

SG-1D/SG-1

**SAMPLING GRAND
OWNER'S MANUAL**



KORG[®] KORG INC.

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KORG[®]

Thank you and congratulations on your choice of the KORG SG-1D/SG-1 Sampling Grand. To obtain optimum performance and long service life from your new SG-1D/SG-1, please read this owners manual carefully before use.



MAIN FEATURES OF THE SG-1D/SG-1

1 The SG-1D and SG-1 utilize high resolution 12 bit sampling, allowing extremely realistic sound performance not possible with conventional electronic pianos. Four preset piano voices ... 2 acoustic and 2 electric ... are built in. A fifth preset voice is accessed via easily changed optional ROM Memory Cards, for virtually unlimited sound reproduction capabilities.

2 The SG-1D/SG-1's weighted touch sensitive keyboard rivals that of an actual acoustic piano. Dynamic response can be varied over 8 different settings, to match the keyboard's response to your own touch.

3 Features a built-in Pitch Bend and Modulation wheels. Also transmits Velocity, Program Change, Sustain and Aftertouch (SG-1D only), making the SG-1D/SG-1 a highly versatile master keyboard in a MIDI setup.

4 Features built-in 3-band EQ plus Brilliance control, allowing fine-tuning of timbre and tone quality. Built-in Stereo Digital Chorus adds full, rich ambience.

SPECIFICATIONS AND OPTIONS

Specifications

- **Keyboard** : SG-1D 88 keys-full keyboard
SG-1 76 keys-E1 to G7
- **Sound Source** : 12 bit Sampling stored in ROM memory
- **Number of notes** : 12
- **Controls** : MIDI (Pitch Bend, Modulation), Volume, Equalizer (Bass, Mid-Range, Treble), MIDI (SG-1D) or MIDI/TRANSCOPE (SG-1), Preset Sound Select (Piano I, Piano II, E. Piano I, E. PianoII, Card), Brilliance, Chorus (On/Off, Depth, Speed), Tune, Dynamics, MIDI Channel (Receive/Transmit).
- **Output jacks** : Output (L/Mono, R-Low/High Switch), Headphones
- **Control Inputs** : Damper, MIDI (In-Out-Thru), ROM Memory Card Slot
- **Supplied Accessories** : Connection Cord, Damper Switch (DS-1), AC Voltage Cord
- **Dimensions** : (SG-1D) 1370mm(W) × 400mm(D) × 123mm
(SG-1) 1205mm(W) × 400mm(D) × 123mm
- **Weight** : (SG-1D) 33.7kg.
(SG-1) 29kg.
- **Options** : ROM Memory Card (SGC-01 Harpsichord, SGC-02 Clavinet, SGC-03 Guitar/Bass, SGC-05 Harp), Headphones (KH-1000), Hard case: HC-SGD (SG-1D), HC-SG (SG-1), MIDI Cable (7m, 10m, 12m)

★ Specifications subject to change without notice.

N O T I C E

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 a serial number disqualifies the product sold from the manufacturer's/distributor's warranty and liability. This requirement is for your own protection and safety.

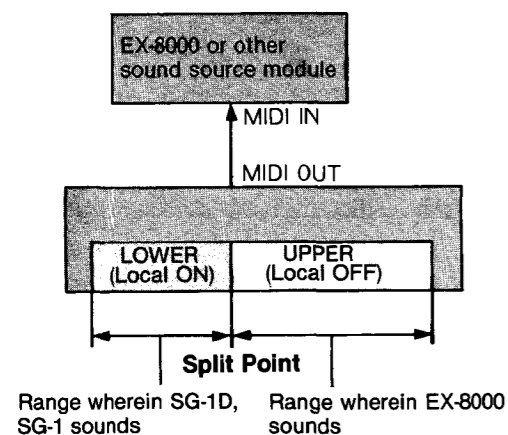
SG-1D/SG-1

■ SPLIT KEYBOARD FUNCTION

The SG-1D/SG-1 allows you to play different sounds from different parts of the keyboard using both internal sounds and external MIDI units via the SPLIT KEYBOARD and LOCAL CONTROL ON/OFF functions. The split point can be set anywhere on the keyboard. The user can also select which section (s) play internal sounds and which play external units. In the following example, the Upper section is set to LOCAL CONTROL Off, and thus controls the connected EX-8000 synthesizer module via MIDI only. The Lower section plays the SG-1D/SG-1's internal sounds, and does NOT transmit data over MIDI.

