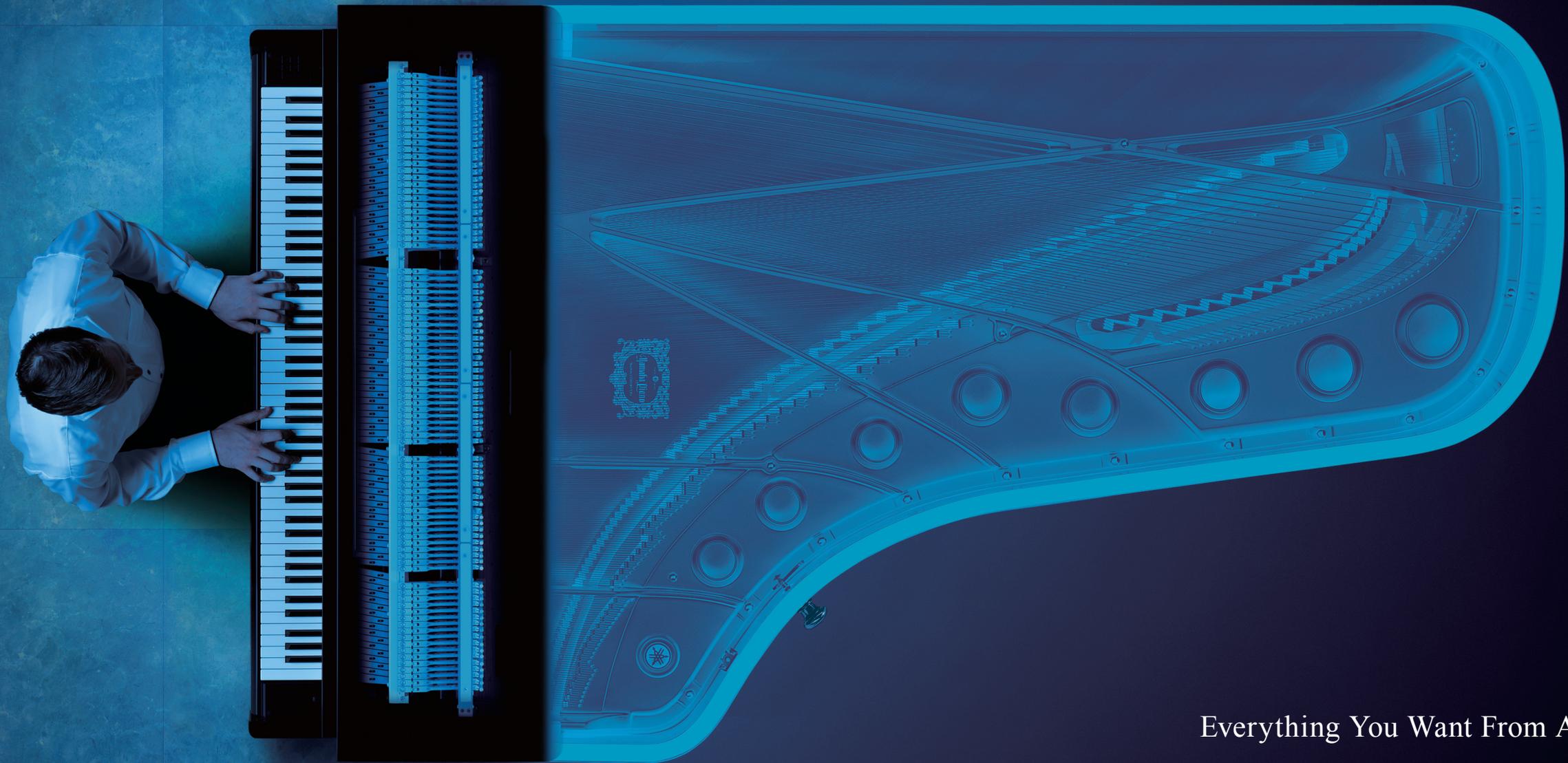


 **YAMAHA**

Yamaha Hybrid Piano
AVANTGRAND

N3X N2 N1 NU1X





Everything You Want From An Acoustic.
Everything You Need In A Digital.





N3X



N2



N1



NU1X

Hybrid pianos that don't settle for acoustic approximations, an AvantGrand equals a true acoustic experience.

A seamless unity of refined technologies and acoustic elements – modern, classic and unmistakably Yamaha.

The Ultimate AvantGrand

N3X

Innovative digital technologies meld seamlessly with traditional acoustic craft to create a dynamic piano experience that offers the best of both worlds.

The AvantGrand N3X exceeds all expectations by offering the touch, tone and beauty demanded by even the most discriminating pianists.



Contoured Elegance

N2

With a design inspired by the curved lines of a grand piano, the N2 features the same action as our renowned acoustic grands. Housed in a modern and elegant form, the N2 offers an authentic touch and resonance that will enhance any performance.



