

## Casio to Release Digital Keyboard That Delivers a Unique New Way to Enjoy Playing Singing Voices on the Keys

New Sound Source Technology Creates Singing Voices  
by Combining Lyrics and Voice Tones



CT-S1000V

Norderstedt, January 20th, 2022 – Casio Europe GmbH announced today the release of the CT-S1000V, a new addition to the Casiotone lineup of electronic keyboards that delivers a whole new experience. The new keyboard allows the user to play singing voices on the keyboard without the need for special playing skills or making detailed settings.

The CT-S1000V is an electronic keyboard for musicians and music creators who want to enjoy new kinds of keyboard expression and music production. The model is equipped with Vocal Synthesis, a newly developed onboard sound source technology which lets users play human, robot, and animal voices created by combining lyric data and vocal tones.

Vocal Synthesis is an original Casio sound source technology that employs a musical instrument to produce a singing voice. The human singing voice features complex variations in timbre depending on the lyrics and melody, and it is considered difficult to reproduce with conventional sound source technologies. While products pursuing the concept of replicating the sound of the singing voice in a keyboard format have been available for a while, they have not been easy to play for all users, since they have required special performance techniques and detailed adjustments. The new Casio technology solves all this by generating lyric phrases in simulated singing style, leveraging large volumes of singing voice samples, then combining them with vocalist data to create a smooth-flowing, human-style singing voice.

The CT-S1000V not only pronounces lyrics for each syllable each time a key is pressed, but also automatically sings the user's pre-set lyric phrases in the pitches and harmonies played on the keyboard. This way, there is no mismatch between the lyrics and what the user plays on the keys, and the user can perform freely without worrying about the lyrics. In addition, each syllable smoothly flows to the next, enabling intuitive musical expression and creation as if humming a melody.

In addition to 100 built-in lyric phrases, the user can create their own original lyrics and edit pronunciation details with the dedicated Lyric Creator\*<sup>1</sup> app.

\*1. Connecting the Lyric Creator to the CT-S1000V requires a commercially available USB cable or conversion cable that supports data communication.

For keyboardists who want to cover everything from practice to performance with one unit but do not need the Vocal Synthesis technology, Casio will also release the CT-S500,<sup>\*2</sup> which features built-in speakers and a horizontal bass reflex system for a powerful low end, and can also be connected to external speakers.

\*2. The CT-S500 is not equipped with Vocal Synthesis.

Model	Vocal Synthesis	Number of Built-in Tones
CT-S1000V	●	800 + 100 Lyric
CT-S500	-	800

### Main Features of the CT-S1000V

#### Vocal Synthesis: A unique new sound source technology for playing singing voices with a musical instrument

The CT-S1000V is a unique sound source technology for creating vocal sounds with a musical instrument, developed by Casio based on the technology of Techno Speech, Inc., a venture company from the Nagoya Institute of Technology. This technology creates lyric-singing voices by combining articulation models based on earlier machine learning research from actual singing voices with vocalist data such as age and gender.

#### Performance modes for intuitive playing

There are two performance modes for singing voice: Note Mode, in which the user plays a phrase on the keyboard and the lyrics advance with each note played; and Phrase Mode, which steps through the lyrics automatically at a fixed meter while the keys are being pressed. Users can play melodies that match lyric phrases, or intuitively expand on their own inspiration while freely handling the instrument, unfettered by conventional keyboard playing approaches.

#### AiX sound source for sophisticated tone expression and beautiful, powerful sounds

The AiX sound source, which combines high-quality tones with rich expressiveness, is equipped with a wide variety of built-in tones, including the singing voices in Vocal Synthesis. There are 900 built-in tones, including the highly expressive ADVANCED TONES and the CASIO CLASSIC TONES, which have been carefully selected from the unique lineup of electronic instruments developed to date by Casio. In addition, the CT-S1000V unique horizontal bass reflex system, which efficiently secures space inside a slim body, delivers a powerful sound that is full of presence.

### Main Features of the CT-S500

#### An electronic keyboard featuring various tones and powerful expressive possibilities

The CT-S500 is an electronic keyboard that can cover everything from practice to performance, thanks to the AiX sound source, which enables profound expressiveness. Despite the compact footprint of the keyboard, the built-in speaker and horizontal bass reflex system deliver a powerful low end. The CT-S500 also connects to external devices with its standard LINE OUT jacks, and the tone parameters can be manipulated in real time to achieve dynamic expression.



