

DSM-1 ... A Marriage of High Technology and Highest Musicality.

The DSM-1 is engineered to take sampling to new heights of accuracy and realism, with the largest memory and fastest sampling rates of any instrument in its class. It's designed to be a flexible and efficient studio production tool. And like all Korg Sampling Products, it's designed to take you beyond mere imitation to a new dimension of sound creation. The DSM-1 combines advanced sampling features, plus a full set of synthesizer functions, to give you access to a whole new world of sounds.



DSM-1 & COMPUTER SYSTEM



SPECIFICATIONS

• CONFIGURATION : 16 voices, 16 VCF modules, 16 VCA modules • WAVE MEMORY : 1 Megaword • SOUND SOURCES : Oscillator waveforms created by sampling or by 128 Harmonic Synthesis • QUANTIZATION : 12-BIT • SAMPLING TIMES & FREQUENCIES : 16 sec x 4 Banks—16 kHz, 11.5 sec x 4 Banks—24kHz, 8 sec x 4 Banks—32kHz, 5.5 sec x 4 Banks—48 kHz • MAXIMUM NUMBER OF SPLIT POINTS : 16 per Multisound, 64 per Combination (4 Timbres) • NUMBER OF MULTISOUNDS : Up to 32 in internal memory • NUMBER OF COMBINATIONS : 32 • COMBINATION TYPES : Single, Layer 2, Split 2, Layer 4, Split 4, Split/Layer, Multi, Manual. • NUMBER OF PROGRAMS : 32 • OUTPUTS : 16 Individual Out, Mix Out, Stereo Headphones, MIDI OUT/THRU, HSI Terminal. • INPUTS : Audio In Footswitch, MIDI IN • DISK DRIVE : Takes 3.5 inch, Double-Sided, High Density, Double-Track (2HD Unformatted) Floppy Disks: PERFORMANCE DISKS (for storage of internal memory) WORK DISKS (for storage of Multisounds and Harmonic Data) and DSS-1 DISKS (for loading of DSS-1 data only) • SUPPLIED ACCESSORIES : Floppy disks 4, SYNC/MIDI Cable x 1, AC Power Cord x 1, Rack Mount fittings, Voice Chart, Parameter Sheet • DIMENSIONS (W x H x D) : 430 x 134 x 433 mm (Without Rack Mount fittings) • WEIGHT : 11 kg (without Rack Mount fittings)

OPTIONS

- PS-1 PEDAL SWITCH
- KH-1000 DYNAMIC STEREO HEADPHONES
- MIDI CABLE (7m/10m/12m)
- SYNC/MIDI CABLE (1.5m/3m/5m/1m+0.5m)
- HSC-020 HSI CABLE (2m)
- MF-2HD MICROFLOPPY DISKS
- SOUND PROGRAM LIBRARY



- Specifications and features are subject to change without notice for further improvement.
- Color reproduction in printed materials may differ from actual product appearance.

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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. This requirement is for your own protection and safety.

