

# KORG

## KROSS 2

SYNTHESIZER WORKSTATION

### **More features, more sounds, more possibilities.**

**A state-of-the-art platform with ever greater functionality.**

**The mobile synthesizer workstation that does everything.**

- A rich selection of more than 1,000 powered-up presets
- 128MB of expansion PCM memory is built-in, and option libraries are supported
- The rich expressive power of the EDS-i sound engine, and a rich selection of effects with 134 types
- Superb sampling functionality and 16 sampler pads
- A panel layout that lets you access functions without confusion
- Realtime control section for quick parameter editing
- Favorite function lets you register and instantly recall up to 128 frequently-used sounds
- Quick layer/split can be specified by a single button
- Ultra-lightweight compact body; the 61-key model weighs only 3.8 kg, the lightest in its class
- Long operating life, with six AA batteries allowing up to seven hours of use
- A color lineup with a peerless finish that exceeds its class
- Audio player/recorder that can be easily triggered by the pads
- Sequencer, drum track, and arpeggiator to support your song production
- A rich array of input jacks for singer-instrumentalists or vocoder performance without requiring additional equipment
- Also functions as a USB audio interface

KROSS 2, the long-awaited successor of the KROSS, is a compact, portable workstation with a huge range of sounds. While maintaining its identity as ultra-lightweight, compact, and capable of running on batteries, this new model dramatically enhances KROSS's sounds and functionality. In addition to a total of more than a thousand preset sounds, expansion PCM memory has been newly added. Also new is a pad sampler that allows full-fledged sampling, and USB audio/MIDI interface functionality. The color scheme is even more stylish, and the user interface allows intuitive operation even by beginners.

Effortlessly select the sound that you want to play, shape it to match your imagination, sample a sound, create phrases and rhythms, record your vocal or guitar, bring KROSS 2 on stage, and perform. Whatever your artistic vision, you can make it happen. KROSS 2 is a versatile synthesizer platform made with creative freedom in mind.

**Even more powerful preset sounds,  
with specialized optional expansion sounds**

**A rich variety of more than 1,000 preset sounds**

The sound quality of KORG synthesizers is endorsed by top-ranking musicians around the world. The evolved KROSS 2 expands polyphony from 80 to 120 voices, and dramatically powers-up the number of internal programs from 809 to 1,075 programs. Including multi-layered pianos and electric pianos, thick strings and other new sounds that will work well with any band, as well as the latest drum kits to cover current styles such as EDM. The wide selection of programs covers your needs from live performance to studio production.

### **Built-in expansion PCM memory, and support for optional libraries**

The KROSS 2 now provides 128 MB of built-in expansion PCM memory. By selecting from optional libraries that will be released following KROSS 2, you can expand KROSS 2's internal sounds to meet the needs of your performing style or situation.

### **The rich expressive power of the EDS-i sound engine, with a full complement of effects**

The high-quality EDS-i Enhanced Definition Synthesis-integrated sound engine is inherited from KORG's professional synthesizers. You can use a total of seven effects units simultaneously: five insert and two master. Rich expressive power is available from the selection of 134 high-quality effects, including standard effects such as delay and reverb as well as amp modeling, vintage effect units, and even a vocoder.

### **Superb sampling function and a pad sampler**

As a first in its class, the KROSS 2 is newly equipped with a unique sampling function that provides 16 playable pads. You can record the input from the LINE IN jack and assign a stereo sample of up to 14 seconds to each pad. Up to four pads can be triggered simultaneously. You can edit the sample waveform using functions such as start/end loop point settings and normalize, and even resample within the KROSS 2, allowing you to perform extensive sampling without requiring any additional equipment. Long audio files from an SD card can also be assigned to these pads.

### **Straightforward access to the sounds and functions you need**

It's easy to get around on KROSS 2, thanks to a user-friendly layout. The panel of the KROSS 2 has been further improved since the first KROSS, ensuring that anyone can quickly access desired sounds and functions from the enormous range of choices.

### **Realtime control section**

The new realtime control section lets you directly control KROSS 2's main parameters without having to navigate through a menu hierarchy. In addition to realtime control of the sounds and effects, and simple editing of programs, you can use the knobs to easily control the vocoder settings or adjust the tempo of the arpeggiator and sequencer.

### **Favorites function**

The favorite function lets you register frequently-used programs and combinations and recall them at a single touch, and has even been expanded to allow 128 favorite locations, twice the number of the first generation of KROSS. This function is ideal for live players that need quick access to a specialized set of sounds on stage.

### **Quick layer/split**

The layer/split function, which lets you layer two sounds or assign separate sounds to the left and right regions of the keyboard, is now easier to set up, thanks to a dedicated quick layer/split button.

