

LISTEN TO YOUR IMAGINATION

KORG

THE
MAGAZINE

Autumn 2007

www.korg.com

INTERVIEWS WITH...

Genesis' **Tony Banks**,
Adam Blackstone,
DJ Logic and **Zero 7's**
Eddie Stevens

Closer look

Expert guides to the
KP3, OASYS and RADIAS

Essential advice

In-depth features on tuners,
recording formats and Korg synths

INCLUDES
KORG
GUITAR
GUIDE

The next coming of M

UNVEILED: Korg's new wave of
products released for 2007

KAOSS MIXERS



R3 SYNTH



MR RECORDERS



PA2X PRO



ZERO4 MIXERS



Welcome

It's been a very busy year for Korg. It started in January when we launched an army of new gear at the NAMM Show in the USA. Then we transported them all to the huge Frankfurt Musikmesse in March where they proved to be great crowd-pullers.

Our Hot New Products section (p6) introduces you to all the latest releases, and it's our biggest section ever with no less than 10 new products to showcase. These include the amazing M3 synth workstation, the streamlined R3 synth and the awesome MR 1-bit recorders. Next comes all our new Dance & DJ gear into one place (p18). Check out the new Zero mixers, the KAOSS mixers, the mini-KP and the fabulous KAOSSILATOR.

"Our Hot New Products section introduces you to all the latest releases, and it's our biggest section ever with 10 new products"

For the lowdown on our existing gear, go to our Buyers' Guide (p45) and guitarists shouldn't miss our Guitar Special (starts page 57) not least because we have news of a powerful new multi-effects processor, the PX5D, on page 67.

As if that wasn't enough, we have an exclusive interview with Genesis' keyboardist and long-time Korg fan Tony Banks on page 32 and talk techie with Zero 7 and Moloko's keyboardist Eddie Stevens on page 56.

Yes, we've been busy here at Korg but we've loved every minute of it and we hope you enjoy reading about the results in this magazine!

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IN THE MIX

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Awards2007

Winning gear!

Each year at the Frankfurt Musikmesse, the results of the MIPAs (Musikmesse International Press Awards) are announced, and this year Korg walked away with two awards. Korg products were nominated in five categories and the KAOSS Pad KP3

was voted Best DJ Tool and the new M3 won the Best Keyboard Workstation award. So don't just take our word for it, our products really are that fantastic!

You can read more about the awards at www1.mipa-award.de.

musikmesse
international
press
award

m.i.p.a.



FOR
MORE
INFO
visit the
Korg website
www.korg.com

Perfect harmony

The Nashville Chamber Orchestra is one of the first organisations to benefit from the superior audio quality of the new Korg MR1000 1-bit digital recorder. After comparing its 5.6MHz recording to a typical 24/96kHz PCM version, the musical director Paul Gambill commented, "Hearing the orchestra recorded on the MR1000 is like being on the conductor's podium... it's that real. Nothing else compares."

Visit the Nashville Chamber Orchestra online at www.nco.org.



EasyArranging

Now available for the PA800 is the new V1.50 operating system. It includes a double MP3 player with Transpose and Tempo change, Guitar Track for Styles, track EQ memorised in the Song Play-Global Set-up

and touch control on sliders, drawbars, knobs and numeric fields.

The PA800 manual and the new V1.50 operating system are available to download from www.korgpa.com.



Total Karma

Now online is a special introduction to the new M3 and its KARMA features introduced by the man behind this amazing technology, Stephen Kay. The online video sees Kay presenting a brief introduction to the new M3 synth and discussing the second-generation KARMA technology it inherits from the OASYS. It includes real-time performances of three of the new Combis from the factory voicing.

Log on to www.karma-lab.com/me/m3_demos.html for the full video.



ArtistNews



Music on the move

From Bunnymen to Baltic Fleet there's no stopping Paul Fleming...

Ex-keyboardist with Echo & The Bunnymen, Paul Fleming has written and recorded an album for his new band, Baltic Fleet, while on the road. Using a Triton Rack, CX3, MS10 and microKORG, Paul went from conception to finished tracks on trains across Japan, planes around the world, hotel rooms and soundchecks, showing that these compact products let you create music anywhere. The album *Trains, Planes And Digital Delays* is out now. Visit www.myspace.com/balticfleet.

Left: Paul Fleming on a private jet with the microKorg

Upgrade

OASYS System Upgrade



Korg has announced the release of an upgrade for its flagship OASYS workstation synthesizer, marking another leap in the evolution of this globally-acclaimed instrument, which has opened up a whole world of sonic possibilities for musicians around the world.

System version 1.3 expands the sound-creation and performance-enhancing potential of OASYS via a host of new features, from practical tweaks to seriously cool new functions.

KARMA 2.1 has arrived, adding increased functionality and flexibility, not least support for 12 banks of 128 User GE's (for a total of 1,536), in addition to the 2,048 internal presets.

Soundbites



ADAM WAKEMAN FORMS NEW BAND

Keyboardist Adam Wakeman (son of Rick) who plays with Ozzy Osborne has formed a band called Headspace, who'll be supporting Osborne this summer using Korg gear.

"I use an 88-note Triton Extreme and a 65-key Triton Pro," explains Adam. "In Ozzy's band I use these plus an Akai sampler."

The Headspace/Ozzy gig is to be held at Wembley Arena on 19 June. Find out more about Headspace at www.myspace.com/headspacetheband and keep up with news of the Ozzy tour at www.ozzy.com.



ROCK LEGEND USES KORG D4!

Rock legend and former Led Zeppelin frontman Robert Plant recently reformed his 80s band, The Honeydrippers. They have been playing at some small venue charity concerts billed

as An Evening Of Rhythm And Blues.

On keyboards in the band, long-time Korg user Mark Stanway used a Korg CX3 organ and Robert himself also recently acquired a Korg D4 personal four-track recorder to use as a songwriting tool.

Find out more about Plant's latest musical exploits at www.robertplant.com.

LITE UP YOUR LIFE

Korg has teamed up with Ableton to offer owners of previous versions of Live Lite Korg Edition a free upgrade to Live Lite 6 Korg Edition. The software offers many of the new features found in the full version of Live 6, including multicore/multiprocessor support, instrument and effects rack presets, macro controls and project management tools. To get more info about the update, visit www.ableton.com/free-korg-upgrade.

Other OASYS 1.3 changes include:

- Scene Changes can now be quantized/delayed to an interval in the range of a 16th note triplet, up to four measures, allowing a larger timing value to be entered and thus greater advance selection.

- KARMA patterns can now be triggered in perfect time, even at the fastest tempos, thanks to the introduction of adjustable Quantize Windows.

- Custom Note Maps can now be copied between Programs, Combis and Songs, for a more streamlined workflow.

- EXs expansion sample

sets can now be loaded and unloaded without restarting OASYS.

- Each EXi expansion instrument in a dual Program can now be transposed separately, giving greater sonic flexibility.

- All Step Sequencers now provide separate smoothing parameters for attack and decay, allowing more complex tonal changes.

- User Sampling RAM capacity has been expanded, when using EXs-1 and EXs-2 expansion sample pack PCM data, thanks to a new lossless compression method.

A demo version of the new EXi MOD-7 Waveshaping VPM synth, which takes classic forms into uncharted territories of cutting-edge sound generation, is also included with the OASYS 1.3 upgrade. In addition, an optional EXs-3 Brass & Woodwinds Expansion Sample Library is now available, providing over 700MB of expressive, natural-sounding instruments.

For further details of the improvements featured in the OASYS 1.3 upgrade, visit www.korg.com

M3

Meet the bold, innovative, third-generation workstation from the company that invented the concept...

OVERVIEW

This year sees the release of the M3 workstation and sampler. It inherits much of its heritage from the flagship OASYS, distilled into an inspiring and affordable music production package.

The M3 heralds the third generation of Korg workstation. The original M1 defined the category and soon became the best-selling workstation ever. The Trinity that followed it, in turn, gave rise to the whole family of Triton products.

Korg is now poised to redefine the genre once again. The inclusion of a new tone generator, great innovations and a multi-year sound design commitment, in order to make it 'sing', have led to the M3, the workstation that rightfully deserves to wear the 'M' badge that started it all.

KARMA-fied

The M3 includes all the second-generation KARMA functions, as featured on the flagship OASYS, including KARMA wave sequencing. KARMA is the inspiring, real-time phrase generator that can help you play everything from natural instrument gestures to complex cascades of notes, dance riffs, gated and chopping effects, and more.

Open Sampling

The Open Sampling system allows sampling and resampling in every mode, with 64Mb of RAM as standard, expandable to 320Mb with the optional EXB-M256 board. Compatibility with WAV, AIFF, AKAI and now SoundFont 2.0 ensures a library of possible sounds beyond your own creative efforts.

Enhanced definition

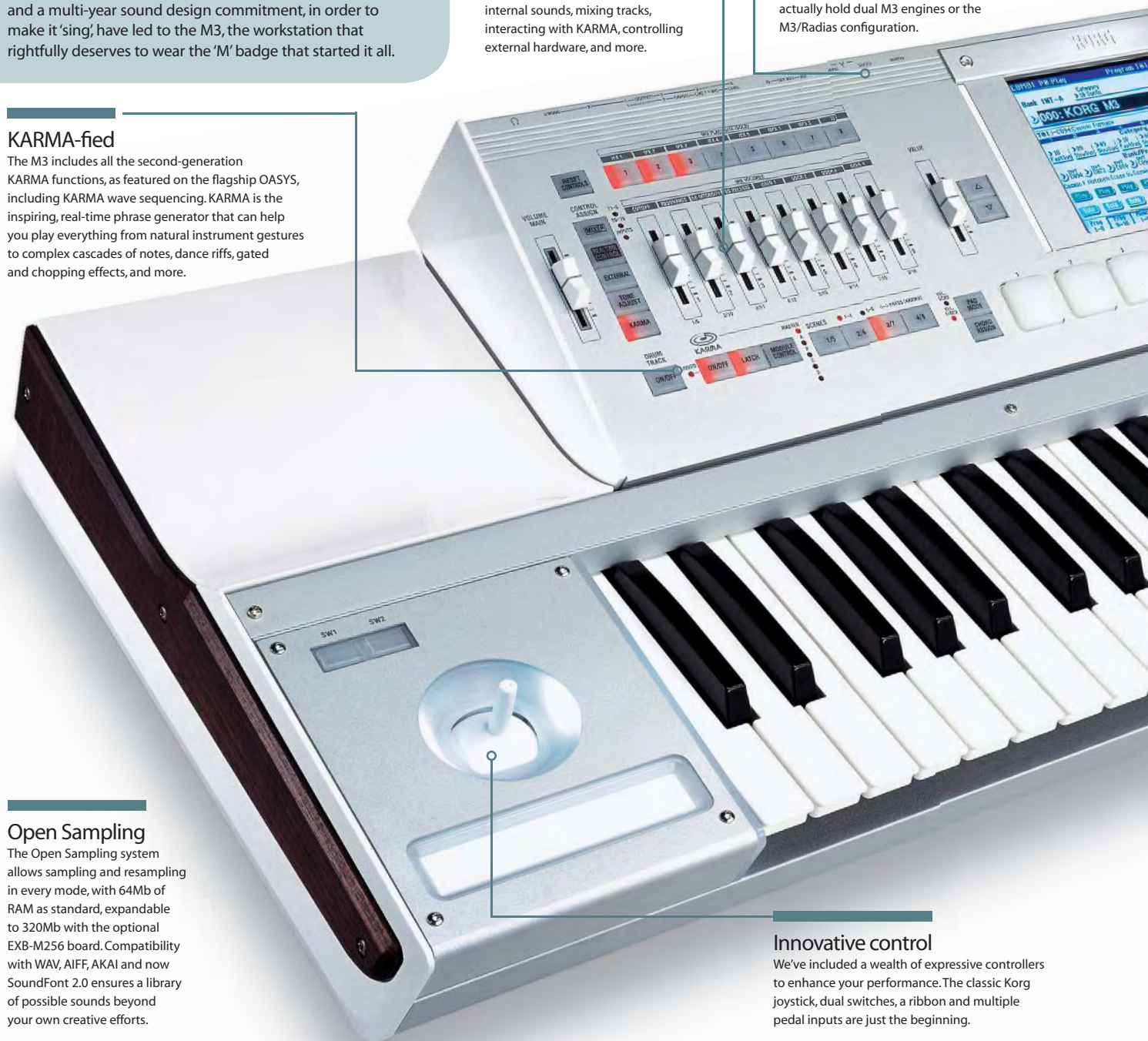
The M3 utilises a new sound chip designed in parallel with the software that became the HD-1 in the flagship OASYS. The new EDS (Enhanced Definition Synthesis) system shares much of the OASYS lineage. With its low-aliasing oscillators, a powerful new filter topology, detailed envelope generators, a Drive parameter for analogue warmth and grit, and the AMS mixer for advanced modulations, the 120-voice M3 delivers the essential elements from the acclaimed HD-1 design.

Control room

The M3 music workstation uses the same type of multi-mode real-time control surface, as first featured on the OASYS. Eight sliders and switches with powerful functionality give you total control over tweaking internal sounds, mixing tracks, interacting with KARMA, controlling external hardware, and more.

Unique design

The M3 offers a new design concept called the Korg Komponent System, allowing you to custom-configure your own expandable instrument. The 73-key version can host both the M3 and the Radius-R module for a powerful dual-panel system. The 88-key version can actually hold dual M3 engines or the M3/Radius configuration.



Innovative control

We've included a wealth of expressive controllers to enhance your performance. The classic Korg joystick, dual switches, a ribbon and multiple pedal inputs are just the beginning.



Radias enhanced

You can add even more synth power to your M3 thanks to the EXB-RADIAS expansion board, a 24-voice, single-timbre version of the awesome MMT synthesizer engine that fuels both the Radias and R3 synths. Just pop it in your M3 and enjoy analogue-modelling and digital synthesis combined, offering endless synthesis possibilities, with 128 great new Programs marrying the engine to the many features found only in the M3.

More ROM

A whopping 256Mb of ROM, with 1,028 multisamples and 1,606 drum samples, provides plenty of choices for sound construction. It's like the 'best-of' from the OASYS ROM compiled into a great new sound set, including velocity-switched sources for the main acoustic sounds, and plenty of synth sources and drums.

Amazing sounds

Korg is renowned for its unsurpassed sound programming, and the M3 takes that reputation to an even higher level. 512 expressive Programs and 384 stunning Combinations take full advantage of all the innovations of the M3. With space for a total of 1,664 Programs and 1,792 Combinations, you'll never run out of room for your own creations.

SOUNDS ONLINE

Hear the mighty new M3 synth workstation in action at www.korg.com/m3 where you'll find 11 MP3 demos to download and an online manual

In vision

The colour TouchView display doubles as an X/Y pad for controlling synthesis and effects parameters, changing colours in response to your movements.

Better sequencer

The M3 features a new, high-resolution sequencer engine with a professional 480ppq for a natural feel. It includes all the must-have Korg innovations, including one-touch record, song templates, RPPR, cue list and tone adjust part-editing.

Great new feel

The 61- and 73-key synth-action versions feature a newly-designed keybed that delivers great feel, fast response and ultimate control. The 88-key version uses Korg's heralded RH3 weighted action that's graded to feel heavier at the bottom and progressively lighter as you go up. All three models boast aftertouch sensitivity.

Drummer included

Drum Tracks are an M3 innovation: natural-sounding, user-programmable grooves that can be played along to for instant inspiration, integrated with KARMA for new creative possibilities and used as springboards for your next hit song.

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AT A GLANCE

SYNTHESIS METHOD
EDS (Enhanced Definition Synthesis) system

POLYPHONY
120 voices

KEYBOARD
61, 73 or 88 weighted keys, velocity-sensitive and aftertouch

PRESETS
1,664 Programs (512 preloaded), 1,792 Combis (384 preloaded), 144 drumkits (32 preloaded)

EFFECTS
170 types; 2 master effects, 5 insert effects, 1 total effect

INS & OUTS
Inputs 1&2, mic/line switch input, damper pedal, dual assignable switch/pedal, L/mono & R outs, individual outs 1-4, S/PDIF, headphones, MIDI In/Out/Thru, USB, FireWire x2

For more information go to:

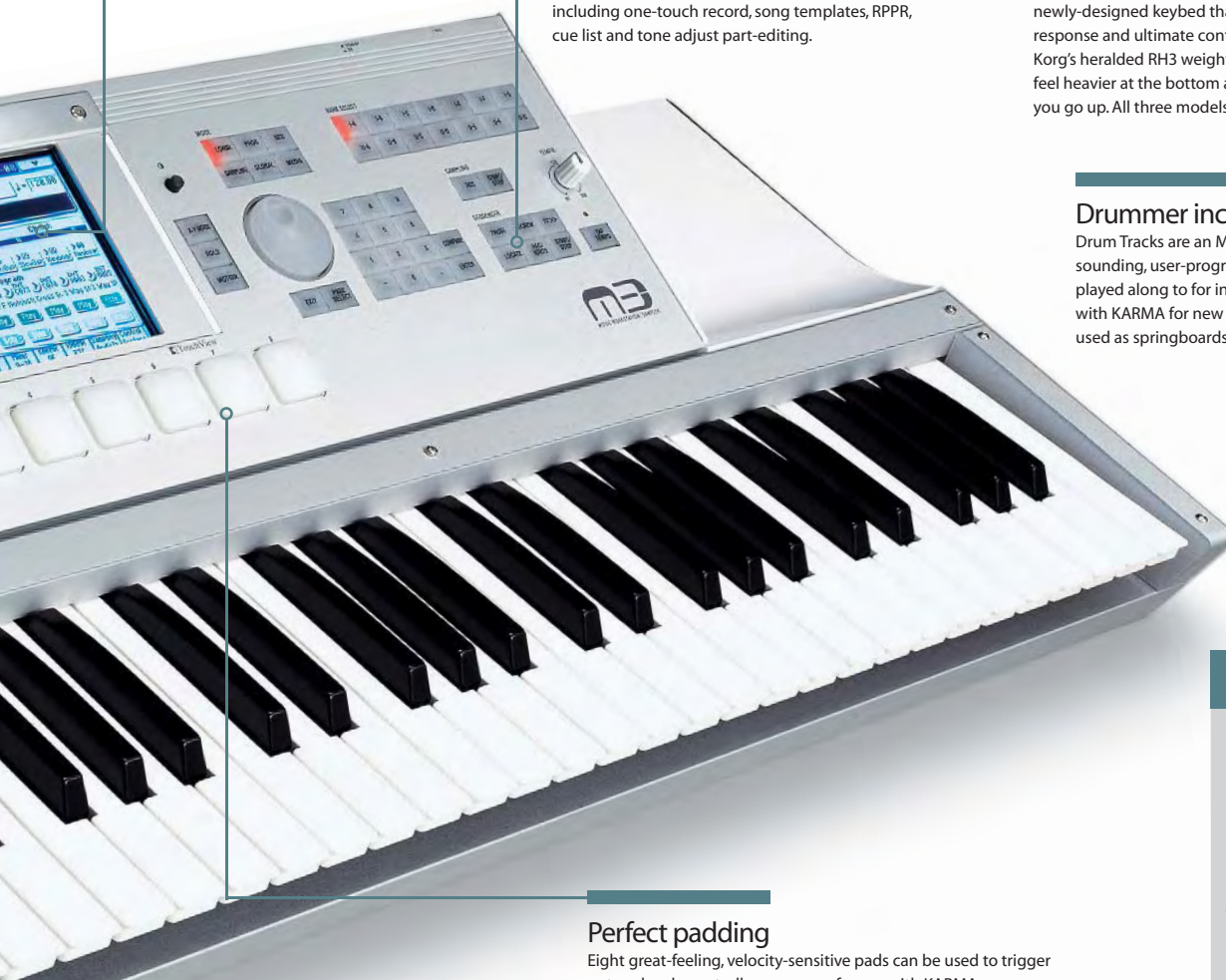
www.korg.com

Computer friendly

The bundled editor/librarian software uses USB MIDI to enable you to edit and work with your M3 using your computer. This powerful software works in standalone mode or as a plug-in within your favourite host software.

Fire power

Adding the visionary EXB-FireWire option enables the M3 to interface both audio and MIDI with your computer using a single FireWire cable. The M3 shows up in your DAW/sequencer like a plug-in, with complete control and interactive operations.



R3

The new R3 synthesizer takes Korg's synthesis power to new levels...

OVERVIEW

Borrowing ultra low-aliasing modelling techniques from the OASYS, the Multi Modelling Technology (MMT) synth engine found in the R3 synthesizer and vocoder exceeds common analogue expectations and rapidly takes off for uncharted territories.

This powerful MMT engine first appeared in our EMX-1 Electribe, and was then fully realised in the amazing Radias. Now say hello to the R3, the newest member of the family.

Mod sequencing

The R3's modulation sequencer provides discrete values to a modulation parameter that changes over time, in stepped or smooth motion, which can then be looped over and over.

Modulation station

Two LFOs and three ADSR envelopes shape the sound and add cyclic motion to nearly any voice parameter. Connect various modulations, sources and destinations together using the six virtual patches.

Streamlined design

Compact, portable and easy to use, the R3 keeps important controls close at hand, and individual parameter displays let you dig deep when editing or programming. The Bank Select dial keeps all 128 preloaded Programs organised by category for fast access.

Processing package

Audio inputs allow any audio signal to be gated and filtered using the internal synthesis and effects.

Awesome architecture

Each of the 128 R3 Programs consists of up to two Timbres. Two insert effects and a two-band EQ can be assigned to each Timbre, and you can choose from 30 different effect types. The Program itself offers an eight-step arpeggiator plus a master effect that lets you add extra effects such as reverb or delay to the whole.

Action vocoding

Above and beyond traditional vocoding, Formant Motion records the formant of a sung or spoken phrase so it can be recreated at any time. The vocoder offers 16 bands for extra clarity and a vocoder mic is included.

Punch it up

Bring definition and emphasis to the beginning of the sound by adding variable amounts of Punch to reinforce its attack.

Catch that wave

For each voice, the R3 provides two oscillators. The first gives you a choice of seven waveforms, including sawtooth, pulse, formant, noise and DWGS. You can also apply cross modulation, unison, or VPM (Variable Phase Modulation). The second oscillator gives you a choice of four waveforms, such as sawtooth and sine, and can also be used as a modulation-type oscillator to apply sync or ring modulation for distinctively analogue synthesizer sounds.

SOUNDS ONLINE

Visit www.korg.com/r3 where you'll find some online MP3 demos showcasing the R3's sounds.

Keys to the kingdom

The R3 synthesizer offers full-size, velocity-sensing keys, while pitch and mod wheels allow expressive performance control.

AT A GLANCE

SYNTHESIS METHOD
MMT(MultiModellingTechnology)

POLYPHONY
8 voices

SYNTH STRUCTURE
2 Timbres per Program

VOCODER
16-band with formant motion, shift and hold functions

EFFECTS
30 types, two-band EQ, 2 insert effects per Timbre, 1 master effect per Program

KEYBOARD
37 keys, velocity-sensitive

INS & OUTS
Audio ins 1&2, L/mono & R outs, headphone out, MIDI In/Out/Thru, USB, pedal switch

ACCESSORIES
Gooseneck mic, CDROM, AC supply

DIMENSIONS
635 x 270 x 76mm

For more information go to:

www.korg.com

Bend me, shape me

Add analogue warmth by dialling up extra Drive. Innovative wave shaping provides dramatic results, even offering virtual 'pick-up' response.

Free editing software

You can manage and save your sounds and formants with the free sound editing and librarian software that's bundled with the R3. The single USB connection makes transferring data quick and easy.



PA2X Pro

Korg unleashes the ultimate Arranger for the professional musician, with the best range of features, ever – listen, and believe!

OVERVIEW

The magic combination of unbeatable sound quality and professional features has seen Korg's Arranger series, including the industry standard Pa80 and leader, the Pa1X, thrill audiences and delight players around the globe. Following countless interviews with professional musicians, Korg have raised the bar once again with the all-new Pa2X, an intuitive, powerful, and interactive standard-bearer that boasts the most stunning sound ever produced by an Arranger keyboard, coupled with a mind-blowing range of pro features. Guided by RX Technology, offering 'Real eXperience' for musicians and listeners alike, the Pa2X Pro really has to be seen and heard to be believed.

Assignable controls

The Pa2X Pro's bank of eight sliders (the ninth normally acts as an MP3 volume control) are fully assignable so your live performances work the way you want them to, and can act as organ drawbars, volume controls for each part of a backing track, or mic settings.

Help!

Two interface modes, Easy and Expert, help keep you on track, ensuring that all the controls you actually need are right at your fingertips. Easy mode shows only the most important controls, which is useful for beginners or during live performances, while Expert gives you full editing facilities. And, for more information, you can use the multi-lingual contextual Help System which comes as standard.



TC Helicon inside

The Pa2X Pro features vocal processing and harmonies, powered by the world-acclaimed TC Helicon Voice Processor. Its professional quality EQ and effects include Compressor, Gate, Delay and Reverb, designed and shaped specifically for vocals. Add XLR/Combo balanced connection with switchable phantom power, a dedicated high quality mic preamp and ultra-realistic three-voice Harmonizer, and you've got a recipe for an all-singing success!

Configurable

You can configure and edit almost anything in the Pa2X Pro. Modify and save Styles, Pad, Performances, Sounds, Songs, SongBook, settings for Sliders, Switches, Pedals, Global (Midi channels, output routings, etc.) and more, for both, internal and external control. Scales are fully programmable, including Quarter Tone settings and an Arabic Scale.

Deluxe Styles

The Pa2X Pro features many deluxe styles, including four dedicated Pad tracks, programmed by leading arrangers. The result is unparalleled realism and detail over a wide range of musical genres, with styles for almost every occasion. You can even record and edit your own, with the added advantage of Fill 3/Break, Intro 3/Count In and Ending 3 Style Elements.

Sound Expansion

The Pa2X Pro is dedicated to professional musicians, and its full-featured internal Sampler can load Wave, AIFF, Korg format files and, of course, the incredible Akai sample library into its standard 128MB of added memory (expandable to 256MB).

Professional keyboard

The 76-key, velocity-sensitive bed has been designed for the demanding professional and expert pianists, boasting a great feel, with aftertouch, natural piano shape keys and semi-weighted action.

Advanced editing

The Pa2X Pro features such professional sample editing facilities as Loop, Cut, Normalize and Crop, plus Time Slice, which allows you to slice audio grooves and import the data into a Style, to create some of the coolest rhythms imaginable.

