

THE KORG  
PROFESSIONAL  
PERFORMANCE  
SERIES

# S3

RHYTHM WORKSTATION



# COMPLETE CONTROL

You've always wanted to have complete control over your music. And have it in a single device—ideally, in your rhythm machine, the place where your music starts. But you also need control that's flexible and comprehensive enough to ensure that your music sounds like it's coming from a human being, not a machine. That's exactly what the Korg S3 Rhythm Workstation gives you. The S3 is a professional rhythm machine with superior sounds. But it's so packed with sophisticated features and functions, so comprehensive in its applications, and—in a word—so musical, that we can't really call it just a rhythm machine. That's why we called it a Rhythm Workstation.



**si** SI System

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# S3

**RHYTHM WORKSTATION**

## THE WORKSTATION CONCEPT

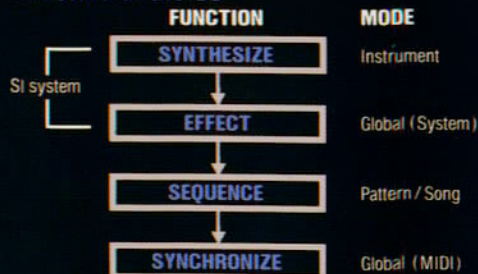
Korg took the workstation concept and transplanted it to the rhythm machine. The result is the S3.

Conventional rhythm machines are capable only of playing sequences of rhythm sounds. The S3, however, allows control over all aspects of the rhythm—creating the sounds, playing them, and arranging them in the composition of a song. It also provides many sophisticated and creative functions.

In fact, with all the advanced features it has, it will forever change the narrow notion of what a rhythm machine is and what it ought to do. The S3 Rhythm Workstation is a revolutionary new

rhythm machine that provides the power to control the entire music-making process.

## Structure of the S3



The operation of the S3 is made up of four main functions and eight modes, for understandability and ease of control.

FUNCTION	MODE
PATTERN	PATTERN PLAY/REC MODE
	PATTERN EDIT MODE
SONG	SONG PLAY/REC MODE
	SONG EDIT MODE
INSTRUMENT	TIMBRE MODE
	KIT MODE
GLOBAL	MIDI MODE
	SYSTEM MODE

## CLEAR, REALISTIC SOUNDS

The S3 Rhythm Workstation begins with the creation of dynamic, high-quality sounds. That's why we installed the sophisticated SI (Sonic Integrity) System. It features percussion sounds of superior clarity and power—and it provides sound editing capabilities far beyond anything previously available in a rhythm machine. A full 75 high-quality PCM sound programs make up the sound source section of the S3, with a comprehensive set of parameters provided for editing the waveform data of these PCM sounds. Furthermore, up to two sounds can be layered and played from a single pad, and processed through a digital effects section. Bringing all these elements together within a single unit is the concept behind the SI System.

### SI INTERNAL WAVEFORMS

00	BDhead01	25	SDshel06	50	CGslap01
01	BDhead02	26	SDshel07	51	TBhead01
02	BDhead03	27	ClisdHH01	52	TBhead02
03	BDhead04	28	ClisdHH02	53	TBhead03
04	BDhead05	29	OpenHH01	54	TBshel01
05	BDhead06	30	OpenHH02	55	TBshel02
06	BDhead07	31	PedlHH01	56	TBshel03
07	BDshel01	32	TMhead01	57	TBside01
08	BDshel02	33	TMhead02	58	H Clap01
09	BDshel03	34	TMhead03	59	CowBel01
10	BDshel04	35	TMhead04	60	Tambrn 01
11	BDshel05	36	TMhead05	61	Agogo 01
12	SDhead01	37	TMshel01	62	Bongo 01
13	SDhead02	38	TMshel02	63	Bongo 02
14	SDhead03	39	Crash 01	64	Maraca01
15	SDhead04	40	E Ride01	65	Cabasa01
16	SDhead05	41	B Ride01	66	Cabasa02
17	SDhead06	42	SidSik01	67	Shaker01
18	SDhead07	43	Stick 01	68	PotCover
19	SDhead08	44	CGhead01	69	SynBas01
20	SDshel01	45	CGhead02	70	Wave 01
21	SDshel02	46	CGshel01	71	Wave 02
22	SDshel03	47	CGshel02	72	Wave 03
23	SDshel04	48	CGpalm01	73	Wave 04
24	SDshel05	49	CGmute01	74	Wave 05

