

Kronos Basic Specifications → System: Kronos

Keyboard

88-key: RH3 (Real Weighted Hammer Action 3)
73-key: RH3 (Real Weighted Hammer Action 3)
61-key: Natural Touch Semi Weighted

Display

TouchView graphical user interface, 8 inch TFT,
SVGA (800x600 dots), adjustable brightness

Outputs

L/MONO, R: 1/4" Balanced
Individual 1-4: 1/4" Balanced
Headphones: 1/4" stereo phone jack
S/P DIF: Optical; 24-bit/48 kHz,
(L/MONO, R signal)
USB-B: 24-bit/48 kHz, (L/MONO, R signal)

Inputs

Audio Inputs 1 and 2: 1/4" Balanced
S/P DIF: Optical; 24-bit, 48 kHz
USB-B: 24-bit, 48 kHz, 2 channels

Control Inputs

Pedals: Damper pedal (half damper supported),
assignable switch, assignable pedal

MIDI

In, Out, Thru

USB

USB A (TYPE A) x 2 (for connection to external
USB devices)
USB B (TYPE B) x 1 (MIDI/audio interface,
MIDI: 1(16ch) input / 1(16ch) output,
Audio: 2channel input / 2channel output) 2 USB
high-speed ports (supports 480Mbps)

Principal Specifications

Frequency Response: 20Hz-22kHz, +/-1.0dB, 10k
Ohms load
THD+N: 20Hz-22kHz, 0.01%, 10k Ohms load
(typical)
S/N: 95dB (typical)
Dynamic Range: 95dB (typical)
Crosstalk: 95dB, at 1kHz (typical)

Dimensions: (W x D x H)

88-key: 57.28" x 16.18" x 5.71"
73-key: 48.94" x 16.18" x 5.71"
61-key: 41.42" x 14.25" x 5.28"

Weight

88-key: 50.71 lbs.
73-key: 44.75 lbs.
61-key: 27.56 lbs.

Accessories

AC cord, Quick Start Guide, Accessory DVD Disk
(Restore Data, KORG USB Driver, Manual PDF, etc.)

Options

XVP-10: Expression/Volume Pedal
EXP-2: Foot Controller
DS-1H: Damper Pedal
PS-1: Pedal Switch
PS-3: Pedal Switch

Full specifications are available online at www.korg.com/Kronos
* Developed under license of physical modeling patents (listed in
<http://www.sondiusxg.com>) owned by Stanford University, USA,
and by Yamaha Corporation.

* Appearance and specifications of this product are subject to
change without notice.



KRONOS

PREPARE TO BE AMAZED

KORG

www.korg.com | www.korg.co.uk



KARMA® (Kay Algorithmic Real-time Music Architecture) and the KARMA Logo are registered trademarks representing patented technology licensed from Stephen Kay, Karma-Lab LLC, www.karma-lab.com.

KORG

THE GAME HAS BEEN CHANGED. Kronos is more than a new instrument. It is a milestone in synthesis and workstation evolution; one that embodies fresh ideas and breakthrough technologies. Kronos brings together multiple sound engines working in harmony and new interactive performance features that reflect the way musicians play. Most importantly, Kronos provides a seemingly inexhaustible supply of breathtaking, spectacular sounds. Prepare to be amazed.



KRONOS

THE FUTURE HAS ARRIVED

THE NEXT-GENERATION WORKSTATION FOR LIVE, PRODUCTION, AND SOUND DESIGN



The Kronos Music Workstation is the single instrument designed for live performing musicians; for artists creating in a studio or computer-based production environment; and for musicians and sound designers seeking the ultimate synthesizer. The expansive control surface offers joysticks, sliders, knobs, switches, a ribbon controller, assignable pedal inputs, and of course our improved resolution color TouchView™ display.

LIVE – for the performing keyboard player.

In creating Kronos, we listened to the needs of performing musicians from around the world. Our goal was to change the way musicians interacted with their instrument to provide a more fluid, expressive, and natural experience; one ideally suited to the way musicians play. Kronos provides the absolute finest in keyboard sounds; accurate and responsive to the player's technique. Our new Smooth Sound Transition technology is designed to maintain any currently held, played, or sustaining notes (with their effects), helping to prevent drop-outs as you switch sounds or change from Program to Combi mode. Also new is the Set List screen, allowing the instant recall of song or set specific Programs, Combinations, or song data with a single touch, regardless of mode. You can also leave notes for yourself using the Set List page, to remember the key of a song, for example. The Set List adds a stereo graphic EQ at the main audio output, which can be used to compensate for the acoustical character of the performance venue.

