THE KORG
PROFESSIONAL
PERFORMANCE
SERIES

PERFORMANCE SIGNAL PROCESSOR

A1
A New Standard. The A1 was designed to surpass the usual limitations of digital multi-effect processors. It is the first device of its kind to provide users with exceptional processing power and virtually unlimited programming flexibility—without compromising the high quality of its individual effects.

Creative Effects Flexibility. The A1 includes 59 different effects with a number of variations. These effects can be assigned in different orders within the 50 variable effect Chains, for a limitless number of creative recording, live sound and musical instrument processing options.

User-Compatibility. Designed for maximum ease of use, the A1 is based on the same quick, intuitive user interface as Korg's popular A3 processor. Effects Chains and parameters can be quickly and easily accessed and edited via the convenient front panel control layout and/or optional RE1 remote controller.

Sonic Integrity. The A1 incorporates the latest in digital processing technology to achieve truly superior sound quality. It combines the exceptional processing power of two high speed DSP chips with sophisticated A/D converters, thus minimizing signal degradation and preserving the high order sonic integrity of the individual effects.

Effects
The A1 has 59 types of effects with 103 variations for a greater number of creative options. Including everything from studio-quality Delays and Reverbs, through Compressors, Gates and EQs to Pitch Shifting, Rotary Speaker effects and Tube Distortion Simulation, it provides effects for any application. It also offers unique effects not found anywhere else such as a Noise Generator integrated with Reverb processing and a Dynamic Delay effect controlled by the input signal. Each effect has been optimized for matchless sound quality, allowing effects to be used alone or as part of an effect Chain in combination with up to six other effects.

Reverb is an essential effect in professional recording studios. Consequently, the A1 offers 28 variations of Reverb. The Dynamic Reverb, for example, is ideal for processing drum sounds. In this effect it is possible to select a specific input level threshold where the reverb is triggered. A signal below the assigned threshold does not trigger the reverb effect. The inverse is also possible using the "Dynamic Polarity" parameter.

Unique A1 effects such as Tempo Delay and Dyna Pan® can be locked to MIDI clock, allowing delay time and panning to be synchronized with a song's tempo.

Effects and Variations

<table>
<thead>
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<th>NAME</th>
<th>SIZE</th>
<th>VARIATION</th>
</tr>
</thead>
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<td>S/R</td>
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Applications. A powerful processor for a variety of professional recording applications, the versatile A1 can also be used effectively in live sound applications, high-tech guitar racks and MIDI keyboard setups.

PERFORMANCE SIGNAL PROCESSOR
A1

THE KORG PROFESSIONAL PERFORMANCE SERIES
• Comprehensive Control
The A1 is designed with a logical, intuitive user interface that, while allowing complete control of an extraordinary amount of processing power, does not get in the way of the creative process.
All Chains, effects parameters and other functions are displayed in the large two line, 40 character LCD. Dual function knobs below the LCD make editing parameters a simple task. Additional dedicated keys for the A1's major operation modes are clearly labeled and include Edit Compare and Performance Editor functions for more "user friendly" control.
The optional RE1 Remote Editor provides even greater operational convenience for the user. The RE1 allows the A1's edit functions to be available from the user's listening position.
The optional FC6 Foot Controller allows program changes and effect on/off switching from the user's on stage position in live performance applications.

• Dynamic Modulation
For added expressive control, the A1 includes a Dynamic Modulation function that allows the user to control effect parameters in real time using pedals, MIDI data or input signal envelopes.
Some examples of Dynamic Modulation in the A1 factory programs are: using a MIDI keyboard's mod wheel to control Rotary Speaker speed or the Pedal Wah effect, using MIDI keyboard velocity to control the Dynamic Reverb Input level or using a volume pedal to control pitch bending in the Pitch Shift effect.
The parameters of the Dynamic Modulation function include:
- Dynamic Parameter — Selects the effect parameter to be controlled (e.g. LFO speed, input level, effect level, etc.)
- Dynamic Source — Selects the controller (e.g. foot pedal, MIDI data, etc.)
- Dynamic Amount — Sets the amount and direction of the dynamic control.