BD = Bass Drum SD = Snare Drum TM = Tom  
 Conga TB = Timbales head = Attack Sound  
 Shel = Sustain Sound

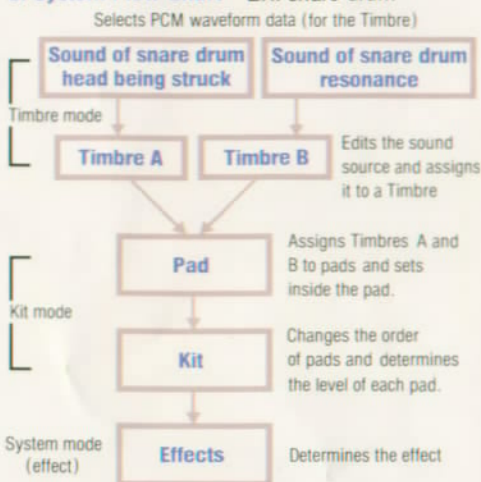
## SOPHISTICATED EDITING

The snare drum sound of the S3, for example, is an intricate combination of two separate waveforms, each a single sonic element of the total sound. It includes the attack sound, the sound made at the instant the stick hits the drum surface, the sound of the drum following the hit, and the sound of the sympathetic vibrations as the drum resonates. Since the waveform data can be combined and edited through the use of various synthesizer parameters, such as envelopes and the like, it is possible to make extraordinarily realistic snare drum sounds. Moreover, the S3 is capable of reproducing the subtle nuances of real drummers through various parameters, such as the tuning, balance, response and output of each Timbre of the pads. The S3 makes it possible to recreate the delicate changes in sound quality and slight differences in tone that result when the drum is struck with varying velocity.

Additional waveform data can be loaded to the S3 from optional ROM cards. With the wide variety of high-quality waveforms to work with, and the exceptionally versatile editing functions included on the S3, you can create a wealth of original sounds never heard before. To give just one example, a unique bass drum sound could

be made by combining the waveform data of the snare head attack with the sustain sound of the bass drum shell.

### SI System Flow Chart EX: snare drum



This flexibility is the magic of the SI System. Features like these provide you with an unprecedented degree of sound-shaping potential—the creative edge you need for your music.

## DIGITAL EFFECTS

When you need to have the perfect percussion sound, the SI System delivers. The S3 Rhythm Workstation is the first rhythm machine to be equipped with dual independent stereo effect devices. The fully digital effect system provides 28 different programs, including reverb, equalizer, exciter, delay, chorus and flanger, as well as multiple effects such as delay plus reverb. Two effect types can be selected from these and combined in an effect program, which can then be stored to one of 16 internal memory spaces. The effect system not only has extensive editing capability, but it also lets you set the placement of each of the effects in the stereo image. The editing flexibility of the S3's effects allows you to get precisely the sound you want for every instrument and in each song.

### S3 EFFECT VARIATIONS

NO	STEREO-TYPE EFFECTS	NO	DUAL-TYPE EFFECTS
01	HALL REVERB 1	15	DUAL EQUALIZER
02	HALL REVERB 2	16	DUAL EXCITER
03	HALL REVERB 3	17	DELAY/HALL REVERB
04	ROOM REVERB 1	18	DELAY/ROOM REVERB
05	ROOM REVERB 2	19	DELAY/EARLY REFLECTION
06	ROOM REVERB 3	20	DELAY/DELAY
07	EARLY REFLECTION 1	21	DELAY/CHORUS
08	EARLY REFLECTION 2	22	DELAY/FLANGER
09	EARLY REFLECTION 3	23	DELAY/PHASER
10	STEREO DELAY	24	DELAY/TREMOLO
11	STEREO CHORUS	25	EQUALIZER/DELAY
12	STEREO FLANGER	26	EQUALIZER/CHORUS
13	STEREO PHASER	27	EQUALIZER/FLANGER
14	STEREO TREMOLO	28	EQUALIZER/TREMOLO

(29) OFF

Sounds or timbres created with the sound editing process described above are assigned to pads, and the data is organized in a "kit." Up to ten kits can be stored to internal user presets, in addition to the ten pre-programmed kits that have been included with the S3. And, with the use of RAM cards, as many kit settings as you want can be stored for future use.