PRODUCTION – satisfying the producer, music director, and musician.

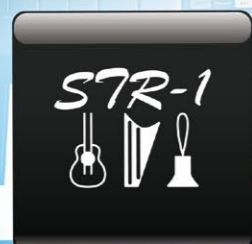
For many, the studio is where the work gets done; from laying down tracks, to building up grooves for an on-stage extravaganza, to delivering the soundtrack for today's media-rich world. For these creative leaders, Korg has equipped the Kronos Music Workstation's sequencer with 16-track MIDI tracks plus 16 audio tracks, our Open Sampling System, dazzling hi-fidelity effects, as well as flawless plug-in integration with many popular DAW platforms. Of course, Kronos is equipped with phenomenal sound, dynamic drums, and an impressive array of premium sound effects. Add to that the ability to use KARMA, the Drum Track, and the sequencer's RPPR to greatly speed up and enrich the music creation process.

SYNTHESIS – programming joy for the enthusiast and sound designer.

In addition to being Korg's premier workstation, Kronos has in its blood the power to satisfy the programmer, sound designer, and synthesizer enthusiast; the musician who dreams of turning visions of the cosmos into sound, of tweaking parameters to conjure sounds from the ether. Kronos rekindles Korg's founding dream that is at the core of synthesis: the exhilaration and enjoyment of creating new sounds, sounds never before heard! A variety of exclusive Korg technologies drive the synth engines to provide astounding results - VMT (Virtual Memory Technology); CMT (Component Modeling Technology); Physical Modeling, Digital Synthesis, Wave Sequencing, MDS (Multi-Dimensional Synthesis); KARMA® and more!



NINE ENGINES; A UNIVERSE OF SOUND



Kronos unites nine individual synthesis engines in a single instrument, each providing the finest sound creation techniques available. Together, they represent not only the rich legacy of Korg, but the history of the electronic keyboard industry itself. Prepare to be amazed.



KRONOS

SGX-1 Premium Piano

Piano sound engine

You've never heard pianos like this on any workstation. The SGX-1 Premium Piano sound engine offers two distinctive grand pianos; a rich German D piano, and a robust Japanese C model. Each uses superb, un-looped stereo samples, sampled at eight velocity levels for each and every key. Virtual Memory Technology (VMT) allows Kronos to play large samples directly from the internal high-capacity Solid State Disk (SSD). Korg's meticulous sampling also captures and reproduces the resonance of the piano body, plus the inherent noises of playing the keys and pressing and releasing the pedals. The foundation of every keyboard instrument is the piano, and Kronos delivers with superior sound and unsurpassed realism.

EP-1 MDS Electric Piano

Electric piano sound engine

Using Korg's new MDS (Multi-Dimensional Synthesis) technology, the exciting new EP-1 sound engine faithfully recreates the most timeless and coveted electric pianos. The six models provide unique control over the hammers, tines, reeds, and noise elements that make up the essential character of these classic electromechanical instruments.

The EP-1 also includes simulations of the period amp, cabinet, speaker, and hard-to-find vintage effects that gave the original instruments their distinctive sound. Unhindered by conventional sampling techniques such as velocity-switching, the sounds respond smoothly to the subtleties of the player's touch, while delivering an astounding dynamic range. Every element has been coordinated to create the ultimate electric piano experience.

CX-3 Tonewheel Organ

Tonewheel organ sound engine

CX-3 has been the name of two Korg instruments; one from 1980 and one from 2000. In Kronos, the CX-3 engine precisely models every aspect of the classic tonewheel organ, including the vacuum tube amp, effects such as Vibrato/Chorus, and the 'must-have' rotary speaker. The signature instability, fold-back, leakage, and tonewheel noise have been obsessively analyzed and recreated. Korg's exclusive EX mode switches from 9 to 18 drawbars (13 footages plus 5 to define the percussion) and generates even richer and more detailed sounds. Go ahead and experience these classic organ sounds, reborn for the present day.