Inspired Simplicity

N1

Featuring the authentic sound and action that is consistent throughout the AvantGrand series, the N1 offers the allure of a real grand piano experience in a simple, stylish package.



Upright Style, Grand Spirit

NU1X

Traditional sensibility meets modern practicality in this sleek and compact AvantGrand that transcends convention and blurs the line between acoustic and digital. The NU1X features the renowned Yamaha upright feel with captivating grand piano sonics.



NU1X

NU1XPBW



An authentic grand piano action with wooden keys

To express yourself musically, you need to form a physical bond with your instrument. In the case of the AvantGrand series, it starts with the keys. Real wooden keys with a comfortable touch, thanks to Ivorite® keytops* that look and feel just like natural ivory. The AvantGrand then utilizes a real acoustic grand piano action that is inherited from our esteemed concert grand pianos. Beneath your fingers you sense the same precise weight and responsiveness, the same scope for expression and refinement.

To capture every nuance of your performance, the AvantGrand employs a non-contact optical sensor system that doesn't affect the feel or performance of the action in any way. Under each key is a continuous optical sensor that captures the speed and depth at which that key is depressed. An additional optical sensor affixed to each hammer shank measures the timing and strength of the hammer hitting the virtual strings. This information is instantly translated into a beautifully authentic reproduction of sound. The more you play, the more you find yourself becoming one with the piano.

Featured on the N3X, N2 and N1

* Ivorite®, which is used on Yamaha grand pianos, is available on the N3X and N2.



Two world-class grand pianos in one

When it comes to judging piano tone, much depends on personal taste. To help you achieve the tonal palette you desire, Yamaha offers the choice of two world-class grand pianos in one. Each with its own unique character to convey the emotion you want to express through a piece of music. At the touch of a button on the AvantGrand, you can opt for authentic sounds sampled either from a Yamaha CFX concert grand or from a Bösendorfer Imperial.

As our flagship grand piano, the majestic CFX boasts a wide palette of tonal colors, from sparkling high notes to powerful bass tones. The legendary Bösendorfer, meanwhile, is renowned for its sonorous and rich Viennese sound.

Either way, the lifelike sounds of the AvantGrand allow you to explore the outer reaches of your expressive imagination.

Featured on the N3X and NU1X



A revolution in acoustic piano sampling and sound reproduction

The AvantGrand series takes a unique approach to reproducing the sound of an acoustic grand piano. When capturing the original sounds from a specially selected full concert grand, Yamaha technicians took samples from four different positions across the soundboard: left, right, center, and rear. Compared to conventional left-and-right channel (stereo) recording, this yielded wonderfully rich and authentic results.

To make the most of this four-channel sampling process, AvantGrand pianos employ our Spatial Acoustic Speaker System — a four-point speaker configuration that allows AvantGrand pianos to deliver faithful three-dimensional recreations of the original instruments. For the N3X, speaker placement mirrors the four recording positions on the sampled piano. For the N1 and N2 models, the speaker locations are optimized to suit the different cabinet styles of those pianos.

Featured on the N3X, N2 and N1



Natural resonance created with innovative soundboard resonator technology

In addition to the four-channel Spatial Acoustic Speaker System, the AvantGrand features a flat-panel Soundboard Resonator located beneath the music rest and spanning the width of the instrument. This component allows for a more subtle reproduction of the buildup of sound that you feel when playing an acoustic grand piano. It works by using an oscillating transducer to transmit vibrations to the flat-panel soundboard, giving a realistic sound response that is especially evident in the upper key range.

Featured on the N3X



A fully immersive headphone experience

AvantGrand pianos are designed to deliver flawless room-filling sound. But there are times when you may want to keep your playing to yourself — when you're practicing at night, for example, or when people nearby are engaged in other activities. In such cases, headphones offer a private sanctuary where you have the freedom to play however and whenever you choose.

Thanks to Yamaha advanced binaural sampling* technology, the sound you hear through your headphones is remarkably lifelike. This technology uses piano samples recorded by specialized microphones that mimic the interaural characteristics of the human ear. This unique approach allows the AvantGrand to recreate the perceived acoustic sound only experienced when seated in front of a concert grand piano. The resulting sound is so natural, so enveloping, that you'll soon



forget you're even wearing headphones at all.

* Binaural sampling is available for the N3X and NU1X (CFX Grand Voice only).

Tactile Response System recreates the physical sensation of piano vibrations

When you play an acoustic piano, the entire instrument resonates. You feel it subconsciously, through your feet on the pedals and through your fingers on the keyboard. It's this subtle physical sensation that Yamaha Tactile Response System (TRS) works to recreate. This digital technology conveys the natural vibrations that emanate from a grand piano, unifying the emotional energy between you and the instrument. Even if you're wearing headphones, you can use TRS to enhance the realism of the playing experience.