## CREATING A TRULY HUMAN FEEL

### EIGHT TRACK SEQUENCER

The sequencer section of the S3 consists of eight tracks: four pattern tracks and four song tracks. This four-track setup allows you to build your songs systematically. For example, each of the four tracks making up a single pattern could have a different instrument—one track for the snare, another for the hi hat, and so on. The four

song tracks allow you to overdub material. For added expressive potential, the S3 lets you record fill-ins at any point you wish, and you can record them as you listen to the backing tracks of the song. This advanced sequencer section can also be used as a eight-track MIDI sequencer by changing the track status. Set up your synthesizers and tone generators with the S3, and you've got a complete music sequencing system, not just a rhythm machine.

## MORE SOPHISTICATED FUNCTIONS

The S3 Rhythm Workstation is also loaded with advanced features that help you create rhythm tracks with more of a human feel.

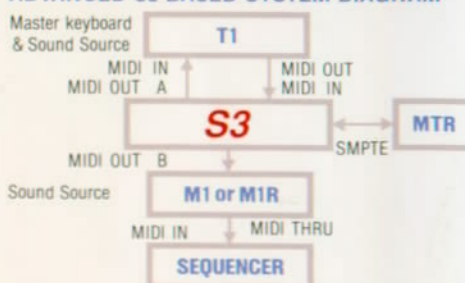
To start off with, all data in both pattern tracks and song tracks can be recorded at the high resolution of 192 PPQ ( $J = 1/192$  or 768 clicks per measure). The track delay function can be set to units as small as  $J = 1/192$ , and the timing of each track can be offset independently. This function makes it possible to recreate the feel of human drummers with techniques such as anticipating the beat or playing slightly behind it. Moreover, a swing function makes it exceptionally easy to get a more natural swing feel than was previously possible with conventional step recording and realtime recording. Of course, the S3 is equipped with a quantize function that corrects the recorded data to a specified timing resolution. When some of the beats you've recorded are too loud or too soft, you can use the velocity edit function to change the velocity of the recorded data. Adding accents is easy as well. Through these sophisticated functions, the S3 effectively eliminates the mechanical feel of the conventional rhythm machine, and gives you the feel of a real, live drummer.

## MUCH MORE THAN JUST A RHYTHM MACHINE

### SMPTÉ SYNCHRONIZATION

The SMPTÉ (Society of Motion Picture and Television Engineers) time code is a standard code used for the editing of film and video. It is commonly used to synchronize tape recorded material with film and video. With its built-in SMPTÉ synchronizer, the S3 lets you take full advantage of this flexible synchronization system. Unlike with the use of FSK signals for tape sync, SMPTÉ makes it possible to start recording or playback at any point in a song and still have perfect synchronization. In this way the S3 can act as a central controller for your entire system. It also gives you operational conveniences such as the ability to instantly calculate the tempo depending on the song running time. Finally, and most importantly, it gives you broad creative potential and precise editing power—the power of exactly matching your sequenced and tape recorded music with video and film.

### ADVANCED S3 BASED SYSTEM DIAGRAM



A system based on the S3, where the S3 acts as the nucleus of a multitrack recording setup.

## DUAL MIDI PORTS

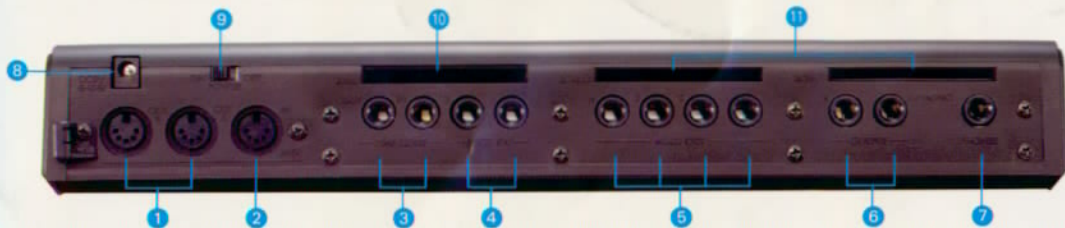
The total music power of the S3 Rhythm Workstation is rounded out by its comprehensive MIDI functions. Since it comes with two independent MIDI ports, you effectively get twice the instrument output power and twice as much control over your music setup. And because the MIDI ports are independent, you can systematically set up and distinguish your various external tone generators and MIDI equipment.

