300 Grand Compact

for sforzando

User Manual

300 Grand Compact User Manual

Description

300 Grand Compact is a high-quality piano sample library sampled from a Yamaha CFX grand piano in a world-class performance hall. Formatted for the FREE Plogue sforzando player, 300 Grand Compact uses the same samples as the Outside Tube microphone perspective from the larger 300 Grand for Kontakt. 300 Grand Compact is approximately 11 GB* in size before lossless FLAC compression.

Thanks to sforzando's ARIA Engine, the performance and sound quality of 300 Grand Compact rivals that of 300 Grand, the Kontakt version, with the same settings applied! 300 Grand Compact is 300 Grand LE's Outside microphone perspective for the sforzando player.

300 Grand Compact is ideal for Studio Production, Stage Production, Film Score Production, Live Performance and more!

Instrument Features

- Neumann "Golden" M149 tube microphone perspective just outside the piano lid
- 24 bit 96k source sampling rate reduced to 16 bit 44.1k using Goodhertz conversion
- Round-robin pedal noise samples with normal and loud settings
- Sampled key up mechanical noises from the actual keyboard action
- Sympathetic Resonance with on/off and volume controls
- Sostenuto pedaling
- Recorded at world-class performance hall
- Lynx Aurora A/D converters used
- Premium API microphone preamps used
- 12 velocities pedal up samples (selected from over 32 sampled velocities)
- 12 velocities pedal down samples (selected from over 32 sampled velocities)
- 12 velocities release samples (selected from 32 sampled velocities)
- Fast loading
- Extremely memory efficient thanks to lossless FLAC compression

Note from the Developer

Thank you for your purchase! Production Voices is a small developer consisting of myself and a handful of talented freelancers. Your purchase helps support our continuing efforts to bring exceptional sample libraries at an affordable price. Production Voices would not exist without the dedicated users who make suggestions for upgrades and new libraries and continue to share their experiences with our products on forums and groups.

Sampling can be like catching lightening in a bottle. Everything has to line up to get a great sample library. The right instrument has to be available for the duration of the project. Then a venue/recording space needs to be available at the same time as the instrument for 2+ weeks with 24 hour access. A recording engineer has to be available at the same time as the instrument and the venue. All the recording gear has to be organized and any rental gear arranged for the same time. And all of this is just for the sampling session which is just a small portion of the time commitment to create a sample library. But, when all of these things come together something magical happens. You get the beginnings of a truly exceptional virtual instrument. The goal was to capture a large performance piano in true performance hall where the reverb would be real, not added on as an afterthought. 300 Grand Compact is the stereo outside microphones from the sampling session. These modern tube microphones where well placed to capture mostly direct piano tone while giving just a hint of the natural ambience on the releases. This balance allows for 300 Grand Compact to easily cover many genres of music from Classical to Jazz to Pop and beyond. It is a versatile library that is sure to bring years of enjoyment and inspiration!

300 Grand Compact joins six other (with hopefully more to come) Production Voices libraries for sforzando!

Death Piano for sforzando is sound design piano library of tortured piano samples.
Production Grand Compact for sforzando is a sampled Yamaha C7 grand piano.
Estate Grand for sforzando is a sampled Kawai GS-60 near 7' grand piano.
Concert Grand Compact for sforzando is a sampled Steinway D grand Piano.
Electric V for sforzando is a sampled Mark V electric piano from a famous tine electric piano maker.
The Halfling for sforzando is a hybrid upright piano/soundscape library.

300 Grand has been an labour of love and I am so pleased to be able to share it with you and other performers, producers, songwriters and composers.

Jason Chapman
Lead Designer - Production Voices

Support

Contact us by email: support@productionvoices.com

Credits

Concept, Editing, Sampling, Programming, UI: Jason Chapman   www.productionvoices.com
Graphic User Interface Elements: Kovdra Studio
Recording Engineer: Dajaun Martineau
Audio Editing: Kyle Ashbourne

System Requirements

Minimum System

Plogue sforzando 1.969 or greater
(or unofficially Aria Player)

Plogue sforzando is available for FREE here:
http://www.plogue.com/products/sforzando/

Multi-core Intel i3, i5, i7 or better
8 GB RAM
64 bit operating system
Mac OS X 10.7 and above or Windows 10
4 GB of hard drive space for compressed samples.

7200 rpm or better non-system hard drive

Note: 300 Grand Compact will not perform as expected on systems not meeting the minimum requirements.

Recommended System

16 GB RAM or more.
Solid State Drive - SSD for samples
Multi-core Intel i5 processor or better.
64 bit operating system and plugin host.