● Split Example

(Upper unit is at Local Off)



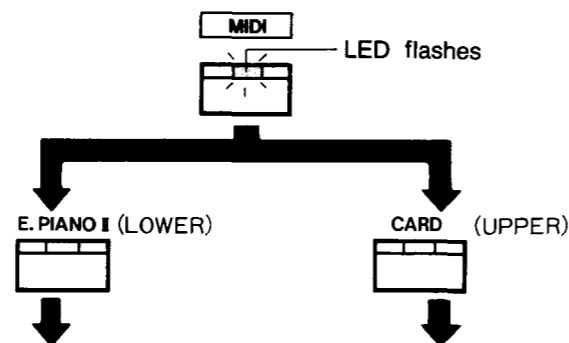
● The relationship between internal sounds and external MIDI units is shown in the following diagram:

INTERNAL SG-1D SOUNDS	MIDI TRANSMISSION	LEDS	EXPLANATION OF DIFFERENT LOCAL ON/OFF MODES
U + L Output from both Upper and Lower	U + L Upper and Lower both transmit		Both sections play internal sounds AND transmit to external MIDI devices. (This mode is automatically selected when the SG-1D/SG-1 is first turned on.)
U Output from Upper only	L Only Lower transmits		Upper section is playing internal sounds ONLY; Lower section is transmitting to external MIDI devices ONLY.
L Output from Lower only	U Only Upper transmits		Lower section is playing internal sounds ONLY; Upper section is transmitting to external MIDI devices ONLY.
No output	U + L Upper and Lower both transmit		Both sections transmit to external MIDI devices ONLY (no internal sounds are produced by playing SG-1 keyboard).

NOTE: Internal sounds can always be played by external devices over MIDI, regardless of LOCAL On/Off settings. Keyboard and Damper Footswitch will have No effect on sounds thus produced.

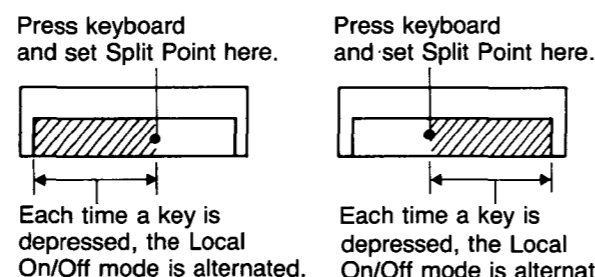
OPERATING PROCEDURE FOR SPLIT KEYBOARD FUNCTIONS

- Press and hold together MIDI (MIDI/TRANPOSE) button and either E. PIANO II (Lower section) or CARD (Upper section) button. MIDI LED indicator will flash; E. PIANO II/CARD LED indicator will change status.



- Set the desired Split Point by pressing a key. (This will also cause the E. PIANO or CARD LED Indicator to change back to its original status)