SGX-1



EP-1



AL-1

HD-1 High Definition Synthesizer

Flagship PCM, Sampling and Wave Sequencing sound engine

The HD-1 engine earned the name 'High Definition' for its proprietary low-aliasing sample playback oscillators, full-bandwidth multimode resonant filters, plus the extraordinarily fast & smooth envelopes and LFOs, all resulting in superior sound. Our SSD and Virtual Memory Technology allow the HD-1 access to a larger sample set – gigabytes in size – than could be normally stored using internal memory. First introduced on the Korg WAVESTATION, the HD-1's Wave Sequencing plays a series of samples over time, creating distinctive rhythmic timbres or smooth, complex evolving sounds. The HD-1 sound engine also includes two 'Ambient Drums' kits. Each provides three different mic'ing positions, and allows the custom blending of the drums' direct sound and ambient sound layer. The HD-1 covers all of the essential sounds in exquisite detail, from orchestral to classic rock to hip-hop, all instantly available.

AL-1 Analog Synthesizer

High-fidelity analog modeling sound engine

Feature-packed, the AL-1 is the same premium analog modeling engine that was first featured on the Korg OASYS, the Open

Architecture SYNthesis Studio. Its patented ultra-low-aliasing oscillators (using completely different technology than the HD-1) recreate all the power and glory of true analog synthesis. Morphing waveforms allow the oscillator shapes to change in real-time. Resonance modeling provides a choice of classic filter sounds, and the extraordinarily flexible MultiFilter allows the creation of new hybrid filter shapes. Hard sync, analog-style FM, drive, low-boost, and ring modulation offer plenty of tone-twisting power.

MS-20EX Legacy Analog Collection

Analog modeling sound engine

Debuting in 1978, the coveted MS-20 offered a thick and solid sound, aggressive filters, plus a patch panel that opened up limitless potential. The MS-20's rich personality captivated countless synth freaks. Using Korg's CMT (Component Modeling Technology) the MS-20EX faithfully reproduces the MS-20 while dramatically expanding its patch panel functionality: modulate filters with audio-rate oscillators; turn audio inputs into control signals; control all of the original knobs with mod sources – including additional envelopes, LFOs, and real-time controllers. The MS-20EX remains a tweaker's dream.

PolysixEX Legacy Analog Collection

Analog modeling sound engine

The Polysix first appeared in 1981, offering six-voice polyphony, program memory, and a surprisingly competitive price tag. With its self-oscillating four-pole filter, smooth analog oscillator and sub-oscillator, plus a lush Chorus/Ensemble effect, the PolysixEX extends the abilities of the original in many creative ways. We've added modulation of every control on the front panel, for a world of sounds impossible on the original. It's also very well-suited to hands-on control via the Kronos' Tone Adjust; with a knob, slider, or switch for almost all of the original Polysix controls. The classic arpeggiator built into the original Polysix is also provided. As a bonus, The PolysixEX is also capable of extremely high polyphony.

MOD-7 Waveshaping VPM Synthesizer

VPM/Waveshaping/PCM processing sound engine

Combine Variable Phase Modulation (VPM), wave-shaping, ring modulation, samples, subtractive synthesis, plus a modular patch-panel system, and you have MOD-7. Exceptionally versatile, it offers everything from classic FM keyboards, bells and basses (including the ability to import classic DX sounds) to rhythmic soundscapes

and sparkling, epic pads. Vast sample-mangling capabilities, with incredible flexibility and power, let you create intensely rich processing environments: combine multiple stages of filtering, waveshaping, and ring modulation – even use samples as modulators – all patched together however you like.

STR-1 Plucked String Synthesizer

Physical modeling sound engine

The STR-1 struck/plucked-string sound engine begins with highly playable sounds whose tone responds to your touch in ways that are difficult for a PCM sound engine to replicate. These include acoustic guitar, electric guitar, harpsichord, clavinet, harps, bells, and ethnic instruments. Based on the physical modeling know-how Korg has developed over the course of nearly 20 years, the STR-1 then goes beyond, allowing the creation of sounds that obey physical laws, but that don't exist in reality. You can also process samples and live audio input through the physical model. While some of the Kronos engines look back in time, this a sound engine of the future, one that allows the creation of truly new sounds.



