

# NOVUS

HYBRID PIANO





## PREMIUM QUALITY HYBRID INSTRUMENTS

Designed to answer the calls of avid pianists wishing they could play a grand or upright piano without worrying about the time of day or their living environment, the Novus NV10S and NV5S are premium quality hybrid instruments that deliver the true acoustic piano playing experience.

Adopting modern, innovative designs that embrace the latest digital technologies, the stunning ebony polish Novus cabinets incorporate full acoustic piano keyboard actions complete with a real damper mechanism.

These unique hybrid instruments aim to provide the most compact grand and upright piano alternatives possible, satisfying the rigorous demands and lifestyle needs of today's professional pianists.





# NOVUS NV10s

GRAND PIANO ACTION



# The touch of a grand piano

## MILLENNIUM III GRAND PIANO ACTION

When a piano key is pressed, a mechanism referred to as the "action" triggers a hammer, which strikes the strings to produce a sound. This is the essence of Kawai's piano technology, which has continued to advance and evolve, ever since the company's establishment in 1927.

The NV10S is equipped with the same Millennium III action mechanism as that found in Kawai's finest professional grand pianos. This highly-coveted action incorporates components produced using ABS Carbon, an extremely sturdy and rigid composite material that allows these action parts to be stronger, lighter, and faster than their conventional wooden counterparts.

The hammers that strike the strings are another core component of an acoustic piano. Attached to each of the 88 keys, the size of the hammers gradually decreases from the bass to the treble end of the keyboard. Moreover, due to their size, each individual hammer has a different weight – and this difference is an integral part of what influences the piano's touch.

For this reason, the NV10S is equipped with 88 individually grade-weighted hammers, reproducing the genuine feeling of playing an acoustic grand piano. These precision-engineered hammers are also crafted from ABS resin, ensuring exceptional structural stability and optimum keyboard touch-response.

The precise movements of each hammer are measured using high-resolution optical sensors, providing greater accuracy than conventional key-based sensor systems. This more advanced approach closely reproduces the mechanical flow of an acoustic piano, and allows rapid pianissimo passages with mordents or trills to be performed with greater fluency.







# The feel of a grand piano

#### GRAND PIANO DAMPER MECHANISM

The Novus NV10S' beautiful chrome plated pedals and exposed pedal rods are sourced from the same GX series instruments as the premium Millennium III keyboard action. Moreover, in addition to featuring a full grand piano action, the Novus NV10S is the first hybrid instrument to also incorporate a real grand piano damper mechanism.

There are no metal strings inside the Novus to require physical damping, as the instrument's sound is produced digitally. However, in order to reproduce every aspect of playing a grand piano, the NV10S retains the damper mechanism behind the keyboard action, with graded weights attached to each damper lever replicating the load of traditional wood and felt parts, as the keys and pedal are pressed.

This innovation allows pianists to not only hear how the damper pedal affects the Novus' generated sound, but also feel the various mechanical interactions through their hands and feet.

Such attention to detail is unprecedented in a digital instrument, and further reinforces the NV10S' objective of delivering a true grand piano playing experience that is indistinguishable from the real thing.



# The look of a grand piano

#### STRIKING, PROFESSIONAL APPEARANCE

Visual stimulation can have a tremendous impact on musical expression. The sense of exhilaration that one feels when sitting down at an acoustic grand piano cannot be understated, and is one of the essential ingredients in creating a memorable and inspiring playing experience for the pianist.



The NV10S cabinet was designed taking the player's perspective into consideration, giving the instrument a sense of depth when seated at the instrument, along with the elegant curved edges and exquisite details around the keyboard.

Its grand piano-like music rest is broad enough to accommodate the most ambitious of musical works, with simulated leather lining the base. The viewing angle can be easily adjusted to suit the performer's height and posture, while a special 'composer desk' position provides optimum comfort and productivity when annotating or transcribing scores.









# NOVUS NV5s

UPRIGHT PIANO ACTION



# The touch of an upright piano

## MILLENNIUM III UPRIGHT PIANO ACTION

Kawai's 'K' series professional upright pianos have received numerous industry awards, and are widely regarded by academics and institutions as some of the finest instruments in their class.

