

## 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 Opecifications		
Model Name		CT-S1000V	CT-S500	
Number of Keys		61	61	
Touch Response		3 sensitivity levels	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 TO	IES	37		
CASIO CLASSIC TONES		16	16	
Effects	Reverb	24 (+ Preset for each	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	50	
Auto Accompaniment		Yes	Yes	
Metronome		Yes	Yes	

### Main Specifications

Songs         Part Select         Yes           User Songs         0         0           Demo Songs         2         1           Registration         -12 to +12 Semitones         -12 to +12 Semitones           Transpose         -12 to +12 Semitones         -12 to +12 Semitones           Transpore         -12 to +12 Semitones         -12 to +12 Semitones           MIDI Recorder         Yes         -12 to +12 Semitones           Memory Capacity         40.000 Notes (per song)	Arpeggiator		150	
User Songs         10           Demo Songs         2         1           USB Memory Song Playback         Max.6 4 setups (4 setups x 16 banks)           Transpose         -12 to +12 Semitones           Training         A4 = 415.5 Hz to 440.0 Hz to 465.9 Hz           MIDI Recorder         Yes           Sampling Function         Yes           Sampling Function         Yes           Sampling Function         Yes           Sampling Type / Time         Sampling Melody x 1 / Approx. 10 sec., Sampling Drum Set x 1 / Approx. 3 sec           Format         44.1Hz, 16bit, Stereo           Other         Loop Functionely           Yes         (to 12.4 Seminones)           Krob         3 (for parameter control)           Available APP         Lyric Creator, CASIO MUSIC SPACE         CASIO MUSIC SPACE           General MIDI         Yes         Bluetootth® version 5.0         ALDIO Profile: A2DP, Supported Codec: SBC           MIDI Profile: A2DP, Supported Codec: SBC         MIDI Profile: A2DP, Supported Codec: SBC         MIDI Profile: A2DP, Supported Codec: SBC           MIDI Profile: A2DP, Supported Codec: SBC         MIDI Profile: A2DP, Supported Codec: SBC         MIDI Profile: A2DP, Supported Codec: SBC           MIDI Profile: A2DP, Supported Codec: SBC         MIDI Profile: A2DP, Supported Codec: SBC <td< td=""><td colspan="2">Auto Harmonize</td><td colspan="2">12</td></td<>	Auto Harmonize		12	
Demo Songs         2         1           USB Memory Song Playback         Yes           Registration         Max. 64 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           Memory Capacity         40,000 Notes (per song)           Sampling Type / Time         Sampling Melody x 1 / Approx. 10 sec., Sampling Drum Set x 1 / Approx. 3 sec           Format         0.004 Notes (per song)           Other         Loop Functionality           Pitch Bend Wheel         Yes (10 co 24 semitones)           Knob         3 (for parameter control)           Available APP         Lyric Creator, CASIO MUSIC SPACE           General MIDI         Yes           Wireless Functionality         Bluetoott@version 5.0           MUIO Profile: ADP, Support Contenergy) (using supplied Wireless MIDI & Audio Adaptor WU-BT10)           Vireless Functionality         Standard           PEDAL 1         Standard           PEDAL 2/EXPRESSION         Standard           A	Songs	Part Select	Yes	
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 485.9 Hz           MIDI Recorder         Yes           Sangs         5           Tracks         6           Momory Capacity         40.000 Notes (per song)           Sampling Function         Yes           Imput Method         Aduito In / Media (WA)           Sampling Type / Time         Sampling Melody x 1 / Approx. 10 sec., Sampling Drum Set x 1 / Approx. 3 se           Format         Loop Functionality           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         Bluetooth@ version 5.0           MUDI Profile: ADP, Supported Code:: SBC         MUDI Profile: ADP, Supported Code:: SBC           MUDI Profile: ADP (LU/MONO, R)         Standard           PEDAL 2/EXPRESION         Standard           AUDIO IN IN         Standard           PEDAL 2/EXPRESION         Standard           TO DEVICE		User Songs	10	
Registration       Max. 64 setups (4 setups x 16 banks)         Transpose       -12 to +12 Semitones         Training       A4 = 415. 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         Sampling Type / Time       Sampling Melody x 1 / Approx. 10 sec., Sampling Drum Set x 1 / Approx. 3 se         Format       Audio In / Media (WAV)         Sampling Type / Time       Sampling Melody x 1 / Approx. 10 sec., Sampling Drum Set x 1 / Approx. 3 se         Format       Audio In / Media (WAV)         Sampling Type / Time       Sampling Melody x 1 / Approx. 10 sec., Sampling Drum Set x 1 / Approx. 3 se         Format       Audio In / Media (WAV)         Sampling Type / Time       Sampling Creation (Construction)         Variable APP       Lyric Creator, CASIO MUSIC SPACE         General MIDI       Yes         Bluetooth® version 5.0       AUDIO Profile: A2DP, Supported Code:: SBC         MURIP Profile: CATT (MIDI over Bluetooth® Use Energy) (using supplied Wireless MIDI & Audio Adaptor WU-BTIO)         Terminals       PHONES       Standard         PEDAL 1       Standard         PEDAL 2/EXPRESSION       Standard		Demo Songs	2 1	