Sforzando is Apple M1 and Apple Silicon compatible.

300 Grand Compact and Sforzando work with all major DAWs that use AAX, VST and AU formats such as Cubase, Logic Pro, Pro Tools, Ableton Live and more.

Getting Started

Installing 300 Grand Compact for sforzando

1. Download and install sforzando: http://www.plogue.com/products/sforzando/

2. Download 300 Grand Compact for sforzando and unzip.

3. Place the "300 Grand Compact for sforzando" folder on the drive that you wish to run it from. Any fast hard drive will work. If available, we recommend an SSD solid state drive for best performance.

4. Launch sforzando.

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5. Drag the "300 Grand Compact.bank.xml" file from within the "300 Grand Compact for sforzando" folder onto the launched sforzando player. This registers your purchase with sforzando and puts the presets into sforzando.
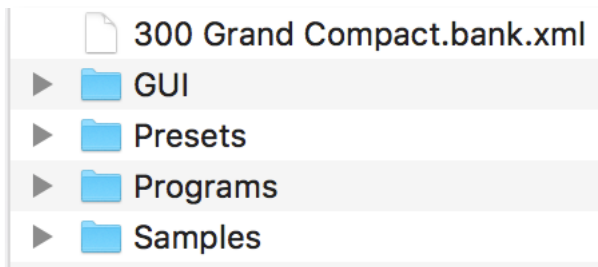
Loading 300 Grand Compact Presets

Once 300 Grand Compact for sforzando is installed, the presets will show up under the **SNAPSHOT** menu.
Suggested Starting Preset: *300 Grand - Performance Grand.*

A Little Room – Balanced piano sound with some room reverb.
At the Piano Hall – Balanced piano sound with hall reverb.
Big Ballad – Best for slower pop music, this preset includes reverb and Tape Saturation for a bold sound.
Distanced Hall 1 – Less wide piano with hall reverb while retaining dynamics.
Distanced Hall 2 – Variation on Distanced Hall 1 - Lowered Touch Response for more authentic distance.
Dream Sequence – Film score setting with lots of long dreamy reverb.
Honky Tonk Lighter Side – Detuned piano for that classic honky tonk piano sound.
Producer Wide Dry – Production ready preset with Tape Saturation and no reverb.
Producer Wide Slight Chorus – Production ready preset with Tape Saturation and warmth from slight chorus.
Producer Wide Wet – Production ready preset with Tape Saturation and reverb.
**Saloon** – Detuned piano emulating a saloon piano.

Warble Piano – Piano FX - detuned piano.

Note: Presets are subject to change as 300 Grand Compact is expanded and enhanced.

Laptop touring musicians will find that 300 Grand Compact works great on stage and loads quickly.