Colour touch screen

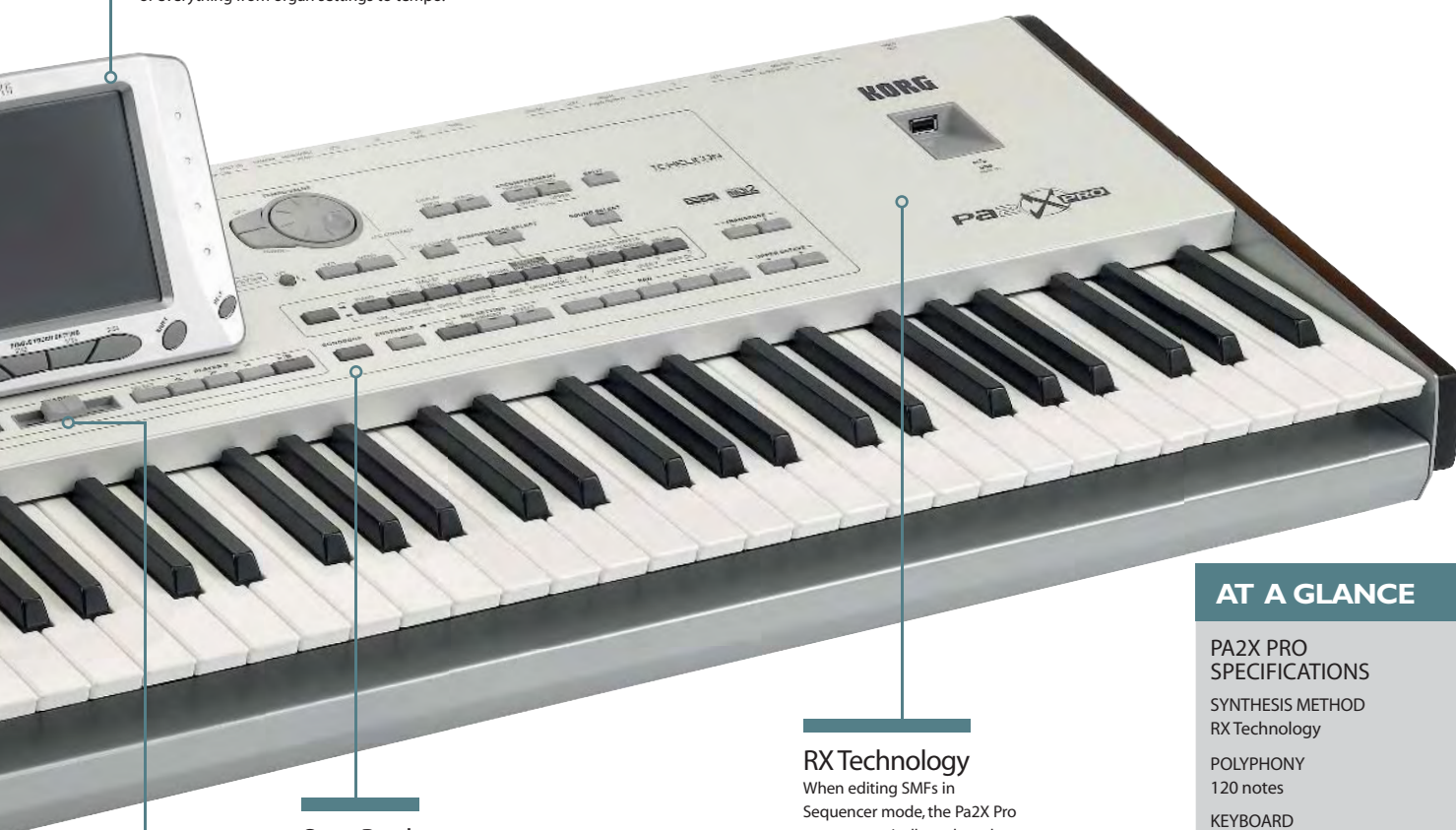
The Pa2X Pro has been designed to be easy to understand and use. A major component in the Pa2X Pro's intuitive design is its motorized, tilting Graphical Colour Touch Screen – simply think, point and click. The Pa2X Pro's sliders, knobs, drawbars and numeric fields can also be changed via the Touch Screen, for control of everything from organ settings to tempo.

Connectivity

Connections include an S/P DIF coaxial digital output, an optional VIF4 Graphical Video Interface (in PAL or NTSC) for TV monitor display. There are two USB Host connections plus a USB port for connection to a personal computer and MIDI devices.

Effects & EQ

The Pa2X Pro has four Stereo Master Effects processors, including 125 standards types (such as Reverb, Delay and Chorus), specialised effects like Vocoder, and acclaimed REMS guitar-based effects. Each Track boasts full EQ-ing, and can be customised for the Song Play mode, plus there are semi-parametric output controls.



SongBook

Unique to Korg, the SongBook is a completely user-programmable musical database that's perfect for live performances, allowing you to store all the settings needed to play a particular song. The SongBook can use Styles, MIDIfiles, karaoke and MP3, immediately recalling the settings. Just select the title and play, it's that easy!

RX Technology

When editing SMFs in Sequencer mode, the Pa2X Pro can automatically replace the Guitar sound with a high-quality RX Guitar sound while adding RX Noise to the track. This means you can transform a flat SMF into an ultra-realistic Song with a real guitar player inside – at the touch of a button!

Compatibility

Although the Pa2X Pro is all new, it is also compatible with the Korg 'i-series' style format and with any 'musical' Pa50, Pa60, Pa80, Pa1X file. This means your Pa50, Pa60, Pa80 and Pa1X sound programs work in the Pa2X Pro as well.

Expandable & Updatable

The Pa2X Pro offers such useful options as the Graphic Video Interface (PAL/NTSC compatible), a memory expansion up to 256 MB for sampling, and a variety of foot pedals. Exciting features and operating systems will be available as free downloads from www.korgpa.com, ensuring that your investment in the Pa2X Pro is always protected!

Double sequencer

Korg introduced the world's first Arranger keyboard with two separate MIDI file players and Cross-Fader in the legendary Pa80 and the Pa2X Pro showcases these double sequencer features at an all-new power level. Two MP3 files can play at the same time, and can be freely transposed, accelerated or slowed down as if they were MIDIfiles. The standard MP3 board lets you record an entire performance (including vocals and Pa2X Pro sounds) in MP3 format. It also features a powerful multitrack sequencer.

AT A GLANCE

PA2X PRO SPECIFICATIONS

SYNTHESIS METHOD
RX Technology

POLYPHONY
120 notes

KEYBOARD
76 velocity sensitive keys with aftertouch

PRESETS
ROM: 950+ sounds and 68 drum kits
RAM: 256 sounds and 64 drum kits

EFFECTS
4 Stereo Master Effects processors, offering 125 types, including reverb, delay, chorus, vocoder and REMS guitar effects, plus TC Helicon Voice processor

INS & OUTS
1 balanced combo XLR mic input with Phantom Power, 2 balanced/unbalanced analog line inputs, 4 balanced/unbalanced analog audio outputs, 1 USB 1.1 device and 2 USB 2.0 host connections, S/P DIF coaxial digital output, headphone jack, MIDI In/Out/Thru

DIMENSIONS
1207 x 365 x 136

For more information go to:

www.korg.com

C340 & C540

The new Korg Concert series combines the elegance of an acoustic piano with all the features you'd expect from a Korg digital keyboard...

OVERVIEW

The C-540 and C-340 boast classic styling, a dark rosewood finish and the same, gently-closing type of key cover used on acoustic pianos.

Their expansive, rich and expressive PCM memory sounds were sampled from a world-class grand piano, with four levels of keyboard dynamics for the C-540, and two for the C-340. In addition, the C-540 meticulously samples the subtle mechanical sounds that occur when the hammer returns to its original position after striking the string, plus the sympathetic resonance from the damper pedal.

Demo features

In addition to 20 demo songs that introduce its sounds, the C-540 provides 185 songs, including classics for everyone to enjoy, plus standard piano practice pieces. You can use the piano lesson function to play along with these demo songs at a comfortable tempo, or listen to the right hand and left hand parts played back separately by a professional pianist, while you practice each part. The C-340 comes pre-loaded with ten sound demos and 20 famous pieces.

Recorder function

On the C540 you can record your performances, with each song containing up to 45,000 notes over two parts. The C-540 can hold a maximum of 16 songs, if each features 45,000 notes. By setting playback to repeat, this function is perfect for piano lessons. Songs can be copied to a computer via USB, as SMF format or MIDI data.

USB connector

The USB connector allows a single-cable connection to your computer, letting you back up recorded performance data, or transmit and receive MIDI data.

C340

Real Weighted Hammer Action

The C-540 and C-340 both use the Real Weighted Hammer Action 3 (RH3) keyboard that's based on the same mechanism as a grand piano and which is also found on Korg's top-class synthesizers. Excessive springiness is eliminated, giving optimum response for any type of passage and ensuring that the keys will return as quickly as if they were being pulled up by your fingers.

Effects

The C-540 provides such effects as reverb (eight types, 128 levels) and chorus (six types, 128 levels). It also provides 24 different insert effects, including rotary speaker, tremolo, delay, and phaser. The C-340 provides reverb and chorus, each operated by pressing a single button.

Performance

Edit and save up to 30 sound sets, each featuring those chosen for Layer or Split mode (up to two sounds) plus effects. The C-540 is set-up with 30 recommended settings, eg. number 29 splits the keyboard in the centre, with the same grand piano sound and octave range assigned to the left and right halves.

C540





Variable velocity sensing

The Key Touch Control function lets you change the way that your playing strength will affect the sound output, with a selection of nine levels on the C-540, and three on the C-340. This allows you to enjoy performing with the optimal touch response for your own playing style.

Temperaments

In addition to the standard equal temperament, the C-540 offers nine historically authentic choices, including pure-toned chords, Arabian, and gamelan scales. The C-340 offers a choice of three temperaments. You can also choose the same stretched tuning which is used on acoustic pianos.

Metronome and drum machine

There's a metronome that lets you use a bell as the accent beat, with adjustable time signature, tempo, and volume. The C-540 also contains 37 different rhythm patterns with drum sounds which can be used as a metronome, and you can play along with these to enjoy the experience of session playing. You can also record your own performance along with these drum patterns.

Three pedals

Both pianos provide all three standard pedals: damper, soft, and sostenuto. The damper and soft pedals support half-pedalling for more expressive control, and the C-540 also lets you assign the pedals to control an effect or other functions. For example, you can use a pedal to apply a glide effect that slightly lowers the pitch, switch a rotary speaker effect, or play/stop the recorder without taking your hands off the keyboard.

Spacious speaker system

Each instrument delivers a rich, spacious, and powerful sound. The C-540 contains a new speaker system with two tweeters to reproduce the high frequencies and a pair of large-diameter woofers to carry the lows. The C-340 boasts two large-diameter speakers.

Connectivity

Audio IN/OUT jacks: The audio OUT jack lets you play the instrument through external speakers, and the audio IN lets you use the built-in speakers to listen to music from a CD player or other audio source while you perform. MIDI connectors: MIDI is the world-wide standard for transferring performance data between electronic musical instruments and computers.

AT A GLANCE

C-540/340 SPECIFICATIONS

KEYBOARD

88-key (A0 ~ C8) RH3 keyboard

KEY TOUCH CONTROL

C-540: nine velocity curves

C-340: three velocity curves

POLYPHONY

C-540: 62 notes,

C-340: 60 notes

PROGRAMS

C-540: 40 types, including

9 acoustic pianos, 8 electric pianos, 2 harpsichords, 2 clavs, 2 vibraphones, acoustic guitar, 3 electric organs, 3 church organs, 3 strings, 3 choirs, 4 basses

C-340: 30 types, including 4 acoustic

pianos, honky-tonk, electric grand, 6 electric pianos, harpsichord, 2 clavs, vibraphone, acoustic guitar, 3 jazz organs, 3 church organs, 2 strings, 2 choirs

EFFECTS

C-540: reverb (8 types), chorus (6 types), insertion effect with 128 step intensity (24 types, including tremolo, delay, rotary speaker)

C-340: reverb and chorus with three-step intensity

RECORDER

45,000 note capacity over two parts per song (C540 only), rename function, controls: record, start/stop, REW, FF, pause, part 1, and part 2

DEMO SONGS

C-540: 205 songs (20 sound demos, 185 piano tunes), Lesson functions

C-340: 30 songs (10 sound demos, 20 piano tunes)

TEMPERAMENT

C-540: 10 types

C-340: 3 types

CONNECTIONS

OUTPUT: (L/Mono, R), headphones x 2, INPUT: (L/Mono, R)

USB connector (C-540 only): supports Windows XP (Home Edition/Professional), Windows Vista, Mac OS X 10.2 or later

MIDI: In, Out

AMPLIFIER WATTAGE

C-540: 35 W x 2

C-340: 25 W x 2

SPEAKERS:

C-540: 16 cm x 2, 5 cm x 2,

C-340: 13 cm x 2

DIMENSIONS:

C-540: 1,369 (W) x 462 (D) x 869 (H) mm

C-340: 1,369 (W) x 462 (D) x 869 (H) mm

For more information go to:

www.korg.com

Legacy Analogue 2007

Great Korg synths new and old are recreated in virtual versions thanks to the new 2007 Analogue Edition of the Legacy Collection...

OVERVIEW

This package of classic analogue synthesizers which have been reborn as cutting-edge software synths includes the Korg Legacy Collection's ever-popular MS20 and PolySix modules, plus the all-new Mono/Poly. The legendary Legacy Cell soft synthesizer plus the powerful MS20FX and MDE-X effects plug-ins are also now included.

Perfect clones

The three synths in this package use Korg's proprietary CMT (Component Modelling Technology) to perfectly reproduce the sound and response of the originals. CMT takes an organic approach to modelling, reproducing not only the sound but also the character and response curve of each parameter, so that the results are completely faithful to the original model.

Mono/Poly

Released in 1981, the Mono/Poly was a monophonic/polyphonic behemoth that many musicians acclaimed as the best analogue synthesizer ever made by Korg. It provided four oscillators, a resonant filter, dual envelope generators and modulation generators plus powerful, four-way synchro and cross modulation capability for creating aggressive and signature tonal effects.

PolySix

The PolySix programmable, six-voice polyphonic analogue synthesizer was introduced back in 1981. With its surprisingly full-sounding voice structure, chorus/phase/ensemble effects and such performance functions as chord memory and an arpeggiator, it quickly became a worldwide hit.



MS20

Since the MS20 went on sale in 1978, this semi-modular monophonic synth has enjoyed unbroken popularity for its thick and solid sound, aggressive analogue filters and inexhaustible potential for creative patching.

Reborn

The MS20 soft synth provides a complete simulation of the legendary original and adds many modern advantages, such as 32-voice polyphony, up to 16-voice unison (with detune/spread), flexible external modulation settings and MIDI clock synchronisation, giving you even greater creative potential.

Today's version

The PolySix soft synth perfectly replicates the original instrument, and adds the same enhancements as the MS20, giving functionality that brings this classic synthesizer up to date for modern music production.



SOUNDS ONLINE

Hear exactly what Legacy Analogue Collection is capable of by listening to the MP3 demos available at www.korg.co.uk/legacyAE

Signature plus

In addition to perfectly reproducing the original, this new Mono/Poly soft synth seriously extends its sound-creating potential. A powerful, eight-virtual-patch matrix lets you route 159 modulation sources to 35 destinations, allowing the creation of complex and diverse sounds. A brace of integrated multi-effects, 16-voice unison and up to 128 voices deliver modern performance power and flexibility.

Effects included

The Analogue Edition 2007 also includes two powerful effects plug-ins. MS20FX lets you run audio through the MS20's snarling filters and flexible DSP signal processing. MDE-X is a suite of 19 high-quality effects derived from many of Korg's classic instruments and recorders.



Sounds

Included is a diverse collection of 256 new sounds, developed by an international team of sound designers and remixers, which are sure to become the sounds of a new era.

AT A GLANCE

Analogue Edition

COMPATIBILITY
Mac (including MacIntel),
Windows, RTAS, VST, AudioUnits
supports, standalone operation

POLYPHONY
PolySix & MS20: 32 voices max
Mono/Poly: 128 voices max
(depends on CPU)

For more information go to:

www.korg.com

Perfect partners

Legacy Cell lets you blend combinations of the MS20 and PolySix synths with two insert effects and two master effects, and use them as a single soft synthesizer that delivers powerful new sounds and textures.

MR-1000 & MR-1

Perfect for future-proof recording on the go, the new professional mobile recorders from Korg offer excellent sound at incredible value...

OVERVIEW

Korg's brand new, super-portable MR-1000 and MR-1 professional mobile recorders break new ground by providing you with high-fidelity, 1-bit recording technology at unbelievably low prices.

The hand-held MR-1 provides high-quality 1-bit/2.8MHz recording and playback, while the larger mobile/tabletop MR-1000 delivers an astonishing 1-bit/5.6MHz, doubling industry DSD recording quality standards.

Pure and simple

Today's state-of-the-art, 24-bit converters already use high-speed 1-bit conversion to capture audio, then employ real-time decimation and other processes to thin out the datastream into the correct bit depth/sample rate to match the desired format. The beauty of the MR-1000's and MR-1's bitstream format is that it uses the original 1-bit data, without the need for the other processes. What goes in comes out, with no manipulation needed.

Save it right

Mixing directly to the MR-1000 gives you the superb fidelity of high-rate 1-bit technology, outperforming today's multi-bit formats. The AudioGate software can convert your recording into the mastering format of your choice. And backing up in this highest-spec 1-bit format future-proofs your mix for potential reuse.

Real world features

Recording formats include DSDIFF, DSF and WSD 1-bit formats, plus multi-bit PCM format (BWF) with resolutions up to 24-bit/192kHz. Both the MR-1000 and MR-1 feature an internal hard drive and a USB 2.0 connection for fast and easy file-sharing with your computer.

Stunning audio

By recording in 1-bit/2.8MHz format, you can feel assured that your most important, once-in-a-lifetime moments are captured in stunning detail and will be ready for whatever the future brings you. Back in the studio, the MR-1 also provides superb final mix and archiving benefits.

Pocket portability

The MR-1 is the ultimate portable 1-bit recorder, perfect for live music performances, location recording, broadcast journalism, and even for rehearsals and songwriting sessions.

MR-1000

Future-proof fidelity

The MR-1000 is the perfect tool for professional users who are recording and archiving their final mixes in the studio. Its compact size and portability also make it ideal for location recording. Whatever you use the MR-1000 for, you get the benefit of capturing it at the new high 5.6MHz rate.

MR-1

Built-in mic

Record anywhere with the MR-1, thanks to the included high-quality CM-2M stereo condenser mic. Its versatile clip-on design allows you to place it anywhere you need.





Pro performance

Quality components ensure the finest audio performance. The MR-1000 uses the highly respected Burr-Brown PCM2404 from Texas Instruments for A/D conversion, and the CS4396 from Cirrus Logic for D/A conversion. It features ultra-high quality mic preamps and uses separate power supplies for the digital and analogue circuitry, providing an absolutely pristine audio path throughout the signal chain.

Pristine fidelity

1-bit recording is the latest advancement in audio. It offers a frequency response of DC to 100kHz and a dynamic range of 120dB, exceeding even the best analogue tape recording systems, and it has already been adopted for use in the critically acclaimed SACD recording format. This combination of uncompromising fidelity, low noise floor, extended dynamic range, lifelike imaging and analogue-quality depth has been praised by top experts.

Integrated software

Korg's innovative AudioGate™ software for Mac and PC converts 1-bit recordings into WAV and AIFF formats at various bit rates (and vice versa) and offers real-time conversion and playback of 1-bit files. Free with every MR recorder, AudioGate also offers DC offset removal, gain control and fade in/out.



The 1-bit advantage

In addition to providing you with the finest audio performance available, the 1-bit format can also be readily converted to any of today's multi-bit PCM formats. The critical issue is that you want to be capturing your recordings/mixes in the highest fidelity possible. You can always repurpose it to the format of your current project, but if you haven't recorded it with the best fidelity in the first place, it can never be improved upon.

AT A GLANCE

MR-1 & MR-1000

RECORDING FORMATS

1-bit: DSDIFF, DSF, WSD (2.8224MHz @ 1-bit for MR1; 2.8224MHz and 5.6448MHz @ 1-bit for MR1000)
PCM: WAV, BWF (44.1kHz and 48kHz @ 16- or 24-bit; 88.2kHz, 96kHz, 176.4kHz and 192kHz @ 24-bit)

NUMBER OF TRACKS

Two tracks simultaneous recording/playback

INS & OUTS

MR-1: L/R mini-jack inputs, stereo mini-jack output, headphones mini-jack
MR-1000: XLR in and out, quarter-inch TRS phone jack input, RCA outputs L/R, headphones quarter-inch

INTERNAL HARD DISK

MR-1: 20Gb; MR-1000: 40Gb

POWER SUPPLY

MR-1: AC adaptor or internal chargeable battery
MR-1000: AC adaptor or eight AA batteries

DIMENSIONS

MR-1: 64 x 120 x 24mm
MR-1000: 192 x 170 x 56mm

For more information go to:

www.korg.com

Zero4 & Zero8

Expanding its presence in the DJ market, Korg has launched two new control mixers that are ideal for any live musician's set up: the Zero4 and Zero8...

OVERVIEW

With the Zero4 and Zero8, Korg has redefined the mixer. No longer to be found at the end of a long signal chain, these live control mixers are now integral to the modern musician's rig, becoming as much a part of the performance as any other piece of gear.

In addition, each Zero mixer is also a FireWire computer interface, capable of sending and receiving audio signals and MIDI data with single-cable convenience. For the DJ, computer musician or keyboardist, the Zero mixers will open up a whole new world of possibilities.

FireWire integration

Your new Zero mixer is also a FireWire audio/MIDI interface, able to transfer audio and MIDI to or from a computer with single-cable convenience. A second FireWire port allows the daisy-chaining of multiple devices.

Edit extras

Use the free Zero Edit software to save and store your custom mixer settings.

Bright lights

A colour-coded lighting system makes it easy to see each channel's status, which is a big plus in low-light environments.

Multiple personalities

Both mixers allow you to select from a library of well defined, modern EQ types, including isolators and filters only available with digital processing. On the Zero8, you can choose a different type for each channel.

Supreme audio quality

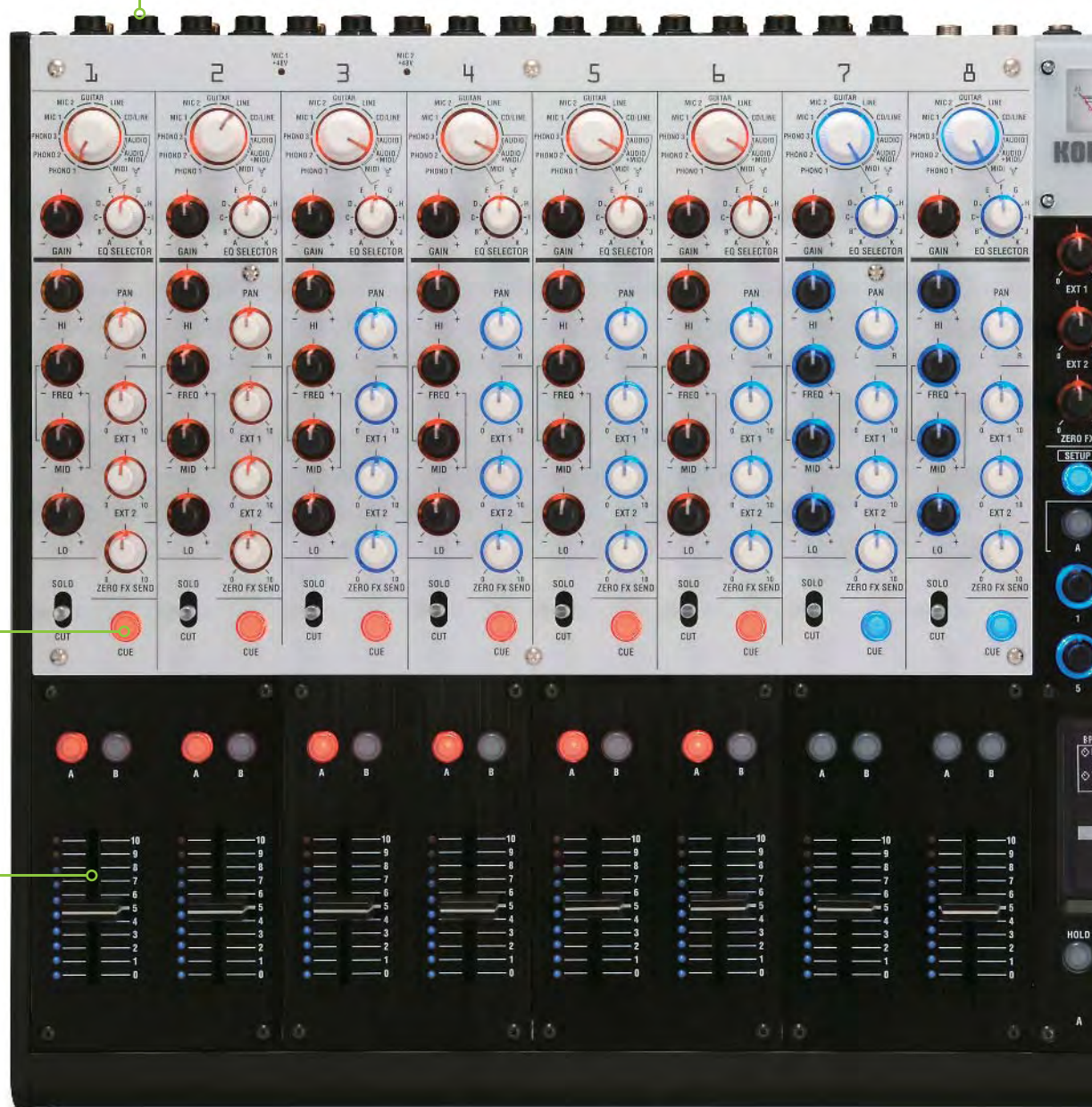
State-of-the-art, 24-bit digital mixing at 44.1, 48 or 96kHz ensures high-quality audio. There's even a special 192kHz mode available for critical applications.

Channel surfing

Each stereo channel on the Zero4 or Zero8 can select from mic, guitar, line, CD or turntable inputs, plus FireWire digital audio inputs. Each channel can even be set as a MIDI controller or as a FireWire audio/MIDI control hybrid.