### **Category dial**

A category dial is provided, allowing you to immediately find the sounds you're looking for amid the vast range of choices. Just choose the general type of sound, such as piano or organ, and then make your selection quickly and efficiently.

### **Ultra-lightweight and compact body, with support for battery operation**

The amazing mobility of the KROSS series is better than ever. The 61-key model features a new and stylish design, and its weight has been further reduced from the 4.3 kg of the previous model to an even more lightweight 3.8 kg. Additional improvements in power efficiency allow up to seven hours of battery-powered operation from six AA batteries. The 88-key model newly provides an accessory compartment that can hold spare batteries or cables, as well as an easily accessible front-located battery panel. On both models, the rear panel KORG logo is fully illuminated, letting you stand out on stage.

### **The ultimate body finish that exceeds its class**

The evolved KROSS 2 also features high quality in its body finish. First, the 88-key model uses a stylish and cool “dark blue” color. The 61-key model uses a “super matte black” color with a high-quality rubberized finish that is durable and feels great to the touch. Lavish use of this sophisticated rubberized finish gives the instrument a highly professional appearance. The 61-key model is additionally available in a limited-edition “red marbled” color. The special marbled red finish is unique and different on each KROSS 2 unit.

### **Audio player/recorder that you can easily trigger from the pads**

The built-in stereo audio recorder lets you record your KROSS 2 performance, or overdub an external input source such as vocals. There's also a pad audio play function that allows recorded sounds or audio files imported from an external source to be assigned to each of the 16 pads for playback. Unlike the sampling function, this allows extended recording and playback that is limited only by the capacity of the SD card; you can strike a pad to play back the backing of an entire song while you perform on the keyboard, or use the pads to trigger sound effects or background music.

### **Supports your song production, turning inspiration into reality**

#### **16-track MIDI sequencer**

The 16-track MIDI sequencer records your keyboard performance and controller movements as MIDI data. It can also record your pad sampler performance, providing an easy way for you to create sketches of ideas for songs.

#### **Step sequencer**

This lets you use the 16 pads to intuitively and quickly create original rhythm patterns of up to 64 steps.

#### **Drum track**

The drum track lets you add rhythm to your performance simply by pressing a button. Choose from 772 preset drum patterns that cover a variety of styles.

#### **Arpeggiator**

This function is a great way to generate ideas for songs; simply hold down keys to generate rhythmic chords, bass phrases, or guitar strumming.

### **Mic connection for the singer-instrumentalist or for vocoder performance, with no other equipment needed**

The 1/4" phone MIC IN jack lets you connect a mic directly, so there's no need for a singer-instrumentalist to provide a separate mixer when performing live. A vocoder function is also built-in, and you can easily perform vocoder sounds with rapid access via the realtime control section. Also provided is a LINE INPUT stereo mini-jack that's convenient for connecting your audio player or for sampling.

### **Also operates as a USB audio interface**

In addition to USB MIDI interface functionality, USB audio interface functionality has been newly added. You can connect the KROSS 2 to your Mac or Windows computer and enjoy DAW recording, or easily use the instrument for playing in conjunction with your iPad or iPhone. The KORG Module high-quality sound module app can be used as an external sound module that's played from the KROSS 2, or you can perform with the backing of tracks that you created using the KORG Gadget DAW app, all with the ease of connecting a single cable.

A dedicated KROSS2 Editor and Plug-In Editor are also provided. These let you edit while viewing numerous parameters at a glance on your computer, or allow you to use the KROSS 2 as a software synthesizer from within your DAW.

# KROSS 2 Specifications

## Keyboard

### KROSS 2 61

- 61 keys (velocity sensitive; aftertouch not supported)
- Normally C2 – C7 (adjustable in the range [C1...C6] – [C3...C8])

### KROSS 2 88

- 88 keys NH (Natural weighted hammer action) keyboard (no aftertouch)
- Normally A0 – C8 (adjustable in the range -A-1...C7) – [A1...C9])

*\* The NH keyboard delivers a playing feel similar to that of an acoustic piano, with low notes being heavier and high notes being lighter.*

## System

- EDS-I Enhanced Definition Synthesis - integrated

## Sound Engine

### Maximum Polyphony

- 120 voices (120 oscillators), single mode
- 60 voices (60 oscillators), single mode

*\* The actual maximum polyphony will vary depending on oscillator settings such as stereo multisamples and velocity crossfading.*

### Preset PCM Memory

- Approximately 128 MB (calculated as 48 kHz / 16-bit linear PCM data equivalent)
- 496 multisamples (including seven stereo), 1014 drumsamples (including 49 stereo)