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       General MIDI     Yes       Wireless Functionality     Yes       Wireless Functionality     Stereo Mini Jack       LINE OUT (LMONO, R)     Standard       PEDAL 1     Standard       PEDAL 2/EXPRESSION     Standard       AUDIO IN     Stereo Mini Jack       To DEVICE     USB Type A		USB Memory Song Playback	Yes	
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 se           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           Casto MIDI         Yes           Bluetooth® version 5.0           AUDIO Profile: AZDP, Supported Codec: SBC           MIDI Profile: GATT (MIDI over Bluetooth® Low Energy)           (using supplied Wireless MIDI & Audio Adaptor WU-BTI0)           Terminals         PHONES           LINE OUT (L/MONO, R)         Standard           PEDAL 1         Standard           PEDAL 1         Standard           PEDAL 1         Standard           PEDAL 2/EXPRESSION         Standard           AUDIO IN         Stereo Mini Jack <td colspan="2">Registration</td> <td>Max. 64 setups (4 setups x 16 banks)</td>	Registration		Max. 64 setups (4 setups x 16 banks)	
MIDI Recorder         Yes           Songs         5           Tracks         6           Memory Capacity         40,000 Notes (per song)           Sampling Function         Yes           Format         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, 15hti, Stereo           Other         Loop Functionality           Pitch Bend Wheel         Yes (0 24 semitones)           Knob         3 (for parameter control)           Available APP         Lyric Creator, CASIO MUSIC SPACE         CASIO MUSIC SPACE           General MIDI         Yes         Bluetooth® version 5.0           Wireless Functionality         Bluetooth® version 5.0         MUDI Profile: GATT (MID) over Bluetooth® Low Energy) (using supplied Wireless MIDI & Audio Adaptor WU-BT10)           Terminals         PHONES         Stareo Mini Jack           LINE OUT (L/MONO, R)         Standard         PEDAL 1           PEDAL 1         Standard         PEDAL 1           Speakers         (13c	Transpose		-12 to +12 Semitones	
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           General MIDI         Yes           Wireless Functionality         Bluetooth@ version 5.0           Wireless Functionality         Standard           PEDAL 12/EXPRESSION         Standard           PEDAL 2/EXPRESSION         Standard           PEDAL 2/EXPRESSION         Standard           TO HOST         micro USB Type A           TO HOST         micro USB Type B           Str	Tuning		A4 = 415.5 Hz to 440.0 Hz to 465.9 Hz	
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           General MIDI         Yes           Wireless Functionality         Bluetooth@version 5.0           MUDI Profile: GATT (MIDI over Bluetooth@ Low Energy) (using supplied Wireless MIDI & Audio Adaptor WU-BT10)           Terminals         PHONES           LINE OUT (L/MONO, R)         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           Anpliffers         2.5W + 2.5W           Povero         Stardard <td>MIDI Recorder</td> <td>r</td> <td colspan="2">Yes</td>	MIDI Recorder	r	Yes	
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           General MIDI         Yes           Wireless Functionality         Bluetooth® version 5.0           MUDIO Profile: AZDF, Supported Codec: SBC           MIDI Profile: SATT (MID over Bluetooth® Low Energy) (using supplied Wireless MIDI & Audio Adaptor WU-BT10)           Terminals         PHONES           LINE OUT (L/MON, R)         Standard           PEDAL 2/EXPRESSION         Standard           AUDIO IN         Standard           PEDAL 2/EXPRESSION         Standard           Strap Pin         Yes           Speakers         (13cm x 6cm) x 2           Horizontal Bass Reflex         Yes           Adaptor         Yes           Speakers         C12V           AC Adaptor         AA-Size alkalin	Songs		5	
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 set           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           General MIDI         Yes           Wireless Functionality         Bluetooth® version 5.0           MUDIO Profile: A2DP, Supported Codec: SBC         MDIO Profile: GATT (MID over Bluetooth® Low Energy)           (using supplied Wireless MIDI & Audio Adaptor WU-BT10)         Terminals           PHONES         Stereo Mini Jack           LINE OUT (L/MONO, R)         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           Achaptor         AD-Al2150U (CC 12V)           AC Adaptor         AA-size alkaline batteries'		Tracks	6	