Keep the beat

Set your delays and other onboard effects to move to the beat using the Manual BPM, Tap Tempo and Auto-BPM Detection functions.





Channel FX

Each of the channel strips on the new Zero4 contains its own effects, featuring eight different effects types. These include everything from a simulated tape echo to modern filters and even a slicer.

Try a sample

Versatile on-the-fly sampling is built into the Zero4. The sampler section also adds a master effects control with ten up-to-the-minute effects types, such as a decimator.

AT A GLANCE

ZERO4 & ZERO8

INS & OUTS

Zero4: Inputs 1-4 (line, CD/line), phono inputs 1-4, mic input, guitar input, L/R master out, L/R booth out, headphones, S/PDIF, FireWire, MIDI In/Out
Zero8: Inputs 1-8, phono inputs 1-3, 2x mic inputs, guitar input, 2x ext inputs, L/R master out, L/R monitor out, 2x ext outs, headphones, S/PDIF, MIDI In/Out

FREQUENCY RESPONSE

10Hz-20kHz \pm 1dB @ 44.1kHz,
10Hz-22kHz \pm 1dB @ 48kHz,
10Hz-44kHz \pm 1dB @ 96kHz,
10Hz-88kHz \pm 1dB @ 192kHz

SIGNAL-TO-NOISE RATIO

100dB (standard) @ IHF-A

A/D & D/A CONVERSION

A/D: 24-bit, 64x oversampling,
D/A: 24-bit, 128x oversampling

DIMENSIONS

Zero4: 300 x 402 x 105mm
Zero8: 450 x 371 x 118mm

For more information go to:

www.korg.com

Total control

The Zero8 provides eight assignable push-knobs for comprehensive external MIDI control. The mixer also features three effects processors: insert, send and master.

Touch and view

Big brother to the Zero4, the Zero8 is an expanded, eight-channel mixer that replaces the former's sampler section with a multi-purpose TouchView display which also doubles as an effects or MIDI control surface, much like Korg's renowned KAOS technology!

Play your way

Customise your Zero mixer performance by creating your own custom fader curves for each of the channel faders and the crossfader!

KM202 & KM402

These brand new incarnations of the KAOSS Mixer prove that the DJ has never had more dynamic power at his fingertips...

DANCE & DJ

OVERVIEW

The creative use of a range of effects during a DJ set can help to turn an 'ordinary' gig into a memorable and dynamic musical experience.

The new KM402 and KM202 KAOSS Mixers merge the effects and revolutionary interface from the KAOSS Pad with six EQ types and an adjustable crossfader, to deliver the most individual DJ mixers on the market.

Impressive effects

The KM402 and KM202 feature 100 effects from the acclaimed KP3 KAOSS Pad, all with the unique fingertip control that made the KAOSS Pad famous. The effects range from filters, phasers, delays and reverbs, to such unique effects as a real-time looper and synth section.

KM402

Release me

The FX Release function allows reverb and delay tails to smoothly decay through preset and effects changes.

Channel hopping

The KM402 offers four channels, while the KM202 boasts two channels, and both mixers feature full 24-bit digital mixing capabilities, to deliver huge headroom and pristine audio quality.

Fading away

The programmable crossfader allows you to adjust the response and curve. Whether you're mixing dual decks, triggering from a laptop or integrating other sound sources, the KAOSS Mixer adapts to your style and personal touch.





KM202

High EQ

The KM402 and KM202 take advantage of full-digital processing to provide six different EQ types, from powerful high-pass filters, to unique 'Hyped' and 'Isolator' curves. Each of the channels has a dedicated three-band EQ (Hi/Mid/Low) that changes its response according to which EQ curve is selected.

Total KAOSS

There's a KAOSS button on each channel for quick, independent control of your effects.

AT A GLANCE

KM202 & KM402

FREQUENCY RESPONSE
20Hz – 20kHz ± 1dB

SIGNAL-TO-NOISE RATIO
90dB (standard) @ IHF-A

INS & OUTS

L/R input (connectors: RCA jacks), L/R phono input (RCA jacks), mic input (quarter-inch mono phone jack), L/R master out (RCA jacks), booth out (RCA jacks), headphones (quarter-inch stereo phone jack)

DIMENSIONS

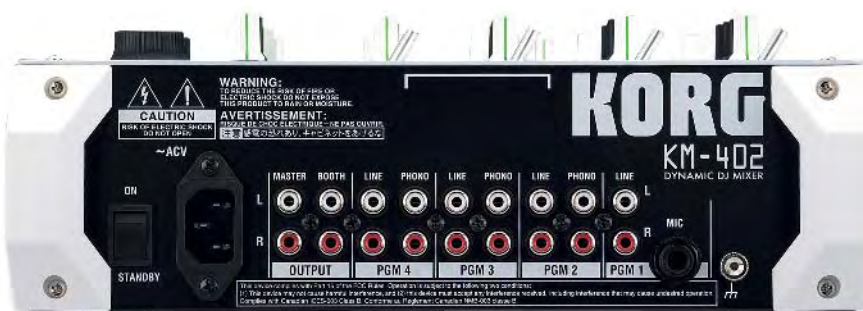
KM402 & KM202:
228 x 384 x 107mm

For more information go to:

www.korg.com

Taking care

The jack guard prevents damage to the I/O section, making the KAOSS Mixers perfect for heavy road use.



Kaossilator

DANCE & DJ

The next innovation in Korg's range of DJ tools has arrived in the compact shape of the KAOSSILATOR dynamic phrase synth

The KAOSSILATOR is packed with Korg's world renowned synth sounds along with innovative performance features including sound effects, arpeggiators, loop recording and 31 scale patterns. The KAOSSILATOR enables anyone, anywhere to play musical phrases at the tap of a button or slide of a finger over its touch pad.

No previous skills are required, but don't think this little wonder is just for beginners. While the KAOSSILATOR has been designed to offer untrained musical enthusiasts a new level of musical involvement and fun it is also aimed at keyboardists, guitarists, and DJs looking for a convenient way to add fresh new elements to a band

specific patterns of notes in sync with the user specified tempo, greatly expanding your performance options. Simply choose one of the fifty patterns to specify the timing of the notes, and you'll be creating all manner of phrases in a flash.

To get you quickly into the groove, Loop Recording allows you to record a phrase with a specified number of beats to a maximum of eight (two bars) and play it back endlessly. For example you can record a phrase using a synth-lead sound, and then overdub bass or drum sounds onto it. You can build up layers of cool phrases by simply repeating this cycle of selecting, playing, and recording sounds.



performance or DJ set.

This is a portable Korg synthesizer delivering maximum flexibility in an ultra-compact body, with battery operation that allows you to jam anywhere.

Powerful sounds & features

KAOSSILATOR comes packed with 100 powerful sound programs that combine Korg's modelling synthesizer engine with the effects from the KAOSS Pad series. The horizontal axis is assigned to note/pitch, while the vertical axis is assigned to parameters such as cut-off, feedback, or modulation depth, giving you a wide range of performance possibilities. In addition to classic synthesizer sounds such as leads, basses and sound effects, there are sounds that faithfully simulate piano, guitar and trumpet as well as looped and one-shot drum sounds, making the KAOSSILATOR a never-ending source of inspiration to stimulate your creativity.

The KAOSSILATOR has a scale function that makes it simple to produce accurate pitches

that match any musical context. You can choose from 31 different scales, including chromatic and diminished, as well as major and minor blues and pentatonic scales – by using the key setting function, you can play them in any key. And, as well as all the standard western scales, Korg has included a few more exotic varieties such as Spanish, Ryukyu, and Raga.

Creative potential

The Gate Arpeggiator enables you to produce

AT A GLANCE

PROGRAMS: 100
MUSICAL SCALE PATTERNS: 31
KEY RANGE: ± 12
TYPES OF GATE
ARPEGGIATOR: 50
CONNECTORS: LINE OUT:
Phono (RCA)
HEADPHONE: Stereo mini jack
SAMPLING FREQUENCY: 48kHz
DA CONVERSION: 24-bit Linear
POWER SUPPLY: 4 alkaline AA
(LR6) batteries (6V) / AC
Adaptor sold separately
BATTERY LIFE: approximately
five hours (with alkaline
batteries)
DIMENSIONS: 106 mm (W) x
129 mm (D) x 29 mm (H) / 4.17"
(W) x 5.08" (D) x 1.14" (H)
WEIGHT: 154 g / 5.43 oz.
(without batteries)
OPTIONS: AC adapter (DC4.5V)

For more information go to:

www.korg.com

mini-KP DANCE & DJ

The mini-KP is the new KAOSS Pad that fits in your pocket and offers you touchpad-controlled, real-time effects for all types of music...

OVERVIEW

Since it first appeared, the KAOSS Pad series has been enormously popular for its intuitive touchpad interface and revolutionary effects. And now the series is joined by the mini-KP.

Distilling the essential elements of the KP3, the multiple parameters of the effects programs can be controlled by a single fingertip, while its small size brings the advantages of battery operation and mobility. Wherever you are, the mini-KP brings new possibilities to any music scene.

Smooth transitions

The FX Release function adds an adjustable delay tail (at the current tempo) when you remove your finger from the pad, preventing the abrupt dropping out of the effect as you go from one setting to another.

The big freeze

When you're touching the pad to apply an effect, you can use the Hold function to 'freeze' the effect settings at any desired point.

Ultimate control

The mini-KP lets you control the effect entirely from the touchpad, in real-time. Different effects parameters are assigned to the X-axis and Y-axis of the touchpad and can be controlled simultaneously, meaning that you can vary the delay and the feedback at the same time, or change both the cutoff and resonance of a filter.

Sync'd up

The mini-KP's Tap/BPM feature can detect the tempo and synchronise it to an audio input source. You can then take advantage of the many BPM effects that can synchronise to your song or performance.

Visual feedback

The LED display not only shows the current Program number, but also acts as a dynamic readout of the X-Y position when you use the pad.

Killer effects

The mini-KP contains a total of 100 effects, many derived from the larger KP3, including filter, delay, and a looper, covering a wide range of musical styles.

Connecting up

The mini-KP features standard phono connections, providing an easy hook-up to CD, decks, mixers, iPods and MP3 players

Instant access

The Memory Key function lets you save the selected effect program for instant recall later.



AT A GLANCE

PROGRAMS
100

INS & OUTS
L&R line inputs, L&R line outputs, headphone mini-jack

POWER SUPPLY
Four batteries or optional AC adapter

DIMENSIONS
106 x 128 x 29mm

For more information go to:

www.korg.com

Portable power

The mini-KP is designed to be portable, so it's lightweight, comes with a carrying strap and is battery-powered for complete convenience.

DJ Logic

This deck-master is turning the tables on improvisation. JC Costa and Jenn Plonski catch up with DJ Logic to find out more...

A master of turntablism, DJ Logic has been instrumental in bringing funk and jazz into the world of hip hop, via such artists as Vernon Reid and Living Color, John Mayer, Medeski, Martin and Wood, Chris Whitley, and others.

Logic, born Jason Kibler, grew up in the Bronx and got his first pair of turntables for Christmas. He quickly refined his skills by spinning music for dances, parties and community events throughout his native borough during the 80s. Turntablism, loosely defined as the art of manipulating sounds and making music with phonograph turntables and a mixer, emerged from Logic's early passion for hip hop, his love of funk and jazz, and penchant for creating new sonic colours.

Having singled-out working with Medeski, Martin and Wood a high point of his career to date, it's unsurprising that Logic counts freeing things up as a key part of his process. "I like improvising, being creative and trying to put things together like a puzzle," he explains. "I love all types of music and that's the cool thing about playing with different jazz, rock and hip hop musicians. I look at each project as something I'm about to dissect and make logical, in my own way so the listener says, 'Wow, that's really different!'"

When it comes to finding the best musical tools to help him achieve his goals, Logic says, "I use the Korg KAOS Pad on everything, and I haven't stopped using it. That's like my signature sound. It's like you have your paintbrush with all of your colours laid out, and all these different options where you can go to and be able to manipulate and be able to create. That's what I love about it. I use it on my remixes, live performances, and recordings. It's been my tool of choice and always will be."

Logic is also psyched about the newer version of his favourite. "It's great because I can save my sounds and recall them," he explains. "I'm just very excited about the KP3 and what Korg has done just to make someone like me appreciate it even more, because they're looking out for the musician. It's awesome."

Photo by Keith Smith

Read more about what's up with DJ Logic and find out about his new *Zen Of Logic* CD on Ropeadope at: www.korg.com/djlogic
And check out: www.djlogic.com

"I use the KAOS Pad on everything... that's like my signature sound."

Getting to know the

KP3 KAOSS Pad

The recently released KP3 KAOSS Pad takes DJ effects to a new level. Tom Osborne gives it a thorough workout...

Since the inception of the original KAOSS Pad in 1999, these unique effects processors have had a huge impact on DJing, taking live performance to new levels, and are equally at home in the studio. The latest KAOSS Pad has undergone a rather stunning facelift. The sleek black finish and an all-new, 64 LED touchscreen are the first things that you'll notice, but there have also been extensive developments in performance.

New features include 24-bit converters, 48kHz sampling, more effects programs and sample pads, a Radians-inspired vocoder and synths, BPM-synchronised FX tail, SD card support and a USB connection. The inclusion of MIDI sockets brings extended functionality, meaning the KP3 can also be used as a controller, sending out three controller numbers from the touchpad, and additional messages from the slider. The four sample pads send and receive MIDI note information, enabling the control of external synths, such as the Electribe series.

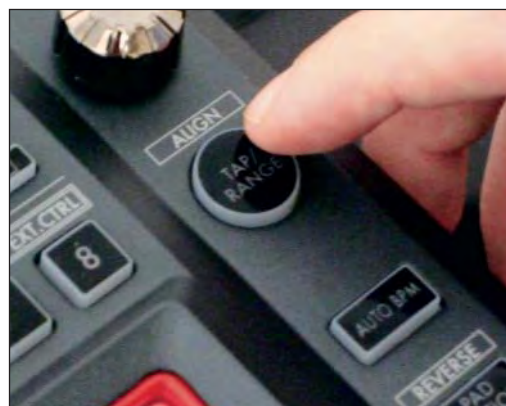
The new effects include a grain shifter, decimator, vintage analogue-style filters with a tone-bending drive circuit and expanded EQs. The new KP3 still retains all of the KP2's favourite functions, including Auto BPM matching, FX Depth editing, hold, mute, pad motion memorisation, with added reverse function and programmable preset buttons.

We're going to take a closer look... but, before we go any further, those of you who have an SD card should format it now. Also, please note that the KP3 should be turned off before inserting your memory card.

Real-time sampling & remixing

You can remix live with the KP3, using its intuitive sampling and editing functions. Running the KP3 in Direct mode means I get a mixed wet and dry signal coming from the main outputs. First, I'll use the Auto BPM button to get my recording in time. To access Sample mode, simply press the Sampling button and the four sample pads will start to flash red, indicating that the KP3 is ready to record.

The display tells me that I'm going to be recording a 16-beat passage (this can be changed to 8, 4, 2 or 1,



Above: Don't know the BPM? Press the Tap/Range button, then press the Auto BPM button to set it correctly



if so required). I'll be recording a simple drum groove on sample bank A, which will start as soon as I tap the bank A pad. You'll now notice that the eight Program Memory pads are lighting in sequence as each beat is recorded. When recording is finished, my drum loop will instantly begin playback, in time with the original. The Sample Bank button is now orange, indicating playback. If I press it again, it'll illuminate in green, confirming that I've got a recording stored.

There are a couple of other cool things that we can do now: by holding down the Shift button and pressing the Bank A button, we can edit the playback settings. You'll notice that all eight of the Program Memory buttons are currently lit, so try experimenting with your loop by pressing them, to take out beats, and do a remix in real time! The display is flashing '0.0' and, by using the Program/BPM knob, you can adjust the playback start point, to manually tighten up the synchronisation. You can also edit the playback volume on the touchscreen.

Resampling

Now that we've done some recording, let's look at how we can add effects to it. If you're still in editing mode, you can exit by pressing Shift once more. Press the Program Memory 1 button to select preset filter 1 (if you have



Above: Press the Program Memory button to access stored effects settings, in this case 'filter 1'

not already saved your favourite presets). This effect works well but try experimenting with some of the other effects, using the Program/BPM knob to scroll through the list. Note that the name of each effect lights up on the touchscreen, which is handy for working in dark clubs!

I find that the looper effects are really great on drums, and you hear DJs like James Zabiela and Sasha using these in their live sets. Remember that you can change the volume of the effect with the depth level at any time. Once you've selected an effect that you're happy with, you'll now want to resample the drums, adding this effect.

With your sample already playing, hold down the Shift button and press the Sampling button. The four Sample Bank buttons are now flashing orange, so begin recording by pressing the Sample Bank 2 button, and get creative. At this stage, make sure you don't press the Sample Bank 1 button, as you'll erase your existing loop (extremely annoying!). From here, you can go on resampling and adding effects until you're satisfied with your creation. When it's used effectively, you can really bring extra dynamics to your live performance.

Saving & connecting to a computer

The hands-on control the KP3 gives you is like nothing else on the market. Controlling such powerful effects in an intuitive way really puts the fun back into production.

Now you've breathed new life into your loops, let's back them up to a computer. Those of you who have a formatted SD card will now be able to save your loops and transfer that information to a computer. By holding down the Shift button and pressing the Program Memory 3 (save) button, you can select which type of data you want to save to the card using the Program/BPM knob. SMP.A through to SMP.D is your sample information. You can also select Prog, All and Glob data to save to the card, pressing the Program/BPM knob when you've made your choice.

The KP3 will now ask you to select the file's destination location (from 00-99). As you start using the card, you'll notice that some locations come up in brackets, which means that the selected file already contains data. Use the Program/BPM knob to make your selection, then click 'Yes' to save your data. The KP3 will now give you an update count as it saves your information.

Assuming that you've installed the supplied software on your computer, you can now hook the KP3 to the computer via USB. To turn it on, hold the Shift button and press Program Memory button 7 (USB). You can now quickly and easily transfer loops and samples to and from the KP3.



Pressing Shift will take you out of USB mode, and then you can carry on using the KP3 as normal.

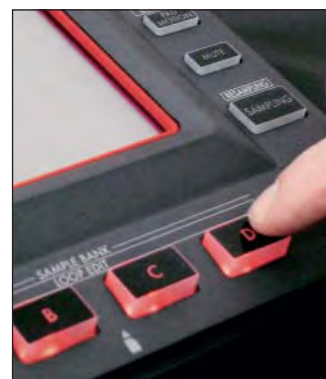
Above: The KP3's LED trail provides visual feedback for your movements

Pad motion

One of the KP3's most useful functions is the Pad Motion feature. This is even cooler for people who want to use the KP3 live, as not only has it got a reverse function, but the new LED touchpad has also made it far easier to use, giving you clear visual feedback by leaving a trail of LEDs that you can pick up and adjust at any time.

Once you've selected your favourite effect, hold down the Pad Motion button to record complex touchpad patterns. The Pad Motion button will flash, indicating that your hand movements are being recorded. The Pad Motion button can now play back this information while you cue up the next record. To reverse the recorded touchpad phrase, hold down the Shift button and press Pad Motion again. The stored information for the Pad Motion memory will transfer to other effects if the Program/BPM knob is used; pressing the Program Memory buttons will lose this data. Pad Motion information can be stored with the presets, which is another great feature, so if you capture that special performance on the touchscreen you can always save it as part of the Program Memory.

Using the KP3 to its full potential is very rewarding, quick and extremely good fun. Enjoy!



Above: Pressing the Bank D button lets you access sample information

BPM & FX release



Korg has substantially updated the BPM features on the new KP3, and nearly all the patches are now syncable. The parameters will automatically lock when receiving MIDI clock, with different areas of the touchpad intelligently representing each note value. When MIDI clock is not available, it's still extremely easy to set the correct BPM. The dedicated Auto BPM button does a great job of detecting the transient patterns of most musical genres, between the 80 and 160bpm range. You can use the Tap/Range button if you aren't sure of the BPM, then switch on the Auto BPM button and it'll do the rest. The Program/BPM knob can be used to fine-tune the results, before adding a whole world of synchronised delay, filter, loop effects and more. You can reset the starting beat by holding down the Shift button and pressing the Tap/Range button, which is set to 4/4 time, and it'll then flash green at the start of each bar.

The FX Release feature is another BPM-related setting. A quarter-note delay is applied to the tail of the effect when lifting your finger from the touchpad. This really helps smooth transitions between some of the dirtier effects. Holding down Shift and moving the FX Release slider will adjust the depth of the release setting.

OASYS close-up

One of the main designers behind the OASYS, Dan Phillips, sheds some light on the work that went into this amazing powerhouse of a synthesizer...



Above: Dan Phillips, one of the group of engineers behind the legendary OASYS

The OASYS took the world by storm when it was released, and continues to wow musicians with its incredible power, superb versatility and stunning sounds. We caught up with one of the sound engineers behind the OASYS project to find out more about what makes this beast tick. Read on, as Dan Phillips reveals the secrets behind the OASYS phenomenon...

KORG Magazine: When did the OASYS concept first start being discussed at Korg R&D?

Dan Phillips: I started working at Korg in 1990, straight after graduating, and the original OASYS concept started about a year after that, growing out of some physical modelling research that had started in 1989. The fundamental idea was that physical modelling of flutes, sax, plucked strings, tonewheel organs and so on would require very different algorithms to create different sounds, so the standard approach of using fixed-purpose synthesis hardware wouldn't work.

Instead, we would need to use flexible hardware, the functionality of which could be changed on the fly to meet the requirements of each sound. This was a pretty dramatic idea at the time, predating Cubase VST (real-time plug-ins on CPUs), Pro Tools TDM (real-time plug-ins on DSPs), virtual analogue synths and the Yamaha VL1.

KM: How did you reach this goal?

DP: To achieve this flexibility, the original, unreleased mid-90s OASYS keyboard used custom-built DSPs for its sound generation and processing. The OASYS PCI card used off-the-shelf Motorola DSPs. When it was time for a successor to the OASYS PCI, we had some ideas for standalone products based on combining a PCI DSP card with a rackmount computer. It soon became clear to us that

general-purpose CPUs had incorporated enough DSP functionality to be extremely capable signal processors in their own right, much more powerful than our previous DSP solutions, so we decided that it would be interesting to use the CPU as one big, ultra-powerful DSP, and do away with the dedicated DSPs altogether.

KM: How did the project develop from these initial ideas and what was it called at this stage?

DP: When we first started talking about using a CPU as the synthesizer hardware and using Linux as the OS, there were concerns about performance (how many voices we could play), stability, latency and so on – basically, all of the usual complaints about software plug-ins – so we embarked on several, year-long projects to prove it could be done. Our manager, Charlie Bright, came up with the codename POCKY, which is an acronym for Proof Of Concept Korg Year-End, and it's also the name of a Japanese confection!

The hardware used standard Pentium-based motherboards and, eventually, custom audio I/O, hooked up to standard video monitors with a spartan user interface. We used some real-time extensions to Linux, so that the OASYS doled out CPU cycles to the OS, as opposed to the other way around. This put us in the driver's seat, as opposed to the normal situation, with plug-ins being at the mercy of both their host software and the OS, and in turn enabled us to meet our goals for hardware-level performance and latency.

We weren't initially trying to build a new instrument *per se*; instead, we just needed to prove that the basic concepts were sound. Our initial target was similar to the Triton spec. Since this was an entirely different hardware and software platform, however, practically every line of code had to be rewritten from scratch and, unlike the Triton (and all standard workstation keyboards), our software was not just running the system, but also taking the place of the synthesis and effects 'hardware'.

KM: Who was working on which bits at this early stage?

DP: Although the proof-of-concept phase was conducted at Korg R&D, the OASYS project as a whole is a collaborative effort between Korg Inc. in Japan and Korg R&D in California. Korg R&D has largely been responsible for the underlying system and the synthesis engines, and Korg Inc. has done most of the user interface and the sequencer. The specification duties and effects implementation have been shared between the two groups.

KM: How was the OASYS taking shape at this time?

DP: Physically, we had initially thought of it as a Triton-like keyboard workstation. As grand and forward-looking



Above: The working title for OASYS was actually POCKY: Proof Of Concept Korg Year-End!

"Korg's chairman saw the OASYS as a bold statement, with a huge colour LCD and a powerful physical presence"

as the underlying technology was, we had been trying to keep the cost as low as possible. It was Korg's chairman, Mr Kato, who saw the OASYS as a bold statement, with a huge colour LCD and a powerful physical presence. Korg's designers and hardware engineers executed this concept quite admirably, in my opinion.

KM: And what about inside?

DP: All of the internal engines have been developed as a collaboration between Korg R&D, Korg Inc. and Korg's international voicing team. We'd develop a first draft of the spec, then go back and forth to incorporate everyone's input.

A great thing about the OASYS has been the opportunity to start with a lot of really good fundamental material, then bring everything to the next level. For instance, with the HD1 sample playback synth we started with a spec which was a serious upgrade to the Triton, with better-sounding sample playback oscillators, more flexible filters, and other innovations like the per-voice driver.

We then added features which built on the WaveStation line (which also came from Korg R&D), including wave sequencing and vector synthesis, both extensively updated. Even the envelopes and LFOs were significantly enhanced, with much faster update rates creating snappier, smoother modulation than was possible under previous architectures.

The AL1 virtual analogue synth and STR1 physical modelling synth both built on Korg R&D's work on the original OASYS projects, but then took the concepts much further. Both synths improved on our already acclaimed sound quality, offered much more flexible algorithms and vastly deeper programming structures, and simultaneously delivered significant increases in polyphony.

Most recently, we took a similar approach with the MS20EX and PolySixEX: we started with the work from the Korg Legacy group, and then added a bunch of OASYS-exclusive features, such as deeper modulation structures and a major revamp to the MS20's patching capabilities.

The sounds made with these engines are the most important aspect of the instrument, in my opinion; great algorithms give the synth a beautiful voice, but we still need gifted sound designers to make it sing! Korg is fortunate to have a group of immensely talented sound designers, who devoted their skills (and sweat) to make that happen.

KM: What was the overall aim for the OASYS?

DP: The goal was to create a superlative musical instrument with compelling sounds, unsurpassed audio quality, expressive real-time controls and a user-friendly interface. We expected that this would appeal to professional

musicians and serious amateur keyboardists and that it would be used in a wide variety of situations: integrated into studios with computer-based DAW set-ups, used as a standalone home or remote all-in-one studio, or played live on stage. We also designed the features and sounds to support a wide variety of genres, and OASYS users are indeed diverse, spanning the gamut from hip hop to jazz, from progressive rock virtuosos to soundtrack composers.