• MIDI Control
In addition, with the ability to use MIDI Aftertouch, Velocity, Pitch Bend and control numbers 01-95 as Dynamic Sources to control A1 effect parameters, it is possible to record automated effect mixes and changes to a MIDI sequencer. In fact, all front panel buttons such as effect on/off or effect parameter changes can be recorded to a MIDI sequencer in real time directly from the A1.

• External Interface
The A1 is equipped with a variety of connectors to interface with other equipment. 1/4" audio inputs are found on the front (unbalanced) and rear (balanced) panels. Rear panel Audio outputs are provided in both XLR balanced and 1/4" unbalanced formats. It also has a Send/Receive loop for interfacing with external devices such as other effect units or guitar pre-amps. The EXT control output allows external devices such as guitar pre-amp channel switching to be controlled by A1 program changes or manually with a footswitch connected to the A1.

For digital audio signals, the A1 is also equipped with a SPDIF format digital I/O. This allows two A1's to be cascaded digitally or the connection of an A1 to an R-DAT machine or digital mixer, processing and transferring entirely in the digital domain.

• A1 — Creative Processing in the Real World
The creative power, speed and operational flexibility of the A1 truly come to the fore in a variety of real world processing situations. It provides users with an endless variety of processing options that sound great and are easy to control. Audition the A1 at an authorized Korg dealer and hear for yourself how good a multi-effect processor can sound.
**Effects Chains**

The AI frees the user from the limitations of working with specific/ordered effects or fixed Chains created by the manufacturer. It's an open-ended Chains allow up to seven effects to be assigned in a variety of different orders or connections. Included are Chains that connect effects in series, (one after another), in parallel for simultaneous processing, and in a dual configuration to process two signals independently. There are Chains that combine series and parallel combinations and even Chains that feature a key input for gating and compression effects.

Moreover, 59 effect types can be assigned to these Chains. The user can select normal effect combinations in series Chains or experiment with all of the various effects and Chains to create totally original, “customized” effect programs.

Ultimately, the AI provides over 50 possible effect Chain variations that can be divided into the five major categories: Series, Parallel, Dual, Key-in and Send/Return.

**AI Chain Examples Chart**

<table>
<thead>
<tr>
<th>Series Chain</th>
<th>Parallel Chain</th>
<th>Dual Chain</th>
<th>Key-In Chain</th>
<th>Send &amp; Return Chain</th>
</tr>
</thead>
<tbody>
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<td>L</td>
<td>R</td>
<td>L</td>
<td>R</td>
<td>L</td>
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<tr>
<td>Stereo</td>
<td>Limiter</td>
<td>Stereo</td>
<td>Exciter</td>
<td>Stereo</td>
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<tr>
<td>L</td>
<td>R</td>
<td>L</td>
<td>R</td>
<td>L</td>
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<tr>
<td>Stereo</td>
<td>Delay</td>
<td>Hall</td>
<td>Reverb</td>
<td>Chorus</td>
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<tr>
<td>L</td>
<td>R</td>
<td>L</td>
<td>R</td>
<td>L</td>
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<td>Limiter</td>
<td>1 Band</td>
<td>P. EQ</td>
<td>Sending</td>
<td>4 Band</td>
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<tr>
<td>L</td>
<td>R</td>
<td>L</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Limiter</td>
<td>3 Band</td>
<td>EQ</td>
<td>2 Band</td>
<td>EQ</td>
</tr>
</tbody>
</table>

**Effects Programs**

Up to 100 effects programs can be stored in the internal memory. The internal programs can be saved individually or in bulk to MIDI DATA FILES or to removable RAM cards. Programs can be read directly from a ROM or RAM card inserted in the front panel card slot, making a total of 200 effect programs immediately accessible! The AI also features a pre-loaded selection of 100 factory programs. Additional programs, written by professional musicians and engineers, will be available in the AI ROM card library.

