Berlin  Hamburg  Vienna

Three Legendary Pianos in One
Digital Acoustic Hybrid Technologies

Since the development of the first digital piano, instrument makers have strived to create an instrument that could provide the experience of playing an acoustic grand piano. For years, Casio has refined its technologies with this goal in mind. Casio derives a significant advantage in reaching this goal since it does not manufacture acoustic pianos. This position has allowed Casio to research the finest acoustic pianos from around the world and develop groundbreaking music technology that recreates the piano experience. The result is a revolutionary new line of digital pianos.

These digital pianos incorporate tones developed from three world-famous grand pianos, a keyboard system employing the same materials and dynamic mechanisms as grand pianos, and a sound system that delivers the rich, natural tone quality and sound field of an acoustic grand piano. This convergence of acoustic and digital technologies is in Casio’s CELVIANO Grand Hybrid.
Three Legendary Pianos
Their individual character and tone faithfully recreated

CELVIANO Grand Hybrid reproduces even subtle nuances of the world’s most respected pianos. Three pianos that originate in Berlin, Hamburg and Vienna were chosen for this project. Casio has painstakingly researched and analyzed the unique characteristics of each piano. CELVIANO Grand Hybrid delivers brilliant sound of these pianos reproduced with Casio’s advanced technology, it will provide the experience of owning three of the finest pianos on earth.

**Berlin**
[ Berlin Grand ]
A balanced, elegant sound, ideal for playing impressionistic music. Notable for its clear, ringing tone across the entire range.

**Hamburg**
[ Hamburg Grand ]
A brilliant, rich sound. Loved by pianists for its wide range of expression. Well suited for various playing styles and genres.

**Vienna**
[ Vienna Grand ]
Noted for its impressive bass range. Great for both soft and vigorous playing with its warm tone. An ideal instrument for music from the classical period.
Sound Development in Collaboration

The Berlin Grand sound was developed in collaboration with C. Bechstein.


casio

Casio sought a clear, balanced and elegant sound for CELVIANO Grand Hybrid.

Casio intensively studied to achieve the goal.

Mr. Albrecht, Service Director and Master Piano Maker at C. Bechstein, visited Casio R&D to supervise the sound development process through the final modification.

"Superior sound and a professional touch. We believe we have crafted a sensational digital piano we can be very proud of."

— Werner Albrecht, Service Director and Master Piano Maker at C. Bechstein

"Casio is a very successful company in the field of electronic musical instruments. C. Bechstein is Europe's most important maker of high-end acoustic grand and upright pianos, with 160 years history and expertise in traditional craftsmanship. With their rich and noble tone, providing a wide range of tone colors and their professional and elegant touch, C. Bechstein pianos have continued to inspire and delight music lovers and famous artists around the world. We are confident that these two companies, by collaborating in a partnership that draws on their mutual experience, can create new digital pianos unlike anything we have seen before.

For this project, we developed the tone colours for the CELVIANO Grand Hybrid "Berlin Grand" based on sampling of a C. Bechstein concert grand piano. At the same time, we focused our efforts on also achieving an excellent key action.

Through this collaboration between Casio and C. Bechstein, we believe we can take pride in having created a very competitive digital piano with excellent sound and a professional touch."
Touch

Your performance demands authenticity
It begins at the first touch

The player’s movement is transformed into music with many important factors. The most tangible factor is the keys. CELVIANO Grand Hybrid delivers authenticity from the first touch. The revolutionary new Natural Grand Hammer Action keyboard is made with full-length, wooden keys. Its new mechanism incorporates real hammers that follow the same path of motion as in a concert grand piano. When the lid is lifted, you can see the hammers in motion through a clear panel as you play. Going beyond a standard acoustic mechanism, this new action allows faster note repetition than acoustic pianos, while maintaining a true piano touch.
Experience

The Grand Hybrid experience goes far beyond playing piano

Play a legendary space

CELViano Grand Hybrid includes a Hall Simulator featuring numerous world-class performance venues. Using advanced analysis and signal processing, Casio has recreated the acoustic characteristics of renowned concert halls, opera houses, cathedrals and other performance spaces around the world. You can instantly select one of these settings, creating an immersive atmosphere for your performance.

