New Standards for Multi-Effect Processors

In designing the A1, our primary goal was to create a signal processor that went beyond the limitations normally associated with multi-effects devices. These limitations, including compromised sound quality and limited control, have been replaced with features and functions that redefine the multi-effect processor.

The A1 incorporates the latest advancements in signal processing technology so each individual effect has exceptional sound quality. Effects can be connected in virtually any order using parallel, dual or series signal paths.

The user interface combines a large display with programmable knobs and dedicated function keys for fast and intuitive control over all A1 functions. Both analog and digital audio interfaces are provided as well as comprehensive interfacing for external control. All functions integrate to form a multi-effects processor equally at home in the studio, in sound reinforcement, or as part of a guitar or keyboard setup.

Creative Sounds

With over 60 effects to choose from, the creative options begin here. From traditional delay and reverb through compressors, gates and pitch shifting, the A1 has the sounds for any application. We have also included new effects you won’t find anywhere else like a wave generator integrated with reverb and dynamic delays that are controlled by the input signal. Each effect has been optimized for superior sound quality allowing effects to be used alone or as part of an effect chain in combination with up to six other effects.

Ultimate Flexibility

With the A1, you are not locked into the order of the effects or limited to fixed chains that were created by someone else. The A1 includes chains that connect the effects in series, one after another, in parallel, for simultaneous processing, and in a dual configuration making it possible to process two signals independently. There are chains that combine series and parallel connections and even chains that have a key input for gating and compression effects. Any chain in the A1 can be customized to use the effects you need, in the order you want. This extraordinary flexibility allows you to create virtually any kind of effect — from standard processing to new and original combinations.

The A1 comes complete with 100 effect programs stored in internal memory. These programs have been created using a variety of chains and effects to cover a broad range of sounds and applications.

Any modifications you make to a program can be stored in the internal memory or on a RAM card. RAM cards will store an additional 100 programs and let you take your sounds anywhere.

Functional Control

All the flexibility in the world doesn’t mean a thing if you can’t control it. The A1 combines the best types of control and display devices with a logical and proven method for editing any of the processors’ parameters. Large seven segment displays show program numbers. A line 40 character LCD display shows the chain, effects and the parameters that control the program. Soft knobs under the LCD display make editing parameters as simple as turning a knob. Additional dedicated keys for major modes and an Edit Compare function keep operation simple and efficient.

For even more convenience, the A1 can be controlled by the optional RE-1 Remote Editor. With the RE-1, all of the A1’s functions are available right from your listening position! The optional FC-6 Foot Controller allows program changes and effect on/off switching from the floor stage position in live performance applications.

The A1 responds to real time MIDI control of effect parameters and MIDI program change commands. Plus it features exclusive External Control for switching guitar amps or other equipment. All this adds up to simple control that can be configured for studio, stage or instrumental use.

Connecting with the World

When it comes to interfacing with other equipment, the A1 has all the right connections. Audio input connectors are on both the front and rear panels. They will operate in either balanced or unbalanced configurations.

Audio outputs are provided in both XLR balanced and quarter inch unbalanced formats. There is an even an effect send/receive loop for interfacing with guitar amps and preamps.

For sonic integrity, the A to D converters use 64 times oversampled delta sigma conversion virtually eliminating the artifact normally associated with digital conversion.

For digital signals, the A1 is also equipped with a SPDIF format digital input and output. This interface can be used with most R-DAT machines and other digital devices for processing and transferring entirely in the digital domain.

Experience High Quality Multi-Effects

The true test of any product is when you put it to work. With the A1, you won’t find yourself fighting to find the right sound. What you will find is an endless variety of choices that are easy to control and sound great. Audition the A1 at an authorized Korg dealer and hear how good multi-effects can sound.

SPECIFICATIONS

- Input Level/Impedance: Left, Right Inputs -- Front +4 dBm (+19 dBm max.)/1 MΩ, -20 dBm (+19 dBm max.)/1 MΩ; Rear +4 dBm (+19 dBm max.)/10 KΩ, -20 dBm (+19 dBm max.)/100 KΩ; Return Input: +4 dBm (+19 dBm max.)/100 KΩ, -20 dBm (+19 dBm max.)/100 KΩ
- Output Level/Impedance: Left, Right Outputs: +4 dBm (+19 dBm max.)/600 Ω, -20 dBm (-5 dBm max.)/600 Ω; Send Output: +4 dBm (+19 dBm max.)/600 Ω, -20 dBm (-5 dBm max.)/600 Ω; Direct Output (Stereo): Input Gain Unity/2.2 KΩ
- A/D, D/A Conversion: 16-bit Linear
- Sampling Frequency: 48 kHz
- Frequency Characteristics: 20 Hz - 20 kHz (+1.5/-3 dB)
- Dynamic Range: Greater than 85 dB
- Memory: Internal 100 Programs, plus 100 Programs in Memory Card
- LED indicators: 59 groups
- Display: LCD 40 characters x 2 lines (backlit) 7 segment LED x 2
- Terminals: Input Terminals (R, L, MONO)x2; Front, Rear); Output Terminals (R, L, MONO); Balanced Output Terminals (R, L, MONO); Send/Return Terminal: Direct Out Stereo Terminal; MIDI Terminals (IN, OUT, THRU); Remote Terminal, Digital Audio Terminal (IN, OUT compatible with wCP 340 TYPE II, sampling frequency of 48 kHz only); EXC Control Output Terminal; Synchronizer Terminal; Switch Terminal (1/2); Parameter Pad Input Terminal; Volume Pedal Input Terminal; Headphone Terminal; Pedal Input Terminal; Headphone Terminal; Power Supply: AC, Local Voltage
- Power Consumption: 25W
- Dimensions: 430(W) x 407(H) x 88(D) mm
- Weight: 6.5 kg
- ACCESSORIES: Rackmount adaptors, AC power cord, Function label, Program internal preload data card (SPC-041)
The Wavestation A/D is everything you would expect from a synthesizer module based on the revolutionary Wavestation and more.