KM: Do you use an OASYS and how do you use it?

DP: I'm lucky enough to have an OASYS 88. I use it for my own songwriting and production; you can hear some of my music on my website at www.danphillips.com.

KM: What are your favourite aspects of the OASYS?

DP: I love the sounds; those are my real pride and joy, and are the heart of the OASYS for me. I love to just play with a sound or delve into the parameters and create something timbrally new; the sound quality is simply addictive.


KM: And what bits of your work are you most proud of?

DP: The OASYS is a group effort, with a large team of people across several continents making significant contributions. That broad collaboration is essential to the success of the endeavour. As far as my own input, in addition to helping to steward the spec as a whole, I'm particularly pleased with the MultiFilter and the AMS Mixers.

The MultiFilter is used in the AL1 and STR1; it exposes various rarely-heard aspects of a common filter type in a somewhat new way, in combination with easy real-time modulation. Its results range from subtle to extreme, and it's been used to good effect by our sound designers.

The AMS Mixers allow combination and processing of modulation signals, from simple addition and multiplication of two modulators to shaping, lag processing, quantising and choosing between two sources based on the state of a third. This isn't a completely new idea, but I'm pleased with the way that we've integrated it into the OASYS, and with the new capabilities that it makes possible.

KM: What are you working on at the moment?

DP: We're hard at work on new stuff for the OASYS, so stay tuned! I'm excited about it, but that's all that I can say for now! 



Above: The OASYS's revolutionary huge colour LCD screen



Above: The OASYS is the epitome of vision, innovation and technology combined in one musical instrument

Getting to know the Radias

The sleek-looking Radias is a synth for the 21st century, with plenty of power under its bonnet. Jake Williams takes it for a thorough training session...

When it comes to well rounded products that can turn a chap's head in the studio *and* deliver great results musically, Korg is way out there at the cutting edge of design, both sonically and visually. And the Radias synth is no exception, offering classic yet contemporary styling and sonics that build on the huge success of the MS2000, which garnered praise from all quarters upon its release during 2000.

The Radias comes in two boxes. One is for the synth unit, while the second houses the optional controller keyboard for those after a striking studio centrepiece.

Once assembled, you'll be able to tilt the rack to your preferred angle for getting hands-on, a must for any gear that you'll be spending time getting to know. So exactly what is it capable of?

There are 24 voices to be found under that steely exterior, each of which can be carved up into four parts. There's also a 16-band vocoder onboard that's perfect for anyone wanting to add a little sonic weirdness to their music, or just on the vocals, *à la* Röyksopp. Add to that a stack of great effects algorithms that can turn those presets into aural gold and we're still only scratching the surface! Let's take a closer look...

Synth

Start playing through the 256 onboard presets and you'll soon get a feel for the range of possibilities on offer. Sure, the Radias is better suited for dancefloor and electronic styles, so if you're looking for authentic pianos and string sounds you may be better off looking elsewhere. If, however, you're looking for biting leads, chunky basses, thick pads, and evolving sequenced and arpeggiated patches, then you're in the right place.

Part of the reason the onboard sounds are so full and varied is down to Korg's Multi-Modelling Technology (MMT), which has been lifted from the OASYS, Korg's



Above: The impressive Radias offers you both MMT and powerful effects

flagship workstation that broaches the £5k mark. So how does the Radias sound? Exactly as you'd imagine... awesome! There's so much to say about this technology, but we'll save that for another time. Suffice to say that the higher frequencies are smoother, which makes for a natural and more expressive sound.

Regarding patch creation, each Timbre is made up of two oscillators. You can then combine up to four Timbres to create a Program. You give you stacks of potential for the most outrageously expressive sounds. However, just because you can make monster patches doesn't mean you have to. The Radias is just as good at simple, single oscillator sub-basses as it is at fully loaded, complex pads. Versatility is the buzzword here!

Vocoder

When it comes to vocoders, don't think it's all about cheesy robot voices and *Mr Blue Sky*. Sure, Radias can do that, and well, but given that it uses 16 bands for this, you can also conjure up anything from smooth and luxurious to stark, abrupt and fizzy vocoding. So is the technique still useful in the studio? Sure thing! Just check out Röyksopp's *Remind Me*, or *Intergalactic* by the Beastie Boys. Enough said.

The Radias includes a gooseneck condenser mic. Simply connect that, select a vocoder patch from the onboard presets and you're away. Just press a key on the keyboard and sing into the mic, it really is as



Above: Get to grips with the two oscillators that make up each Timbre and you'll have some amazing sounds



Above: The onboard vocoder is 16-band so it's capable of recreating most of the classic vocoder effects we all know and love



Above: Get stuck in and twiddle with the knobs to create some crazy sounds



Above: There are two insert effects available to each Timbre in the RADIUS

easy as that! You don't *have* to sing, though, although it is great fun. With the RADIUS you can record 7.5 second-long chunks of formant information to the internal memory, allowing you to get all the synthetic goodness of vocoding without even having the mic attached.

Don't think it stops with the supplied mic, though. You can also use the stereo inputs on the RADIUS's back panel to shovel anything you like through that vocoder, so you can put drum loops, throbbing sine waves, acoustic guitars, brass or whatever you like through it for an unlimited palette of great sounds.

Modulation

Don't think that creating a patch is where the sound creation possibilities dry up. Modulation is the next stop on our sonic journey through the full potential of the RADIUS, and here we can really get our patches moving and twisting in some pretty extreme ways.

No synth would be complete without low-frequency oscillators (LFOs), and the RADIUS comes with two, to get some real movement into those sounds. There's also a step-sequencer onboard that lets you program in rhythms, basslines or leadlines; in fact, anything you care to! From here on in, your hands are free to get to work, utilising the reams of pots on that control surface, which really let you get in there and twist things up.

There's also an arpeggiator, with six different modes, so you can play chords and have them wobble and bubble away, again while you get hands-on with setting the

filter cut-off, envelope release times, or whatever else comes to hand. All this without mentioning the RADIUS's three Modulation Sequences, which can be used to adjust almost all parameters with a grid sequencing style precision. Possibilities? Unlimited!

Effects

So far you can see that the RADIUS puts a stack of control and sound-shaping tools under your fingertips, but we haven't come to the end of the line just yet. At the end of the signal path comes the well appointed effects section, which covers a stack of bases, and then some.

With two insert effects available to each Timbre, plus a master effect to gel the sound together at the end, you can already see how much potential is available. Overall, there are a whopping 30 different effects available to you, including the usual suspects, such as reverbs, delays, filters, auto-panners, flangers, and the like. There are also a heap of more esoteric offerings, such as tape echoes, ring mods, talking mod, grain shifters and rotary speaker sims. It's a generous haul, one which allows you to take the most basic of sounds and morph them into another dimension. To hear just how the effects can revolutionise a sound, simply head to the presets and turn the effects off – sometimes the difference can be truly breathtaking.

Finally, just to add to the overall polish, there's also a two-band EQ that can be strapped across the outputs, to pump up the bass or add a little air to your creations, making it much easier to bed those sounds into a mix. ●



Above: Add movement with the two onboard low-frequency oscillators

Fully in control



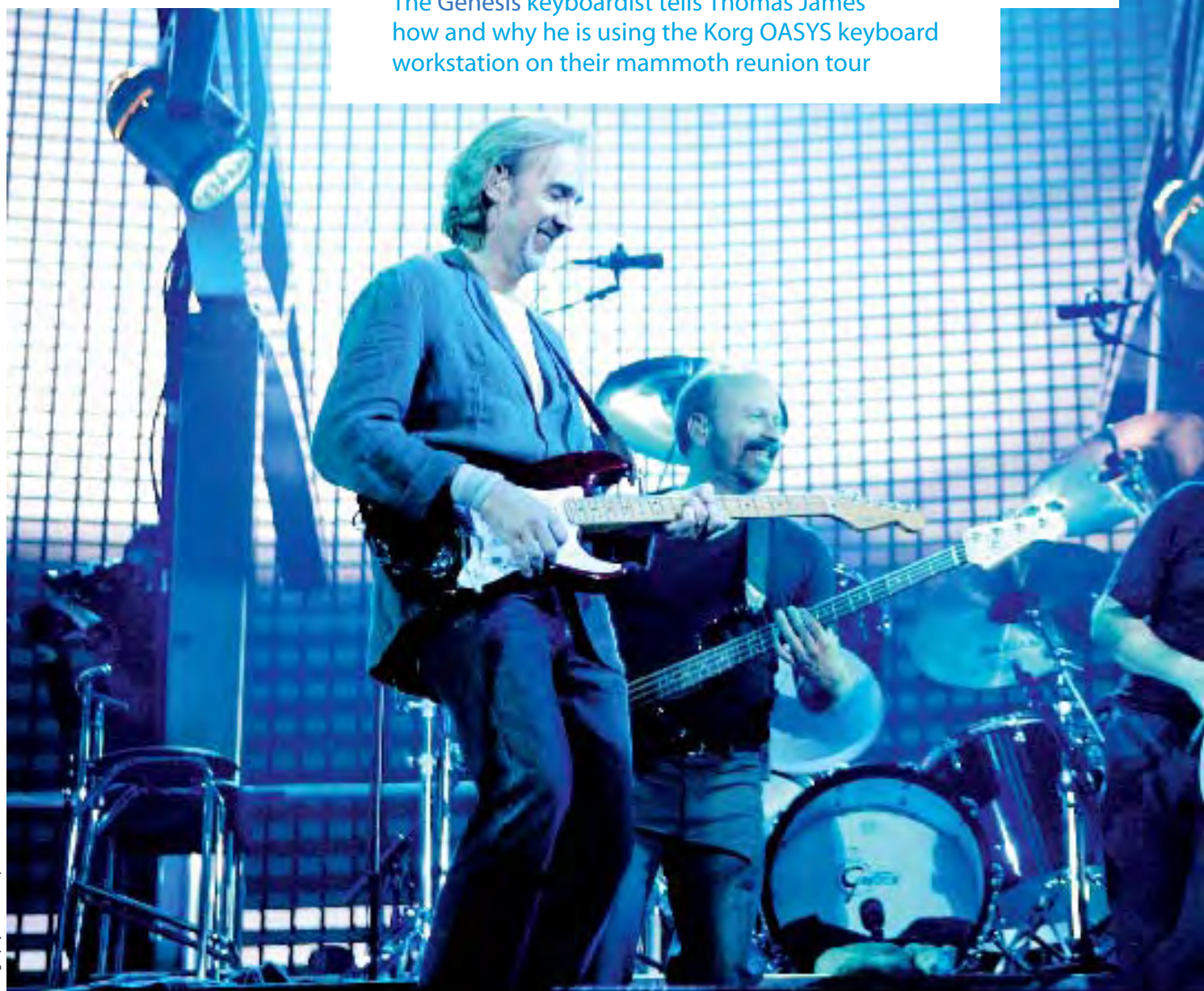
There's no doubt that the RADIUS is a powerful beast. All of this power, however, is nothing without control. If you take even the swiftest look at that control surface, you'll see that it's absolutely festooned with all manner of hands-on tweakables, letting you get right into the minutiae of each sound, shaping it exactly to your liking.

This hands-on control should never be under-estimated: when inspiration strikes the last thing you want is a wealth of menu pages to wade through before you can get to the parameters you want. It isn't just the level of control that puts you firmly in the picture, as far as editing presets is concerned: the RADIUS's impressive light show is just as important when it comes to knowing what's what.

Between the control options and the light display, you always know exactly where you are, which means fast and effective editing; essential whether you're in the studio, or simply getting hands-on and creating patches just for the fun of it.

"I've never used a programmer; I've always done it myself because that's part of the fun"

The Genesis keyboardist tells Thomas James how and why he is using the Korg OASYS keyboard workstation on their mammoth reunion tour



Photography: Guido Karp



“Most people think I’m still using the old instruments, which really is a good thing!” laughs Tony Banks, reflecting on the fine job his Korg OASYS keyboard workstation has been doing on this year’s international Genesis reunion tour.

For the first time in over a decade, keyboardist Banks and guitarist Mike Rutherford have been joined by ex-vocalist and drummer Phil Collins, to perform a set of old favourites, celebrating the band’s 40th anniversary, and promoting a host of newly-formatted DVD releases.

Recreating the sounds from songs written using several generations of equipment hasn’t been a simple task,

but Korg’s flagship workstation, the OASYS, is Tony’s secret weapon. It also came to the rescue during the band’s Wembley Stadium performance, as part of the UK Live Earth show in July.

Not one to hang onto his vintage gear, Tony originally intended to recreate his old sounds using virtual instruments running from a dedicated, rack-mounted computer, but eventually decided that the OASYS - offering a selection of different synthesis types within the one box - was a better bet. “It is something of a coincidence that I happened to come across it at this particular time,” he explains. “I was looking at something to power my virtual instruments and bought the hardware, but when I started fiddling

around with OASYS, I realised that I didn’t need the other system.

“A lot of people do the same thing using computers but I trust OASYS more and it is much easier because it’s a complete system. I find that the trouble with virtual instruments is the latency. Sequencing is fine but when you are actually trying to build up an idea they are not terrifically user friendly.

“So an instrument that has it all in is easier and, obviously, you can plonk your own sounds in as well. For example, I’ve loaded in, what we call, ‘the elephant sample’ from the start of *No Son Of Mine*. Simple things like that are so easy to do. I’ll probably move all my samples across, eventually.” →

→ Remarkably reliable

On stage, the OASYS provides almost all the sounds originally created using analogue synthesizers other pre-digital gear. "Everything that pre-dates 1980 is almost exclusively done on the OASYS and it's been fantastic for that," he insists. "We do a long medley starting with *In The Cage*, passing through lots of instrumental passages and ending with *Afterglow*, and every sound in that is from the OASYS. I don't have any of the old keyboards anymore, and wouldn't want to tour with them. The OASYS has got a great piano, organ, strings and voices, plus all the monophonic synthesizers I used in the old days.

"I hate saying this when I have plenty of shows still to do, but it has been remarkably reliable. We have two OASYS on tour and the great thing is that you can swap the disk across and it's absolutely the same. That is really useful. For the Live Earth gig, for example, I hired one, plugged our sounds in - perfect!"

Tony's live setup employs three keyboards, two of which are merely controllers, set-up to play the sounds stored in the OASYS. For each song, the relevant sounds are split between the three, enabling Tony to instantly access whatever he needs with great ease. "I just use about 30 or 35 user presets to represent all the different songs, and set it up so that the splits are appropriate for each song. For example, for *In The Cage*, which has about seven or eight sounds,

different presets. There are 16 different sounds in each Combi so that works fine."

Although the powerful KARMA technology, incorporated within the OASYS, isn't a key area of interest for Tony, he's still found a use for it on the Genesis tour. "In a piece called *Duke's Travels* there's this massive, arpeggiating synthesizer sound, which I originally created using the Arp Quadra, and to replicate that I used KARMA. But I'm really using the OASYS for its sounds and versatility. It is very versatile, in that it allows you to use a multitude of independent effects on all the different sounds and combine them in various ways. I like being able to load a program with all its effects, which are sometimes very important. You may want to change them but when you bring in a sound without its effects it can sound very nude, so that's a useful function."

To ensure the OASYS sits at the summit of the keyboard workstation market, Korg has paid particular attention to the standard of audio playback, ensuring that it's of the highest quality, as Tony has experienced. "The technical jargon doesn't mean much to me," he laughs, "all I know is that all frequencies are taken care of and it has a very nice sound. You can tell from listening to things like the strings."

A few of Tony's older Korg keyboards are still in service, playing back vital sounds which he has yet to replace using the OASYS. "I use a Wavestation SR for a

In the beginning...

Tony Banks formed a series of bands with fellow pupils Peter Gabriel and Mike Rutherford while still at school, eventually landing a recording deal and settling on the name Genesis. By 1970, Phil Collins had joined as drummer and, together with guitarist Steve Hackett, the band fully established themselves as one of the most important progressive rocks acts of the era.

When Gabriel left in the mid-70s to pursue his solo career, Collins took over on vocals. From there on, the nucleus of the band became Collins, Rutherford and Banks, signalling a change in musical direction. By the mid-80s, Genesis had adopted a more commercial song-writing approach and, as a result, began to enjoy huge record sales. The Invisible Touch tour of 1996 sold-out Wembley stadium night after night, and saw the band utilising pioneering stage lighting and sound technology. Collins eventually chose to go solo, leaving Rutherford and Banks to continue working under the Genesis name, until the recent reunion tour.

"It's great to be able to combine quite distinct synthesis forms within one instrument"

three of them can be played on the OASYS itself; the lead is played remotely from a little sprung keyboard sat on top, and then I have two types of organ on the third.

A very flexible performer

So far, Tony has shied away from using the large touch screen and real-time controls live, preferring to prepare everything beforehand so that he can concentrate fully on performing. "When programming I use the OASYS' screen a lot and I think the way the pages are done is pretty good. But since I got the keyboard I've been in tour rehearsal mode so that's really what I've used it for and I don't want to fiddle with controllers or touch my setup on stage. I get it sorted in rehearsal, so I only have to press a button for it to go to the song, with every parameter setup correctly. If I need two touches on the same sound then I just set up two

couple of specific pad sounds, particularly on *No Son Of Mine* and *Hold On My Heart* from *We Can't Dance*. Having a few pieces of outboard is not a problem but I'm sure there are very similar sounds buried on the OASYS.

"Everybody ends up with favourite sounds and there was one string sound on the Korg 01W I used a lot for writing. It wasn't necessarily the most fantastic string sound but it just had such a nice quality to it and was very playable. For the songs we are doing at the moment I didn't need to replace many of those sounds but if I want a generic pad I use the OASYS. Some string samples are just great for writing so I'm looking forward to using the OASYS like that.

"I think the OASYS organ sounds are really good and it's great to have a keyboard that gives you the same kind of rich quality as the original Hammond

organs. The Leslie speaker effects on it are good, too. I love slow Leslie sounds and you can definitely get that. So, for me, that side of it works really well."

Past to present, and future

When it comes to replicating sounds from the past, Tony has some strong views on what's important. "In the old days I used the organ because it was our only alternative to a piano - it wasn't because I loved the organ! That's also true of things like the ARP Pro Soloist sounds - we only used them because that was all we had. And I never really liked the Mellotron! It has a nostalgic quality but it isn't a great sound. To me, a real string sample is vastly better. If I can make a sound that is similar but has more quality, or whatever it is I'm looking for, then I'm very happy to do that.

"So when I go back to old songs I don't necessarily recreate the sound. Where I



feel that it was a crucial part of the song, I get it sounding as authentic as possible and I think the audience wants to hear organs, pianos and Mellotron-style strings and voices. It is the spirit of the sounds, as much as anything, that you've got to get back. For example, getting the right amount of portamento on some of the early songs is very important. All you need is the right saw-tooth wave and portamento and you've got 90 percent of your sound! They weren't subtle sounds and I suppose that's what I'm after.

"You couldn't really write parts on machines like the Mellotron because they weren't particularly sophisticated. You tended to just put your hand on a chord and play so I play the OASYS emulations in the same way. If I want to play something really fast I choose a synthesizer or organ sound with a hard attack. For most of the solos I'm using the equivalent of the old ARP sound I used in the 70s and 80s."

Of all the sound creation tools the OASYS has to offer, it is its ability to use several completely different types of synthesis simultaneously which has excited Tony the most. "It's great to be able to combine quite distinct synthesis forms within one instrument," he explains. "I liked the ARP Quadra because it had four synths together, which made you try things you wouldn't otherwise consider. I've always been a great believer in leaving things to chance, but the more you use outboard and computer-based stuff, the more you have to think in advance, so it's harder to let things just happen. I don't yet know how good OASYS is for that but I'm hopeful because it's all mixed in. When I've found time to play with the sounds, I've realised that certain combinations work well. I've already explored this instrument a great deal more than I ever explored the Korg 01W, for example.

"I've never used a programmer; I've always done it myself because that's part

Above: Tony onstage during the Genesis reunion tour, with his Korg Wavestation and OASYS set-up – the latter's distinctive profile is visible to his left

of the fun. On things like the Sequential Prophet, for example, I'd create every sound from scratch or modify presets, but the Yamaha DX7 and the Synclavier changed the way I thought because they were desperately difficult to program, and I started relying on presets to a greater degree. In the old days, I'd put a Pianet through a fuzzbox and a wah, and try everything I could, so I get embarrassed by the fact that we sometimes only really explore a small percentage of an instrument's potential.

"But I have found that with OASYS I have got back into modifying the sounds much more again. If I want to go back to the ADSR way of thinking then it's all in there and that is great when I'm trying to create old ARP-type sounds. If I want to go for exotic morphing sounds, I can do that, too. When I get back into writing mode I think I'll be using the OASYS a lot!" ■
Go to www.korg.co.uk to see live footage from the tour.

Your technical problems solved

Q&A

Want to know more about your Korg gear? Having trouble understanding some of the technology behind the sounds? That's why our experts are here to help...

SOUND ENVELOPES

Q On my Radias there's an 'Envelopes' section, which I'm gradually getting to grips with. However, I want to know more about the technology behind envelopes; what are they and how do they affect the sound?

A These days, we've got soft synths like the Legacy Analogue Collection and analogue-modelling synthesizers, such as the Radias to take care of all the theory for us, so we don't actually have to get to grips with what analogue synthesis actually is. However, it's always a good idea to look at the technology behind the sounds you're producing, so your question is a good one.

Analogue synthesis all starts by triggering a basic waveform, generated by a voltage-controlled oscillator or VCO. This can be in the form of a square (pulse) wave, a sine wave, a triangle wave or a sawtooth wave.

Once triggered, usually by pressing a key on the keyboard, this signal is then passed through an envelope

generator to begin shaping its characteristics. The envelope itself doesn't make any sounds but is, in fact, a group of values that dictate the output voltage. These values are called attack, decay, sustain and release, and they can be explained as follows...

Attack: This is the value that dictates the velocity of the note, in other words, how long the note takes to reach 100 per cent volume when the key is pressed. For example, a very short attack value will result in the note being played at full volume the instant you put your finger on the key, whereas a longer value will result in the note fading in gradually, until it reaches full volume.

Decay: This value represents how long the note remains at its peak 'Attack' level before it reaches the Sustain stage.

Sustain: This is the value that controls the volume level at which the note is sustained after it has passed through the Decay stage. This level will remain constant until you release your finger from the key.

Release: This value limits the time over which the note comes to an end or becomes silent. Something like a bell or chime would have a long Release value, as its sound lingers for longer before it disappears.

To summarise, by adjusting the values of your ADSR envelope, you can shape the waveform into a specific style or timbre, depending on the musical instrument that you're attempting to emulate. These values define whether the note is short and percussive or musically sustained. By varying these four values, and combining them with other synthesis functions, the possibilities are almost infinite. This ability to create unique and interesting sounds is all part of what makes Korg synthesizers such powerful creative tools!

BIT BY BIT

Q The new Korg MR-1 and MR-1000 recorders feature 1-bit technology, but I thought that we were all meant to strive for 16-bit if not 24-bit quality these days. What is 1-bit technology and how does it compare to 24-bit recording?

A Nowadays we are bombarded with numerical data in 'bits' that represent the recorded resolution or detail captured by our digital multitrackers and computer interfaces. Numbers such as 16-bit, 24-bit and even 48-bit abound, so it's not surprising that you may assume a 1-bit recording device is only a fraction of the quality... but this is not the case!

The Korg MR-1 and MR-1000 digital mobile recorders employ extremely high-quality A/D (analogue to digital) converters. These converters sample the incoming signal at 2.8MHz (MR-1) and 5.6MHz (MR-1000). In the case of the MR-1000, that's 5.6 million samples per second! Now, if you compare this to the more common sampling frequency of 192kHz (192 thousand samples per second) you can see why Korg's latest recording technology means that fewer 'bits' of resolution are required in order to maintain the integrity of the original signal.

S/PDIF explained

Q My Korg D3200 has an S/PDIF output on the rear panel, but I'm not sure what it is used for. Can you tell me more?

A The two-channel S/PDIF (Sony/Philips Digital Interface Format) output is an alternative way of transferring the master stereo mix of your songs to another digital recorder, such as a CD writer, DAT recorder or computer interface. The stereo mix data is output via a fibre-optic cable terminated in a TOSLINK™ connector at both ends.



Left: A close-up of the S/PDIF output found on the back panel of the Korg D3200



Above: The revolutionary Korg MR-1 mobile recorder offers 2.8MHz 1-bit digital recording

In simple terms, the incoming signal is sampled at such an incredibly high frequency, it can be captured in a tiny 1-bit 'package' that maintains the original resolution, without the need for multi-bit processing.

Another added bonus of this technology is the significant increase in dynamic range; essentially the level at which quieter, low-level signals can be recorded before resolution is lost and noise creeps in. Allied to the 120dB dynamic range is an upper frequency response of 100kHz, which means that these recorders can capture every possible nuance of your source signal.

Once the audio is inside an MR recorder, it isn't subjected to any further sample rate or bit depth conversion, and therefore remains perfectly intact.

(You can read more about 1-bit technology and other recent developments in recording technology in Tom Osborne's *Future formats* feature on page 40.)

PHANTOM POWER

Q On my Korg D3200 recorder there's an area marked 'phantom power' which I know is to do with microphones, but what is it and do I need it?

A Microphones can commonly be split into two separate categories; dynamic and condenser or 'capacitor'. For dynamic microphones to work, you just plug in your mic cable and turn up the gain (input) level until you achieve the result you want. With condenser microphones however, it's a different matter.

In order to work, condenser microphones require a constant electrical charge, usually 48 Volts, which is supplied to the microphone down an XLR to XLR cable. This is why you are likely to find a phantom power source somewhere on most mixers, digital recorders and mid-range computer interface cards. Don't worry if you haven't got it on yours, as there are several manufacturers that make an external 48 Volt supply and most of these units are relatively inexpensive.

As a note of caution, it is always good practice to connect your cable to your microphone before turning on phantom power and, equally as important, to switch it off before disconnecting the mic when you're ready to pack away. This will help to avoid those unpleasant 'pops' and crackles that could potentially cause harm to your monitors, headphones or ears!

The term 'phantom' comes from the fact that the voltage provided from these inputs is invisible to those microphones that don't require it (mainly dynamic and ribbon mics), provided, of course, that the XLR cable is balanced and properly wired!