## UNLIMITED SOUND SELECTION

If you need more PCM sounds, they're available. In fact, there's an ever-expanding library of high-quality PCM sounds. The KSC Series features sets composed of a PCM card and a Program card. The PCM card provides the waveform data—the basic sound building blocks—that is stored to internal memory. A single card can store up to 40 waveforms. The accompanying Program card has specially designed sound programs that use data on the companion PCM card. A wide selection of sounds are being readied for release, including more drum and percussion sounds as well as melodic instruments such as bass and vibraphone. Cards for instantly setting up a stereo drum kit are also in the making.



## S3 REAR PANEL



**1. MIDI OUT (A, B):** Play data, clock and timing data, MTC (MIDI time code), and MIDI exclusive data is output through these terminals. A and B can be set independently. They can also be used as MIDI THRU terminals. **2. MIDI IN:** For connection to MIDI OUT terminals of external MIDI instruments. **3. TIME CODE (IN, OUT):** Input/output terminal for SMPTE time code signal. **4. FOOT SW (1,2):** For connection to footswitches for start/stop operation and to trigger assignable pads. **5. MULTI OUT (1, 2, 3, 4):** For individual output connection with external audio mixers and recording equipment. **6. OUTPUT (R, L/MONO):** For conventional stereo connection to audio equipment such as amplifiers and mixers. **7. PHONES:** For headphones use. **8. DC 9V IN:** For connection to the included AC adaptor. **9. POWER SW** **10. RAM card slot:** Optional RAM cards and program cards are inserted here. **11. ROM card slot (1, 2):** Optional PCM data cards are inserted here.

## S3 SPECIFICATIONS

• **TONE GENERATION METHOD:** SI System (Sonic Integrity System) • **POLYPHONY:** 12 voice • **PADS:** 8 pads with touch sensitivity • **QUANTIZATION:** 16 bit • **EFFECTS:** Independent dual system stereo multi-effects • **WAVEFORMS:** 75 • **TIMBRES:** 160 (80 presets, 80 user programs) • **SEQUENCER:** Maximum 30 songs, 100 patterns, 8 tracks (4 pattern tracks, 4 song tracks) resolution  $\downarrow = 1/192$ , tempo range  $\downarrow = 40-250$  • **EXTERNAL SYNCHRONIZATION:** MIDI, SMPTE time code (30, 29.97, 25, 24 non-drop frame) • **CONTROL INPUTS:** Assignable foot switch  $\times 2$  • **OUTPUTS:** R, L/MONO, Multi out  $\times 4$ , Headphones • **CARD SLOTS:** ROM slot  $\times 2$ , RAM slot  $\times 1$  • **MIDI:** IN  $\times 1$ , OUT (switchable to MIDI THRU)  $\times 2$  • **DISPLAY:** Backlit LCD (24 characters  $\times 2$  lines) • **DIMENSIONS:** 348(W)  $\times$  337(D)  $\times$  57(H)mm • **WEIGHT:** 2.6kg

## S3 OPTIONS



• **PCM PROGRAM CARD (KSC SERIES)**  
KSC-1S STEREO DRUMS  
KSC-2S DANCE  
KSC-3S JAZZ  
KSC-4S INSTRUMENTS  
KSC-5S PROCESSED

• **MEMORY CARD RAM MCR-03**  
The optional S3 memory RAM card can memorize and stock sound program data such as timbre/kit, sequence data, and global data of MIDI settings and system structures.



• **HARD CASE HC-S3**



• **MULTI CASE LB-60**



• **HEADPHONES KH-1000**



• **SYNC/MIDI CABLE 1.5m/3m/5m/1m + 0.5m**

- Specifications and features are subject to change without notice for further improvement.
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# KORG

**MUSIC POWER**

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