- When pressing E. PIANO II (Lower),
- When pressing CARD (Upper),



IMPORTANT SAFETY PRECAUTIONS

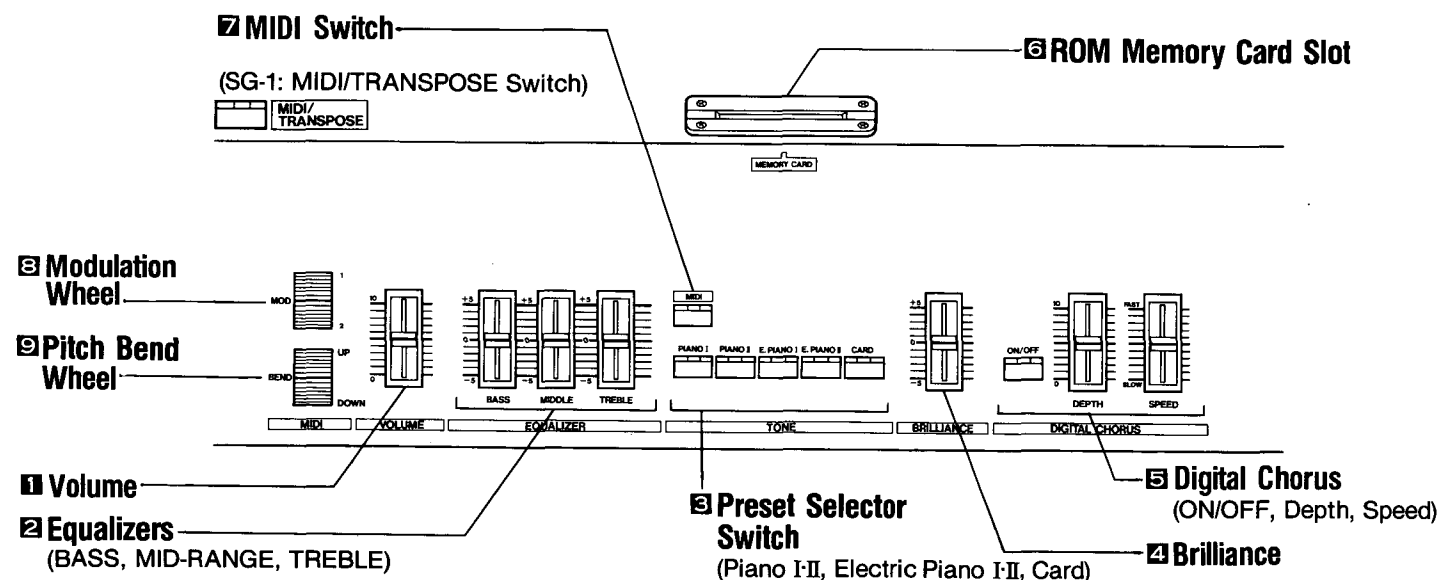
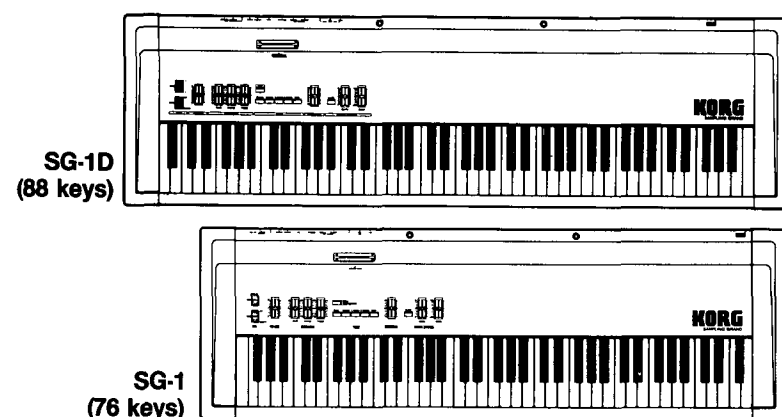
- LOCATION:**
 To avoid malfunction, do not use this unit in the following locations for long periods of time.
 - In direct sunlight.
 - Exposed to extremes of temperature or humidity.
 - In sandy or dusty places.
- HANDLE WITH CARE:**
 All controls are designed to provide positive operation with a gentle touch. Do not use force.
- CLEANING:**
 If necessary, wipe the exterior of this unit with a soft, dry cloth. Never use volatile cleaning agents such as benzene, alcohol, or flammable polishes.
- KEEP THIS MANUAL:**
 For future reference, please keep this manual in a safe place.
- POWER SUPPLY:**
 - Use only with rated AC voltage. If you will be using this unit in a country having a different voltage, be sure to obtain the proper transformer to convert to the rated voltage.
 - To help prevent noise and degraded sound quality, avoid using the same outlet as other equipment or branching off extension cords shared by other equipment.
- PREVENTING ELECTRICAL INTERFERENCE:**
 The SG-1D and SG-1 uses sophisticated digital microcomputer circuitry. Like all such devices it is subject to interference from nearby electrical devices (TV, radio, etc.). For best performance, operate the SG-1D/SG-1 at a distance from these other devices.

