accented</td>
<td></td>
</tr>
<tr>
<td>Sustain Expressive Dyn (Short expr.)</td>
<td></td>
</tr>
<tr>
<td>Spiccato</td>
<td>19RRs</td>
</tr>
<tr>
<td>Spiccato Exposed <strong>NEW</strong></td>
<td>6RRs</td>
</tr>
<tr>
<td>Staccato</td>
<td>7RRs</td>
</tr>
<tr>
<td>Staccato Bold</td>
<td>3RRs</td>
</tr>
<tr>
<td>Martele FFF</td>
<td>3RRs</td>
</tr>
<tr>
<td>Portato FFF</td>
<td>4RRs</td>
</tr>
<tr>
<td>Portato Long</td>
<td>4RRs</td>
</tr>
<tr>
<td>Pizzicato</td>
<td>5RRs</td>
</tr>
<tr>
<td>Tremolo</td>
<td></td>
</tr>
<tr>
<td>Tremolo Accented</td>
<td></td>
</tr>
</tbody>
</table>
Tremolo sfz ........................................ 2RRs
Trills (HT/WT)
Trills (HT/WT) Accented
Trills (HT/WT) sfz .............................. 2RRs
Hook Trem ........................................ 4RRs
Hook Trills (HT/WT) ........................... 4RRs
Repetitions 16th (fast/ slow) TS
Repetitions Triplets (fast/ slow) TS
Double Strokes slow .......................... 6RRs
Double Strokes fast ............................ 6RRs
Triple Strokes slow ............................ 9RRs
Triple Strokes fast ............................. 9RRs
Pre-Recorded Octave Runs TS
True Dynamics
(cresc, decresc, swells; all in several lengths)
Blurred Staccato ............................... 5RRs
Bow Noises

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VIOLAS
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Legato Slurred, Expressive
Legato Agile
Legato Playable Runs
Legato Portamento
Sustain Soft - Romantic Vib.
Sustain Soft - Without Vib.
Sustain Soft - Strong Vib.
Sustain Immediate - Romantic Vib.
Sustain Immediate - Without Vib.
Sustain Immediate - Strong Vib.
Sustain Accented
Sustain Expressive Dyn (Short expr.)
Sustain Expressive Dyn (Long expr.)
Spiccato ................................. 19RRs
Spiccato Exposed NEW ................. 6RRs
Staccato ................................. 7RRs
Staccato Bold .............................. 3RRs
Martele FFF ................................. 3RRs
Portato Short .............................. 4RRs

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CELLI
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Legato Slurred, Expressive
Legato Agile
Legato Playable Runs
Legato Portamento
Ostinato Arpeggio Legato fast ........ 6RRs
Ostinato Arpeggio Legato slow ........ 3RRs
Sustain Soft - Romantic Vib.
Sustain Soft - Without Vib.
Sustain Immediate - Romantic Vib.
Sustain Immediate - Without Vib.
Sustain Accented
Sustain Expressive Dyn (Short expr.)
Sustain Expressive Dyn (Long expr.)
Spiccato ................................. 19RRs
Staccato ................................. 7RRs
Spiccato Exposed NEW ................. 6RRs
Martele FFF ................................. 3RRs
Portato Short .............................. 4RRs
Portato Long ............................... 4RRs
Pizzicato .................................................. 5RRs
Pizzicato Perc ........................................ 6RRs
Tremolo
Tremolo Accented
Tremolo sfz .......................................... 2RRs
Trills (HT/WT)
Trills (HT/WT) sfz .................................. 2RRs
Hook Trem.................. 4RRs
Hook Trills (HT/WT).............. 4RRs
Repetitions 16th (fast/ slow) TS
Repetitions Triplets (fast/ slow) TS
Playable Glissandi
Pre-Recorded Octave Runs TS
True Dynamics
   (cresc, decresc, swells; all in several lengths)
Blurred Staccato.................. 5RRs
Bow Noises

BASSES

Legato Slurred, Expressive
Legato Agile
Legato Playable Runs
Sustain Soft - Romantic Vib.
Sustain Soft - Without Vib.
Sustain Soft - Strong Vib.
Sustain Immediate - Romantic Vib.
Sustain Immediate - Without Vib.
Sustain Immediate - Strong Vib.
Sustain Accented
Sustain Expressive Dyn (Short expr.)
Sustain Expressive Dyn (Long expr.)
Spiccato ........................................ 19RRs
Spiccato Exposed NEW ............... 6RRs
Staccato .......................................... 7RRs
Staccato Bold................................. 3RRs
Martele FFF ............................ 3RRs
Portato Short......................... 4RRs
Portato Long ......................... 4RRs
Working with Berlin Strings:

BLENDING ARTICULATIONS
by Hendrik Schwarzer

When musicians perform a line, they fit a specific articulation, its timbre, attack, expression and length perfectly and convincingly to the surrounding phrase. They do that in a natural and organic way. They don’t just play Portato or Staccato. Everything they articulate is unique and depends on the notes before and after, their length and dynamics. That’s why it is so important to have as many articulations in a sample library as possible. The larger your arsenal, the easier you can achieve convincing results "out of the box". But sometimes we need something between e.g. Staccato and the shorter Spiccato. With layering them we’ll get the sharper attack at the beginning of the short note but the boldness and impact of a staccato. I’m not convinced of monophonic keyswitching, because it does what it is: Switching between modes. By blending and layering different articulation lengths and types we’ll reach the areas between two captured articulations. With the polyphonic keyswitching within The Capsule - our new framework, this is so easy to do.