Play with a symphony orchestra

CELViano Grand Hybrid's Concert Play feature gives you the role of solo pianist with an orchestral performance. The sound system plays the orchestral part accompanying you. Works by Tchaikovsky, Pachelbel, Smetana and others are featured. The tempo of these pieces can be slowed down to facilitate practice.
Play a moment in time

The GP-500ex and GP-400ex models have an additional feature that allows players to design or select Scenes. You will enjoy customizing your own Scenes by selecting a type of piano, a Hall Simulation and any desired effects. Casio has also created several inspirational preset Scenes. These thoughtfully designed examples let you interact with the history of piano music. Select the name of a famous composer, and you will be presented with an instrument customized to suit their music and a venue where their music might have been performed.
GP-500BP

- Polished Black
- Natural Grand Hammer Action Keyboard
- Grand Acoustic System
- Grand Pedal System
- Adjustable lid position
GP-400BK
- Black Wood Grain
- Natural Grand Hammer Action Keyboard
- Grand Acoustic System
- Grand Pedal System
- Adjustable Leg position

GP-300BK / WE
- Satin Black (GP-300BK)
- Natural White Wood (GP-300WE)
- Natural Grand Hammer Action Keyboard
- Grand Acoustic System
- Grand Pedal System
- Adjustable Leg position
**Sound**

**AIR Grand Sound Source**

The CELVIANO Grand Hybrid incorporates AIR Grand Sound Source, a newly developed system using Casio's state-of-the-art sound technologies. It includes many impressive features. Multi-dimensional Morphing delivers smooth changes between soft and strong playing. Acoustic Simulator reproduces the characteristics of sounds produced by acoustic grand pianos. The authenticity generated by the AIR Grand Sound Source ensures a pure piano experience.

**Multi-dimensional Morphing**

On an acoustic grand piano, the volume and quality of sounds change from the time the keys are struck until they die away. Casio’s Multi-dimensional Morphing technology enables natural smooth transitions in sound volume and tone based on the power of the keystroke. This technology contributes to more expressive performances.

**Acoustic Simulator**

**[Resonance System]**

The various types of resonance in a grand piano are crucial to the playing experience. The CELVIANO Grand Hybrid incorporates String Resonance, which exposes the harmonic relationships between various strings when keys are struck. Also, Damper Resonance reproduces the resonance occurring when a damper pedal is pressed. The GP-500CD and GP-400CD are equipped with Open String Resonance and Damper Resonance functions for enhanced realism. Casio’s Resonance System reproduces the resonance of both the strings and sound board of a grand piano by selecting, controlling and synthesizing according to performance conditions.

**[Hardware Resonator]**

The unique, newly developed Hardware Resonator synthesizes Damper, Open String, and Attack Resonance to reproduce distinctive, individual sounds for all the respective 88 keys.

**[Hammer Response]**

The timing of a grand piano’s sound varies subtly depending on whether the keys are being played, even when the keys are struck with the same force. To achieve optimal authenticity, Casio has installed appropriate settings for each of the three grand piano tones. The sound production timing can also be adjusted to suit the player.

**[Action Sound System]**

A grand piano also generates several types of mechanical sounds, which are an important part of the playing experience. Casio has sought to provide a more realistic simulation by reproducing the sounds of these mechanisms. Four types of operating sounds are included, and the volume of each can be set independently or turned off.

*Foot Pedal Action Notes, Key On Action Notes and Key Off Action Notes are incorporated in the GS1500 and GS1500CD.

**[Key Off Simulator]**

The lengths of the lingering sounds produced by a grand piano vary depending on the speed at which players release their fingers after pressing the keys. In a similar fashion, Casio’s Key Off Simulator controls the length of these sounds based on the key’s release speed. This enables players to express delicate nuances when playing staccato and legato.

**[Hammer Response]**

**[Grand Pedal System]**

By continuously sensing and detecting the position of the damper pedal, Casio’s Grand Pedal System enables fine-tuning of the damping volume and note length depending on the degree of pedal depression. In addition, the Half Pedal Position function permits adjustment of the depression position at which the damping effect comes into play according to the player’s preference. The Action Sound System’s Damper Noise and Pedal Action Noise features installed in the GP-500CD and GP-400CD reproduce even subtle operating sounds like those experienced with an acoustic grand piano.
Sound

Grand Acoustic System

Casio has developed a new dedicated speaker system for the CELVIANO Grand Hybrid that reproduces the characteristics of sound emanating upwards and downwards from an acoustic grand piano. The four-channel audio system incorporates six speakers, carefully positioned in a structural design that advances sound outward from the interior of the body. The system delivers the same sound field experience a player would enjoy while playing an acoustic grand piano.

Adjustable Lid Position

The CELVIANO Grand Hybrid’s design includes a top panel that can be manually raised and lowered. The lid’s position not only physically affects the sound coming from the upper speakers, but also works in conjunction with the “Lid Position” setting to accurately duplicate the characteristics of the adjustable lid on an acoustic grand piano.