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1. Front Panel



- VOLUME**
Slider
- EQUALIZERS (BASS, MID-RANGE, TREBLE)**
 - Sliders
 - Bass: controls low frequencies.
 - Mid-range: controls mid range frequencies.
 - Treble: controls high frequencies.
- PRESET SELECTOR SWITCHES (PIANO I, II, ELECTRIC PIANO I, II, CARD)**
Pressing one of these buttons activates the corresponding internal or ROM card voices. LED indicator confirms selection.
- BRILLIANCE**
Controls brightness and clarity of sounds.
- DIGITAL CHORUS (ON/OFF, DEPTH, SPEED)**
Controls the "ambience" of the SG-1 sounds.
 - ON/OFF: Turns the chorus effect ON and OFF.

- DEPTH: Controls depth of modulation of chorus effect.
- SPEED: Determines the modulation speed of the chorus effect.
- ROM MEMORY CARD SLOT**
Specially designed Korg SG-1D/SG-1 Memory Cards are inserted in this slot to change sounds
- MIDI (SG-1: MIDI/TRANPOSE) SWITCH**
Accesses SG-1D/SG-1 internal MIDI functions. (Also transposes keyboard on SG-1). Additionally, resets all internal functions in case of interference by external MIDI devices.
- MODULATION WHEEL**
Transmits Modulation Information (two types) to external devices via MIDI. (Internal sounds are not affected.)
- PITCH BEND WHEEL**
Transmits Pitch Bend information to external devices via MIDI. (Internal sounds are not affected.)

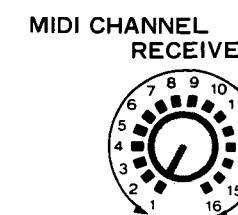
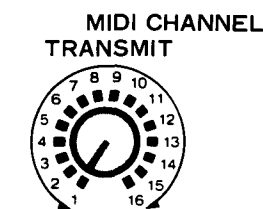
SETTING THE MIDI TRANSMIT/RECEIVE CHANNELS

TRANSMIT CHANNEL

This switch determines which MIDI channel (1-16) the SG-1D/SG-1 will transmit MIDI data on. Only the designated channel will be used.

RECEIVE CHANNEL

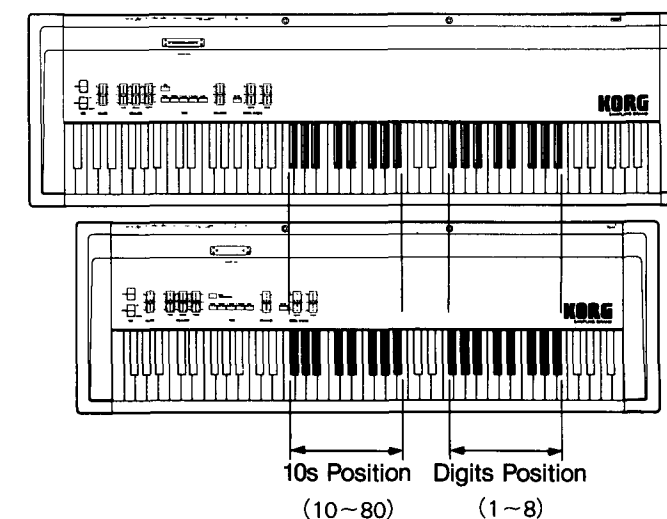
This switch determines which MIDI channel the SG-1D/SG-1 will receive MIDI data on when in the OMNI OFF mode. Only the designated channel will be recognized (in OMNI Off). In OMNI On mode, the SG-1D/SG-1 will receive MIDI data on all channels, regardless of the setting of the RECEIVE CHANNEL switch.



NOTE:
Immediately after turning power source On, the Omni Mode goes ON.

TRANSMITTING PROGRAM CHANGE INFORMATION

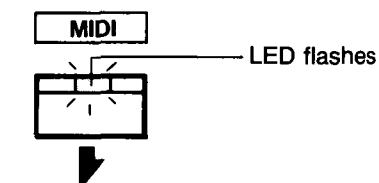
The SG-1D/SG-1 can select programs of external devices over MIDI. Selection is accomplished by depressing keys on the keyboard, as described below (see also diagram...)