PROGRAMS AND COMBINATIONS

Q After years of playing synthesizers, I've just bought my first Korg synth, a Triton Extreme, and am intrigued by the 'Korg speak', whereby sounds and styles are called Programs and Combinations.

How exactly are these terms defined and is there anything else I should know about them?

A In Korg speak, a Program is a preset sound; commonly a single instrument or synthesized sound which has been 'mapped' across the keyboard so that, depending on its timbre, it can be played as a musical scale; for example, a piano.

Most of us are familiar with the incredible, and sometimes strange, sounds that synths produce, and this is where Combinations come into play. Basically, a Combination is a group of 'Programs' that are grouped together to create a multiple layer of sound. Combis are sometimes known as 'performances' on other synths. Sometimes the Programs are combined and mapped to different zones of the keyboard, so that the timbres remain as solo instruments. Other times, they're layered over one another, in order to create rich and intricate soundscapes. For example, at the press of a button, you could have a jazz trio or a full orchestra playing from the same keyboard. Alternatively, you could layer complex synthesized sounds that crossfade and blend into each other, depending on how long you hold the keys down.

Programs and Combinations are normally grouped into themes so that you can switch to a similar timbre quickly and easily. This is a really helpful feature and saves you having to scroll through hundreds of sounds in order to find a similarly-styled tone.

All of Korg's synths are provided with a substantial number of Programs and Combinations already built-in, but they also enable you to create and save your own. For example, the TR series music workstations boast an amazing 512 Programs, 384 Combinations and 24 drumkits (16 preloaded) programmed into its memory, but you can choose to edit any of these and save them as your own with a minimum of fuss.



Above: Choosing Programs and Combinations on the Triton Extreme

Below: The phantom power microphone inputs on the D3200 provide the electrical charge that is needed for condenser microphones



Adam Blackstone with
Pharrell Williams and
the Triton Extreme



Photo: Jason Goldwatch (www.deconmedia.com)

Beat brothers

Keyboardist Adam Blackstone is renowned for his collaborations with Jay-Z, LL Cool J and Pharrell Williams. Jenn Plonski caught up with him to find out how Korg fits in with his sound...

"I wanted to bring the ammonia back to radio and back to the visuals that you get from the music," explained Pharrell Williams, during a recent interview with *Remix* magazine, on the subject of his first solo album, *In My Mind*. "You know, when a person is fainting, they wave a tissue doused in ammonia to bring them back, and that's what this is – a dousing of ammonia. It's gonna change everything."

Pharrell continued this train of thought on his website, pharrellwilliams.com, claiming, "It's funny because I never really wanted to do a solo record. But I'm always making beats – that's just what I do. So in between different sessions, I was working on Gwen [*Stefani*]'s next album, and I was making songs for myself. I thought eventually that I'd give them to someone else, but the stories were a little too personal. So at that point, I started joking around, saying, 'All right, I'm making an album.' And before I knew it, I really was making one."

Pharrell and partner Chad Hugo, who form the production team The Neptunes, have been linked to a virtual *Who's Who* of A-list artists – N'Sync, Britney Spears, Busta Rhymes, Gwen Stefani, Mariah Carey, Jay-Z, Kelis, LL Cool J, Ludacris, Janet Jackson, Snoop Dogg and Neptunes-assisted Grammy Award winners, Justin Timberlake, Nelly and Usher, to name a few. In 2003, The Neptunes took home their own Grammy for 'Producer(s) of the Year, Non-classical'. Pharrell is also a member of the alt-rock trio N.E.R.D., which stands for No One Ever Really Dies. Group members Pharrell, Chad and Shay Thorton have released two platinum albums of their own, *In Search Of...* and *Fly Or Die*.

Being a world-class musician, Pharrell had to surround himself with the best when choosing a backing band for his recent solo tour. Pharrell quickly joined forces with the *crème de la crème*, in the shape of keyboardist/bassist and co-producer Adam Blackstone, after being hooked-up by a mutual industry friend, ?uestlove of The Roots. Adam, a jazz bass player who had been awarded a full director's scholarship from the University of the Arts in Philadelphia, was already equipped with a resumé that included tours with the likes of Jay-Z, Musiq Soulchild, LL Cool J and Joss Stone. Somewhat unsurprisingly, Adam and Pharrell quickly hit it off.

We caught up with Adam Blackstone, who had recently completed Pharrell's (or 'P' as Adam affectionately refers to him) album-supporting tour, to tell us more about touring with Pharrell and how Korg fits into the musical equation...

Korg Magazine: Of the huge roster of artists that you've worked with, who's been the most memorable?

Adam Blackstone: The most memorable musical experiences I've had so far have definitely been for real. I've gotta say P and working with Jay-Z, Jill Scott and Mary Mary. Pharrell is, of course, an R&B/hip hop artist. He started out as a producer, and is very influential in my production. Jay-Z is Jay-Z, what more can you say about Jay? Jill Scott is an R&B artist out of Philadelphia, which is where I'm from. She has allowed me the opportunity to write, co-produce and be her musical director for the past two years. And then there's Mary Mary; I've been listening to their music, I would have to say, for the past six years. But I've just had the opportunity to become their musical director this past year, in July of 2006. Those four artists have basically summed up what I can definitely say is a great accomplishment for myself, and I am very blessed to be able to have them on my resumé.

KM: How did you first get hooked up with Pharrell?

AB: It was through one of my big brothers in the industry, Ahmir ?uestlove Thompson, who is the drummer for the Roots. Ahmir is also a very well known producer for artists like D'Angelo, Erykah Badu and Joss Stone. He was contacted by Pharrell, because he is, like, the 'drummer to the stars' and he brought me on the gig. Initially, it was a one-off date, we did *Letterman* for Pharrell's single *Can I Have It Like That*. It was an upright [bass] sample, so I ended up coming in and playing. ?uestlove was the musical director and drummer. But primarily, Ahmir's main gig was with The Roots. When Pharrell decided to take his artistry on tour, Ahmir definitely wasn't available, so he passed it on to the musicians that were on the *Letterman* gig with him, which was myself, Junius Bervine as the musical director, Clay Sears, Eric 'Booty' Green on acoustic drums, and James Darrell Robinson on electronic drums. That's how that happened, hooking up with Pharrell...

KM: And you guys seem to be pretty tight right now...

AB: Yeah, everything is good. P and I developed a great friendship outside of just the stage. I pride myself on definitely being a great people person and just meeting the artist and working with them. I definitely want to nurture a friendship, you know.

KM: When you toured with Pharrell you took Triton Extreme out on the road. What did you use it for?

AB: I love the Triton Extreme. I use it for all the bass parts that are on Pharrell's album because most of them came from older Korg models. Pharrell is interesting; a lot of his sounds are Triton-based but he also uses gear like the T3 and the M1. There are a lot of the older Korg products that the Triton has nurtured and developed into the signature sound that we hear today. I took the Triton EX88 on the road because it basically covers the wide variety of sounds on his album.


KM: What's your first memory of Korg?

AB: Do you remember when the Trinity came out? That was pretty monumental with the touchscreen. When the Triton came out, it basically shut everything else down. The Triton was the must-have piece. So, as an up-and-coming producer in 2000-2001, I had to have that piece to my arsenal, and ever since then, that has been the only keyboard that I have ever needed and ever used, as far as my sound is concerned.

KM: What does your current rig consist of?

AB: I still have my Triton Classic, gotta keep that. I use a Triton EX88 and I have the KONTROL49, which is what I use to trigger my laptop. When I'm performing live, I sometimes use a microKORG and an MS2000B, depending on the gig, because they cover a lot of analogue sounds.

KM: Do you primarily use the Triton EX88 for the sound, or are there any features that stand out?

AB: I am not a good knob guy, meaning, like, I just like to dial in, hit a sound and play. For me, both the Triton Classic and Triton EX88 cover the vast array of sounds that I look for. There are situations where there is a little more in-depth detail and you almost have to create what you are looking for, but the Triton EX88 has the features to do that. For me, the functionality of the Triton EX88 helps so much, because when you are on stage, you do not have a lot of time to redirect sound and you just want to hit it and go. The Triton EX88 covers the wide variety of every sound that you could ever need. 

Read the rest of Adam's interview and find what Pharrell is up to next at: www.korg.com/pharrell. Keep up with Adam at: www.adamblackstone.com



Future formats

Recording has come a long way since the days of wax cylinders and Shellac records, and technology is pushing ever forward. Tom Osborne takes a closer look...

The ultimate goal for any recording system is the ability to recreate an event exactly as the original, without the result being compromised by the medium on which the audio data will be stored. Playback will always be affected by other factors, such as the choice of loudspeakers, but it's the job of a recorder to capture and recreate, as accurately as possible, that original moment.

When looking back in time to some of the first analogue devices capable of recording and playback, such as tape and vinyl, they still sound very good, but the shortcomings are very apparent. Physical contact with the recording medium means that tape becomes worn every time it passes over the head, and vinyl when a needle passes through its grooves – ultimately, the sound quality suffers. Later digital formats that still use tape technology, such as DAT, ADAT and R-DAT, suffer the same shortcomings. MiniDiscs and CDs that use laser technology don't suffer from this physical contact, but sound quality is curtailed by the physical limitations of the medium.

Over the past few years, newer formats like DVD-Audio and SACD, which use PCM, 1-bit and DSD technology, have brought higher-fidelity recordings to the optical disk. Korg's new MR-1 and MR-1000 recorders are the first in their class to

utilise 1-bit DSD technology, streaming direct to the hard drive. The MR-1 is capable of 1-bit/2.8MHz recording, and the MR1000 delivers up to 1-bit/5.6MHz, twice the industry standard for DSD.

PCM

We're all familiar with the sound quality of a compact disc (CD) that uses Pulse Code Modulation (PCM) operating at 16-bit 44.1kHz. The sampling rate was chosen because of the Nyquist theorem, which states that the sampling rate must be at least twice the highest frequency to be encoded. The frequency response of the human ear is 20Hz to 20kHz, so this sample rate enables us to encode frequencies up to 22.05kHz. It isn't 40kHz because we need to apply a steep cutoff filter to remove frequencies above 20kHz to stop aliasing, which is unwanted noise in the encoded material. 44.1kHz is the lowest sampling rate that would capture the entire frequency response of the human ear, and 16-bit technology offered increased dynamic range over analogue recording systems.

The increases in computer performance, cheaper hard drive storage and faster memory means that it's increasingly popular to record direct, at sample rates of 96kHz and above, with increased bit depths. These higher sampling rates capture frequencies

"It's the job of a recorder to capture and recreate, as accurately as possible, that original moment"

much higher than 20kHz and encode more of the 'air', which has an impact on how we perceive sound. This is similar to digital cameras, where the higher the sampling rate, the better the picture. With audio, when it comes to re-creating the sound wave, the more samples of information we have, the more accurate the results. It isn't uncommon to find PCM recorders offering a proliferation of different sampling rates and bit depths.

1-BIT/DSD

At first glance, a 1-bit system may seem lower in quality than a conventional PCM CD recording, which operates at 16-bit 44.1kHz. What this means is that a discrete 16-bit word is generated to describe each sample of sound, 44.1 thousand times per second. A 16-bit system can represent one of 65,536 values for each sample, with 16,777,216 values being represented by a 24-bit system.

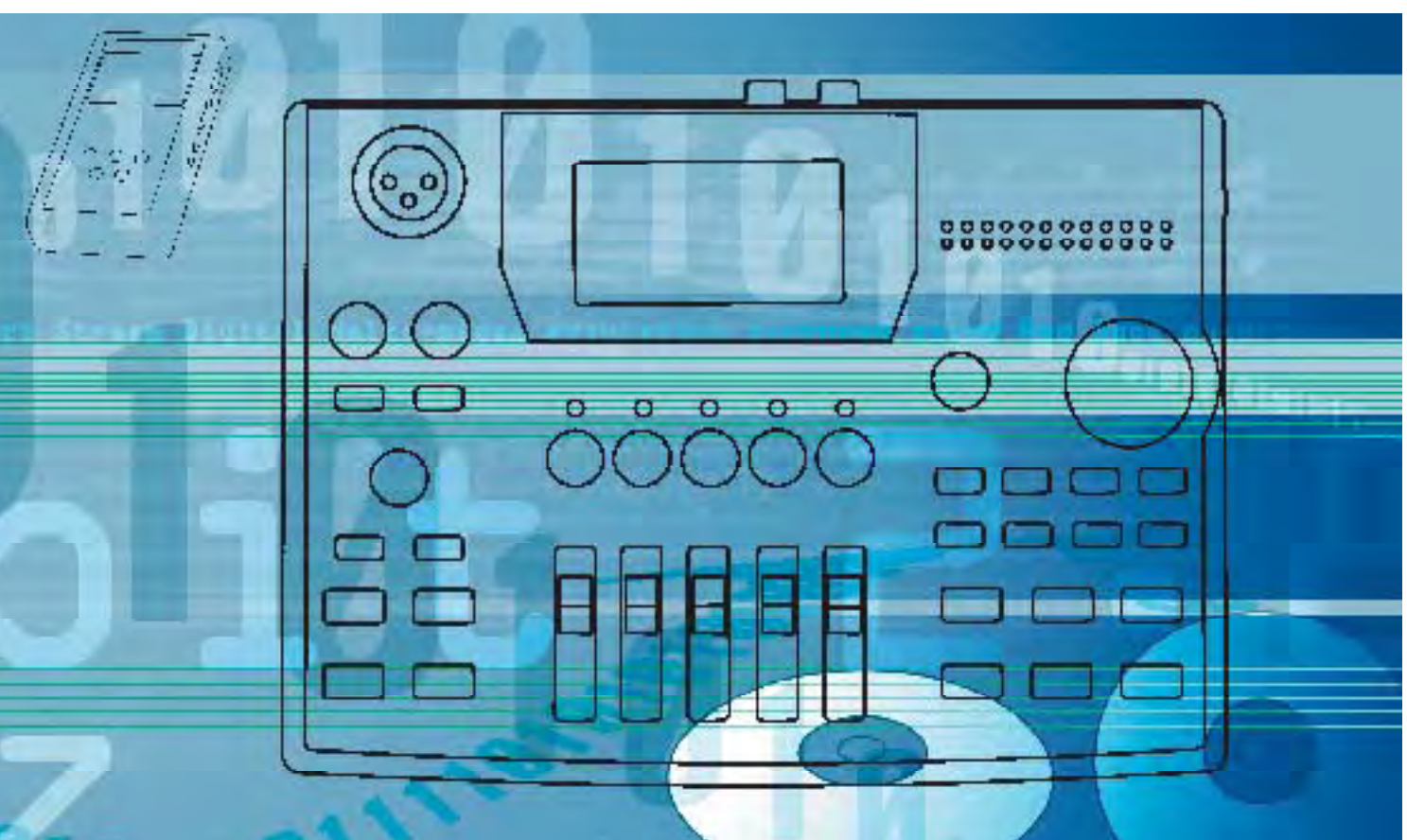


Illustration: Kate McDonnell

Direct Stream Digital (DSD) is the trademark name for a system that uses a 1-bit words and Pulse Density Modulation (PDM) encoding. The 1-bit stream represents two values, either a 1 or 0, and DSD records the 1-bit stream directly. The MR1 can sample at 2.8MHz, 64 times higher than conventional CDs, while the MR1000 can sample at 5.6MHz, 128 times faster than conventional CDs and twice the speed of standard DSD.

A 1-bit system describes the basic slope of a waveform, either higher or lower than the previous sample, rather than using discrete words for each sample. This may suggest that a 1-bit DSD system generates at least 64 times more data than standard CDs, but because DSD uses a 1-bit word instead of a 16-bit word (you can divide this figure by 16) it's only creating four times the amount of data.

1-bit conversion is already being used in a lot of current 24-bit PCM recorders in the primary processing stage, before the decimation process. The A/D conversion is done at a low bit depth with a high sampling rate; the decimation filter is then converting the data stream into the desired multi-bit format by thinning the data stream. The encoded material is then passed through the anti-aliasing filter. These filters are based on different algorithms that affect the audio in different ways, which is why the same recording can sound different going through disparate converters.

Upon playback, the recorded information goes through the D/A process, where it's re-assembled. This involves the interpolation of the data, where the waveform is re-created through mathematical analysis of the data points taken during recording. Delta Sigma modulation is then used to filter out unwanted noise. In a PCM system your audio is being manipulated at least twice after the recording process, before you get to listen to it.

With 1-bit DSD recorders, all the original information is kept intact, meaning there's no need for either the decimation stage A/D or interpolation stage D/A, both of which can add unwanted artifacts and colourise the original material. Because 1-bit recording eliminates the need for both these processes, what goes in comes out.


The advantage of using a 1-bit system for recording means more of the original performance is kept intact, enabling older recordings to be archived at the highest quality available. These 1-bit recordings can then be down-converted to any current PCM format and are, therefore, future-proofed against any upcoming formats.

The MR-1 and MR-1000 recorders are accompanied by Korg's innovative AudioGate software and this will convert your 1-bit masters into WAV and AIFF formats. AudioGate also offers DC offset removal, gain control and fade in/out.

SACD

Super Audio Compact Discs (SACDs) are a double-layered hybrid of conventional Red Book CDs. They look like conventional CDs and will play on your CD player but, due to a second high-density layer, they provide better dynamic range, higher frequency response, multi-channel sound, graphics and video.

The first layer is Red Book compatible, and it's this that's read by domestic CD players. The sound is mastered in DSD and then down-converted to the Red Book CD format. The second, high-density, 4.7Gb layer stores the original two-channel DSD sound and can contain a six-channel version of the music. Text, graphics and video are also stored here.

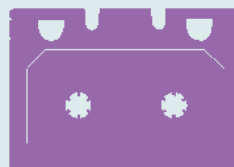
SACDs are currently in a 'format war' with DVD-Audio that uses high quality PCM recording, although it seems they may end up co-existing, as most households now own CD and DVD players that are capable of playing both the new formats. 

Out with the old

A round-up of some classic recording formats that didn't make it into the 21st century...



Digital Compact Cassette (DCC) was Philips' response to the failure of R-DAT. It was fairly popular, but the technology behind the DCC is now used to make beer.



Sony's Elcaset was a short-lived format that failed to make an impact on the consumer market in the 70s. They looked similar to the compact cassette, only larger.



Omega's Jaz cartridge is no longer in production. The 1 and 2Gb disks weren't as popular as the smaller Zip disks and provided less storage than hard drives.

Synth secrets

Korg produces a wide selection of keyboard synthesizers but what do they all do and which one would be best suited for you? Jon Andrews sheds light on the complete range...

OASYS

The Korg OASYS (which stands for Open Architecture Synthesis Studio) is the daddy of all synths. Put simply, this keyboard can do everything you need, from writing your tune to burning it to CD. It has the world's most powerful synthesizer, hard-disk recording, sequencing, professional effects, and sounds to die for. With expansion options available for instruments, effects and sample libraries, the OASYS is guaranteed to stay ahead of the crowd, no matter what musical fashion dictates. This truly is one synth to rule them all...



😊 **WHO'S IT FOR?** Producers in need of one keyboard package to turn ideas into professional results.

🎵 **WHAT MUSIC IS IT SUITED TO?** Any genre, simple as that!

❓ **WHAT ELSE CAN I TRY?** All the Korg synths have elements of what OASYS offers but no other keyboard does quite as much!

M3

This is Korg's third generation of synthesizer workstation. The innovative M1 became the keyboard of choice in the late-80s and, 20 years later, the technology and sound has been refined to perfection, resulting in this keyboard marvel. The M3 has many features from OASYS, including Enhanced Definition synthesis, KARMA functionality and an easy-to-use, multi-function control surface, and adds the 'virtualised hardware' concept for even greater integration with computer DAW set-ups. Two decades on, and Korg has once again redefined the whole concept of the workstation...



😊 **WHO'S IT FOR?** It's a 'one-stop shop' for producers/writers.

🎵 **WHAT MUSIC IS IT SUITED TO?** The M3 is a great workhorse keyboard synthesizer that crosses every musical genre.

❓ **WHAT ELSE CAN I TRY?** You might also audition the OASYS.

X50

The X50 synthesizer packs the sound engine from Korg's famous Triton synth into an ultra-compact keyboard.

It offers a huge variety of on-board sounds and Combinations plus built-in effects. The X50's clever Category Select system means you can quickly and easily find the sounds you want. Weighing in at just four and a half kilos, it's ideal for both small studio set-ups or life on the road, and with a powerful Multi mode available, the keyboard lends itself to big and varied arrangements, and can easily be used to produce entire songs.



😊 **WHO'S IT FOR?** Ideal for the live player who's always on the move and need access to a huge variety of sounds.

🎵 **WHAT MUSIC IS IT SUITED TO?** The X50 is a great workhorse keyboard that can be used in just about every musical genre, and is especially suited to both rock and pop bands.

❓ **WHAT ELSE CAN I TRY?** For a range of even more great sounds you might also want to audition Korg's TR series.

microX

Yet again, Korg redefines what you'd expect to get from such a compact keyboard! The microX brings the fun back into synthesis, while still offering some seriously good sounds. In total, there are 640 Programs available, all based on the HI synthesis used in the Triton range, and the microX's 384 Combinations create huge sounds that you simply don't expect from such a diminutive keyboard. Add four high-quality effects and a powerful arpeggiator, and you'll be amazed at what this ultra compact keyboard is capable of.



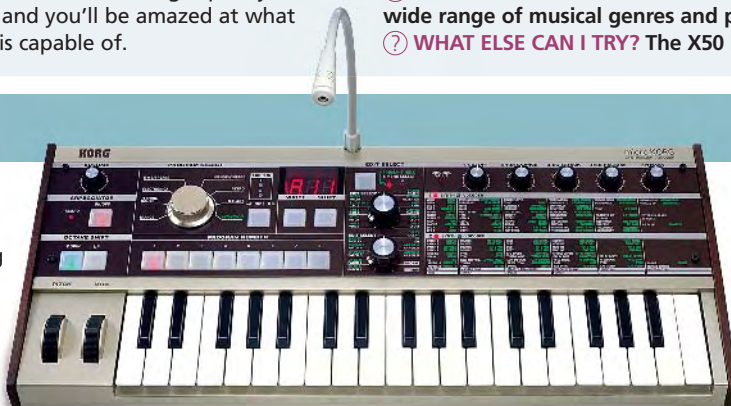
😊 **WHO'S IT FOR?** This is a great keyboard for the gigging musician, compact studio owner or the laptop musician who needs access to lots of great sounds... fast!

🎵 **WHAT MUSIC IS IT SUITED TO?** The microX is ideal for a wide range of musical genres and production styles.

❓ **WHAT ELSE CAN I TRY?** The X50 has a similar range of sounds.

microKORG

The microKORG features superb analogue modelling based on the award-winning MS2000 synth. There's a flexible multi-band vocoder and three quality effects on offer, enabling Korg to deliver professional and flexible features from a compact keyboard. The powerful synth engine, filter modes and waveforms mean you'll never be short of sonic options to choose from and prove that size isn't always important when it comes to synths!



😊 **WHO'S IT FOR?** Laptop musicians will love the microKORG's compact design which is perfect for the studio, and live players will love the synthesizer's portability.

🎵 **WHAT MUSIC IS IT SUITED TO?** The microKORG keyboard

is great for dance music, including trance, house, and techno, and is perfect for anyone after huge fat analogue sounds!

❓ **WHAT ELSE CAN I TRY?** Korg's small but powerful R3 synth.

Radias

The Radias is a synth that utilises Korg's innovative Multi-Modelling Technology (MMT) to produce a variety of synthesis types: from warm analogue, to classic and contemporary waveforms. Boasting a massive selection of synthesis options and hands-on controllers, Radias offers you both conventional and radical new approaches to sonic creativity. Essentially, it's several powerful synths in one box. The bottom line is that the Radias is one of the most flexible and groundbreaking synths out there...



😊 **WHO'S IT FOR?** This is ideal for both digital and analogue synth enthusiasts who want the best of both worlds.

🎵 **WHAT MUSIC IS IT SUITED TO?** Create cutting-edge electronic sounds and warm analogue richness.

❓ **WHAT ELSE CAN I TRY?** OASYS offers this amount of flexibility or the R3 offers a cutdown version.

R3

The Korg R3 is a small but powerful synthesizer that delivers quality analogue sounds with plenty of controls for sonic creativity. It features 37 keys and Korg's versatile MMT synth engine (as used in the Radias), all packed into a lightweight and compact body. With a very flexible oscillator section, dual filters and a drive/waveshaping section, it's a small synthesizer with a huge and very flexible sound. Add in a modulation sequencer, an arpeggiator and a 16-channel vocoder, and you'll see the R3 proves that big things really can come in small packages!



😊 **WHO'S IT FOR?** It's for both beginner and professional musicians who want access to great sounds and easy synthesis.

🎵 **WHAT MUSIC IS IT SUITED TO?** It's really suited to dance music or stripped-back electronic music that demands big sounds.

TR series



Korg's Triton series has become a worldwide keyboard standard, one which the TR series looks set to redefine by adding even more bang for your buck. The new keyboards come with Korg's classic Triton sounds but also pack in a whole new bank of sounds, new fully-fledged sampling features, a massive sequencer and, as with all Korg synths, USB connectivity.

😊 **WHO'S IT FOR?** The TR series range of keyboards offer affordable workstation technology that's great for the gigging musician or project studio owner.

🎵 **WHAT MUSIC IS IT SUITED TO?** These are great keyboards for rock and pop, and are the ideal choice for gigging bands.

❓ **WHAT ELSE CAN I TRY?** You might also like to try Korg's M3.

Triton Extreme

Korg's famous Triton series offers something for everybody, in terms of workstation functionality versus value for money, with a number of options depending on your budget. The Triton Extreme is the mother of the range, offering everything you need in one package, including an audio/MIDI sequencer, a huge number of sounds, a massive 120 voices of polyphony and a rich, warm analogue sound derived from the on-board Valve Force technology. This really is a superb do-it-all keyboard synthesizer and a songwriter's dream piece of equipment.



😊 **WHO'S IT FOR?** Korg's Triton Extreme synthesizer offers the complete deal for the songwriter or music producer.

🎵 **WHAT MUSIC IS IT SUITED TO?** Its genre-hopping sounds make this keyboard ideal for pretty much every type of music.

❓ **WHAT ELSE CAN I TRY?** Try auditioning Korg's OASYS or M3.