Recommended Plogue sforzando Settings Before Loading

Note: These recommended settings are only needed for loading from the **INSTRUMENT** menu. If you load from the **SNAPSHOT** menu, the settings are set automatically for you!
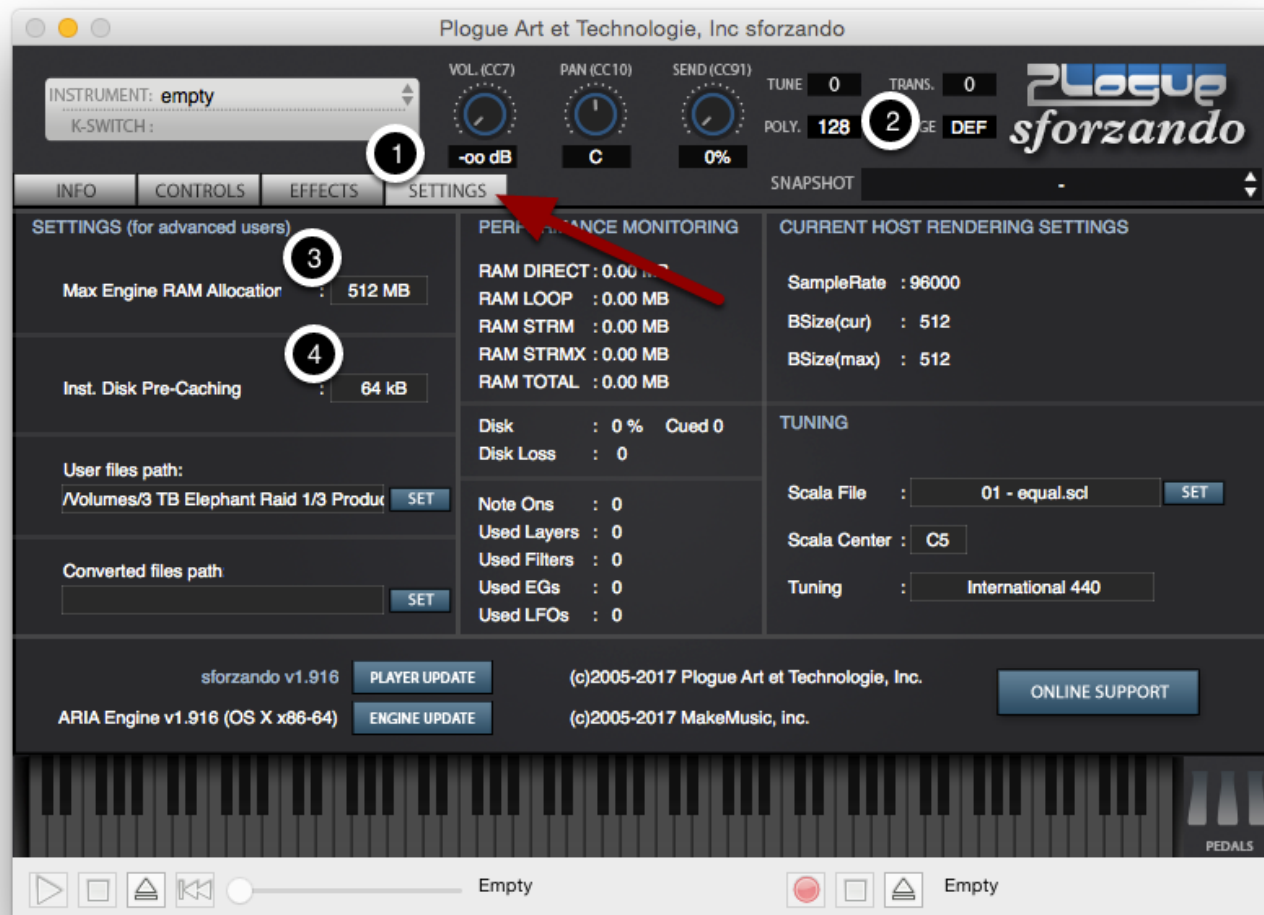
Before loading 300 Grand Compact, set the following recommended settings:

1. Select the "SETTINGS" tab.
2. Set POLY. To 128.
3. Set "Max Engine RAM Allocatior" to 1 GB. This can be set lower on systems that have less RAM, but performance will be affected.
4. Set "Inst. Disk Pre-Caching" to 64 kB. This will load 64 kB of every sample into RAM as a buffer before streaming the samples from the hard drive.

Note: 300 Grand Compact is quite "compact" and will run on fast systems with the default sforzando settings. The above settings are for optimized performance.

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300 Grand Compact Controls

Main Volume:

100 (MAX) is the ideal Main Volume slider position with the exception of using Tape Saturation, which may require the Main Volume to be reduced. The slider moved to MAX at the right represents unity gain or 0.0 dB. This is where the fader is neither adding nor subtracting volume from the sound.
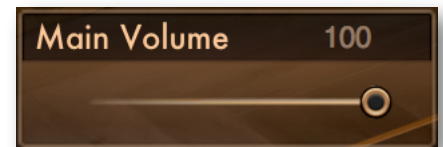
Main volume can also be controlled with MIDI CC#22.

Sympathetic Resonance on/off and volume:

Symp Res.
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Sympathetic Resonance is the harmonic ringing of a held note caused by the strike of another note that is within the harmonic series of the held note that naturally occurs on a piano. Wow, that last statement is technically right, but not very helpful if you don't know what it is! For example, if you play and hold C2, the C below middle-C and then strike and release middle-C, that note strike will cause C2, the held note, to vibrate at the frequency of C3! When C2 is released, the sympathetic resonance will stop.

300 Grand Compact uses samples to emulate sympathetic resonance.

Sympathetic Resonance can increase the voice count and polyphony which results in higher disk load and increased CPU load. To save resources, 300 Grand Compact 1.0 only has octaves and 5ths above a note up to the 3rd octave as sympathetic resonances.

Sympathetic Resonance can add warmth and realism to 300 Grand Compact, but at the expense of both increased cpu and voice count! For solo piano work it is suggested to turn it on, but perhaps advisable to turn it off in busy arrangements where the resonance is likely to be masked (not heard).