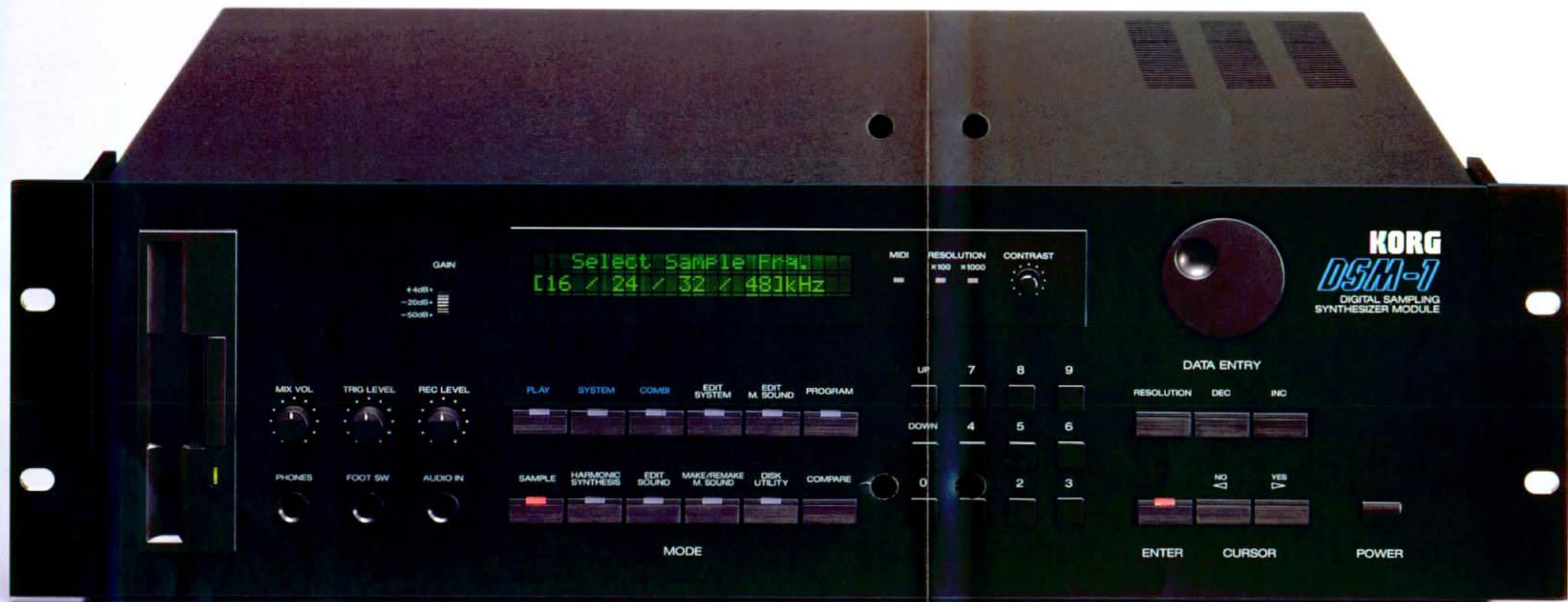
KORG

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DIGITAL SAMPLING SYNTHESIZER MODULE **DSM-1**



Beyond Sampling, Beyond Synthesis... Into the Heart of the Sound Itself.



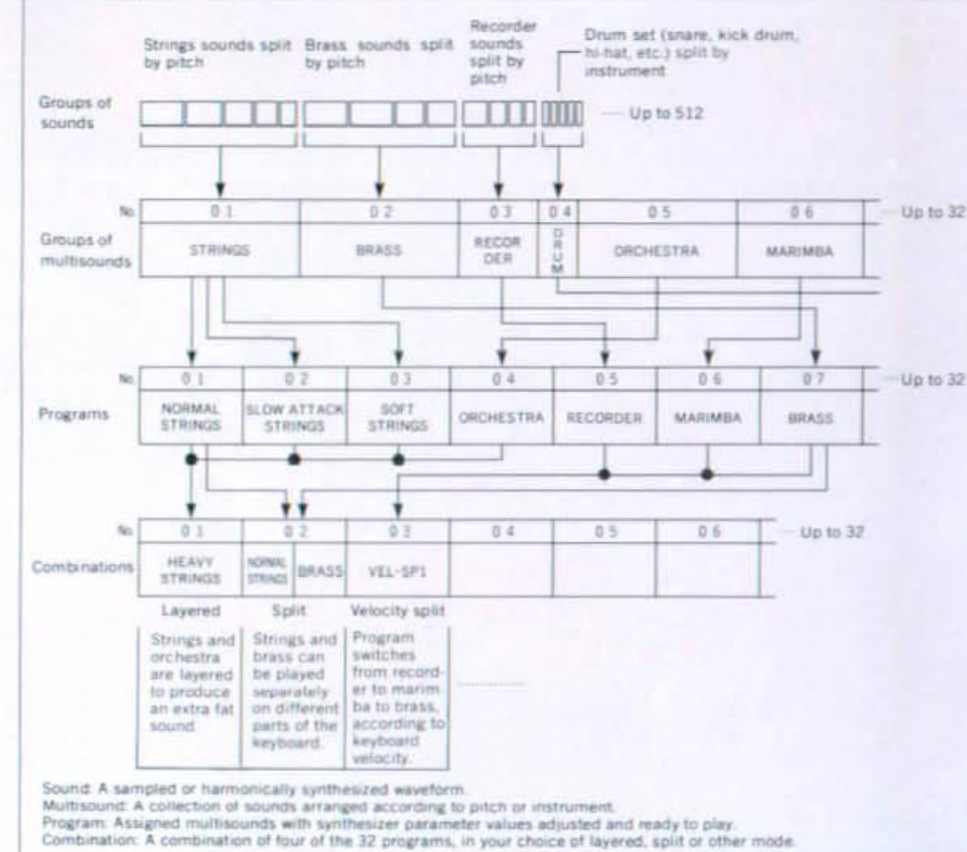
WAVE MEMORY : 1M word. SAMPLING TIME : 64-22sec. SAMPLING RATE : 16-48kHz.