### Expansion PCM Memory

- Approximately 128MB (\*when converted to 48 kHz 16-bit linear PCM)

*\* Used when loading option PCM*

### Program

- Oscillator: OSC1 (Single), OSC1+2 (Double): Stereo multisamples are supported 4 velocity zones per oscillator, with switching, crossfades and layers.
- Filters: Four types of filter routing (single, serial, parallel, 24 dB)  
Two multi-mode filters per voice (low pass, high pass, band pass, band reject)
- Modulation: For each voice, two envelope generators (Filter & Amp), two LFOs, two key tracking generators (Filter & Amp), and two AMS mixers. In addition, pitch EG, common LFO, and two common key tracking generators

### Combination

- Timbres: Up to 16 timbres, switchable via key zone or velocity zone, layer and crossfade supported, Tone Adjust function allows program settings to be offset
- Master Keyboard functionality: These allow you to control external MIDI devices

### Drumkits

- Stereo and mono drumsamples. 4-way velocity switches with crossfades and adjustable crossfade shapes (Linear, Power, Layer).

### **The Number of Combinations/Programs/Drum Kits**

- User Combinations: 896 Combinations (384 Preload)
- User Programs: 1280 Programs (768 Preload)
- User Drum Kits 58 Drum Kits (42 Preload)
- Preset Programs 265 Programs (256 GM2 Programs + 9 GM2 Drum Programs)

## **Favorites**

### **Number of memories**

- 128 (16 favorites × 8 banks)

## **Effects**

### **Insert effects**

- 5 Insert Effects In-line processing; stereo in - stereo out.

### **Master effects**

- 2 Master Effects Two effects sends; stereo in - stereo out.

### **Effects types**

- Total of 134 types (select from 74 types for insert effects, 101 types of master effect 1, and 120 types for master effect 2)

### **Modulation**

- Dynamic Modulation

### **Effects Control Bus**

- Stereo side-chaining for limiter, gates, vocoders, etc.

## **Polyphonic arpegiators**

### **Program mode**

- one arpegiator

### **Combination mode**

- two arpegiators

### **Sequencer modes**

- two arpegiators

### **Preset arpeggio patterns**

- UP, DOWN, ALT1, ALT2, RANDOM

### **User arpeggio patterns**

- Number of arpeggio patterns: 1280 (1024 preload)
- Number of tones: 12 tones,
- Number of steps: up to 64 steps

## **Step sequencer**

### **Program mode**

### **Combination mode**

### **Sequencer mode**

- One unit

- Number of tones: 12 tones + 1 accent tone
- Number of steps: up to 64 steps
- \* Can be created for each program, combination, and song.

## **Drum Track**

### **Preset Patterns**

- 772 patterns (Held in common with sequencer patterns.)

### **Other**

- Trigger Mode / Sync / Zone settings can be specified

## **Sequencer**

### **Tracks**

- 16MIDI Tracks

### **Number of Songs**

- Up to 128 songs

### **Resolution**

- 1/480

### **Tempo**

- 40.00 – 300.00 (1/100 BPM resolution)

### **Maximum Memory**

- Up to 210,000 MIDI events

### **Counter**

- Measure/Beat/Tick

### **Template Song**

- 16 preset/16 user template songs

### **Preset Patterns**

- 772 patterns (shared with Drum Track patterns)

### **Format**

- KORG (KROSS) format, SMF format 0 and 1

## **Pad sampler**

### **Specifications**

- 16 pads × 8 banks
- Automatically saved on the SD card, and automatically loaded
- Up to four pads can play simultaneously

### **Recording format**

- PCM audio format 48 kHz/16-bit

### **Recording time**

- Up to approximately 14 seconds of stereo sample for each pad

### **Importing**

- WAVE format, file name extension: .wav, 44.1 kHz/16-bit, 48 kHz/16-bit, stereo

*\* 44.1 kHz is automatically converted to 48 kHz*

### **Edit**

- Waveform display editing functionality, start address and looping settings etc., normalize and other editing operations

## **Audio Recorder**

### **Recording Format**

- PCM audio format 48kHz/16bit

### **Import**

- WAVE format (file name extension: wav ) 44.1kHz/16bit, 48kHz/16bit stereo

*\* 44.1 kHz is automatically converted to 48 kHz*

### **Export**

- WAVE format (file name extension: .wav) 48kHz/16bit, stereo

### **Recording Time**

- Maximum continuous recording time: 3 hours
- Depends on the SD card used; approximately 90 minutes per 1 GB

### **Number of Songs**

- Up to 200 songs

### **Number of overdub recordings**

- Depends on the remaining capacity of the SD card

### **Counter**

- Hour/Min/Sec

### **Pad audio play**

- 16 pads × 8 banks
- Directly play back data from SD card
- Multiple pads cannot be played simultaneously