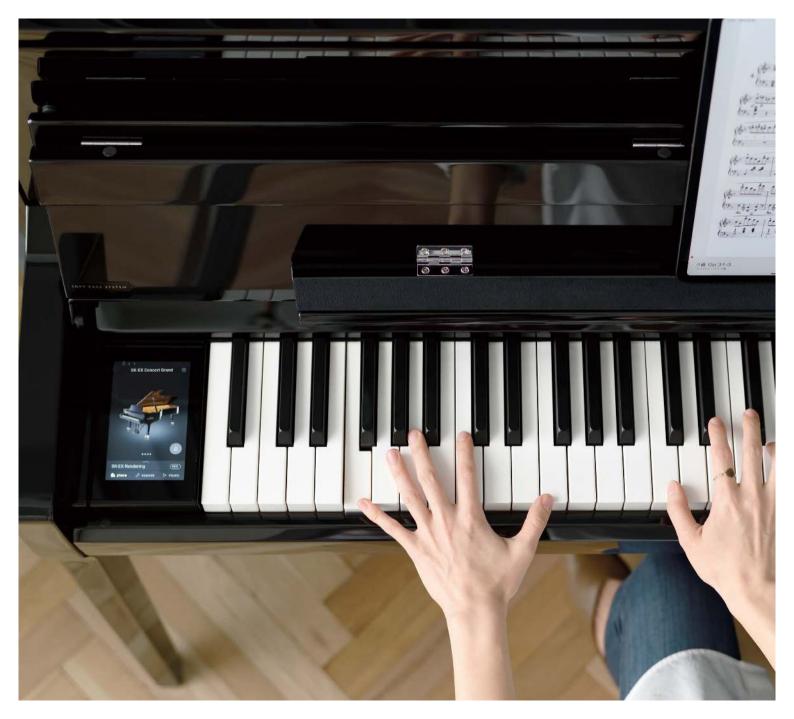
The Novus NV5S utilises the same Millennium III upright piano action mechanism as that found in the 'K' series instruments, including the precision engineered ABS Carbon components that are stronger, lighter, and faster than wooden parts. Moreover, ABS Carbon parts are also impervious to environmental changes in temperature and humidity, ensuring outstanding action performance for many, many years.

As with its larger sibling, there are no metal strings inside the NV5S for the action's hammers to physically strike when the keys are played, therefore their precise movements are also captured using high-resolution optical sensors mounted inside the action.

Another important characteristic of Kawai's premium acoustic instruments that is inherited by the latest Novus hybrid models is the pioneering use of extended key sticks. Longer keys result in lighter movement and easier key control, because the key can be played with a larger keystroke, even towards the rear of the playing surface. This enhancement affords pianists a greater range of expression during performance.

In addition, Novus keys are cut from the same luxurious solid spruce as their acoustic piano counterparts. This light and resilient solid wood contributes to the smooth action feel, and is carefully seasoned to ensure enhanced durability against changes in humidity.









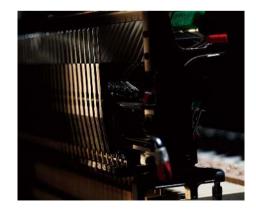
# The feel of an upright piano

#### UNDERSTANDING THE DAMPER MECHANISM

The dampers of an acoustic piano consist of soft felt pads that rest directly over the instrument's metal strings, muting their vibration. As each piano key is pressed and the string is struck, the corresponding damper lifts away from the string, allowing it to vibrate freely, and for the note to sing.

While the keyboard action activates dampers individually, the damper pedal is used to lift all of the piano's dampers simultaneously. This allows all of the instrument's strings to vibrate and resonate in sympathy, creating a wonderfully rich sound and sustaining notes after their respective keys are released. The damper mechanism therefore plays a pivotal role in influencing the overall sound of a piano. However, the process of moving the dampers also has a subtle but noticeable effect on key touch, with the weight of the action gently easing when the damper pedal is depressed.

This natural interaction between keyboard and pedals is a fundamental characteristic of every acoustic piano, and one that requires the pianist's patience and skill to master. Novus instruments strive to reproduce every aspect of the acoustic piano playing experience, therefore both the NV10S and NV5S incorporate the important damper mechanism as an integral part of the keyboard action.



# The look of an upright piano

#### PREMIUM FINISH. ULTRA-SLIM FOOTPRINT

The Novus NV5S' stunning ebony polish cabinet is crafted in the same piano production facility as Kawai's 'K' series upright instruments, ensuring exceptional build quality and an immaculate mirror-like finish. Its exterior appearance is undoubtedly inspired by classic piano design, thanks in part to the handsome fallboard and wide music rest, providing a sense of stability and reassurance when sitting at the instrument.