DIGITAL SAMPLING
SYNTHESIZER MODULE
DSM-1

FUNCTIONS

<ul style="list-style-type: none"> ● PLAY MODE (No functions) COMBINATION SELECT, MASTER TUNE ● SYSTEM MODE F1 GET SYSTEM F2 SAVE SYSTEM F3 GET DSS-1 SYSTEM F4 SYSTEM COMMON MIDI CHANNEL F5 PLAY BACK F6 AUDIO TRIGGER ● COMBINATION MODE F00 SELECT COMBINATION TYPE F01 RENAME COMBINATION F02 WRITE COMBINATION F03 MIDI RECEIVE FUNCTION (PGM CHANGE, MOD. AFT TOUCH) F04 TRANSPOSE (OCTAVE, SEMITONE) F05 KEY ASSIGN MODE F06 ASSIGN PROGRAM F07 NUMBER OF VOICES F08 TUNE F09 LEVEL F11 SELECT VOICE ALLOCATION MODE F12 MIDI CHANNEL F13 LEVEL VELOCITY POLARITY F14 VELOCITY WINDOW (BOTTOM TOP) F15 KEY WINDOW (BOTTOM TOP) F16 SELECT OUTPUT TYPE ● EDIT SYSTEM MODE F1 GET PROGRAM F2 MULTISOUND DIR IN MEMORY F3 FREE SPACE IN BANK F4 ERASE MULTISOUND IN MEMORY F5 GET MULTISOUND F6 COPY/RENAME MULTISOUND F7 CLEAR BANK ● DISK UTILITY MODE F0 FORMAT DISK F1 DISK STATUS F2 PROTECT DISK F3 COMBINATION DIR F4 PROGRAM DIR F5 DSS-1 PROGRAM DIR F6 MULTISOUND DIR F7 HARMONICS DATA DIR 	<ul style="list-style-type: none"> F8 DELETE MULTISOUND F9 DELETE HARMONICS DATA ● EDIT MULTISOUND MODE F1 SELECT MULTISOUND F2 SELECT MONITOR PROGRAM F3 RELATIVE PARAMETERS (TUNE, LEVEL, FC) F4 ORIGINAL TOP KEY F5 SOUND START, SOUND END, LOOP LENGTH F6 RECOVER MEMORY F7 SAVE/RENAME MULTISOUND ● PROGRAM MODE F01 SELECT PROGRAM F02 RENAME PROGRAM F03 WRITE PROGRAM F11 ASSIGN MULTISOUND F12 TUNE CONTROL F13 OSC MG CONTROL (FREQUENCY, DELAY, INT) F14 OSC MG CONTROL (WAVEFORM) F15 OSC AFTER TOUCH (MG INT) F16 AUTO BEND CONTROL (POL., TIME, INT) F17 AUTO BEND INITIAL TOUCH (INT) F21 VCF CONTROL (CUTOFF, KBD TRACK) F22 VCF CONTROL (EG POL., VCF EG INT) F23 VCF EG (ATK, DCY, BRK, SLP, SUS, REL) F24 VCF MG CONTROL (FREQUENCY, DELAY, INT) F25 VCF MG CONTROL (WAVEFORM) F26 VCF INITIAL TOUCH (CUTOFF) F27 VCF INITIAL TOUCH (ATK, DCY, SLP) F28 VCF AFTER TOUCH (CUTOFF or MG