PCM Sounds and Advanced Vector Synthesis

Starting with a full 4 megabytes of ROM, the Wavestation A/D contains a wide variety of basic sounds, including single-cycle waveforms, sampled sounds and Wave Sequences. With the sophisticated Advanced Vector Synthesis system, you can assign any four sounds to the built-in joystick and program a constantly changing mix of the sounds. This results in entirely new, composite sounds with rich textures and complex harmonic variations.

Wave Sequencing

The next step is Wave Sequencing which allows you to link up to 256 waveforms generating sounds with timbral characteristics that evolve over time. With this powerful technology, you can recreate the rich characteristics of analog synthesizers and even create sounds that have never been heard before. Melodic or rhythmic sequences can also be created and used to form the basis of completely original sounds and music. Up to 128 Wave Sequences with 2000 steps can be accessed in real time. Using a ROM or RAM card, the numbers are increased to 160 Wave Sequences with 2500 steps. Additional internal memory is provided for 140 patches and 200 Performances (combinations of patches) and when using a ROM or RAM card, you have access to 175 patches and 250 Performances. Optional program and program/PCM card sets for the Wavestation Keyboard (WPC and WSC Series) are also compatible with the Wavestation A/D.

External Audio Processing

The Wavestation A/D introduces a powerful function not found in any other synthesizer or module: stereo audio inputs and integrated A/D converters. These audio inputs allow any external stereo or mono sound source to be used as additional waveforms for the synthesizers. Any sound, from a guitar or external keyboard to a human voice, can be processed through the dynamic filters, amplitude envelopes, pattern control, modulation section and other functions of the Wavestation A/D. The analog inputs can also be processed by the integrated dual digital effects processors and even mixed with synthesized sounds created by the Advanced Vector synthesis system. A sophisticated Vocoder feature allows you to create "talking instrument" and other special effects by modulating the waveforms of the Wavestation A/D with a human voice, instruments or any external signal. These advanced capabilities, including cross modulation, represent a leap forward in the concept of providing maximum sound shaping control.

Expanding Control

For increased polyphony, two Wavestations, A/D or keyboard, can be connected together using a MIDI overlay function. This also expands your expression capabilities when using Performances with multiple waveforms. You can even control the Wavestation A/D's Vector Synthesis system in real time from a Wavestation keyboard's joystick.

Listen to the Options

With the Wavestation A/D, the sonic options are endless. You can select sound sources from internal PCM, Advanced Vector Synthesis, Wave Sequencing, and any external audio signal. Then layer and mix sounds in any combination and process the results with dynamic digital multi-effects. To experience the ultimate in sound creation and processing freedom visit an authorized Korg dealer and hear the Waves roll on.

SPECIFICATION

- System: AV (Advanced Vector Synthesis) System, 24bits Digital processing, 19bits DAC
- Tone Generator: 20bits 32 voices including individual filters, amps, LFOs, and envelopes
- Wave Memory: 4 Mbytes (sampled and single-cycle)
- Program Memory: 1 ROM Bank, 2 RAM, Bank and 1 Card Bank
- Macros: Voicing templates for Pitch, Filter, Amp, Pan, Env and Keyboard Modes
- Effects: Up to 6 simultaneous digital effects, with dynamic modulation
- Performance: 200 internal, 50 in card
- Patches: 140 internal, 35 in card
- Wave Sequence: 128 internal, 32 in card
- Wave Sequence Steps: 2000 internal, 500 in card
- Multi-Mode Setups: 16 configurations of multi timbral, 16-channel MIDI reception
- A/D Function: A/D function (2 inputs) is available for Vocoder Mode etc.
- Control inputs: Assignable footswitch/pedal 1 and 2
- Card slots: PCM data, PORG data
- MIDI: IN, OUT, THRU (Extensive Multi-timbral capability)
- Display: 84×240 pixel back-lit LCD with soft-key menu system
- Inputs: 1/4" +4, -10, -50
- Outputs: XLR outputs for 1/4", 2/3 and standard 1/4" 1/4", 2/3, 4, Headphone
- Power consumption: 11W
- Dimensions: 430(W)×405(D)×86(H)mm
- Weight: 9kg

OPTIONS

- RAM card (MCR-03)
- PCM/Patch performance card (WSC series)
- Patch performance card (WPC series)
- Foot Controller (EXP-2)
- Footswitch (PS-1, PS-2)