Legacy Collection Analogue & Digital Editions



Classic Korg sounds, all recreated as software, in superb detail! If you're a computer musician, these really are for you. They're the finest recreations of classic synth hardware that you'll find, with the Analogue Collection comprising virtual versions of Korg's MS20, PolySix and MonoPoly synths, and the Digital Edition doing the same for the M1 and WaveStation.

😊 **WHO'S IT FOR?** This range of different analogue and digital software synthesizers and the wide array of sounds they offer make them great tools for desktop and laptop musicians.

🎵 **WHAT MUSIC IS IT SUITED TO?** Electronica, dance and pop.

❓ **WHAT ELSE CAN I TRY?** You might also try the Korg Radias for another perfect marriage of analogue and digital.

SYNTHS
AND MORE
10 pages of
indispensable
Korg kit

Welcome to your KORG BUYERS' GUIDE



Whether you're performing live or recording and mixing finished tracks, Korg has the gear to help you realise your ideas. Here's a taster of our current range...

- | | |
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Go to www.korg.com for information on all Korg products



**SOUNDS
ONLINE**

Hear the TR
workstation in
action at
www.korg.com
where you'll
find two
MP3 demos
for download

Powerful workstations

TR series

The TR workstation series builds on the power and reputation of the mighty Triton, combining inspiring sounds with excellent value...

AT A GLANCE

SYNTHESIS METHOD
HI (Hyper Integrated),
48kHz sound engine

WAVE ROM
64Mb PCM ROM

POLYPHONY
62 voices, 62 oscillators
(Single mode)

KEYBOARD
61- and 76-key: velocity-sensitive
and aftertouch;
88-key: real-weighted (RH2),
velocity-sensitive and aftertouch

EFFECTS
89 types; 2 master, 1 insert,
master EQ

PRESETS
512 Programs (512 preloaded),
384 Combis (384 preloaded),
24 drumkits (16 preloaded)
GM sound map compatible
128 Programs + 9 drumkits (ROM)

SEQUENCER
16-track, 200-song, 200,000-note

ARPEGGIATOR
Dual polyphonic

INS & OUTS
L/R mono outs, individual stereo
outs, headphones, USB-B,
SD card slot, MIDI in/out/thru

DIMENSIONS
61-key: 1,045 x 302 x 95mm
76-key: 1,257 x 302 x 95mm
88-key: 1,414 x 365 x 123mm

For more information go to

www.korg.com

What is it?

Korg's TR music workstations distill the essential power and creativity of the acclaimed Triton into an affordable all-in-one package. We start with Korg's proven HI sound engine, then add in a comprehensive 64Mb sample set, including many new acoustic instruments. Plenty of new Programs and Combinations were created from these sounds, resulting in a set that covers all genres and tastes.

What control do I have?

The TR offers an easy-to-understand interface with clearly laid-out screens which be illuminated for low-light levels. There are four knobs that offer fixed and assignable functions, plus two assignable switches and footpedal jacks, giving you indispensable control over synthesis parameters, effects settings and MIDI control. The four-way joystick lets you vary the pitch and apply modulation effects, such as vibrato or wah.

What about the arpeggiators?

The richly expressive dual arpeggiators generate powerful performances. You can use one arpeggiator in Program mode and both simultaneously in Combi mode. You can even record the arpeggiators' output directly into the internal sequencer.

What kind of sequencer is included with the TR?

There's an onboard 200,000-note, 16-track sequencer with One-Touch Record function, song templates complete with pre-programmed drum patterns, and RPPR phrase-based pattern sequencing.

What sounds and effects are included with the workstation?

The 64Mb PCM waveform memory is jammed with new sample data, including 470 high-quality multisamples and 518 outstanding drum samples, many with multi-level dynamics and stereo imaging. These are shaped into 512 awesome Programs and 384 Combinations (blends of up to eight Programs for advanced splits/layers and mixtures). The TR also offers a broad palette of 89 effects types to enrich your sound creations. This section consists of two master effects, one stereo insert, and a master EQ.

Is there a sampler?

With the EXB-SMPL upgrade, the TR boasts fully-fledged sampler capabilities, including such advanced functions as graphic waveform editing, timestretch, crossfade looping and time slice.

How many keys does it have?

The TR workstation series comes in three different sizes, covering any performance need: 61- and 76-key synth actions, and a graded 88 weighted-key version. All models include aftertouch sensitivity for increased expression.

How do I move data from the TR to my computer?

The USB port lets you make MIDI connections with your computer using just a single cable. No MIDI interface is needed! You can also use compact, affordable, high-capacity SD cards to transfer data in and out of the TR, or to make back-ups to your computer.

ALSO AVAILABLE

■ TRITON EXTREME:

A top-class live performance instrument with a massive range of onboard presets, two arpeggiators, clear LCD screen and flexible ribbon or joystick controls



Below: These workstations are powerful enough for fast song creation, and very portable for stage work





SOUNDS ONLINE

Hear the
X50 synthesizer
in action at
www.korg.com
where you'll
find some
MP3 demos
for download

Portable keyboard synthesizer

X50

The new X50 music synthesizer is packed with distinctive sounds, features intuitive controls, and boasts an ultra-portable design...

AT A GLANCE

SYNTHESIS METHOD

HI (Hyper Integrated);
48kHz sound engine

PCM ROM

64Mb: 470 multisamples and
518 drum samples

KEYBOARD

61 keys, velocity-sensitive

PRESETS

512 Programs (512 preloaded),
384 Combis (384 preloaded),
128 multis (16 preloaded),
40 drumkits (16 preloaded)
GM sound map compatible
128 Programs + 9 GM2
drumkits (ROM)

INS & OUTS

L/R mono outs, individual stereo
outs, headphones, damper switch,
pedal, MIDI In/Out, USB

DIMENSIONS

975 x 257 x 80mm

For more information go to

www.korg.com

What is the idea behind
the X50 synthesizer?

With its modern styling, integrated handles and lightweight design, Korg's new X50 packs all the sonic brilliance and clarity of the TR synth into a portable package. The head-turning X50 synthesizer leaves out the TR's sequencer-based production tools, sampling option and media slot, offering a lean and compact performance synthesizer with real audio firepower for both live performance or use with computer-based applications.

What is the Multi mode
feature used for?

You can use the 16-part Multi mode with your favourite sequencer or DAW application. You can save and recall 128 of these flexible multi set-ups internally.

How simple is it to connect
the X50 to my computer?

Very. A single USB cable provides the connection, and the X50 comes complete with editor/librarian software that can run as a plug-in or standalone.

How easy is it to use?

The X50's intuitive interface makes it very simple to control. In place of the TR-style joystick, the low-profile panel offers traditional pitch and mod wheels, and the new ClickPoint cursor system makes navigating the X50 a breeze.

Which sounds are included
and how are they arranged?

The X50 offer hundreds of preset sounds and finding the right one quickly has never been easier. The X50 provides a



Category Select function that makes it quick and easy to choose the sound you need from the vast array of high-quality tones available. There's also an Audition Riff function that provides you with a one-touch audition of each sound, enabling quick selection.

How compatible is the X50
with other products?

This versatile synth shares the same great 64Mb ROM, 512 sound Programs and 384 Combinations as the TR series, which means that the X50 allows you to share sounds with Korg users around the world.

What should I use it for?

The lean, mean design of the X50 ensures it can fit into the smallest home studio workspace or tight stage set-up, and thanks to its cool side handles, it's easy to take along wherever you go. Even with its 61-note keyboard, which gives you plenty of room to perform, the X50 boasts an ultra-light weight of only 4.3 kilos, which is about the same as an electric guitar.

ALSO AVAILABLE

■ **MICROX:** Boasting a full complement of great sounds and a clean design that gives you the essentials, the microX is the perfect fit for any musical genre, production style and performance scene



■ **MICROKORG:** State-of-the-art analogue-modelling and multi-band vocoding in a compact portable instrument



Below: The X50 is a sleek, lightweight, five-octave synthesizer offering a powerful range of effects





**SOUNDS
ONLINE**

You can listen
to some
online demos
of the
microX
synthesizer at
www.korg.com

Mini keyboard synthesizer

microX

This compact synth delivers plenty of sonic power, advanced control and total integration with computer music systems...

AT A GLANCE

SYNTHESIS METHOD
HI (Hyper Integrated),
48kHz sound engine

ROM
64Mb: 642 multisamples
and 929 drum samples

KEYBOARD
25 keys, velocity-sensitive

POLYPHONY
62 voices, 62 oscillators
(Single mode)

EFFECTS
89 types; 2 master, 1 insert,
master three-band EQ

PRESETS
640 Programs (640 preloaded),
384 Combis (384 preloaded),
128 multis (16 preloaded),
40 drumkits (30 preloaded)
GM sound map compatible
128 Programs + 9 drumkits (ROM)

INS & OUTS
L/R mono outs, individual stereo
outs, headphones, damper,
assignable switch/pedal, USB,
MIDI in/out

DIMENSIONS
606 x 226 x 80mm

For more information go to

www.korg.com

What is the microX?

Designed to fit into a computer-based or portable set-up, the microX is the perfect tool for any musician, and is packed with fantastic sounds generated by the same HI (Hyper-Integrated) system as found on Korg's Triton series. It features 640 Programs, with an emphasis on modern synth and dance applications, plus unique ethnic instruments and traditional sounds. One minute it's a hardware synth, the next it's a software plug-in, and it's also multi-function controller. The microX is all of the above... and more!

How controllable are the sounds created by the microX?

Multiple effects processors bring the sound of the microX to life. Two master effects and an insert effect can be used simultaneously. A final, three-band master EQ puts a finishing touch on the tone. The dual polyphonic arpeggiators can be used individually or in tandem (only one arpeggiator is available in Program mode), on individual or multiple timbres. For multitimbral performances, the microX offers not only the traditional eight-part Korg Combi, but also adds new 16-timbre multi sets, which are perfect for working with software sequencers.

How hard is it to navigate?

The microX makes it easy to find the perfect sound, all of which are grouped by category for easy access. An Audition button plays the selected Program with

an appropriate riff. Best of all, the new Click-Point controller makes navigating through the display a breeze.

Can I use the microX for live work?

Yes, its compact size makes it ideal for gigging. When connected to your main keyboard, the microX is a fully-featured, multitimbral MIDI expander module that's been carefully voiced across the full 88-key note range. The microX also comes in a cool, custom carry case of tough orange plastic that includes space for the power adapter and cables.

How about at home?

The microX is a welcome addition to any software studio. To play your soft synths, we've added an external control feature that allows 12 controller functions to be assigned to the four knobs as a 'set', and 64 of these can be stored and instantly recalled on the microX.

How does the microX connect to my computer or laptop?

A USB jack allows the microX to talk MIDI with your computer. We've included a graphic-style editor/librarian program that can run as a standalone program or as a plug-in under VST, AU or RTAS.

What outputs does it have?

Two individual outputs plus the master left and right outputs add even more versatility for isolating individual timbres or creating true four-channel mixes!

ALSO AVAILABLE

■ **ELECTRIBE MX & SX:**
The MX & SX are all-in-one music production tools. The MX features a modelling sound engine with 16 synthesis types while the SX employs a 16-part sampler



Below: The intuitive microX puts you totally in control of your music



Intuitive MIDI studio controller

padKONTROL

The padKONTROL joins Korg's expanding line-up of MIDI studio controllers, boasting an intuitive front panel and assignable controls...

AT A GLANCE

CONTROLS

X-Y pad, two assignable knobs, assignable pedal jack, 16 velocity-sensitive, illuminated trigger pads

DISPLAY

Seven-segment, three-digit LED

MEMORY

16 user, 30 preloaded templates

INS & OUTS

Pedal, MIDI in/out, USB

DIMENSIONS

314 x 234 x 55mm

For more information go to

www.korg.com

What is it?

Packed with user-friendly features, the padKONTROL is the most expressive and versatile pad controller ever. In addition to triggering drum sounds or samples, it can control soft synths and effects, trigger loops and video clips, and act as transport controls for DAW programs.

How do I control it?

Combining an X-Y pad, 16 illuminated pads, footpedal input and assignable knobs, the padKONTROL gives you unsurpassed fingertip power over your musical creations.

How do the pads work?

You'll appreciate the fantastic feel of the pads, which respond well no matter where you strike them. Each pad can feature its own velocity curve so you get responsive, great-sounding results every time!

What about the X-Y PAD?

Based on the KAOSS Pad's pioneering technology, the X-Y pad can be used to intuitively manipulate any two continuous controllers in real time. The X-Y pad adds real-time dynamics to flams and rolls. By

moving from left to right you increase the speed of the roll or the distance between the flamed notes, and by moving up you increase the volume of the roll or the second note in the flam.

What is the footswitch for?

This optional extra allows you to add real kick drum parts or close an open hi-hat. The footswitch can also be set as a toggle or momentary switch for any parameter.

What is a user scene?

You can save an entire set of assignments as a user scene. There are 16 user scene locations available in the padKONTROL itself, plus 30 preset scenes, which instantly match the padKONTROL to some of the most popular music software programs.

Does it come with any software?

It comes with free editor/librarian software, so you can create, organise and store vast scene libraries. Third-party software like a special Korg edition of Toontracks' dff SUPERIOR, a 260Mb drumkit plug-in with 2,700 samples, and Korg's Creative Control Pack, are also provided.

ALSO AVAILABLE

■ K61 CONTROLLER:

This keyboard offers 61 velocity-sensitive keys, and has four velocity curves for the ultimate in control



■ MICROKONTROL:

Extensive features set in an incredibly compact design



Right: The 16 sensitive yet sturdy pads can control trigger loops, effects and soft synths, even video clips



**SOUNDS
ONLINE**

Download and listen to our seven online demos on the microKORG page at www.korg.com

Analogue-modelling synth

microKORG

This tidy analogue-modelling synth will help you recreate the classic sounds of yesteryear, adding modern effects plus a generous sprinkling of vocoding magic...

AT A GLANCE

POLYPHONY

4 voices

MULTITIMBRALITY

2 parts

SOUND GENERATION

2 oscillators and noise generator, multi-mode filter, envelope generators x2, LFOs x2, virtual patches x4

VOCODER

8-band, 4-voice

EFFECTS

Chorus/flanger, phaser, ensemble, stereo delay, cross delay, L/R delay, two-band EQ

PROGRAMS

128

ARPEGGIATOR

Six types

KEYBOARD

37 mini keys, velocity sensitive

INS & OUTS

Audio ins x2, line/mic in, outs x2, headphones, MIDI in/out/thru

DIMENSIONS

524 x 232 x 70mm

For more information go to

www.korg.com

What is it?

The microKORG is a virtual analogue (or analogue-modelling) synth with built-in vocoder. It boasts a 37-note mini keyboard and a flexible microphone for voice input, plus a wealth of front-panel controls.

How does it create sounds?

Featuring four-voice polyphony, the microKORG synth has two oscillators and a noise generator per voice, producing basic saw, pulse, sine and noise waves plus vox and cross waves. Each of these can be tweaked by hand via the performance controls.

Can these basic sounds be tweaked any more?

Yes, the initial sounds can be further personalised by making use of the microKORG's full set of programmable synth parameters. These parameters include four filter modes, two envelope generators and LFOs, ring and sync mods plus a Virtual Patch matrix.

Can I save my sounds?

Once you have a sound you like, you can save it to one of the 128 memory locations which are built-in to the keyboard.

Does it do more than analogue sounds?

There are 64 waveforms, taken from the classic Korg DW8000 synth, which enable

the microKORG to reproduce a varied collection of bells, electric pianos, guitars, basses and many other sounds that are usually difficult to obtain on an analogue synth.

What about the vocoder?

The microKORG's eight-band vocoder has many advanced features to make your music literally sing. You can easily capture and 'freeze' the formants of your voice, then play it across the keyboard, or shift the formant frequency to make your voice sound male, female, like a child, or just plain wacky!

What effects does it have?

There are three types of modulation effects (chorus/flanger, phaser, ensemble), and delays (stereo, cross, L/R) plus a two-band EQ. The delays can be synchronised with the arpeggiator or sync'd to an external MIDI clock, and all of the effects can be edited.



Above: The easy-to-use controls and pots let you concentrate on the music

Below: The microKORG combines analogue sounds with a classic vocoder effect





SOUNDS ONLINE

There are a total of 14 online demos of the MX and SX Electrubes, which you'll find at www.korg.com

All-in-one production boxes

Electrube MX & SX

The Electrube series defined a new standard, and thousands of forward-thinking musicians and producers continue to use them to create groundbreaking music...

AT A GLANCE

ELECTRIBE SX
Music production sampler

PARTS
16 (synth x2, drum x9, drum accent x1, stretch x2, slice x1, audio in x1)

SAMPLES
384 (100 mono, 128 stereo)

MEMORY
256 Patterns, 64 Songs

EFFECTS
16 types x3 (Chain)

SEQUENCERS
128 steps per part

SONG
256 patterns, 20,000 events

INS & OUTS
Audio in, 2 mono outs, 2 individual outs, headphones, MIDI in/out/thru

DIMENSIONS
358 x 256 x 62mm

ELECTRIBE MX
Music production station

OSCILLATORS
16 types

FILTERS
4 (synth part)

WAVEFORMS
Drum x207, synth x76

PARTS
16 total (synth x5, drum x9, synth accent x1, drum accent x1)

MEMORY
256 Patterns (192 preloaded), 64 Songs (3 preloaded)

EFFECTS
16 types x3 (Chain)

SEQUENCER
128 steps per part

SONG
256 patterns

INS & OUTS
Audio in (L/mono & R), 2 mono outs, 2 individual outs, headphones, MIDI in/out/thru

DIMENSIONS
358 x 256 x 62mm

For more information go to

www.korg.com

What's the main idea behind the Electrube range of products?

The Electrube range has been putting power at the fingertips of dance music producers for years. With this pair, Korg has upped the ante, taking all-in-one production boxes to a new high. Whether you want to supercharge your live performances or lay down some stunning tracks, the MX and SX are for you.

How does the MX work?

For anyone after a single box of tricks that's capable of all manner of dancefloor action, the MX is the obvious choice. Drums and synthesis are the name of the game, with five synth parts and a stack of drum sounds, all of which can quickly be strung into patterns with the help of the powerful onboard sequencer. There's 16 synthesis types, giving you enough variation to cover all the sonic bases, and when you throw in the filters, envelope and mod controls for each part, you're looking at a very powerful performer.

How easy is it to use?

Very. The front panel's knobs and switches control all the most important sound

parameters, so you can modify in real time. This gives you the hands-on feel of an analogue synthesizer.

So what's the difference between the MX and the SX?

Anyone who's more into cut-and-paste music production will be after the power to sample, and the supercharged SX workstation is just the thing!

How much space is there?

You shouldn't run out of space. With just under five minutes of mono sampling time onboard, for up to 384 sounds, the only problem is which track to play first!



Above: The Electrube MX and SX give you the ultimate in dancefloor potential

ALSO AVAILABLE

■ **MICROX**: Packed with a full complement of great sounds and featuring an uncluttered design that gives you just the essentials, the microX is the perfect fit for any musical genre, production style or performance scene



■ **MICROKORG**: State-of-the-art analogue-modelling and multi-band vocoding in a compact, portable instrument



Right: The SX boasts an impressive five minutes of sampling and 384 sample sounds

Digital recorders

D3200 & D888

The D3200 and D888 digital recorders offer awesome mixing capabilities and plenty of groundbreaking features to help you produce high-quality sounds...

AT A GLANCE

D3200

RECORDING FORMAT

24-bit/16-bit uncompressed,
44.1kHz/48kHz

RECORDING/PLAYBACK TRACKS

32-track playback, 16-track recording
@ 48kHz/44.1kHz, 16-bit
16-track playback, 12-track recording
@ 48kHz/44.1kHz, 24-bit

RECORDING TIME

119 hours (at 44.1kHz, 16-bit) when
using 40Gb hard disk

INS & OUTS

44 channels (32 recorder channels,
12 sub-in), effects send buses x2, aux
buses x2, solo buses x2 (stereo), cue
buses x2 (stereo), master buses x2
(stereo), monitor buses x2 (stereo)
MIDI in/out, S/PDIF

EQ

4-band parametric (channels 1-24),
2-band shelving (channels 25-32)

DIMENSIONS

D3200: 547 x 371 x 115mm

D888

TRACKS

64 plus master track, eight-track
simultaneous recording/playback

RECORDING TIME

124 hours (single recording; 6 hours)

MIXER

Eight-channel inputs (8-bus)

DIMENSIONS

D888: 375 x 331 x 110mm

For more information go to

www.korg.com

What are they?

The Korg D3200 and D888 are powerful digital recorders. The 32-track D3200 is also a mixing desk, effects processor and CD burner in one table-top package, while the lightweight and portable, eight-track, eight input/output D888 has an analogue-style mixer layout, making it perfect as a live or location recorder, for rehearsals or gigs.

What are their main features?

The D888 has a 40-bit, 44.1kHz processor, with an ample 124 hours' worth of onboard storage. The D3200 meanwhile offers uncompressed (16-bit, 44.1kHz) CD-quality audio, supports 32 playback tracks with 16-track simultaneous recording, and can record stereo drum rhythms to a pair of ordinary tracks. With the D3200's built-in CD-RW drive, you can back up or restore songs and user data, and also import WAV files or create audio CDs. For added professionalism, use the Album CD Project function to specify the track order and length of gaps between songs. Both units also boast USB 2.0 connections, meaning that tracks can be speedily and easily transferred to your computer.

What are their mixing capabilities?

The D888's interface is like no other digital recorder. As with a traditional analogue mixer, each channel on the D888 has its own channel strip, complete with trim, three-band EQ, effect send and pan controls; each with its own real-time knob. The D3200's mixer meanwhile provides 32 recorder channels and 12 sub-mixer channels. Fader, EQ, pan and effect

settings can be stored as a 'scene', and up to 100 can be saved per song. Dynamic Automation can record and play back real-time individual fader and pan movements. The mixer parameters for both recorders can be controlled via MIDI.

What effects do they have?

The D888 boasts 11 effect types for the master effect. Each channel has its own send knob, a global return allows you to set just the right mix and, of course, the effects settings are memorised with each song. The D3200's multiple effect processors use 56-bit internal processing and allow you to select from 128 Programs, created from 52 different effect algorithms.

What editing does the D888 offer?

Non-destructive editing tools allow you to copy entire sections of the song, swap tracks, erase and so on, while Undo and Redo commands allow you to hear both the before and after versions of any edit. Punch In and Out recording allows precise overdubbing and fixing of sour notes.

How do I create a drum track with the D3200?

You can create dynamic drum tracks with the D3200's built-in Session Drums feature. You simply twist the Group and Session knobs to choose the overall musical style and use the Variation knob to select a pattern for your song. You can then tweak your drum tracks by using the Shuffle and Humanise knobs, to produce subtle variations in the timing, accent, feel and volume of each drum hit.

ALSO AVAILABLE

■ **MR-1:** The brand new, hand-held Korg MR1 digital recorder offers exceptionally high-quality 1-bit/2.8MHz recording/playback



■ **MR-1000:** The tabletop Korg MR1000 digital recorder offers recording and playback at an even more astonishing 1-bit/5.6MHz



Below: With all of the D3200's features, it's amazing that it's still under £1,000

Right: The Korg D888 is an eight-track digital recorder with an interface that nods to a classic analogue mixer



Digital piano

SP250

Korg's SP range of digital pianos has always provided an authentic sound and feel for stage and home musicians, and now the SP250 joins the line-up...

AT A GLANCE

KEYBOARD
88 notes

TOUCH CONTROL
Light, Normal, Heavy

POLYPHONY
60 voices (max)

PROGRAMS
30 sounds (Piano x5, Electric Piano x7, Harpsichord, Marimba, Vibraphone, Acoustic Guitar, Clavs x2, Jazz Organ x3, Church Organ x3, Strings x3, Choirs x3)

EFFECTS
Reverb, chorus (3 levels each)

METRONOME
Tempo, Time Signature, Accent and Volume controls

TUNING
Key transpose, finetuning, temperament (Equal, Kirnberger, Werkmeister)

PEDAL
Damper-style (included), half-pedalling supported

SPEAKERS
2 dual-cone speakers (2 x 10 cm) with bass-reflex speaker box

POWER SUPPLY
DC 12V (External AC adapter) 3.5A

POWER CONSUMPTION
42W

DIMENSIONS
1,295 x 380 x 140mm

For more information go to

www.korg.com

What is it?

The Korg SP250 is a portable, lightweight digital piano boasting the rich sound and timbre of a concert grand piano.

How does it achieve this?

This is the first Korg digital piano to feature the all-new RH3 real-weighted hammer action. This state-of-the-art key mechanism features differing key weights in each register of the keyboard, delivering the same playing experience as a grand piano. The keyboard is exceptionally responsive, even when playing quickly-repeated figures, thus preserving every expressive nuance of the performance. The Key Touch Control provides three selectable touch curves, delivering perfect sensitivity for every playing style or song type. For such a robust keyboard, the SP250 still manages weigh less than 19 kilograms.

What if I want a larger range of sounds?

In addition to piano, the SP250 includes an array of other sounds. The touch of a button gives you an

assortment of classic electric pianos (reed and tine styles), church and jazz organs, string and choir sounds, harpsichord and clavs, even guitar.

How loud does it go?

The SP250 boasts a custom system featuring two 10cm dual-cone speakers, matched to a pair of 11W amplifiers which beautifully reproduce its rich sounds. You can rest assured that the bass-reflex speaker system ensures that you'll enjoy every bit of the SP250's deep resonance.

Is there a damper pedal?

For ultimate control, the high-quality damper pedal provides half-pedalling, a variable effect based on how deep you press, rather than the simple on/off switch found on cheaper instruments.

Are there any other effects?