Hall Simulator & Listening Position

Twelve types of Hall Simulator are included; each one based on careful analysis of the acoustic characteristics of a world-famous concert venue. Each space has a total of four Listening Position settings. For example, the pianist can simulate the experience of hearing the piano from a seat in the audience, as opposed to the playing position.

Lid Simulator

The volume and timbre of sound produced by a grand piano change depending on the degree to which the lid is open or closed. The Lid Simulator simulates these acoustic effects digitally. Pianists can select among four settings for opening and closing stages and enjoy playing music with the piano sound effect of their choice.

Volume Sync EQ

Volume Sync EQ is especially useful for quiet playing at home and other times when you want to keep the speaker volume low. This function balances the sound at low volumes by adjusting the sound quality in the low and high registers. The result is a consistently pleasant playing experience, no matter where the volume is set.

Headphone Mode

Headphone Mode automatically creates a spacious sonic image while wearing headphones, recreating the feeling of playing an acoustic piano. With the experience of wearing headphones significantly enhanced, pianists can enjoy playing naturally and feeling the sound field of a traditional grand piano.

* Rotations and graphs for complete perspective please refer to page 23.
Natural Grand Hammer Action Keyboard

For an authentic piano touch, Casio has developed a new keyboard system called the ‘Natural Grand Hammer Action Keyboard’. This keyboard system features full-length wooden keys as well as hammers that follow the same path of motion as in a concert grand piano. CELEVANO Grand Hybrid features keys that are manufactured using exactly the same materials as acoustic grand piano. Careful attention is paid not only to finish of the surfaces of the keys but also to the quality of the wood employed for the key basis. This combination of an outstanding action mechanism and superior-quality key materials further enhances the sensation of playing an acoustic grand piano.

Original Tr-Sensor action mechanism

The use of CELEVANO Grand Hybrid’s keyboard performance is created by Casio’s proprietary action mechanism. The mechanism includes a hammer movement, installed from a grand piano and three sensors, which accurately capture a performer’s expression from the keys. Since there are no physical actions, Casio’s advanced action exceeds the performance characteristics of a grand piano, providing superior playability that enables pianists to perform such pieces as the Toccata and fugue in D major, the complete sonatas of Beethoven and many other classics.

Comparison of keyboards’ dynamic characteristics

*Keynote: speed of 1.08 knots, 305 blowers, 15 degrees of performance power

“Grand piano”

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Concert Play

Playing with an orchestra is an extraordinarily thrilling event. "Concert Play" feature demonstrates orchestral performance for a pianist to enjoy an experience of playing as a soloist accompanied by a full orchestra. 15 pieces of music are built in.

When you practice, a convenient playback function offers capabilities of slow, fast-forward, reverse, and AB segment repeat. Using a Song Mode, the tempo of these pieces can be slowed to 80% of normal speed as needed.

Scene

Available with the CP-4000i and CP-4000i, this feature provides the most suitable sound environment to the music performer select to play. The Scene can be created by combining a variety of sound combinations of tone, effects and reverb. A total of 15 different Scenes were designed as preset settings according to such themes as composer, musical genre and venue. Users can also customize Scenes and register up to ten favorite settings.

Casio’s technology for enhancing control of soft and moderately soft strokes

Precision touch changes

The Natural Grand Hammer Action Keyboard is designed with high precision to ensure that changes in the dynamic pressure from the players' fingers are similar to that of a grand piano. Casio’s keys have ultimate control over notes and dynamics.

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**Features**

**Recording Functions**

[Audio Recorder]

GFVIANO Grand Hybrid pianos have the ability to record performances on USB flash memory available on the market as stereo audio files (M4A, WMA) or WAV format. Recordings can be stored on or played back on a computer or transferred to CDs or other media. The piano’s built-in playback function permits use of such features as pause, fast-forward, rewind and A-B segment repeat.

*Software available on the market may be required for producing CDs.*

**Layer and Split**

The layer function enables pianists to overlap two types of tones, while the split function lets them separate tones into lower and upper keyboards.

**Tone Selection**

To begin with, advanced digital technologies are employed to sample many instrumental tones produced by acoustic pianos. This ability to select suitable tones for the music to be performed adds to the pleasure of playing and listening to music.

**Music Library**

GFVIANO Grand Hybrid includes 60 piano pieces in its “Music Library.” The scores for these pieces are included and GFVIANO Grand Hybrid’s features are ideal for learning, left and right hand parts can be practiced separately. Tempo can be changed and an A-B segment repeat allows you to practice a section of the piece. Each piece has a selected preset tone but players can enjoy their own choice from the Berlin Grand, Hamburg Grand and Vienna Grand tones.

*Some music scores are not published due to copyright issues.*