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           General MIDI         Yes           Wireless Functionality         Bluetooth® version 5.0 AUDIO Profile: AZDF, Supported Codec: SBC MIDI Profile: AZDF, Supported Codec: SBC MIDI Profile: AZDF, Supported Codec: SBC MIDI Profile: AZDF, Supported Codec: SBC           Vireless Functionality         PHONES           Vireless Functionality         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           Marplifiers         2.5W + 2.5W           Power Supply         DC 12V           AC Adaptor         AD-A12150LW (DC 12V)           AA-size akalinine batteries * 6 or A-size rechargeable nickel metal		Memory Capacity	40,000 Notes (per song)	
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           General MIDI         Yes           Wireless Functionality         Yes           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           LINE OUT (L/MONO, R)         Standard           PEDAL 1         Standard           PEDAL 2/EXPRESSION         Standard           AUDIO IN         Stereo Mini Jack           TO DEVICE         USB Type A           TO DEVICE         USB Type A           TO HOST         Microart Ascemy Piece           Speakers         (13cm x 6cm) x 2           Horizontal Bass Reflex         Yes           Speakers         C12V           AC Adaptor         AA-size alkaline batteries x 6 of A-size rechargeable nickel metal hydride batteries x 6	Sampling Fund		Yes	
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           General MIDI         Yes           Wireless Functionality         Bluetooth® version 5.0           MUIDI Profile: A2DP, Supported Codec: SBC           MIDI Profile: A2DP, Supported Codec: SBC           MIDI Profile: GATT (MIDI over Bluetooth® Low Energy) (using supplied Wireless MIDI & Audio Adaptor WU-BT10)           Terminals         PHONES           LINE OUT (L/MONO, R)         Standard           PEDAL 1         Standard           PEDAL 2/EXPRESSION         Standard           AUDIO IN         Stereo Mini Jack           TO DEVICE         USB Type A           TO DEVICE         USB Type A           TO HOST         micro USB Type B           Starp Pin         Yes           Speakers         (13cm x 6cm) x 2           Horizontal Bass Reflex         Yes           Amplifiers         2.5W + 2.5W           Power Supply         DC 12V           AC Adaptor         AA-size alkaline batteries x 6 or A-sizer chargeable nickel metal hydride batteries x 6 ark -size rechar				
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         Supported Codec: SBC           Wireless Functionality         Bluetooth® version 5.0           Wireless Functionality         AUDO Profile: GATT (MID) 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           Starap Pin         Yes           Amplifiers         2.5W + 2.5W           Power Supply         DC 12V           AC Adaptor         AD-31250LW (DC 12V)           AC Adaptor         AD-31250LW (DC 12V)           AA-size alkaline batteries x 6 or AA-size rechargeable nickel metal hydride batteries '' x 6           Battery Life         Approximately 3 hours continuous operation?           Battery Life         Approximately 3 ho		Sampling Type / Time	Sampling Melody x 1 / Approx. 10 sec., Sampling Drum Set x 1 / Approx. 3 sec	
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       Bluetooth® version 5.0         AUDIO Profile: A2DP, Supported Codec: SBC       MIDI Profile: A2DP, Supported Codec: SBC         Wireless Functionality       Bluetooth® version 5.0         AUDIO Profile: ATT (MID) over Bluetooth® Low Energy) (using supplied Wireless MID1 & Audio Adaptor WU-BT10)         Terminals       PHONES         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       AA-size alkaline batteries x 6         Battery       AA-size alkaline batteries x 6         Battery Life       Approximately 3 hours continuous operation?         Dimensions       930 x 258 x 91mm         Weight       <		Format	44.1kHz, 16bit, Stereo	
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       AA-size alkaline batteries x 6 or AA-size rechargeable nickel metal hydride batteries x 6         Battery       AA-size alkaline batteries x 6 or AA-size rechargeable nickel metal hydride batteries x 6         Dimensions       930 x 258 x 91mm         Weight       4.7 kg         Horizontal Acceptories       AC adaptor (AD-A12150LW), Wireless MID 8 Audio Adaptor (WU-BT10), Music <td colspan="2">Other</td> <td colspan="2">Loop Functionality</td>	Other		Loop Functionality	
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           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         AA-size alkaline batteries x 6 or AA-size rechargeable nickel metal hydride batteries" x 6           Battery         AA-size alkaline batteries x 6 or AA-size recontinuous operation <sup>2</sup> Dimensions         930 x 258 x 91mm           Weight         AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	Pitch Bend Wheel		Yes (0 to 24 semitones)	
General MIDI Yes General MIDI Yes Wireless Functionality BHONES Functionality BHONES EXAMPLE Wireless Functionality BHONES Start and	Knob		3 (for parameter control)	