SOLID WORKSTATION INTEGRATION

The Kronos Music Workstation integrates a world-class list of tools into a single, reliable instrument. Under the hood, all nine engines share the same hardware, with no separate cards to manage or polyphony barriers between them – providing an integrated experience no PC can match.

16-track MIDI sequencer / 16-track audio recorder

The sequencer offers 16 MIDI tracks plus 16 audio tracks; a great resource for putting together a dazzling performance or a brilliant production. MIDI sequencing makes it easy to save your ideas and inspiration. The 16-track audio recorder can capture up to four tracks at once. Play along with recorded tracks, add in effects, KARMA phrases, Drum Tracks, or RPPR (Realtime Pattern Play/Recording) patterns and resample the Kronos itself. Polish your tracks with the sequencer's mixer automation and editing functions.

The ultimate effects suite

Kronos provides 16 internal effects to add impact to your sonic creations. Each of the 12 Insert effects can be applied to individual or multiple timbres in a combination, or to individual or multiple tracks of the sequencer. In addition, two Master effects can be applied to sends 1/2, and two Total effects can be applied to all tracks at the final stage of the sound. Each effect offers 185 distinct effect types, covering every possible sound-shaping need. A separate three-band EQ is provided for every timbre, sequencer or audio track. Each effect provides numerous realtime modulation possibilities, delivering outstanding versatility.

KARMA®

This revolutionary algorithmic music technology instantly produces sophisticated phrases, drum grooves and full-blown backing tracks based on the notes and chords you play and the intuitive operations you perform with the knobs, sliders, and switches. Greatly enhanced, this second generation KARMA offers KARMA Wave-Sequencing, Note Mapping, eight scenes per layer and other innovations.

Drum Track

Improved from the M3 and M50 Music Workstations, the Drum Track can create everything from a simple reference beat to an outline rhythm track up to a full-blown drum track for your music productions. Kronos now includes drum performances from professional artists, able to generate grooves reproducing the distinctive feel of a pro drummer.

Open Sampling System

Kronos is able to sample from any mode – Program, Combination, or Sequencer – and you can even sample the performance of the Kronos itself. Sample tools include truncate, normalize, time stretch, or time slice. Edited samples can also be exported in AIFF or WAVE format. Samples can be loaded in AIFF, WAVE, SoundFont 2.0, and AKAI S1000/3000 formats via USB memory, allowing Kronos to use samples previously created on other instruments or on a PC.

Computer Connectivity

Kronos can send MIDI signals to and from your computer via USB. Using the Kronos Editor software (free download), sounds and settings can be edited directly from your computer. The Kronos Plug-in Editor (free download) lets you use Kronos from within many popular DAW systems, as if it were a plug-in instrument. Kronos can also be used as an audio I/O for your computer, sending and receiving two channels of audio via USB. In a music production system using your Kronos and a computer, there is no need to purchase any additional hardware, creating the simplest possible set-up.



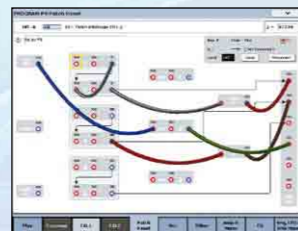
Set List



POLYSIX



MS20

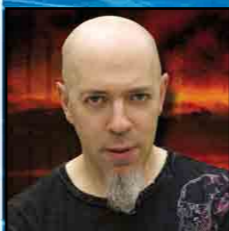


MOD-7

HELP FROM OUR FRIENDS

To make the most of Kronos' nine sound engines, Korg called on respected musicians to guide our sound design team. Numerous world-class players contributed their time, energy, and critical listening to help us zero in on making these sounds respond to the way they play. Our artist signature sounds were tested, judged, and tweaked by the likes of Jordan Rudess, Russ Ferrante, Lyle Mays, George Duke, Tom Coster, Frank McComb, Herbie Hancock, John Novello, and several other artists known for their serious love of sound and for their critical, demanding ears.

KRONOS



Jordan Rudess



George Duke



Russ Ferrante



Frank McComb



Herbie Hancock



KARMA® (Kay Algorithmic Real-time Music Architecture) and the KARMA Logo are registered trademarks representing patented technology licensed from Stephen Kay, Karma-Lab LLC, www.karma-lab.com.