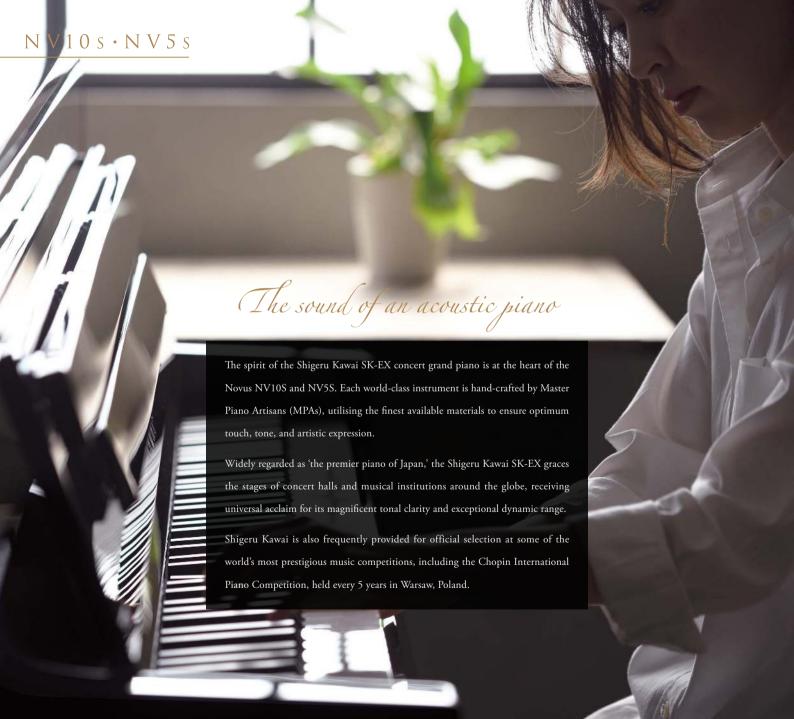
Yet, despite housing an acoustic piano keyboard action and damper mechanism, the NV5S is a remarkably compact instrument, occupying a depth of just 46 cm – far smaller than a conventional upright.

This slim profile allows pianists to enjoy an authentic, acoustic piano playing experience, in confined spaces previously limited to a standard digital piano.

The NV5S' topboard speaker cover features an original Kvadrat material, customised to meet Kawai's specifications, with a woven mesh composition optimised for musical clarity and tonal projection. Its soft, dark-grey yarn with pearl-like highlights, contrasts with the lustrous sheen of the NV5S' ebony polish cabinet, elevating this musical instrument to the level of a piece of fine furniture, destined to become the centrepiece of any room it occupies.









## SK-EX RENDERING MULTI-CHANNEL SOUND ENGINE

In order to reproduce the stunning tonal qualities of the Shigeru Kawai concert grand piano digitally, Novus instruments incorporate Kawai's latest SK-EX Rendering technology. This advanced piano sound engine combines the well-established process of sampling with the modern approach of physical modelling, to produce a piano sound that is both rich in natural acoustic character, and dynamically responsive to the player.



## ADVANCED DELIVERY CUSTOM SPEAKER DESIGNS

The NV10S' high-fidelity sound is delivered through a powerful 7-speaker output system, which combines a large 20 cm woofer enclosed within the instrument's base, with four premium quality top facing mid-range drivers, and two tweeters placed behind the upper board. The result is a remarkably authentic playing experience that immerses the performer in a grand piano-like three dimensional sound field.



## ONKYO TECHNOLOGY PREMIUM AUDIO

Developed in collaboration with Onkyo, one of Japan's leading premium audio equipment manufacturers, the NV10S and NV5S feature specialist filtering and amplification components designed for high-resolution sound reproduction. These technologies improve tonal clarity throughout the dynamic range, while helping to preserve the unique harmonic characteristics of the Shigeru Kawai concert grand piano.



## ACOUSTIC AMBIENCE TWINDRIVE SOUNDBOARD SPEAKER

By contrast, the NV5S' custom speaker system takes full advantage of the instrument's upright piano cabinet design, pairing four premium quality speakers and two front-facing tweeters with Kawai's exclusive TwinDrive soundboard technology. This combination delivers an exceptionally rich, yet warm, organic sound that faithfully reproduces the tonal ambience of an acoustic upright piano.

# The features of a digital piano



#### SUPERB HEADPHONE SOUND

The Novus pianos feature an audiophile-grade headphone amplifier that delivers piano sounds with richness and clarity. In addition, Spatial Headphone Sound (SHS) technology enhances the depth and realism of the instruments' sound, while also helping to reduce auditory fatigue when using earphones or headphones for extended periods of time.