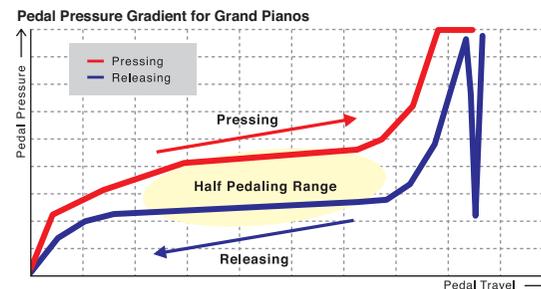
Featured on the N3X and N2

Replicating the subtle pedaling style of grand pianos

When you press down on a grand piano pedal, you notice subtly different stages — light to the touch at first, slightly firmer partway through the travel, and then lighter again as you push through. Skilled players take advantage of these pedal movements by using extremely delicate pedaling to achieve finely nuanced expression in their playing.

In developing the AvantGrand, we set out to reproduce as faithfully as possible the sensations of a grand piano's pedals. The resulting pedals give you the scope to play music how it was meant to be played, while also offering the responsiveness to play more impressionistic pieces that require a lot of half-pedaling.

Featured on the N3X



The superb natural feel of a real piano action

The NU1X represents the next evolution in hybrid piano technology melding the Yamaha pedigree of unparalleled piano craft with progressive digital innovation. Employing a real acoustic upright piano action that intuitively connects player and piano, the NU1X offers a gratifying dynamic experience. The result is an instrument that not only pays tribute to its acoustic counterpart but exceeds all expectations.

Featured on the NU1X



An elegant complement to any room

The elegant simplicity of the NU1X blends effortlessly into any setting, adding an air of distinction without being imposing. Inheriting the superb sound and playability of the AvantGrand series of pianos, the NU1X offers the warmth and natural presence of an acoustic instrument in a stylish, compact form.

Featured on the NU1X



Intelligent UX and integration

Behind its simple control panel, the NU1X hosts an abundance of connectivity options for maximum functionality and integration with external devices. It can be connected directly to computers and mobile devices via USB, sound and recording systems via audio cables, act as a Bluetooth receiver, and integrate with iOS apps via WiFi.

Featured on the NU1X



Top artists praise the AvantGrand

The AvantGrand is the next step in the evolution of piano

Francesco Tristano

How did you feel when you first sat down and played the AvantGrand?

The first thing I noticed was the richness of the overtones. I could see that the technology has really advanced in the past few years. I was curious about how the piano works in terms of the overtones, and what makes it seem so natural, so acoustic, and so organic. The sound comes from within. It's not a superficial sound — it's a very deep sound. The first time I actually played the AvantGrand, my immediate sensation was that I knew this touch — it was the piano I've been playing all my life. Over the years, I've always been struck by the quality of Yamaha pianos. So it was no surprise to me that Yamaha would make something so perfect.

Imagine you had an AvantGrand. Where would you like to play it and how would you like to use it?

I could find lots of ways to use it. I'd definitely use it as a practice instrument, because it's really incredible. But I don't want to say it's just a substitute, because it's really much more than that.

I'd put it in the living room so that family and guests could play it, and so we could have live music in the house.

At live shows, when you put a piano through a P.A. system to be amplified, there's a lot of feedback. But this instrument would be

ideal in situations where you can't control the environment — for example, in large halls or open-air spaces.

I'd also like to try recording with it in a studio. Normally, when you record with an acoustic piano and you want to get the overall sound of the instrument, you have to set up microphones both near and far from the piano. But you don't need to do that with this piano, since you have a direct line out.

Lastly, what kind of potential do you feel the AvantGrand has?

This instrument would be great for my creativity. It would encourage me to find new harmonies, new sounds, and new rhythms, because it's a piano that just makes me want to play it. A wonderful thing about pianos is that they have continued to evolve over the centuries.

I'm fascinated with all things piano-related, and this instrument is another step in the evolution of the piano. The AvantGrand reconciles both the acoustic world and the digital world — or the sampled piano world — in a very convincing and refreshing way. A new form of piano has come to us from the future. Twenty years ago, this would have been the talk of science fiction. But the future is here now. It's got a futuristic edge to it, which I like.



The AvantGrand N3X is a musical piano for a new musical domain

Takeshi Kobayashi

On March 11, seven years after the day of the Great East Japan Earthquake, I was afforded the opportunity to play this piano at an event held at Sendai PIT. It was the first time I had performed with just a piano and vocals. I played “Swallowtail Butterfly” by YEN TOWN BAND, and Bank Band’s “to U,” and when I think back on it I have memories of the feeling and touch of playing a wonderful acoustic piano. The fact that it doesn't need tuning despite these

acoustic-like properties makes the AvantGrand N3X simply amazing, and the resonance from the piano's internal speakers when played in rehearsals without the PA was impressive. I think that in combining digital elements with an evolved analog feeling, the AvantGrand N3X is a musical piano for a new musical domain.