Wireless Functionality         Biluetooth® version 5.0 AUDIO Profile: A2DP, Supported Codec: SBC MIDI Profile: GATT (MID) 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 or AA-size rechargeable nickel metal hydride batteries*' x 6           Battery Life         Approximately 3 hours continuous operation'2           Dimensions         930 x 258 x 91mm           Weight         4.7 kg           Weight         AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	Available APP		Lyric Creator, CASIO MUSIC SPACE CASIO MUSIC SPACE	
Wireless Functionality       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       AA-size alkaline batteries x 6 or AA-size rechargeable nickel metal hydride batteries * x 6         Battery       Battery Life       Approximately 3 hours continuous operation <sup>-2</sup> Dimensions       930 x 258 x 91mm         Weight       4.7 kg         Use Uddd Accessories       AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	General MIDI		Yes	
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 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 <sup>1</sup> x 6 Dimensions 930 x 258 x 91mm Weight 4.7 kg	Wireless Functionality		AUDIO Profile: A2DP, Supported Codec: SBC MIDI Profile: GATT (MIDI over Bluetooth® Low Energy)	
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 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 <sup>1</sup> x 6 Dimensions 930 x 258 x 91mm Weight 4.7 kg	Terminals	PHONES	Stereo Mini, Jack	
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       Batteries x 6 or AA-size rechargeable nickel metal hydride batteries x 6 or AA-size rechargeable nickel metal hydride batteries x 6 or AA-size rechargeable nickel metal hydride batteries x 6 pairters         Dimensions       930 x 258 x 91mm         Weight       4.7 kg         Included Accessories       AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music				
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         Dimensions       930 x 258 x 91mm         Weight       4.7 kg         Included Accessories       AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music				
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       Dimensions     930 x 258 x 91mm       Weight     4.7 kg       Included Accessories     AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music		PEDAL 2/EXPRESSION		
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       Dimensions     930 x 258 x 91mm       Weight     4.7 kg       Included Accessories     AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music		AUDIO IN		
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		TO DEVICE	USB Type A	
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		TO HOST		
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 <sup>12</sup> Dimensions       930 x 258 x 91mm         Weight       4.7 kg         Included Accessories       AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	Strap Pin		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* <sup>1</sup> x 6         Battery Life       Approximately 3 hours continuous operation* <sup>2</sup> Dimensions       930 x 258 x 91mm         Weight       4.7 kg         Included Accessories       AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	Speakers		(13cm x 6cm) x 2	
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 <sup>*2</sup> Dimensions 930 x 258 x 91mm Weight 4.7 kg Included Accessories AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music		Horizontal Bass Reflex	Yes	
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			2.5W + 2.5W	
Battery       AA-size alkaline batteries x 6 or AA-size rechargeable nickel metal hydride batteries* <sup>1</sup> x 6         Battery Life       Approximately 3 hours continuous operation* <sup>2</sup> Dimensions       930 x 258 x 91mm         Weight       4.7 kg         Included Accessories       AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	Power Supply		DC 12V	
Battery       AA-size alkaline batteries x 6 or AA-size rechargeable nickel metal hydride batteries* <sup>1</sup> x 6         Battery Life       Approximately 3 hours continuous operation* <sup>2</sup> Dimensions       930 x 258 x 91mm         Weight       4.7 kg         Included Accessories       AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	AC Adaptor		AD-A12150LW (DC 12V)	
Battery Life         Approximately 3 hours continuous operation <sup>12</sup> Dimensions         930 x 258 x 91mm           Weight         4.7 kg           Included Accessories         AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	Battery		AA-size alkaline batteries x 6 or AA-size rechargeable nickel metal hydride	
Dimensions 930 x 258 x 91mm Weight 4.7 kg AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	-	Battery Life	Approximately 3 hours continuous operation <sup>*2</sup>	
Weight 4.7 kg AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	Dimensions			
AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	Weight			
	Included Accessories		AC adaptor (AD-A12150LW), Wireless MIDI & Audio Adaptor (WU-BT10), Music	

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