INT) F31 VCA CONTROL (TOTAL LEVEL) F32 VCA EG (ATK, DCY, BRK, SLP, SUS, REL) F33 VCA CONTROL (DECAY, KBD TRACK) F34 VCA CONTROL (RELEASE, KBD TRACK) F35 VCA INITIAL TOUCH (ATK, DCY, SLP) F36 VCA INITIAL TOUCH (TOTAL LEVEL) F37 VCA AFTER TOUCH (TOTAL LEVEL) F41 BENDCONTROL (PITCHBEND RANGE) 	<ul style="list-style-type: none"> ● SAMPLE MODE F0 SELECT BANK F1 SELECT MONITOR PROGRAM & VU MODE F2 SAMPLING AUTO F3 SAMPLING MANUAL F4 RESAMPLING F5 RELATIVE PARAMETERS (TUNE, LEVEL, FC) F6 ORIGINAL TOP KEY F7 SOUND START, SOUND END F8 LOOP LENGTH F9 RECOVER MEMORY F0 SAVE/RENAME MULTISOUND ● HARMONIC SYNTHESIS MODE F0 SELECT & CLEAR BANK F1 SELECT MONITOR PROGRAM F2 GET HARMONICS DATA F3 SELECT HARMONICS DATA F4 EDIT & SYNTHESIZE F5 SAVE HARMONICS DATA F6 SAVE HARMONIC MULTISOUND ● EDIT SOUND MODE F01 SELECT MULTISOUND & SOUND F02 SELECT MONITOR PROGRAM F11 SOUND START, SOUND END F12 REVERSE SOUND F13 LINK SOUNDS F14 MIX SOUNDS F15 LOOP PROCESS-BACK & FORTH F16 LOOP PROCESS-CROSSFADE F17 PITCH ADJUST F18 VIEW & EDIT SOUND DATA ● MAKE/REMAKE MULTISOUND MODE F01 GET MULTISOUND F02 SELECT MULTISOUND F03 MAKE NEW MULTISOUND F04 SELECT MONITOR PROGRAM F11 INSERT SOUND F12 REPLACE SOUND F13 ERASE SOUND F14 SAVE/RENAME MULTISOUND
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DSM-1 System

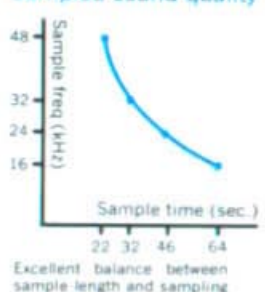


Advancing the Standards of Sampling Technology

The DSM-1 can record and store more than a minute of samples (64 seconds, to be exact) because it has a full Megaword of internal PCM memory. Now you can sample a grand piano at full fidelity throughout its entire range, with room left over for more waveforms and samples. Store up to 512 samples and waveforms in memory at one time. Configure up to 64 split points over a full 128 note range with such flexibility, you can actually assign a different sample to each key on a standard five octave keyboard.