Specifications		N3X	N2	N1	NU1X
Keyboard	Number of Keys	88			
	Type	Ivorite®		Acrylic resin	
	Action	Specialized Grand Piano Action for AvantGrand			Specialized Upright Piano Action for NU1X
Pedal	Number of Pedals	3 (Damper with half-pedal effect, Sostenuto and Soft)			
	Type	Specialized Grand Piano Pedal for AvantGrand	—		GP Responsive Damper Pedal
Tactile Response System (TRS)		Yes		—	
Voice	Tone Generation	Spatial Acoustic Sampling			Yamaha CFX, Bösendorfer Imperial Sampling
	Piano Sound				Yes (CFX Grand Voice only)
	Binaural Sampling	Yes (CFX Grand Voice only)	—		Yes (CFX Grand Voice only)
	Piano Effect VRM	Yes	—		Yes
	Polyphony	256 (Max.)			
Number of Voices	Grand Piano×5 + E.Piano×3 + Harpsichord×2	Grand Piano×2 + E. Piano×2 + Harpsichord×1		15	
Sound	Spatial Acoustic Speaker System	Yes			—
	Amplifiers	25 W×4, 35 W×5, 45 W×4, 80 W×2	22 W×10, 80 W×2	25 W×1, 30 W×5	(45 W+45 W)×2
	Speakers	(16 cm+13 cm+2.5 cm)×4 (6-5/16"+5-1/8"+1")×4	(13 cm+2.5 cm)×3, (8 cm+2.5 cm), 16 cm×2 (5-1/8"+1")×3, (3-5/32"+1"), 6-5/16"×2	8 cm×3, 13 cm×2, 16 cm×1 3-5/32"×3, 5-1/8"×2, 6-5/16"×1	(16 cm+1.9 cm)×2 (6-5/16"+3/4")×2
	Soundboard Resonator	Yes	—		
Function	Overall Controls				
	Reverb				Yes
	Metronome				Yes
	Transpose				Yes
	Tuning				Yes
Scale				7 types	
Song (MIDI)	Preset songs	10 voice demo songs + 10 preset songs	5 voice demo songs + 10 preset songs		15 Voice Demo Songs + 50 Classics
	Recording	Number of Songs	10		1
		Number of Tracks			1
USB Audio Recorder	Playback	WAV	—		WAV
	Recording	WAV	—		WAV
Connectivity	Headphones	PHONES×2			Standard stereo phone jack (×2)
	MIDI	IN/OUT			
	AUX IN	Stereo Mini	[L/L+R][R] (Standard stereo phone jack, unbalanced)		Stereo Mini
	AUX OUT	[L/L+R][R] (Standard stereo phone jack, unbalanced)			[L/L+R] [R] (Standard stereo phone jack)
	OUTPUT	[L][R] (XLR jack)	—		
	USB TO DEVICE	Yes			
	USB TO HOST	Yes	—		Yes
Color/Finish	Polished Ebony				NU1X:Polished Ebony NU1XPBW:Polished Brilliant White
Dimensions: Width×Depth×Height	1,481 mm×1,195 mm×1,014 mm (58-5/16"×47-1/16"×39-15/16") Lid up: 1,734 mm (68-1/4")	1,471 mm×531 mm×1,009 mm (57-15/16"×20-7/8"×39-3/4") With music rest: 1,181 mm (46-1/2")	1,465 mm×618 mm×995 mm (57-11/16"×24-5/16"×39-3/16") With music rest: 1,170 mm (46-1/16")	1,501 mm×463 mm×1,024 mm (59-1/8"×18-1/4"×40-5/16")	
Weight	199 kg (438 lb. 12 oz.)	142 kg (313 lb. 1 oz.)	124 kg (273 lb. 6 oz.)	111 kg (244 lb. 11 oz.)	
Music Rest	Yes (Angle adjustable 35,70 degrees)		Yes		

-AvantGrand series pianos utilize the same piano action as an acoustic piano. Consequently, changes in the environment or the conditions in which these instruments are used may necessitate adjustment or maintenance.

-Specifications are subject to change without notice. The cabinet colors and finishes in this brochure may appear different than those on the actual products.

-Depending on the region, a piano bench may not be supplied or may differ from that shown here.

Special thanks to KOKOROISHI.



SHARING PASSION & PERFORMANCE

YAMAHA CORPORATION
P.O.Box 1, Hamamatsu Japan

Printed in Japan



P 1 0 0 2 8 5 1 6

This document is printed on chlorine free (ECF) paper.