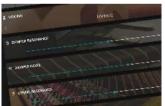
#### BLUETOOTH CONNECTIVITY

In addition to USB and MIDI ports, the NV10S and NV5S also feature integrated Bluetooth® technologies that allow the instruments to communicate with smart devices wirelessly. Once paired with a phone or tablet, Novus owners can enjoy a wide variety of music-related apps, or stream audio through the instruments' premium speaker systems.



#### LCD TOUCHSCREEN DISPLAY

The NV10S and NV5S' various features are primarily controlled through a touchscreen LCD, which is discretely embedded within the instruments' left cheekblock. This high resolution touchscreen allows sounds and settings to be adjusted from an attractive user interface simply by tapping or swiping the display with a finger.





### MODERN APP SUPPORT

Leveraging their built-in Bluetooth features, Novus instruments also support Kawai's latest generation apps for iOS and Android devices. The PianoRemote app provides an alternative way to change sounds and adjust settings, while the PiaBookPlayer app displays notated scores for over 370 classical pieces, complete with hands-free page turning.





N V 1 0 s



## N V 5 s

		Acoustic specifications		
Keyboard	Туре	Millennium III Hybrid, grand piano keyboard action	Millennium III Hybrid, upright piano keyboard action	
action	Keyboard	Extended length spruce keys, acrylic/phenol key surfaces		
	Hammers	ABS grade-weighted hammers		
	ABS Carbon parts	Yes		
	Sensing system	Integrated Hammer Sensing System (IHSS), contact-less optical sensors		
Pedals	Туре	Grand piano pedals	Upright piano pedals	
	Damper	Grand piano damper mechanism (half-pedal support)	Upright piano damper mechanism (half-pedal support)	
	Soft/Sostenuto	Grand Feel pedal system (soft half-pedal support)	Grand Feel pedal system	
Cabinet	Finish	Ebony Polish		
	Keyboard cover	Grand piano type, Soft Fall fallboard (removable)	Upright piano type, Soft Fall fallboard	
	Music rest	Grand piano type, adjustable angle (6 positions)	Upright piano type	
	Dimensions	148 (W) x 65 (D) x 99.5 (H) cm	149.5 (W) x 46.5 (D) x 110 (H) cm	
		58 ¼" (W) x 25 ½" (D) x 39 ¼" (H)	59" (W) x 18 <sup>1</sup> / <sub>3</sub> " (D) x 43 <sup>1</sup> / <sub>4</sub> " (H)	
	Weight	132 kg / 291 lbs.	113 kg / 249 lbs.	

		Digital specifications		
Sound	Sound engine	SK-EX Rendering: 88-key multi-channel piano sampling, 88-key resonance modelling		
		Harmonic Imaging XL: 88-key piano sampling, Acoustic Rendering resonance		
	Piano source	Shigeru Kawai SK-EX, Shigeru Kawai SK-5, Kawai EX		
	No. of sounds	SK-EX Rendering: 10 rendering characters   Harmonic Imaging XL: 90 voices		
	Polyphony	max. 256 notes (depending on selected sound)		
	Virtual Technician	10 presets, 21 adjustable parameters		
	Reverb & Effects	Reverb: 6 types, Effects: 24 types, Ambience: 10 types (SK-EX Rendering only)		
Delivery	Onkyo technology	1-bit processing, Dual DAC, DIDRC filter, Premium Power amps, Premium Headphone amp		
	Output power	135 W (45 W x 3)		
	Speaker system	10 cm x 4 (top speakers), 1.4 cm x 2 (dome tweeters),	8 cm x 4 (top speakers), 2 cm x 2 (dome tweeters),	
		20 cm x 1 (woofer)	TwinDrive Soundboard Speaker System	
Features	Display	5" colour LCD touchscreen		
	Recorder	10 x internal song recorder, MP3/WAV record/playback (USB memory), Metronome		
	App support	PianoRemote (iOS/Android), PiaBookPlayer (iOS/Android)		
Connectivity	Headphones	1 x ¼", 1 x ½" Stereo jacks		
	Audio	LINE IN (1/8" STEREO), LINE IN Level, LINE OUT (1/4" L/MONO, R)	LINE IN (1/8" STEREO), LINE OUT (1/8" STEREO)	
	MIDI/USB	MIDI (IN/OUT), USB to Host, USB to Device		
	Bluetooth*	Bluetooth MIDI, Bluetooth Audio		
	Power	AC IN (60 W power consumption)		