Berlin Strings offers some blurred articulations. These are articulations with a bad tuning. You probably won’t like them isolated but blending them with the regular ones can really breathe live into your mockuped lines, especially on fast phrases with short notes. Just try it out by layering Blurred Spiccatos with the regular Spicc. These blurred articulations really are a fantastic tool to simulate intonation imperfections of a real string section.
The Room  
TELDEX SCORING STAGE

Our carefully recorded collections of the Berlin Series were captured in one of the best acoustic spaces for orchestral productions. When it comes down to hundreds of notes played in parallel, the acoustic properties of the sampled material turn out to be one of the most crucial elements in terms of realistic and convincing mock-ups, where all individual instruments and sections need to merge together to create a full orchestral soundscape. The acoustic characteristics of the Teldex Scoring Stage are simply paramount: Instruments and sections blend together in a way never heard before; all these captured details will be there, even if the full orchestra is playing. Most orchestral libraries tend to be too wet to preserve details and flexibility, some are too dry to recreate a whole orchestral body. With the Berlin Series we present you the perfect balance between these two worlds.

Teldex looks back on a long tradition of many well-known and Grammy® Award-winning productions. Recordings were done for famous Orchestras like the Berlin Philharmonic Orchestra, London Symphony Orchestra or the Chicago Symphony Orchestra. A lot of film scores composed by Danny Elfman, Howard Shore, Alan Silvestri or David Newman were recorded in this unique sounding space.
With our newest version of the Berlin Series, all instruments, dynamic ranges, articulations and microphone positions are balanced to keep the natural dynamics of a real orchestra within our Berlin Series.

**Articulations:** All articulations fit each other perfectly. Switching between articulations within the multi patches feels natural and fluid.

**Instruments:** The dynamic ranges of each instrument in our Berlin Series are modeled after reference recordings we did with a real orchestra. Also the volume relations between all instruments are preserved.

**Release Samples:** All release samples were re-edited to preserve the natural room acoustics within the samples.

**Mic Positions:** The mic positions are balanced to each other. This way you’re able to use our new auto gain feature to blend through the microphone mix without loosing the instrument volume relations.
Capsule adjusts to your way of working, regardless whether you want a dedicated track for each articulation or if you wish to have as many articulations as possible on a single MIDI track. **It’s your choice with our single and multi patch design.** Almost all features of our single patches are available, too, via the wrench button in our multi patches. Here are the features of **Capsule**, our new engine within **Kontakt**.

**Intelligent Mixer with Auto-Gain (Volume Compensation), Audio Out Routing and Grouping Options**

**Deactivate specific Dynamic Layers**

**Define your own Round Robin rules**

**Add pre-defined dynamic filters** for smoother dynamic blending

**Purge specific Round Robins out of RAM**

**Controller Table**: Add your own interpeter envelope curves to any MIDI CC

**Switch between XFade dynamics or Velocity control**
Apply True Legato to any long articulation!
Transform a trills or a tremolo articulation into a True Legato patch. Build your own combinations with up to 3 assignable legato speed slots per articulation, which will be triggered and will adapt to your playing speed. (e.g. at slow playing: Slurred Legato, on very fast performances fast runs).

Polyphonic Keyswitch Concept
Play up to 4 articulations simultaneously and choose in realtime between xfading, switching, 2D morphing via MIDI CC or velocity. You don’t have to setup complicated sample maps and rules in advance. Just perform.

2D Morphing of articulations for sfx and sound design applications
Over years of development Orchestral Tools finally built the most fluid legato concept in the industry which adjusts to any tempo and rhythmic situation. Our Adaptive Legato Engine detects your playing speed in real time and perfectly adjusts all variables within the engine to your performance. Agile lines as well as slow soaring melodies are now possible within a single patch. And with different True Legato speeds as captured in Berlin Strings the Adaptive Legato Engine reveals its true potential.
If you are student, teacher or if you would like to integrate Orchestral Tools products into your educational program you’ll get a 25% discount on our whole product palette. We also provide attractive rates on multi-user licenses. Please send your request and a copy of your student ID or an adequate proof that you qualify for EDU rates to support@orchestraltools.com
To avoid long download times with slow internet providers or as a backup solution to save your Orchestral Tools collections, we recommend our HD backup service on a super fast SSD. Add this product to your shopping cart before checking out to get all libraries in the current order on a SSD storage device.

The drive will be shipped within 2-3 weeks after placement of order (if the library is already released). Delivery time depends on target country and customs.

**TYPE:** 2.5" SATA III  
**TYPE:** 840 EVO Series  
**STORAGE:** 250GB Capacity  
**FEATURES:** Sequential Read Speed: 540 MB/s
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Photos by: Sascha Knorr and Florian Döhring

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