**AI Factory Programs**

**Reverbs**

01 LARGE HALL
1 SMOOTH HALL
2 WARM HALL
3 E/R HALL
4 HUGUE HALL
5 RICH PLATE
6 BRIGHT PLATE
7 LIVE PLATE
8 LIMIT PLATE
9 GATED PLATE
10 SMALL ROOM
11 E/R ROOM
12 TILE ROOM
13 MEDIUM ROOM
14 WAREHOUSE
15 SLAP SPRING
16 AMBI SPRING
17 BRIGHT SPRING
18 ECHOVERB
19 DYNAMIC REV

**Delays**

20 DYNAMIC DLYS
21 Multi Tap DLY
22 1.34sec DELAY
23 SWEEP DELAYS
24 HOLD DELAY

**Modulation and Pan**

25 GIANT CHORUS
26 PARA CHORUS
27 PARA FLANGE
28 Cymbal FLANGE
29 FLANGE VERB
30 ENSemble PAN
31 CROSS PAN
32 PHASER PAN
33 4th BEAT PAN
34 REV SWITCH

**Vocal**

35 RECITAL HALL
36 BALL COURT
37 SIBILANT REV
38 LATE PLATE
39 TEMPO PLATE
40 MOD ROOM
41 EMPTY ROOM
42 WallPla
43 LATE ROOM
44 ALCove
45 TAP HALL
46 ALPINE ECHO1
47 ALPINE ECHO2
48 DELAY GATE
49 SEND TO TAPE

**Drum**

50 AMBiance 1
51 AMBiance 2
52 KICK ROOM
53 E/R KICK
54 CHINA SNARE

**Key-In**

55 FREQUENCY-KICK
56 SHAPEDMIX

**Dual Processing**

57 DUAL RM & HL
58 DUAL DLY REVERB
59 DUAL Graft EQ

**Dynamic Modulation**

60 MOD + WHL RSP
61 MOD + WHL DOLY
62 MOD + WHL WAH
63 MOD + WHL PAN
64 VELO + Dyna REV
65 MIDI + Ck DLy
66 MIDI + Ck PAN

**Pitch Shifter**

67 ORCHESTRA
68 EXAGGERATION
69 MAJOR (DM)
70 MAJOR 6th (DM)
71 7th Chord (DM)

**Guitar (Direct In)**

72 HI-GAIN
73 PEDAL DIST
74 POCKET DIST
75 DRY VALVE 1
76 DRY VALVE 2
77 STUDIO X
78 STUDY DIST
79 4TH-UP DIST
80 STEVE Jr.
81 BLUES VIBE
82 small MIC Damp
83 TREM-O-LUXE
84 ROTARY WARP
85 SEMI CLN MOD
86 Pitch Mod + Dly
87 BRIGHT COMP
88 SWING PHASE
89 North East GTR
90 OCEAN BLUE
91 RIFFLE