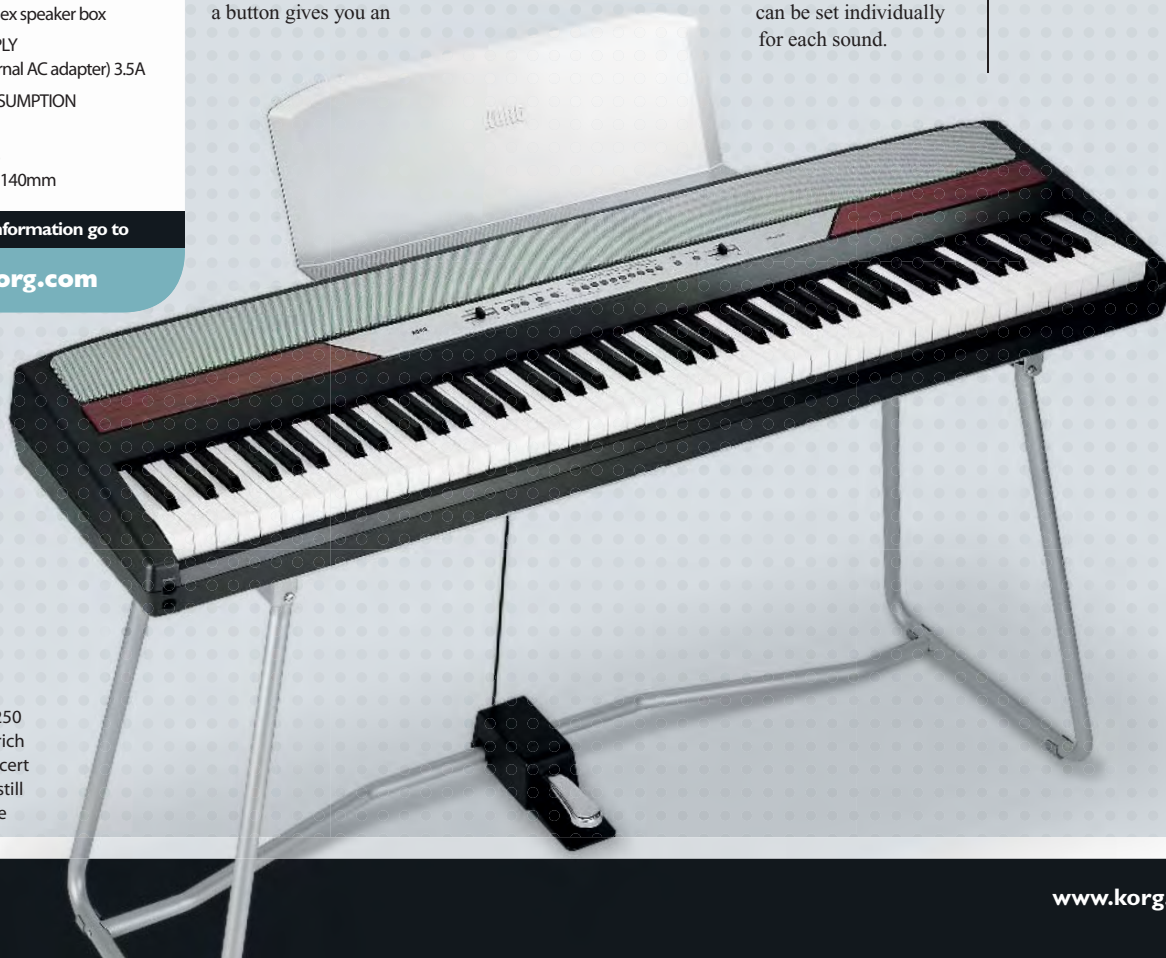
To further enhance the sound, the SP250 provides both a reverb effect that recreates the spaciousness of a concert hall and a chorus effect which adds depth. Each effect features three intensity levels that can be set individually for each sound.

ALSO AVAILABLE

■ **SP500:** This combines the great sound and feel of an acoustic piano with all the accompaniment features you'll need to make your music sound great



■ **SP250 WHITE:** The SP250 is also available in white for great sounds with a seductively stylish look



Above: The SP250 offers you the rich sound of a concert piano, but it is still utterly portable

Professional arranger keyboard

PA800

The new Korg PA800 is an intuitive, powerful, interactive arranger keyboard, based upon state-of-the-art music technology and boasting stunning sound...

AT A GLANCE

SYSTEM
RX (Real eXperience) Technology

SYNTHESIS METHOD
HI (Hyper Integrated) synthesis

POLYPHONY
120 voices, 120 oscillators

EFFECTS
4 stereo digital multi-effects systems, 124 effects types plus built-in vocoder

SOUNDS & DRUMKITS
950+ GM2-compatible sounds (256 user), 64 drumkits (64 user)

STYLES
400+ preloaded Styles, 960 Style locations, Style tracks x8

AMPLIFICATION
22W x2, four speakers

INS & OUTS
Damper pedal, assignable pedal, two unbalanced/balanced jack line ins, unbalanced L/R mono outs, individual outs, MIDI in/out/thru, USB connectivity

DISPLAY
320 x 240-pixel TouchView screen

DIMENSIONS
1110 x 338 x 180mm

For more information go to

www.korg.com

What's the idea behind the PA800?

Following in the footsteps of the PA80, the most successful professional arranger keyboard ever produced, the new PA800 combines powerful RX technology with great sounds, resulting in an impressive yet easy-to-use keyboard for the pro musician.

What effects does it have?

The PA800 has four stereo master effects processors boasting hundreds of choices, from reverb, delay and chorus, right up to the fantastic vocoder and Korg's acclaimed REMS guitar-based effects, for authentic guitar tones. The PA800 also features the world-acclaimed TC Helicon voice processor from TC Electronic.

Does professional mean hard to use?

No. The PA800's colour graphic touchscreen interface makes it easy to understand and use, providing a fast, intuitive and foolproof musical experience.

Tell us about the sequencer...

It boasts a fully programmable and powerful multitrack sequencer, and the Backing Sequences mean you can create

songs based over styles, quickly and easily. Even beginners can easily create songs in minutes using the Step Edit feature.

Why is the sound quality so good?

The PA800 boasts a redesigned version of what was already the most powerful synth sound engine available, to give an even richer, more detailed and natural sound.

What sounds are included?

There are more than 950 ROM sounds, including a new multi-layer, stereo acoustic concert grand piano, plus 64 drumkits.

Can I use it for editing?

Of course. The PA800 features such professional editing facilities as loop, normalise, cut and cropping of samples. The Time Slice feature allows you to cut audio grooves and import the data into a Style, to create some very cool rhythms.

What about connectivity?

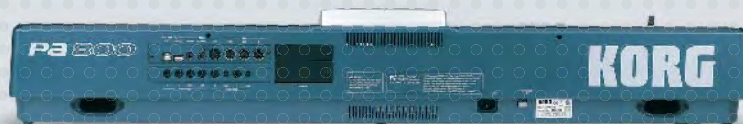
The PA800 has four audio outputs, two mic/line inputs with separate gain, two USB Host connections and one USB connection for easy computer link ups.

ALSO AVAILABLE

■ **PA50:** The most affordable, no compromise professional arranger available



■ **PA1X:** Keyboard, arranger, recorder and sampler; the Korg PA1X is a one-stop music system for all your music production needs



Above: Four audio outputs and two mic/line inputs provide all the connectivity you need



Above: The PA800 boasts the most stunning sound ever produced by an arranger keyboard



SOUNDS
ONLINE

Head over to
www.korg.com/legacy
to listen to
the Digital
Collection
in action

Authentic digital synth recreations

Legacy Digital

Legacy Digital Edition offers stunning software versions of two Korg digital synthesis masterpieces – the M1 and WaveStation – plus the MDEX multi-effects plug-in...

AT A GLANCE

M1 SOFTWARE SYNTH

POLYPHONY
256 voices (depending on CPU)

MULTITIMBRALITY
8 parts

SOUNDS
3,100+ preset, 400 user,
over 950 PCM waveforms

EFFECTS
34 types

WAVESTATION V.1.6

POLYPHONY
256 voices (depending on CPU)

MULTITIMBRALITY
1 part

SOUNDS
1,400+ preset (14 ROM banks and 3
RAM banks), 700+ PCM waveforms

EFFECTS
55 types

MDEX V.1.2 PLUG-IN

EFFECTS
19 types, 128 Programs

COMMON SPECS

Real-time MIDI control and automation

SAMPLING FREQUENCY
44.1kHz – 192kHz

SYSTEM REQUIREMENTS
Mac: Apple G4/500MHz, G4/800MHz,
256Mb, OS X 10.2.8 or later
Windows: Pentium III/1GHz, Pentium 4,
Pentium M, Celeron, Celeron
M/900MHz, 256Mb, Windows XP
Home Edition/Professional SP1

For more information go to

www.korg.com

What is the M1?

As the first workstation synthesizer, the M1 was a definitive element in the sound of the late-80s and 90s. Along with its innovative workstation concept, the M1's AI (Advanced Integrated) synthesis system used PCM waveforms and digital effects to deliver polished, production-ready Program and Combination sounds.

The M1 software synth reconstructs the M1's sound engine into an eight-part multitimbral tone generator featuring up to 256-note polyphony. The M1 software synthesizer also supports RTAS, AudioUnits and VST plug-in formats.

What new features does it offer?

It provides numerous new functions that were often requested for the original M1, including a rich resonant filter, VDA modulation and a compressor effect. While the original M1 had two effect processors, this boasts two insert effects for each of the eight multitimbral parts, plus two master effects.

How do I operate it?

The M1 has a completely redesigned interface. Many parameters can be seen at once, and some can be displayed graphically. Ease of use was a primary consideration at every design point.

What is WaveStation?

WaveStation featured two radical innovations that opened up a revolutionary new world of sound. One was the ability to 'mix' or 'morph' between four oscillators, to create new and unique sounds and textures. The second was wave sequencing, which allowed the playback of different waveforms in a specific order, to create evolving soundscapes and unique rhythmic or melodic sequence patterns.

The WaveStation software synthesizer provides more than 1,450 preset sounds plus a massive collection of additional PCM waveforms and wave sequences. Best of all, the WaveStation software synthesizer is able to import original WaveStation series data via SysEx (SYX) files, opening up the world of sound which can be found on the internet.

What is MDEX?

MDEX is an awesome multi-effect plug-in which boasts 19 high-quality effect types. MDEX V1.2 now supports RTAS, plus VST and AudioUnits plug-in formats. Featuring a low CPU drain design, the MDEX V1.2 comes equipped with 128 useful and editable effect Programs, all of which are perfect for sound design, recording, mix-down sessions or even live performance!

ALSO AVAILABLE

■ **KONTROL 49:** This controller offers 49 full-sized, velocity-sensitive keys, eight encoders and sliders, with USB and MIDI included



Right: Korg's Legacy Digital Edition brings the power of the Korg M1 synthesizer to your PC, but they've made it easier to use and added a lot of extras!



Above: WaveStation has a huge sound library, with over 1450 preset sounds. You can also import your own from the internet





Eddie Stevens playing keyboards with Zero 7 at Shepherd's Bush Empire

Photography: John Alex Maguire/Rex Features

Electronica heaven

Eddie Stevens makes his living by conjuring extra sonic dimensions for Moloko, Zero 7 and Roisín Murphy. Lisa Savage caught up with him to share some gear secrets...

Korg Magazine: What first got you into playing and writing music?

Eddie Stevens: I wanted to be in a band when I was at school. I tried everything... then went with the piano. It sounded good straight away, unlike the violin or saxophone, which sound utterly foul for the first five years. Then I started a band with some older kids who taught me how to smoke fags.

KM: Can you recall the first Korg kit you had?

ES: The first bit of Korg gear I bought, I think, was an old Korg MS10... then I got an MS20 and never touched the poor little MS10 again. Great keyboards though, no question.

KM: You're with Zero 7 at the moment, and have worked with Moloko; what other collaborations have you been involved with?

ES: I do quite a bit of off-kilter experimental music, namely Post Office, Flip Top Box and Egotash. I've just joined a rather wonderful band called Half Cousin. Stuff in the past should probably remain there... with the exception of a band I was in with Ashley Slater and Norman Cook for two or so years called Freak Power. I think Mr Slim denies its existence now, but I have lots of fond memories from those tours and albums.

KM: With all the people you work with, do you have an input on the songwriting side?

ES: Well, all the tracks on Moloko's *Statues* album have my 'sound' on, if there's such a thing.

Also most of the tracks on their *Things To Make And Do* album. I suppose, if anything, I specialise in melody and harmony, using both in unexpected ways, and also sound creation. A lot of the odd sounds are from my little shenanigans.

KM: How long have you worked with Roisín and, previously, Moloko, and what role do you play, both live and in the studio?

ES: I started with Moloko around eight years ago. I was hired, initially, just as a keyboard player but then I got involved with a bit of writing – all the string and brass stuff – and I took care of the live side of things to a large extent. It became very much a band by the end; all six of us together, smashing up the placey [*sic*] night after night.

KM: How long have you worked with Zero 7?

ES: Well I've been with Zero 7 for about four years, somehow managing to fit it in between the other stuff that was going on in the early days, and then with a larger commitment over the past year or so. I arranged the brass on the last album, played a bit of keyboards on the one before. It was down to me to find ways of transferring a lot of the sounds used on the albums to a live environment, where it simply isn't practical to bring along all the racks of equipment used.

KM: Have you seen any of the new Korg releases?

ES: Oh, yes. I want an R3 and a Radias. I want. I want. I want. Can I have them please?

KM: We know you've got a couple of old Korg MS synths, but what's your favourite bit of Korg kit at the moment and why?

ES: The KP3. I really believe that the KAOSS Pad is one of the great musical inventions of the last decade. When I bought my first one I just used it with a dropped jaw for hours and hours and hours. There are only a handful of other bits of kit that have had this effect on me.

KM: What about the future? What does 2007 hold for you?

ES: In a few hours, I'm off to do some gigs with a band called Half Cousin. All being well, that should last well into the summer. Roisín's first album for EMI will be out shortly and we'll no doubt have some extensive touring to do. Zero 7 are working on album four, which I suppose will involve me at some stage. I'm going to write some tracks with the wonderful Tara Busch. And I'm going to continue banging my head against a brick wall and recording it, sending it to undeserving record company types, then banging my head against said brick wall a bit more.

"I really believe that the KAOSS Pad is one of the great musical inventions of the last decade"

TUNER GUIDE

Even experienced guitarists don't stay in perfect tune all of the time, and as most of us can't afford a personal guitar technician, Korg has got the next best thing...

Korg has been making tuners that the best guitarists can rely on for decades, and their current range covers such a wide base that there should be something here for everyone. Whether you want a rack tuner for studio sessions, a small LED model to take on stage, a tuner with

built-in metronome, or a mini version to clip on the end of your acoustic, it's all here. Over the next six pages, we'll introduce you to the complete Korg range of tuners, and shed some light on some of the terms you might come across when buying a new one. All you need to do is tune in and tune up!



LCA120 CHROMATIC TUNER

- Extra large backlit LCD for excellent visibility
- 'Focus Tune' function allows for even more accurate tuning within ± 10 Cents
- Sound Level meter visually indicates the volume of a performance
- Korg's own Sound Back mode lets you tune using a reference tone together with the meter (using the optional CM-100L contact microphone)
- Temperament Program function lets you specify the tuning pitch for each note
- A wide tuning range of A0–C8 (88 notes) and adjustable calibration (410Hz to 480Hz) supports all types of instruments
- Built-in four-octave reference tone
- Indicator marks for perfect major and minor thirds
- Built-in mic for tuning acoustic instruments
- Flip-top design protects LCD display
- Dimensions: 101 x 84 x 20mm (folded)



DT4 CHROMATIC TUNER

- A compact and unique, high-performance chromatic tuner
- Bright LEDs are used to display three types of tuning modes: Strobe, Meter and Mirror
- A wide detection range of A0–C8 (88 notes)
- Calibration range of 410Hz to 480Hz can be adjusted to support various concert pitches
- Built-in condenser mic lets you tune acoustic instruments
- Dimensions: 61 x 65 x 22mm



CA30

CHROMATIC TUNER

- Compact chromatic tuner, ideal for brass band or orchestra
- High-precision LCD needle-type meter for stable tuning
- Wide range of pitch detection covers C1–C8
- Calibration function supports a variety of concert pitches
- Built-in high-sensitivity microphone for tuning acoustic instruments
- Reference tone can be produced from an internal speaker (Sound Out) (A4/B4, 12 notes) C4 (261.33Hz) – C5 (523.25Hz)
- Marks provided for pure major thirds and minor thirds
- Auto Power Off function conserves battery life
- Memory Backup function
- Dimensions: 104 x 64 x 15mm



CA40

CHROMATIC TUNER

- A compact chromatic tuner, ideal for use with a brass band or orchestra
- Larger, more easily readable, high-precision LCD, needle-style meter
- Wide detection range covering A0–C8
- Calibration function that accommodates a variety of concert pitches
- Sound Out function that lets you produce a reference tone from the internal speaker
- Equipped with output jack, microphone & folding stand
- Auto Power Off function saves the battery, even if you don't remember to turn off the tuner
- Memory Backup function
- Approximately 85 hours of continuous use
- Dimensions: 100 x 67 x 17mm



CM100L

CONTACT MICROPHONE

- The perfect complement to any tuner that offers an audio input jack
- Mic can be positioned on just about any instrument to get a more sensitive reading, while allowing the tuner to be positioned for easier reading
- Right-angled, quarter-inch, male jack connection



OT120

ORCHESTRAL TUNER

- Chromatic tuner with a wide, eight-octave detection range that supports band and orchestral instruments
- Dual display combines a needle-type indicator with an easy-to-read, backlit LCD screen
- Sound Back mode plays a reference pitch for the note that's closest to the input pitch. The meter indicates the discrepancy between the input and the correct pitch
- Multiple temperaments support historical tunings
- Transpose mode is convenient for wind instruments
- Choose from three levels of needle response speed (slow, medium and fast)
- Both auto and manual tuning modes are provided
- Built-in reference tone plays in a five-octave range
- Broad range of calibration (349Hz to 499Hz)
- Built-in mic supports acoustic instruments
- Energy-saving design for long battery life (approximately 100 hours)
- Durable, suede-type soft case is included
- Dimensions: 74 x 36 x 120mm

GT120

GUITAR & BASS TUNER

- Dedicated chromatic tuner for guitar and bass that supports seven-string guitars and six-string basses • Dual display combines a needle-type indicator with an easy-to-read, backlit LCD screen • Choose from two tuning modes: Auto or Manual • Built-in reference tone plays in a five-octave range • Flat Tunings: 1-4 in half-note steps • Five types of open tunings (D, E, G, A, DADGAD) • Broad range of calibration adjustment (438Hz to 445Hz) • Built-in mic for tuning acoustic guitars • Long battery life of more than 100 hours, plus a battery status indicator • Durable, suede-type soft case included • Dimensions: 74 x 36 x 120mm



DT10

DIGITAL TUNER

- Chromatic pedal tuner, optimised for guitar and bass players • Cascade cable for powering other 9-Volt pedals • Straightforward and durable design built into a road-ready metal case • A 13-point, LED-type meter for quick response and accuracy • A 16-segment note display for excellent visibility, even on dark stages • Seven-semitone flatted tuning mode • Detection range of E0 (20.60Hz) – C8 (4186Hz) • Adjustable calibration 438 to 445Hz • Two outputs (output and bypass) • Dimensions: 104 x 119 x 51mm



GT4

GUITAR & BASS TUNER

- A compact and unique, high-performance dedicated guitar/bass tuner • Choose from three different tuning modes: Strobe, Mirror, and Meter • Quinta-flat tuning mode allows dropped tuning between one and five semitones • Supports seven-string guitars and six-string basses • Built-in condenser mic supports acoustic guitars • Dimensions: 61 x 65 x 22mm



AW1

MICRO TUNER

- Ultra-compact, ultra-lightweight chromatic tuner you can attach to your wind or string instrument for easy and accurate tuning • Piezo pickup detects vibrations from the attached instrument, or the built-in microphone detects the pitch • Marks to indicate pure major third and minor third intervals • Meter Reverse function lets you invert the display • Adjustable calibration accommodates a wider range of concert pitches • Two clip sizes (large/small) included for use in different situations, or for various types of instruments • Memory backup function • Dimensions: 25 x 55 x 9mm





GA30

GUITAR & BASS TUNER

- High-precision, LCD needle-type meter for stable tuning • Lets you tune up to five semitones flat • Supports seven-string guitars and six-string basses • Supports super-long scale guitars up to five frets longer than conventional guitars • Reference tone can be produced from an internal speaker (Sound Out) • Built-in, high-sensitivity microphone for tuning acoustic guitars • Wide detection range (B0-B6) • Auto Power Off function conserves battery life • Convenient tilt slit lets you insert a plastic card for use as a handy stand • Approximately 100 hours of continuous use • Dimensions: 104 x 64 x 15mm



Grammy award-winning classical guitarist Sharon Isbin uses an AW1 Micro Tuner. "Its ease of use and accuracy is just stunning. Whenever I'm rehearsing, performing or recording, the AW1 is an indispensable tool. It's the only tuner on the market that is so accurate and simple to use. It's a lifesaver!"

GA40

GUITAR & BASS TUNER

- The GA40 is designed specifically for guitar and bass, boasting excellent performance and convenient functionality • Large, high-precision meter-type display for stable tuning indication • Quinta-Flat Tuning mode allows dropped tunings from one to five semitones • Supports tuning of seven-string guitars and six-string basses • Sound Out function lets you produce a reference tone from the internal speaker • Equipped with output jack, microphone & folding stand • Auto Power Off function saves the battery, even if you forget to turn off the tuner • Memory Backup function • Approx. 85 hours of continuous use • Dimensions: 100 x 67 x 17mm



DT7

GUITAR/BASS CHROMATIC TUNER

- Dedicated, super-accurate guitar/bass tuner featuring the Buzz Feiten Tuning System, a worldwide first! • Two selectable tuning modes: Chromatic (for tuning normally tuned instruments) or Buzz Feiten • Large LED-type meter and seven-segment note display for excellent visibility • Buffer amp between the input jack and bypass jack eliminates any tonal colouration • A convenient Sound Out mode • Wide tuning range: A0 (27.50Hz) – B7 (3,951.07 Hz) • Allows tuning of a wide variety of instruments, including five and six-string basses • Built-in mic for use with acoustic guitar • Dimensions: 169 x 63 x 43mm

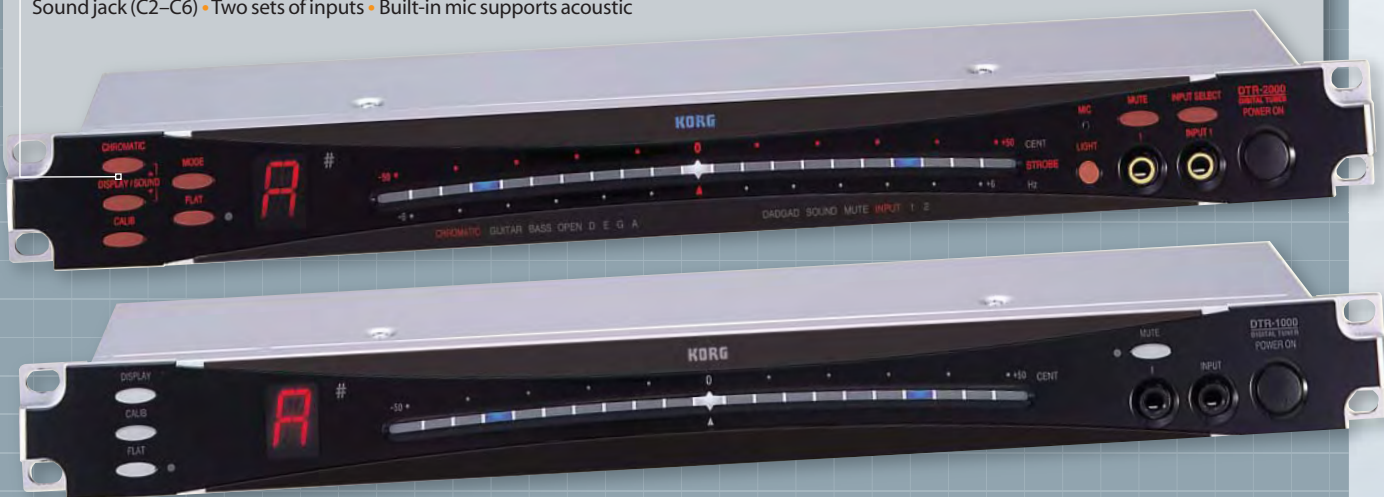


DTR1000 & DTR2000

DIGITAL RACK TUNERS

DTR2000 • Chromatic, guitar (six-string, seven-string)/bass and open modes • Five types of open tuning (D, E, A, G, DADGAD) • Three types of display: Cents, Hertz, or strobe • Seven-semitone flat tuning mode supports dropped tunings: a worldwide first • Adjustable calibration of 438–445Hz (select either Manual or Auto) • Reference pitches can be produced from the Sound jack (C2–C6) • Two sets of inputs • Built-in mic supports acoustic

guitartuning • Illumination function lights up rack-mounted equipment below
DTR1000 • Chromatic tuner automatically detects the note name and accurate pitch • Seven-semitone flat tuning support • Two types of display: Cents or Strobe • Adjustable calibration of 438–445Hz (Manual/Auto)
DTR1000 & 2000 • Dimensions: 481 x 113 x 46mm



BTL1 BEATLAB

DIGITAL METRONOME

- Train with 39 basic rudiments, including roll, paradiddle, flam, and ruff
- Sound and LED indicators let you practice right- and left-hand strikes
- Supports triplets and complex rhythms, such as five-to-nine notes per beat
- Program mode allows creations of 24 different settings of tempo, beat, and rhythm sound volume
- Chain mode lets you link eight chains, each containing up to 16 patterns
- Tap Tempo function lets you set the tempo by tapping a button
- Headphone jack and adjustable volume
- Operation and settings are made easy with a familiar layout of sliders and buttons
- Backlit display for excellent visibility
- Battery operation (four AAA alkaline batteries) or optional AC adapter
- Dimensions: 142 x 104 x 28mm

LMA120

DIGITAL METRONOME

- Digital metronome with an extra large backlit LCD for excellent visibility
- Unique Conducting Motion display allows a natural-feeling sense of tempo
- Choose from two types of tempo steps: Pendulum or Full
- Ten different beats and six different rhythms can be combined
- Tap function lets you set the desired tempo
- The timer/stopwatch function lets you time your practice sessions up to 99 minutes
- You can use the Reference Pitch and Calibration functions to tune your instrument
- Flip-top design protects LCD display
- Dimensions: 101 x 84 x 21mm (folded)



TM40

DIGITAL TUNER/METRONOME

- Tuner and metronome functions can be used simultaneously or independently
- Large LCD-type needle meter
- LED indicators that show pitch deviation or blink to indicate the tempo
- Wide detection range of C1 (32.70Hz) – C8 (4186.01Hz)
- Built-in, high-sensitivity mic for tuning acoustic instruments
- Sound Out mode with built-in speaker and selectable reference switch from A5–B4
- Adjustable calibration in a range of 410 to 480Hz
- Pure major third and minor third interval markings
- Metronome beat mode with preset tempo and time signature selections
- 13 rhythm variations for practising a wide range of styles
- Two tempo adjustment modes: Full and Pendulum
- Optional CM100 contact mic for accurate tuning in noisy environments
- Dimensions: 113 x 77 x 18mm



