In order to extract a variety of sounds from one instrument, modern recording studios employ a complex combination of many effect units. Today, effect units are no longer secondary devices but are essential instruments in their own right, necessary for the creation of sounds. Although a full rack of effect units and compact effect pedal boxes can reproduce nearly any studio effect, it is impossible to instantly switch among different effect settings with them. Some multi-effect devices are currently available to answer this need, yet the performance of individual effects suffers when using several different effects simultaneously. This is the reason that KORG has developed a true multi-effect device, the A3 Performance Signal Processor.

41 DIFFERENT TYPES OF DYNAMIC EFFECTS AND A SPECIAL SELECTION OF 20 SEPARATE EFFECT CHAINS

The A3 is equipped with 41 effect types including reverb, delay, exciter, distortion, chorus and a rotary speaker effect. It also has specially designed effect patterns which allow simultaneous use of a maximum of 6 of these effects connected together. The effect combinations are known as effect “chains” and 20 of the most essential and commonly used chains have been specially programmed to the internal preset memory of the A3. With them, an extremely wide range of effects from standard settings to special effects can be created easily. And since the A3 has 200 memory locations (100 in internal and 100 in memory card), effect chains, as well as the individual effects and their parameter values can be memorized for instant recall. This represents a revolutionary leap forward from the capabilities of previous effect devices, making it possible to instantly set up the most complicated combination of effects simply by selecting the appropriate program. Now, combinations of effects that could only be realized in studio situations are instantly available for live performance as well.

Examples of effect chains which have rich variations:

01: General effect combination for guitar

- A COMP
- B DIST
- C XQITE
- D DELAY
- E MOD
- F REV
- G VOLUME

02: Insert for clean, clear cut sounds, such as muffled rhythm guitar strings

- A COMP
- B EQ
- C XQITE
- D DELAY
- E MOD
- F REV
- G VOLUME

03: For reproducing a combination with a powerful distortion effect, the type made popular by the super guitar

- A WAH
- B DIST
- C EQ
- D XQITE
- E M.DLY
- F REV
- G VOLUME

04: Creates a rich, electric sound due to the auto pan effect, which sways the sound between the right and left channels

- A COMP
- B DIST
- C XQTIE
- D DELAY
- E A.PAN
- F REV
- G VOLUME

05: Provides accurate reproduction of acoustic environments by the use of the speaker simulator effect

- A DIST
- B EQ
- C WAH
- D XQITE
- E M.DLY
- F REV
- G VOLUME

06: Designed especially for the sound of electric guitars, this chain includes exciter, pitch shifter, delay, auto pan, and reverb effects

- A XQITE
- B PITCH
- C M.DLY
- D A.PAN
- E B.DLY
- F REV
- G VOLUME

07: This provides an excellent dressing effect for voices through use of the parametric EQ and compression effects

- A P.EQ
- B COMP
- C XQITE
- D GATE
- E PITCH
- F REV
- G VOLUME

DIGITAL CLIP

- +6dB
- +3dB
- 0dB
- -3dB
- -5dB
- -10dB

CHAIN/EFFECT

- [BYPASS]
effect units together, particularly that of multiple A/D and D/A conversions. As a result, the output sound is every bit as clear and clean as the original. Sampling noise, which occurs in the higher frequencies, has also been greatly reduced by application of a 4-times oversampling digital filter for optimum sound quality. KORG engineers have succeeded in improving the sound quality by decreasing the exceptional burden that is placed on the filter in cutting out unwanted frequencies, and at the same time by substantially decreasing the drop out of group delay characteristics in the high frequency range.

Let's take a closer look at the 4-times oversampling filter and see how this is accomplished. As shown in the figure below, it is difficult to reproduce the original sound waveform simply by applying the filtering process to the normal sampled data, and the result is that the waveform is altered compared to the original sound. The A3, therefore, continuously monitors the amount of data discrepancy and recreates waveform data by calculation and, in effect, smoothly redraws the original waveform. This effectively increases the actual sampling frequency to four times the normal value (or 148.4 kHz), and eliminates strain in filter processing while removing sampling noise (shown as steps in the figure) caused during the process. What this all means for you is a high quality sound reproduction, faithful to that of the original input signal.

UNPRECEDENTED EASE OF OPERATING

Program change, effect ON-OFF, effect volume as well as the parameter settings of individual effects can be controlled in real time by connecting the optionally available FC6 Foot Controller. Checking settings and editing parameters has been vastly simplified by the inclusion of double function editors, which employ both rotary and push button operation, and a large LCD, which displays all pertinent parameter values. The Performance Editor function makes it possible to control the parameters of multiple effects simultaneously for easy real time editing of complex effect chains. For rack mount convenience, it features input terminals on both rear and front panels, with front panel input priority.

TRUE MULTI-EFFECT PERFORMANCE IN A SINGLE PACKAGE
FOOT CONTROLLER

Foot-controlled program changes and effect ON/OFF switching can be performed by connecting the optionally available FC6 Foot Controller. It is also possible to send volume information to the A3 by connecting up to 2 volume pedals directly to the FC6. Effect parameters such as wah-wah, pan and pitch shift can be changed continuously by use of volume pedals, further expanding the performance potential of the A3.

- Size: 440 (W) × 160 (D) × 43 (H) mm (17.5/16" × 6.5/16" × 1 11/16")
- Weight: 1.4 kg (3 lbs., 1 oz.) (including batteries)

SPECIFICATIONS

- Input level/Impedance: +4dBm/1MΩ, -20dBm
- Output level/Impedance: +4dBm/600Ω, -20dBm/600Ω
- A/D, D/A: 16-bit linear
- Sampling frequency: 37.1 kHz
- Frequency characteristics: 20Hz-18kHz +1.5/-3 dB
- Dynamic range: 90dB (IHF-A)
- Internal memory: 100 programs + memory card 100 programs
- Internal effects: reverb group, compressor group, distortion/overdrive group, delay group, stereo delay group, modulation delay group, phaser group, stereo tremolo group, exciter group, ensemble group, rotary speaker group, 3 band EQ group, speaker simulation group, pedal pan group, gate group, pedal wah group, early reflection group, etc.
- Display: 40-character back-lit LCD × 1, LED 7 segments × 3, 5-character level meter
- Terminals: input terminal × 2 (front and rear), output terminal × 2 (L, R), direct output terminal, pedal switch terminal × 2, MIDI IN, OUT/THRU, REMOTE IN
- Power: Local voltage
- Power consumption: 22W
- Weight: 4.5 kg (9 lbs., 14 oz.)
- Size: 482 (W) × 332.5 (D) × 44 (H)mm (19" × 13-1/8" × 1-3/4")

OPTIONS

- PS-1, PEDAL SWITCH
- KS-005 VOLUME PEDAL
- RM CARD MCR-03
- RM CARD SPC-01, SPC-02
- HEADPHONE KHP-1000
- A3+FC6 HARD CASE, HCX, A3 LIGHT BAG, LB-60

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. This requirement is for your own protection and safety.

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