**Bass (Direct In)**

92 ACTIVE BASS
93 WHANKADELIC
94 bEEL-BASS

**Mix (Direct In)**

95 RADIO MIX
96 RADIO MIX
97 LOUDNESS Rm
98 LOUDNESS Mix
99 AI EXAMPLE
1. Balanced XLR Outputs — Stereo output for connection to mixers, patch bays or directly to power amps. 2. Output Level Switch — Set to match the input level of the connected unit. 3. Unbalanced Outputs — 1/4" stereo outputs for connection to mixers, guitar amps, etc. 4. Send/Return (Input/Output) — When using an A1 Send/Return Chain, the processed signal is sent out to an external effect processor or guitar pre-amp via the Send jack and patched back in via the Return jack. 5. Send/Return Level Switches — Set to match the input and output level of the external unit. 6. Direct Out (Stereo) — Direct right and left output via a stereo jack. 7. Inputs (R, L Mono) — Balanced via a 1/4" tip/ring/sleeve phone jack. 8. MIDI (IN, OUT, TRU) — For connection to MIDI controllers, keyboards or sequencers. 9. Remote Jack — Allows connection of the optional REI Remote Controller or FC6 Foot Controller. 10. Digital Audio (In/Out) — SPDIF format digital I/O port allows connection of the A1 to R-DAT, digital mixer, another A1 or digital device with a 48kHz sampling rate. 11. EXT Control Out — Connects to a footswitch input jack on an external processor or guitar amp/pre-amp. The A1 can control (latching type) channel switching or effect bypass of an external unit. 12. Bypass — Connects to a PS-1 footswitch and controls Global Bypass on/off. 13. Footswitch (1, 2) — Connects to a PS-2 footswitch and allows the user to control A1 functions selected in the Utility Mode. 14. Parameter Pedal — Connects to the output of the KVP-001 Volume Pedal and controls Dynamic Modulation effect parameters. 15. Volume Pedal — Connects to the output of the KVP-001 Volume Pedal.

**SPECIFICATIONS**
- Input Level Impedance: Left, Right Inputs — Front: +4 dBm (+19 dBm max.)/1 MO; —20 dBm (+19 dBm max.)/1 MO; Rear: +4 dBm (+19 dBm max.)/10 kQ; —20 dBm (+19 dBm max.)/10 kQ; Return Input: +4 dBm (+19 dBm max.)/100 kQ; —20 dBm (+19 dBm max.)/100 kQ
- 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
- Built-in Effects: 59 groups
- Display: LCD 40 characters x 2 lines (backlit) 7 segment LED x 2
- Terminals: Input Terminals (R, L/MONO) x 2, Front, Rear); Output Terminals (R, L/MONO); Balanced Output Terminals (R, L); Send/Return Terminal; Direct Out Stereo Terminal; MIDI Terminals (IN, OUT, TRU), Remote Terminal, Digital Audio Terminal (IN, OUT compatible with "CP 340 TYPE II", sampling frequency of 48 kHz only); EXT Control Output Terminal; Bypass Terminal; Switch Terminal (1, 2); Parameter Pedal Input Terminal; Volume Pedal Input Terminal; Headphone Terminal
- Power Supply: AC, Local Voltage
- Power Consumption: 25W
- Dimensions: 430(W) x 407(H) x 88(H)mm
- Weight: 6.3 kg
- ACCESSORIES: Rackmount adaptors, AC power cord, Function label, Program internal preload data card (SPC-0A1)

**OPTIONS**
- REMOTE EDITOR REI
  - Remote control of all A1 functions. Easy operation with slider controls and ten key pads.
- FOOT CONTROLLER FC6
  - Foot control for the A1
- FOOT SWITCH PS-1/PS-2
- VOLUME PEDAL KVP-001
- MEMORY CARD RAM MCR-03
- HEADPHONE KH-1000
- MEMORY CARD ROM APC-SERIES
- HARD CASE HC-2U
- SYNC/MIDI CABLE 1.5m/3m/5m/10m/0.5m

**KORG PERFORMANCE SIGNAL PROCESSOR A-SERIES**

**A2 PERFORMANCE SIGNAL PROCESSOR**
- 102 effects and 97 chains. A multi-effect unit for every possible sound enhancement application.

**A3 PERFORMANCE SIGNAL PROCESSOR**
- This versatile multi-effect unit has 41 effects and 20 different chains. It also allows you, through the use of ROM cards, to load additional effects and chains as desired.

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**NOTICE**
Korg products are manufactured under strict specifications and voltages required by each country. These products are warranted by the Korg distributor only in each country. Any Korg product not sold with a warranty card or carrying serial number disqualifies the product sold from the manufacturer's distributor's warranty and liability. The requirement is for your own protection and safety.

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