MM2

METRONOME

- Compact, personal metronome
- 39 tempo steps in a 40–208bpm range
- 0, 2, 3, 4, 5, 6, 7 beats, 8th notes, triplets, 16th notes, +/-2 per cent accuracy
- Easy-to-adjust volume control
- Piezo electric speaker
- Ear hook comfortably fits either ear reducing sound leakage, improves sound quality and stability
- Two interchangeable colour caps
- 3V lithium battery (1x CR1216) included
- Dimensions: 76 x 24 x 50mm



MA30

DIGITAL METRONOME

- Highly visual liquid crystal pendulum
- 13 different rhythms are built-in so you can practice to more than a click track
- Rhythms include duplets, triplets, triplets with inner beats omitted, quadruplets and quadruplets with inner beats omitted
- 12 reference pitches C4–B4
- Adjustable calibration (438 to 445Hz)
- Adjustable volume
- Tempo adjusts from 40–208bpm
- Tap function for setting the tempo
- Earphone jack
- Memory backup function
- Approximately 250 hours of continuous use
- Dimensions: 104 x 64 x 15mm



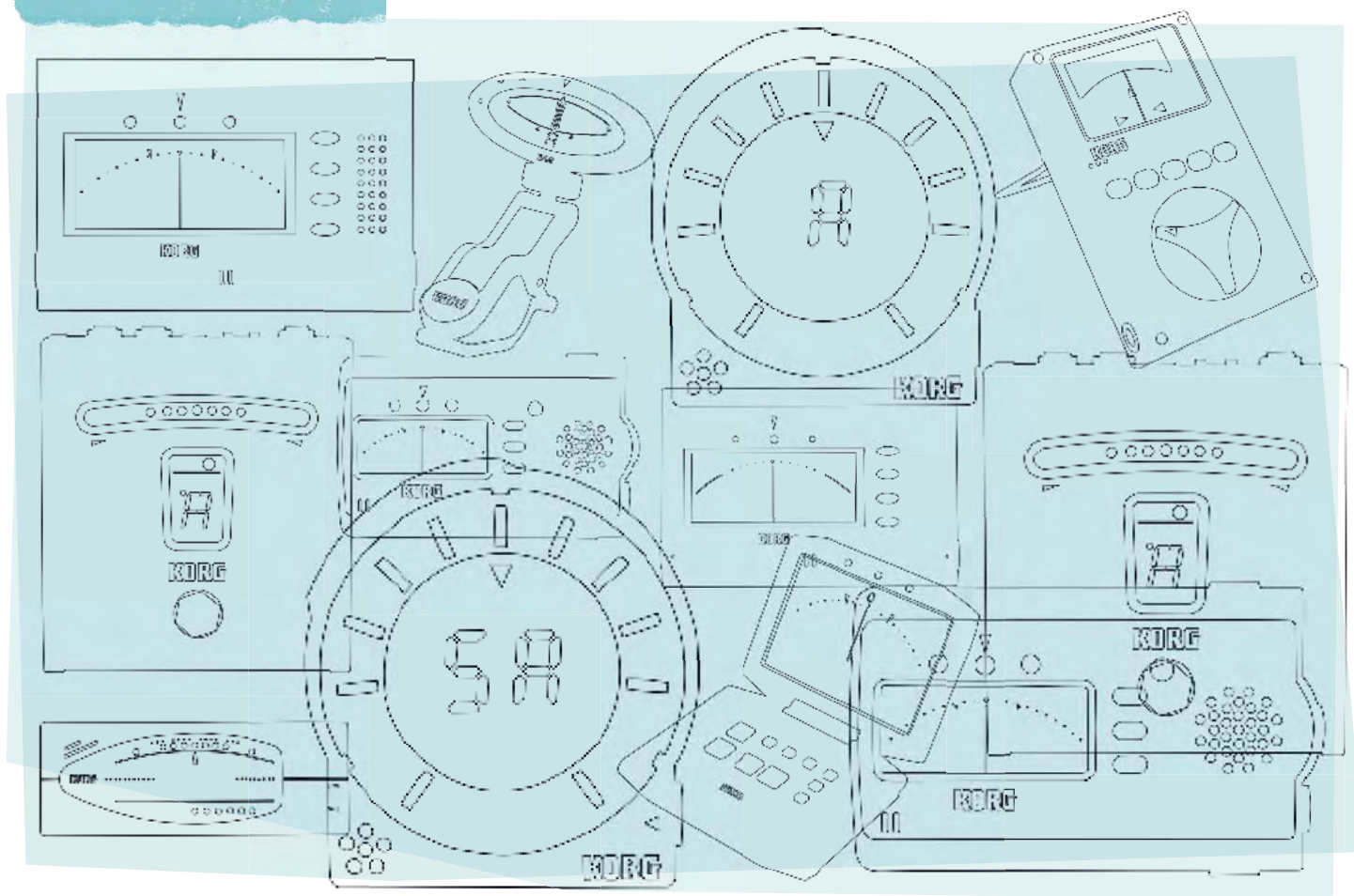
KDM2

DIGITAL METRONOME

- Korg's original, cylindrical resonator speaker provides powerful sound, volume and tone
- An LED provides visual confirmation of the tempo
- Newly-added beat variations range from basic to sophisticated rhythms
- A total of 19 beat patterns cover your practising needs in numerous musical styles
- Three different PCM beat sounds (cowbell/agogo bells/clave)
- Tap Tempo function
- An audible Reference tone in a range of C4–B4 is available for tuning
- An encoder-type Tempo/Calib dial and switch provide direct access to the desired setting or function
- A large LCD screen makes settings easy to see
- Approximately 120 hours of continuous use
- Dimensions: 106 x 49 x 106mm



Turn the page for our guide to tuner specifications ▶



TOTALLY IN TUNE

The tuner is an indispensable accessory for guitarists, but what do all those specs mean and how do they work? Luckily, we can shed some light on this strange science...

With over 20 million Korg tuners sold since 1975, it isn't surprising that a plethora of wonderful new features have found their way into these nifty little units. But if you don't know Hertz from Cents, or Quinta-Flat from Focus, then tune in with this handy glossary of Korg tuner functions.

AUTO OR MANUAL

The humble tuner has been with us since Korg introduced the very first commercially available guitar tuner, the GT6, back in 1975. This was a manual tuner where you selected the string you were tuning using a big dial. Nowadays, all tuners are automatic and will detect the note closest to the pitch played, so you can tune all six strings on a guitar without having to take your hands off the strings. However, most tuners still feature a Manual mode, letting you select and fix the tuning note.

GUITAR OR CHROMATIC

A basic guitar tuner can only select and tune the notes of open guitar strings; E, A, D, G, B and E. Playing C, F or any sharp or flat notes will result in a false reading. This is fine for guitars, but for wind, keyboard or orchestral instruments,



The Korg TM40 tuner offers not only fully chromatic tuning functions but has a built-in metronome as well

Illustration: Kate McDonnell



The Korg DTR2000 is packed with essential tuning features for professional guitar performance

a chromatic tuner should be used, as they can handle and indicate accurate tuning of all 12 semitones within an equal temperament octave. That said, some Korg guitar tuners which boast some specialist guitar functions are chromatic and, on the whole, there's nothing wrong in using a chromatic tuner for your guitar. These advanced guitar tuners will also support alternative, open and DADGAD tuning modes.

FLAT TUNING

Tuning flat, or drop tuning as it is commonly known, has been exploited by many bands, from Led Zeppelin and Black Sabbath, to modern bands like Radiohead. By tuning down you'll get a much beefier, grungy rock tone. Of course, you'll need a tuner that can handle this mode of tuning, and many Korg guitar tuners now let you drop tune by more than just one or two semitones. The Quinta-Flat mode found on the GA30 and GA40 guitar tuners allows a drop of five semitones, while the DTR2000 rack tuner boasts the world's first seven-semitone Drop Tuning mode.

TEMPERAMENTS

Some chromatic tuners also have the ability to select different tuning temperaments, as not all instruments tune to an equal temperament scale. An equal temperament scale is where all semitones in the diatonic scale are the same size. Other temperaments like Pythagorean, Werckmeister III, and many others can be selected. You can also find a Temperament Program function on some tuners that lets you specify the tuning pitch for each note.

HERTZ OR CENTS

Tuners behave like frequency counters, measuring the frequency of an instrument's notes. Scientific frequency counters measure frequency (or cycles per second) in Hertz (Hz), but this can be a bit unintuitive for musical purposes, and so Cents are used where one semitone is split into 100 equal units, each being one Cent. If you are out of tune, the display will indicate how many Cents out you are. For some, tuning in Hertz can still be useful, so Korg's professional rack tuner, the DTR2000, allows you to switch to a Hertz mode as well.

FOCUS TUNING

A new feature found on the LCA120 is Focus Tuning, which allows you to tune with much greater precision. Most tuners display a range of one semitone, from -50 Cents to +50 Cents. However, with some tuners, it can be difficult to get accurately in tune, as being just a few Cents off can be easily misread on the display, yet this is still enough to sound slightly out of tune. With Focus Tuning the display uses a sort of auto-zoom function to indicate a range of ± 10 Cents. In this mode, when you play a note, the display will show the note name that's closest to the pitch you played.

When the input pitch comes within ± 10 Cents of the '0' (centre) position, the display will change to the ± 10 Cent range. If the pitch is not within ± 10 Cents the display will return back to its previous state of ± 50 Cents.

CALIBRATION

By default, all tuners are set so that concert pitch A is measured at 440Hz. But Calibration mode (available on all current Korg tuners) allows you to adjust this, which comes in handy when you need to tune up with other instruments that aren't tuned to 440Hz. On some models there's an Auto Reference Calibration function that detects the pitch of an instrument and sets it as a reference.

SOUND BACK MODE

This mode could be described as auto pitch pipes as it uses the tuner's built-in speaker to produce a reference tone for you to tune to. The tuner will automatically sense the pitch played and produce a stable reference tone of the nearest note. For obvious reasons, with acoustic feedback, this mode won't work with the tuner's built-in mic and can only be used with instruments directly connected to the input jack. For non-electric acoustic instruments the CM100L contact mic can be used.

DISPLAY MODES

When buying a tuner, you may need to think about which type of display is best for you, as each has its advantages. LCDs are high contrast, robust and better for battery life; LEDs are good for tuning at a distance or on dark stages; and needle meters boast a smooth action favoured by orchestral players. Some displays can indicate tuning in different ways.

The Strobe mode, first used on Korg's flagship rack tuners, is now found on the new handheld GT4 and DT4. With Strobe mode, several LEDs light and flow in a clockwise or anti-clockwise motion, depending on whether the note is flat or sharp. As the note is brought into tune, the LEDs slow until they are motionless, indicating the correct pitch.

The new Mirror mode feature shows a brightly-lit LED and a dimly-lit LED when you play a note. You then tune your instrument so that the brightly-lit LED coincides with the dimly-lit indicator at the top of the display. The brightly-lit LED will be shown on the right if your instrument is sharp, and on the left if flat. Of course, the basic Meter mode is always available, lighting just one display segment to indicate tuning.

DETECTION RANGE

Most tuners can easily tune mid-scale notes that aren't too high or low. The Detection Range specifies the extreme upper and lower notes or frequencies that the tuner can handle. It may be worth looking at this if you're tuning an instrument with a wide range of notes, such as some keyboards or orchestral instruments. The low frequencies generated by bass guitars are now specifically catered for by all Korg guitar tuners, including support for five- and six-string basses.

The AW1 tuner uses a built-in contact mic that helps to isolate the sound of your instrument when tuning in a band or orchestra situation



The new GT4 guitar tuner from Korg employs three different tuning displays: Standard, Mirror and Strobe

WELCOME TO YOUR

KORG GEAR GUIDE



The definitive place to find gear, products and accessories for your live and studio, guitar and bass set-ups



CONTENTS



Computer-ready PANDORA

PANDORA PX5D

Korg's new PANDORA PX5D multi-effects processor for guitar is a pocket-sized unit packed with hundreds of realistic modelling effects and versatile functions

TECH SPECS

EFFECTS:
180 types (up to 7 available simultaneously)

NUMBER OF PROGRAMS:
100 user, 100 preset

INPUTS:
Guitar input (1/4" jack), AUX (mini stereo jack)

Output line/headphone dual-purpose output (Stereo jack)

Control FOOTSW jack, USB connector

RHYTHM SECTION:
Patterns 128, Tempo 40–240 bpm

POWER SUPPLY:
Two AA alkaline batteries:
Allows 7 hours of continuous use (backlight OFF)

Allows 5 hours of continuous use (backlight ON)

USB bus-powered (when using the USB connector)

Separately sold AC adapter (DC4.5V)

DIMENSIONS:
118(W) x 75(D) x 20(H)mm
/4.65" x 2.95" x 0.79"

For more information go to

www.korg.com

ALSO AVAILABLE

■ KORG PX4D
Guitar and bass functionality in a single unit. Sounds include vintage amps, cabinets and effects from classic to unique.



What is it?

The PX5D guitar multi-effects processor is the first in Korg's PANDORA series to provide a USB/ audio interface for direct connection to your desktop or laptop computer. The versatile new unit can be used in conjunction with your audio sequencer software - or the bundled Ableton Live Lite 6 Korg Edition recording software - to make multi-track recordings of CD quality.

What effects are there?

As with all PANDORA devices, you get a multitude of effects. These include: 180 variations of classic and cutting-edge guitar amps, bass amps, cabinets plus classic and new effects; 200 multi-effect programs (100 user/100 preset); 744 rhythm and bass patterns; a Phrase Trainer function (maximum 80 seconds); a built-in tuner.

What else does it have?

Plenty. There are 744 rhythm and bass patterns covering a wide range of

musical styles. Korg has made it easy for you to quickly build up tracks by creating chains of rhythm and bass patterns and specifying the chord changes for them. You can also store your favourite effects programs in four banks, and switch between them with a single touch. Alternatively, you can jam along with an external audio source such as a CD, MD or MP3 player - just input it via the AUX jack or USB connector and the PX5D will helpfully you to transpose the key and/or cancel the bass.

REMS modelling

The PX5D's realistic and wide-ranging effects come to you via Korg's proprietary REMS modelling technology. Included are simulations that recreate classic vintage and modern bass and guitar amplifiers (18 for guitar amps and 10 for bass) as well as a host of effects - some familiar and some unique to PANDORA. Numerous effects designed specifically for bass are also included. You can combine cabinets



Above: The PX5D comes with Ableton Live Lite 6 recording and editing software

and speakers freely with any amp models. There are also synth effects with which you can create unique and fresh new sounds - there are three choices each for guitar and bass.

Add to all this, features such as pickup modelling, an intelligent pitch shifter, a talk effect that makes your guitar 'speak' and a great variable-speed rotary speaker effect and you can see why the PX5D is set to become a familiar site on stages and in home studios around the world.



Multi-effects processor

AX3000G

Never before has a pedal combined such a wealth of multi-effects and such a powerful arsenal of controls. It's an effects revolution...

TECH SPECS

EFFECTS

72 types: amp x16, cab x11, pre-effect x11, modulation x11, delay x11, reverb x11, noise reduction x1

PROGRAMS

96

INS & OUTS

Input, insert return, aux in, 2x outputs, insert send, S/PDIF out, headphones, MIDI in/out

DIMENSIONS

500 x 241 x 72mm

For more information go to

www.korg.com

ALSO AVAILABLE

- **Toneworks AX1500G:** The Toneworks AX1500G is packed with 56 different effects and gives you everything from ultra-realistic models of great stompboxes, amps and speaker cabinets, to such essential effects as chorus, reverb, delay and pitchshift.

What is it?

The AX3000G is a powerful multi-effects processor that reaches far beyond its predecessors, delivering high-quality modelling sounds you can control in numerous ways, in real time. Boasting an expression pedal, a control switch and an expression step sequencer, the AX3000G features all the elements a guitarist needs to fulfil their musical vision.

What amp models does it include?

The AX3000G packs in 72 types of amp models and effects, all delivered by Korg's world-acclaimed REMS modelling technology. In addition to true-to-life reproductions of a wide array of vintage and modern guitar amps and cabinets, REMS also provides such standard effects as chorus, delay and reverb in gorgeous detail. These effects transcend the stereotypical concept of effects, opening up completely new vistas of sound for the electric guitar.

What other effects are provided?

There are effects that model a guitar synthesizer, and newbies like the Filttron, which far surpasses the conventional auto-wah. You can use the Acoustic effect to transform the sound of your electric guitar into that of an electro-acoustic, or Pickup Modelling to change the tonal character of your

pickups without switching guitars.

The AX3000G also features send/return jacks that make it easy for you to connect your favourite effects unit. There's even a digital output (S/PDIF optical) jack so you can digitally record your playing without losing any sound quality.

What other features does it have?

In addition to using the AX3000G's expression pedal in standard ways, such as to control volume or wah, you can freely assign it to a variety of effect parameters for unrivalled expressive control. The AX3000G also provides a control switch that's a great asset when performing live. For example, you can use it to switch each effects block (eg. the pre-effect and insert effect) on/off; to set such effect parameters as the tap tempo of a delay in real time; to switch the speed of a rotary speaker effect; or to access the Expression Step Sequencer (ESS), which automatically controls most effect parameters in a fixed or random step function. The possibilities are endless!

How does the AX3000G's built-in auto chromatic tuner work?

The auto chromatic tuner operates when the AX3000G is bypassed or muted, so you can tune your instrument without producing any sound from your amp or

other connected equipment. It's great for those on-stage adjustments when silent tuning is the ideal.

What are the extended possibilities via MIDI?

The AX3000G is able to receive Program Change messages, and can transmit MIDI messages in response to pedal operations, in order to control other MIDI devices. You can also control the AX3000G from your DAW software, making it an ideal addition to even high-end recording set-ups.

What's the AX3000G Sound Editor?

The AX3000G Sound Editor editor/librarian software lets you graphically view the many parameters of the AX3000G and easily edit them, plus save and organise Programs.

Is it easy to use?

The AX3000G is supremely easy to get to grips with. You can select an effects model just by turning the effect select knobs provided for each block, and easily edit individual effects by turning the knobs of the familiar, analogue-style user interface. Effects parameters are then shown on the panel as a clear matrix.



Right: The AX3000G leads a new generation of multi-effects processors, yet has a familiar look and feel



Modelling effects processor

AX5G

The AX5G modelling signal processor delivers a wealth of amp and cab modelling power in a portable and affordable unit with a built-in expression pedal...

TECH SPECS

EFFECTS

58 types: pre-effect x10, wah x1, drive/amp models x16, cabs x10, mod x10, delay x5, reverb x5, noise reduction x1

PROGRAMS

40 user, 40 preset

INS & OUTS

Input, output (quarter-inch jack)

SIGNAL PROCESSING

24-bit A/D and D/A conversion, 31.25kHz sampling frequency

TUNER

C1 to E6, A4 = 438-445Hz

DIMENSIONS

251 x 142 x 43mm

For more information goto

www.korg.com

What does the AX5G do?

Looking for just the right sound? Then check out the AX5G multi-effects processor. This impressive on-the-floor, footswitchable unit contains an array of realistic effects, all of which are powered by Korg's proprietary REMS modelling technology, and is perfect if you want a studio's worth of great amps, cabinets, modulation, and delay/reverb effects, and more. The AX5G's an ideal choice for quick rehearsals, warm-ups or even to pass the time while travelling in the van. With the AX5G you can enjoy great sound wherever you are.

What amps does it model?

Packed with 58 different realistic modelled effects, the AX5G offers you 16 models of a wide variety of highly coveted amplifiers, including hard-to-find tube, boutique, classic and modern amps.

Does it model cabinets?

Yes. Ten cabinet models, ranging from 4x12 stack to combo, are realistically reproduced, complete with their own distinctive sonic characteristics.

What are the editing functions?

The AX5G's simple and intuitive interface makes getting the perfect sound quick and easy. Suitable values are automatically selected when you choose an amp or effect, and there are a wide variety of editable parameters which rival those found on dedicated units. The most frequently used main parameters are accessible directly, via the knobs. Numerous sub-parameters are also provided, so that you can adjust the details of the sound to your taste.

What effects does it have?

You can choose from such standard effects as comp, wah, delay, reverb and acoustic simulator, plus a range of unique choices, including a pickup effect or a drone effect, the latter simulating the strings of a sitar.

Can I save my settings?

You can use up to six REMS effects simultaneously, and save your settings as one of 40 different Programs. Another 40 preset Programs covering a wide range of musical styles are provided, giving you a total of 80.

What is Quick Assign?

The Quick Assign function lets you assign an effect parameter at one touch and adjust the variable range yourself, for maximum flexibility.

What is the expression pedal for?

The AX5G's built-in expression pedal lets you control volume, wah and almost any other effect parameter, including the gain of an amp model or the speed of a tremolo or flanger.

Does it have a tuner?

Yes, an Auto Chromatic Tuner is included so, in addition to having a great tone, you'll always be in tune.

ALSO AVAILABLE

■ **AX3G:** The AX3G packs all of the processing power and functionality of the AX5G into a compact pedal processor, minus the expression pedal. Its small size means it'll fit just about anywhere!



Left: The AX5G is an impressive, compact, easy-to-use effects pedal offering high-end, professional-quality guitar sounds



Bassmodelling signalprocessor

AX3000B

Korg created the AX3000B modelling signal processor solely for bass with a wealth of effects and a powerful arsenal of controls....

TECH SPECS

EFFECTS

72 types: drive/amp x16, cabinet x11, pedal x11, modulation x11, delay x11, reverbx11, noisereductionx1

PROGRAMS

96 (24 Banks x 4 channels)

INS & OUTS

Input, insert return, aux in, outputs x2, insert send, headphones, S/PDIF, MIDI in/out

DIMENSIONS

500 x 241 x 71mm

For more information goto

www.korg.com

What is it?

The AX3000B packs in 72 types of amp models and effects, created specifically for the bass, and delivered by Korg's acclaimed REMS modelling technology.

How many Programs does it have?

There's 32 expertly-created preset Programs, or you can save your own to the 96 user Program locations.

And effects?

You'll find such unique effects as a two-octave pitchshifter, a fretless effect and a bass synth. The AX3000B also boasts pre-effects, cabinets, modulation, delay and reverb effects (11 types of each) plus such standard effects as compressor, limiter, wah, flanger and chorus.

What about the amp models?

The 16, bass-specific drive/amp models include fat-sounding tube, ultra-low bottom-end and clean sounds.

How hard is it to control?

You can select an effects model simply by turning the effect select knobs provided for each effects block.

You edit each individual effect just by turning the knobs. The AX3000B can also receive Program Change messages and transmit MIDI messages in response to pedal operations, to control other MIDI devices. A multi-function control switch can be used to turn effects blocks on or off, set effects parameters, or control ESS.

What is ESS?

The unique Expression Step Sequencer (ESS) lets you add some cool, complex movement to your sound. It automatically controls most effects parameters in a fixed or random step function.

What is the pedal for?

You can use the assignable expression pedal to control volume, wah, or tons of other selectable effects.

Is there any editor software included with the AX3000B?

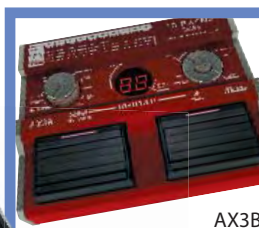
Yes. Special Sound Editor editor/librarian software lets you graphically view the many parameters of the AX3000B and easily edit them, as well as save and organise Programs.

ALSO AVAILABLE

■ AX5B & AX3B: The great-sounding, compact and affordable AX5B and AX3B are both designed specifically for the bass, with 57 of their own specially modelled effects. The 16 famous bass amp sounds range from vintage to standard models, with every detail of the originals faithfully recreated. Every essential effect, plus a collection of unique must-haves for bassists, are included. The AX5B also features a built-in expression pedal.



AX5B



AX3B



Above: The AX3000B is a powerful multi-effects unit that has been created solely for the bass

Acoustic multi-effects processor

Pandora PX4A

Specially designed for acoustic guitars, the Pandora PX4A processor packs in loads of effects and features for that perfect acoustic sound...

TECH SPECS

EFFECTS

82 types: dynamics x3, mic & body x13, modulation x11, filter x3, delay x5, reverb x7, tone, notch, noise reduction x1

PROGRAMS

50 preset, 50 user

INS & OUTS

Guitar input, aux input, line/headphone dual-purpose output (stereo phone jack)

TUNER

Built-in

POWER SUPPLY

AAA alkaline batteries x4 or optional AC adapter

DIMENSIONS

76 x 112 x 25mm

For more information go to

www.korg.com

What does it do?

Created especially for electric-acoustic players, the PX4A features 82 effects, including body effects which model the resonances and vibrational character of the world's greatest acoustic guitars. Such aspects as guitar construction and body size have been modelled in detail.

What instruments can it model?

The PX4A's effects include models for resonator guitar, banjo and nylon-string guitar so you can play a wide variety of acoustic sounds with just one instrument.

What sounds are included?

There are numerous effects, ranging from such standards as compressor, limiter, echo, delay, reverb, and chorus, to distinctive effects like 12-string. The PX4A's effects add the distinctive warmth of resonating wood that's typical of a great-sounding acoustic guitar. The PX4A also features a Notch effect that helps to curtail feedback, which can

sometimes be a problem for acoustic instruments when they're amplified to high levels of volume.

What are the mic effects for?

The featured mic effects carefully simulate the sense of space and depth which is achieved by miking an acoustic instrument.

Where can I save my sounds?

To the 50 user Programs. There are also 50 preset Programs covering a range of styles, including those of famous artists.

Is it useful at practice sessions?

Very. The Phrase Trainer lets you record up to 30 seconds of a song and play it back repeatedly, at a slower speed, without changing the pitch. You can also play along to a CD by connecting a CD player to the aux in jack, and you can then use the Key Transpose function to change the pitch of the song upward or downward by as much as an octave.

ALSO AVAILABLE

■ AX3A: With the compact, affordable AX3A you can make your acoustic-electric guitar sound like a variety of high-end, well-crafted acoustics. You'll also be able to bring the output from your Piezo pickup to life, with a distinctively natural, mellow sound. Boasting loads of amazing-sounding standard and unique effects, the AX3A will make your guitar tone sing.



Left: The Pandora PX4A multi-effects processor is designed specifically for the electro-acoustic guitar