Width

Width: Width controls the stereo balance. Full left is mono where both left and right channels sum to the center. Full right keeps the left and right channels separated for true stereo sound.

Reducing the Width can help the piano samples sound more distant and more realistic when reverb is applied. Full Width gives a more intimate at the piano sound. In some sound recordings with other instruments, a wide piano sound may not blend well in the mix. Reducing the width can help "sit" the piano in the mix.

Tape Saturation: Tape Saturation results in a compressed louder sound that can morph quickly into distortion. Tape Saturation is actually just simulated drive that causes harmonic distortion (the good kind). Keep levels low for best results.

Tape Saturation
0
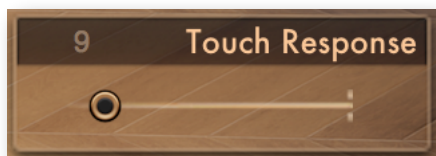
Touch Response
9

Touch Response is the dynamic range determined by velocity. Touch Response determines how 300 Grand Compact adjusts the sample volumes to incoming velocity. Set to 0, 300 Grand Compact will respond exactly like it was sampled. (This is the opposite of Concert Grand Compact and Production Grand Compact as the samples have not been normalized for 300 Grand Compact.) Some users may find this too dynamic. A setting of 9 seem to be a nice sweat spot, but experiment for best results.

Mechanical Noises:

Key Noise: Key Noise controls the volume of the keyboard action sound as a key is released (The hammer returning). This key noise has no musical tone; it is just the key mechanism noise. PU controls the on/off and key noise volume for when the sustain pedal is up (off). PD controls the on/off and key noise volume for when the sustain

Key Noise
PU   PD

pedal is down (on). With PD on, the key noise is only triggered when the sustain pedal is down and a key is released, for example. This is a subtle sound, but it adds that extra touch of realism. You might be asking: "Why have separate controls for pedal up and pedal down?" This gives added control to the mechanism noise and can help based on playing style.

In a busy production or song, the Key Noise may not be heard. Turn off Key Noise to save polyphony.

Pedal Noise: Sustain damper pedal mechanical noise.

The pedal noise controls the volume of the sound of the foot depressing and releasing the sustain pedal. Here the dampers activate the strings in the piano and then stop the strings with a subtle thud sound when released.

There is an on/off button for the pedal noise. Some playing situations may require the pedal noises to be turned off or down. Using lots of reverb usually requires pedal noise and other mechanical sounds to be reduced or turned off.

Most workstation keyboards do not have pedal noise, but it is one of the easiest ways to add realism to your sampled piano.

The Mod-Wheel controls the pedal noises as follows:

When the modulation wheel (MIDI CC#1) is less than 63, the pedal noises cycle through the louder more aggressive variations of both pedal up and pedal down noises.

When the mod wheel has a value of 64 or greater, the softer pedal noises are triggered. These are the modest casual samples from "regular" pedal usage.

Pedal Noise Alt On/Off: This simply is the same as turning the modulation wheel to 127 to choose the softer pedal noises. With Alt. Off, the louder pedal noises will sound when the damper is depressed.

Pedal Noise Tips:

Busy mixes, such as songs with many instruments, may mask the pedal noise. In this case, Pedal Noise can be turned off to save voice count.

On solo or sparse arrangements, consider increasing the pedal noise to give an intimate sound.

Release: Key Release is the volume control for samples triggered when a key is released or the pedal is let up when a note was sustaining from the pedal, but no key is held. This is the sound of the dampers stopping the piano string from ringing.

The key releases give a realistic sound to the stopping of a note that just isn't achievable with ADSR release envelopes. Users can vary how loud they like the key release samples. The longer you sustain a note in isolation, the more likely it is that you will hear the key release when a key is released.

All of the mechanical noises can add up to create an authentic piano sound that will surpass (and in many cases, blow away) most current keyboard workstations or digital pianos.

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Pre-Attack: Pre-Attack is the mechanical key THUMP mechanism noise from striking the key (playing the key) from the moment the finger touches the piano to the moment the piano string begins to sound. This can add an ultra-real and intimate sound to the instrument. The drawback is... LATENCY. Latency is the time difference between when a note is triggered and when a note sounds.

Imagine for the moment the softest note possible on the piano. The speed at which you strike the key would have to be so precise and slow. While editing the piano samples, we noticed that the lowest velocities had around 120 ms or longer of mechanical noise and the fastest loud velocities were from 6 – 18 ms long. This means that turning on the Pre-Attack without LIVE on will cause a latency of at the very least 6 ms to the piano. This makes perfect sense, as a lower velocity would have the hammer mechanism travel slower. The problem with modern keyboard controllers is that samples are triggered at the bottom of the key bed, not the moment a player touches a key like on a piano. So, the latency is unavoidable until a better MIDI keyboard controller is invented.