At the maximum sampling rate of 48 kHz, the DSM-1 digitally records the full audio frequency spectrum: 20 - 20,000 Hz. The new anti-aliasing input filter makes full use of this extended treble response, while reducing distortion. So orchestral strings, cymbals and other acoustic instruments can be recorded with brilliance and fidelity that goes beyond even a Compact Disc. Once you've recorded a sample, advanced Korg editing tools let you get inside it to change even the smallest detail. With functions like Mix, Link, Reverse, Pitch Adjust or View & Edit, you can splice, blend and completely reconfigure any sound. To help you build seamless loops, there are four Looping modes: Normal, Back and Forth, Linear and Equal Power, Cross Fade functions.

Sampled sound quality



Direct Control over Korg's Digital Waveform Generation System

The DSM-1 lets you build your own sounds from the ground up with Additive Harmonic Synthesis. This technique lets you blend 128 sine wave partials, starting with the fundamental frequency, to create any waveform you want. Harmonically synthesized waveforms give you the added flexibility of synth sounds, or they can be combined with samples for unique "Is it real or synthesized?" tonal shadings. Add a bell like texture to a sampled flute, for example, or use a wave form to thicken up sampled strings and horns.

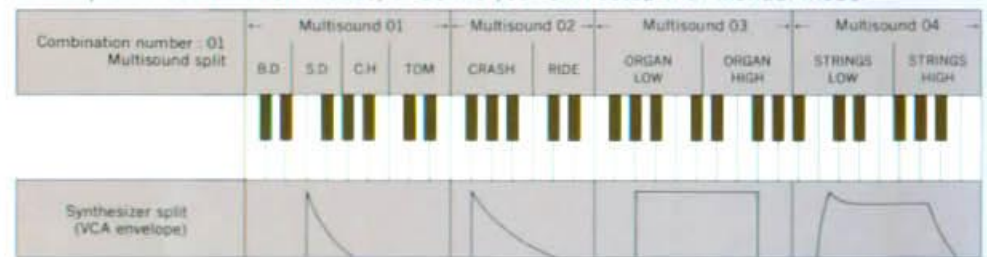
Studio Sophistication

The DSM-1 uses exclusive LSI technology to maximize your freedom in the studio, with full 16 voice polyphonic multitimbral capability. The 16 voices are fully independent all the way to the 16 individual outputs. You can process and mix each voice separately to get the most out of sampled drums and percussion. Or use the DSM-1 for advanced sequencing applications; the comprehensive polyphonic multitimbral capabilities of the DSM-1 lets you play back completely separate "tracks" on four different MIDI channels at once with Combination Programming. A multiple dynamic allocation function automatically assigns the 16 voices.

Live Performance Speed and Power

The DSM-1 is a true Sampling Synthesizer, with a full set of easy to understand, easy to use synthesizer parameters. Each voice has a VCF, a VCA and a pair of digital Envelope Generators to contour and filter sampled sounds or waveforms. You can store up to 32 programs in memory at once.

And you can store up to 32 Combinations of any four Programs. Splits, layers, overlaps, four way velocity switches, all are easily programmed. Or you can assign each Program its own MIDI channel for playback from separate keyboards or from a sequencer. Use one of the seven preset Combination modes, or define your own setup with Manual mode.



Faster Access to Disk Storage

With all of its programming power, extended sampling times and higher sampling rates, you'd expect the DSM-1 to take a long time loading new sounds and setups from disk. Not so: the innovative Quard Density 2 Megabyte 3 1/2" disk drive loads the entire 1 Megaword of PCM sample memory, plus all 32 programs and 32 Combinations, less than 35 seconds. The DSM-1 is one of the first musical instruments to use this new high speed, high density disk storage medium.

Readily Available Disk Libraries

The DSM-1 has its own rapidly growing library of disks, of course. But it can also access the hundreds of sounds and thousands of program available in the DSS-1 disk library, one of the largest collections of sampled sounds available.

There's More...

Powerful features like Velocity Cross Fade, four way Velocity Switch, Variable Loop Tuning, a High Speed Data Port and a Switch/Audio Trigger function. But you get the point: when it comes to creative sampling, to studio efficiency, to on-stage flexibility, there's never been a digital instrument as powerful, and as musical, as the DSM-1.