## **Media**

- File, Utility, Information, additional PCM data management functionality

## **Controllers**

### **General Control**

- Pitch bend wheel, Modulation wheel, SW1, SW2

### **Realtime Control**

- SELECT button, SWITCH button, KNOB1 knob, KNOB2 knob

#### **Step Sequencer/Favorite/Pad Sampler/Pad Audio Play**

- Pads 1 – 16
- STEP SEQ ACTIVE button, Run button
- FAVORITES ACTIVE button
- SAMPLER ACTIVE button, HOLD button
- AUDIO PLAY ACTIVE button
- BANK LEDA/B/C/D/E/F/G/H (also used by Step sequencer, Favorite, Pad Sampler, and Pad Audio Play)

#### **Drum Track**

- DRUM TRACK button

#### **Arpeggiator**

- ARP button

#### **Audio Recorder**

- AUDIO REC button

## **User Interface**

#### **Display**

- 240×64 pixel LCD backlight
- Adjustable contrast (hold the EXIT button and turn the VALUE dial)

#### **Category**

- CATEGORY dial, VALUE dial

#### **MODE**

- COMBI button, PROG button, SEQGLOBAL/MEDIA button

#### **Value Controller**

- Cursor buttons, EXIT,ENTER, FUNCTION, PAGE-, PAGE+, MENU buttons

#### **Sequencer**

- REC button, START/STOP button

#### **Quick Layer Split**

- LAYER/SPLIT button

#### **Other**

- VOLUME knob

## **Control Input**

- DAMPER (Supports piano-style half-damper pedals as well as standard foot switches)
- ASSIGNABLE SWITCH
- ASSIGNABLE PEDAL

## **Audio Outputs (Analog)**

### **AUDIO OUTPUT L/MONO, R**

- Connectors: 6.3mm (1/4") phone jacks(TS unbalanced)
- Output Impedance: 1.1k ohm stereo, 550 ohm mono (L/Mono only)
- Maximum Level: +10.0dBu
- Load Impedance: 10k ohm or greater
- Controllable by the VOLUME knob

### **HEADPHONE OUTPUT**

- Connectors: 3.5mm(1/8") stereo mini phone jack
- Output Impedance: 33Ω
- Maximum Level: 40+40mW
- Controllable by the VOLUME knob

## **Audio Inputs (Analog)**

### **LINE IN**

- Connectors: 3.5mm(1/8") stereo mini phone jack
- Input Impedance: 1.1kΩ
- Maximum Input Level: -42 to 0 dBu

### **MIC IN**

- Connectors: 6.3mm (1/4") phone jacks(TS unbalanced)
- Input Impedance: 33Ω
- Maximum Input Level: -48 to -6dBu
- Phantom power or plug-in power is not supported.

## **Others**

### **MIDI**

- IN, OUT

### **USB**

- USB connector TYPE B x 1, USB-MIDI interface, USB audio interface

### **SD Card Slot**

- One card slot

*\* Capacity recognized: SD memory cards up to 2 Gigabytes (GB). SDHC memory cards up to 32 Gigabytes (GB). SDXC memory cards are not supported.*

## **Main Specifications**

### **Power**

- AC adaptor power supply DC 9V
- AA alkaline batteries x 6, or nickel-metal hydride batteries x 6

### **Battery Life**

- AA alkaline batteries x 6: Approximately 6 hours
- AA nickel-metal hydride batteries (1900mAh) x 6: Approximately 7 hours

*\* Varies depending on the batteries used and the conditions of use.*

### **Power Consumption**

- 5W

**Dimensions (W x D x H)**

- KROSS2-61: 935 mm × 269 mm × 88 mm / 36.81" × 10.59" × 3.46"
- KROSS2-88: 1,448 mm × 383 mm × 136 mm / 57.01" × 15.08" × 5.35"

**Weight**

- KROSS2-61: 3.8 kg / 8.38 lbs (excluding batteries)
- KROSS2-88: 12.3 kg / 27.12 lbs (excluding batteries)

**Included Items**

- AC adapter, Quick Start Guide

**Accessories (sold separately)****Keyboard stand**

- KROSS2-61: Standard-S-BK61
- KROSS2-88: Standard-L-SV88

**Soft case**

- KROSS2-61: SC-KROSS 2 61
- KROSS2-88: SC-KROSS 2 88

**Expression/Volume Pedal**

- XVP-20
- XVP-10

**Foot Controller**

- EXP-2

**Damper Pedal**

- DS-1H

**Pedal Switch**

- PS-1
- PS-3

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\* Appearance and specifications of products are subject to change without notice.