The **LIVE button** plays the pre-attack sound at the same time as the sample strike to avoid latency. This is a balance between authenticity and playability.

300 Grand Compact Pre-Attack defaults with Live on, even if Pre-Attack is turn off.

With the LIVE button off, the piano will play the pre-attack before the sustain (as on a real piano) and delay the sustain sample until after the pre-attack. The timing of the delay is based on velocity, the speed at which a note is struck. Players will notice up to 100 ms delay on low velocities and less delay on higher velocities. This is true of a natural piano sound.

Pre-Attack Volume will naturally seem louder than the piano sample at lower velocities.

Pre-Attack Production Tip: Pre-Attack works best on solo piano or sequenced piano parts.

Pre-Attack is a natural part of the piano sound. Most sample libraries remove it or use an alternate start time to allow the mechanism noise to be bypassed by the user. We took a different approach with 300 Grand Compact. Pre-Attack plays a pair of samples one after another at sample accuracy from the original recording session. The sample pair is the seamless pre-attack and the piano sample. Every sample has a different Pre-Attack time. This method of recreating the mechanism noise was the best approach to allow us to maintain different Pre- Attacks for different notes and velocities. When Pre-Attack is turned off, only the piano samples are triggered.

Performance Optimizations

Disk Issues
If you have a slow hard drive but plenty of RAM, set the Max RAM to 2 GB and set the Inst. Disk Pre-Caching as high as possible on the Settings tab of sforzando. This will load the entire 300 Grand Compact into RAM bypassing the slow hard drive. With any luck, 300 Grand Compact will no longer have disk issues and will likely be able to play many notes at once.

Memory Saving

If memory is scarce but your running a solid state drive (SSD) and a fast CPU, try leaving the default sforzando settings, or reduce the Inst Disk Pre-Caching and the Max Engine RAM Allocator. 300 Grand Compact can run with under 200 MB of RAM with a fast drive for streaming.

Miscellaneous

Release Versions

300 Grand Compact Version 1.0 – Initial Release

The sampling session for 300 Grand Compact consisted of 24 bit 96k samples that were converted to 44.1k using the GoodHertz conversion. 300 Grand Compact uses both 16 bit samples for sustained notes and 24 bit samples for mechanical and pedal samples.

MIDI Control Numbers

300 Grand Compact controls have MIDI Control Numbers assigned to them as shown below. These are preset and cannot be changed. These controls can all be used live on a controller or sequenced in a DAW. Note that Touch Response, Saturation and Width are out of the range of conventional MIDI, but still can be automated in a DAW.

MIDI CC#22=Main Volume

MIDI CC#24=Sympathetic Resonance Vol

MIDI CC#34=Sympathetic Resonance On/Off

MIDI CC#40=Ped Noise Vol

MIDI CC#41=Key Up PD Vol

MIDI CC#42=Release Vol

MIDI CC#43=Key Up PU Vol

MIDI CC#50=Ped Noise On/Off

MIDI CC#51=Key Up PD On/Off

MIDI CC#52=Release on/off

MIDI CC#53=Key Up PU On/Off

MIDI CC#59=Touch Response

MIDI CC#300=Saturation

MIDI CC#301=Width

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300 Grand Compact Strengths

300 Grand Compact loads fast, uses very little memory and contains the same Outside microphone samples as 300 Grand LE Kontakt version. It has a nice balanced sound suitable for many playing styles. Sampled from a Yamaha CFX piano, the tone is balanced without bright overtones like the Yamaha C7.

300 Grand Compact Known Issues

The piano is not perfect from top to bottom. No attempt was made to "correct" any resonance that was naturally present in the recording. If a note slightly buzzed or has an overtone the rings differently than the neighbouring notes, we left it in on purpose.

EULA - End User License Agreement Overview

300 Grand Compact is licensed, not sold, to the end user. Users may have up to two installs.

300 Grand Compact is a software product intended for the end user's use in the creation of musical works. It is not intended nor licensed to create additional software products such as sample or phrase libraries. Users are free to use this product in the creation of trailer music, music libraries and music recordings.

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The complete license agreement can be found here: http://www.productionvoices.com/terms-and-conditions/

Legal Notice

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*Specifications subject to change. Sample sizes are for reference only and may differ slightly depending on how drives are formatted.

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Contact

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