CT-S500

The Casio CT-S1000V and CT-S500 will be available in shops from beginning of February 2022.

**High-resolution images and audio samples can be downloaded here:**

CT-S1000V Pictures

<https://s.cliplister.com/gMioYIBauP>

CT-S500V Pictures

<https://s.cliplister.com/MWEvyCGnaf>

CT-S1000V Audio samples

<https://s.cliplister.com/pqqkmrNsJC>

### Main Specifications

Model Name		CT-S1000V	CT-S500
Number of Keys		61	
Touch Response		3 sensitivity levels, off	
Sound Source		AiX	
Polyphony		64	
Tones		900 (including 100 Lyric Tones)	800
Vocal Synthesis		Lyric Tones: 100 Preset / Max. 150 User Lyric Tone Performance Modes: Phrase Mode, Note Mode Vocalist Types: 22 Preset / 1 User Vocalist Format: 44.1 kHz, 16 bit, Mono	-
ADVANCED TONES		37	
CASIO CLASSIC TONES		16	
Effects	Reverb	24 (+ Preset for each tone)	
	Chorus	12 (+ Preset for each tone)	
	Delay	15 (+ Preset for each tone)	
	DSP Effect	100 (+ Preset for each tone)	
	Master EQ	10 (+1 User)	
Volume-Sync EQ		Yes	
Surround		Yes	
Accompaniment	Number of Rhythms	243	
	One Touch Presets	243	
	User Rhythms	50	
Auto Accompaniment		Yes	
Metronome		Yes	

Arpeggiator		150	
Auto Harmonize		12	
Songs	Part Select	Yes	
	User Songs	10	
	Demo Songs	2	1
	USB Memory Song Playback	Yes	
Registration		Max. 64 setups (4 setups x 16 banks)	
Transpose		-12 to +12 Semitones	
Tuning		A4 = 415.5 Hz to 440.0 Hz to 465.9 Hz	
MIDI Recorder			Yes
	Songs	5	
	Tracks	6	
	Memory Capacity	40,000 Notes (per song)	
Sampling Function		Yes	
Input Method		Audio In / Media (WAV)	
Sampling Type / Time		Sampling Melody x 1 / Approx. 10 sec., Sampling Drum Set x 1 / Approx. 3 sec.	
Format		44.1kHz, 16bit, Stereo	
Other		Loop Functionality	
Pitch Bend Wheel		Yes (0 to 24 semitones)	
Knob		3 (for parameter control)	
Available APP		Lyric Creator, CASIO MUSIC SPACE	CASIO MUSIC SPACE
General MIDI		Yes	
Wireless Functionality		Bluetooth® version 5.0 AUDIO Profile: A2DP, Supported Codec: SBC MIDI Profile: GATT (MIDI over Bluetooth® Low Energy) (using supplied Wireless MIDI & Audio Adaptor WU-BT10)	
Terminals	PHONES	Stereo Mini Jack	
	LINE OUT (L/MONO, R)	Standard	
	PEDAL 1	Standard	
	PEDAL 2/EXPRESSION	Standard	
	AUDIO IN	Stereo Mini Jack	
	TO DEVICE	USB Type A	
	TO HOST	micro USB Type B	
Strap Pin		Yes	
Speakers		(13cm x 6cm) x 2	
Horizontal Bass Reflex		Yes	
Amplifiers		2.5W + 2.5W	
Power Supply		DC 12V	
AC Adaptor		AD-A12150LW (DC 12V)	
Battery		AA-size alkaline batteries x 6 or AA-size rechargeable nickel metal hydride batteries*1 x 6	
Battery Life		Approximately 3 hours continuous operation*2	
Dimensions		930 x 258 x 91mm	
Weight		4.7 kg	
Included Accessories		AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music stand, Strap lock	

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\*1 Measured values while using eneloop batteries. eneloop is a trademark of Panasonic group.

\*2 Actual continuous operation time may be shorter due to battery type, performance type, and usage environment.