NOTE:
The Korg SG-1D/SG-1 supports program numbering systems based on "8," which is compatible with many different synthesizer manufacturers. Other types of synthesizers may use different program numbering systems, such as decimal numbering systems. Program numbers 11-88 on Korg equipment translate to program number 1-64 on decimal systems.

HOW TO SELECT PROGRAMS OVER MIDI (Example: to select Program # 27 on an EX-8000)

① Press and hold the MIDI (MIDI/TRANPOSE) Button (LED flashes).



② Select the Bank Number (left hand digit) corresponding to "2" by pressing the designated key (see diagram).



③ Select the Program Number (right hand digit) corresponding to "7" by pressing the designated key (see diagram).



Program "27" on any attached MIDI devices is selected.

■ SG-1D/SG-1 MIDI DATA

TRANSMITTED DATA	RECEIVED DATA
<ul style="list-style-type: none"> ● Note Off ● Note On ● Control Change <ul style="list-style-type: none"> No. 1 Modulation 1 (Vibrato) No. 2 Modulation 2 (Filter Tremolo) No. 64 Damper Pedal (Sustain) Footswitch ● Program Change ● Channel Pressure (Aftertouch ... SG-1D only) ● Pitch Bend 	<ul style="list-style-type: none"> ● Note Off ● Note On ● Control Change <ul style="list-style-type: none"> No. 7 Volume No. 64 Damper Pedal (Sustain) Footswitch No. 66 Sostenuto No. 67 Soft Pedal ● Program Change
<ul style="list-style-type: none"> ● Active Sensing 	<ul style="list-style-type: none"> ● All Notes OFF ● Local On/Off ● Omni Mode Off ● Omni Mode On ● Active Sensing

■ MIDI PARAMETERS/FUNCTIONS

The following SG-1D/SG-1 MIDI related functions can be accessed by pressing one of the PRESET SOUND SELECTOR Buttons while holding the MIDI (MIDI/TRANSCOPE) button:

● PROGRAM CHANGE

Determines whether program change information from external MIDI devices will be accepted. (The SG-1D/SG-1 recognizes program numbers 1 through 5 only.)

● OMNI MODE

Determines whether the SG-1D/SG-1 will receive MIDI information from all MIDI channels (OMNI On) or from one specific channel (OMNI Off).

● DAMPER PEDAL OUTPUT

Determines whether the SG-1D/SG-1's Damper pedal status will be transmitted over MIDI or not.

● LOCAL CONTROL ON/OFF (UPPER, LOWER)

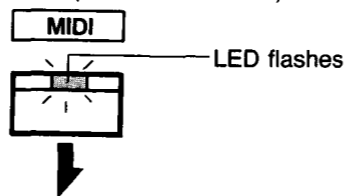
Determines whether the SG-1D/SG-1's Keyboard will control the internal sounds (LOCAL On) or whether the internal sounds will be controlled exclusively over MIDI (LOCAL Off). These switches also allow a split keyboard function, with separate control of each section.

NOTE:

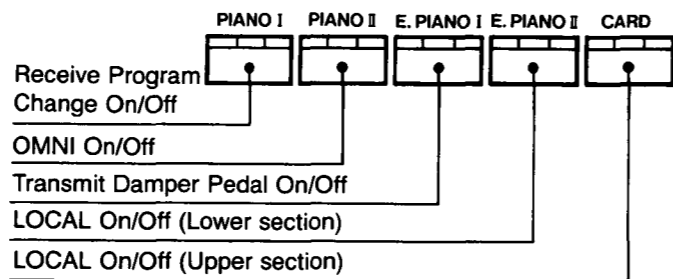
The MIDI (MIDI/TRANSCOPE) Switch will not operate when keys are pressed or when the Damper Footswitch is held down.

SETTING MIDI PARAMETERS

- Depress and hold the MIDI (MIDI/TRANSCOPE) button. The LED indicator flashes.



- Press one of the five PRESET SOUND BUTTONS to turn on or off the desired MIDI function (see table below). The corresponding LED indicates the status of the selected function.



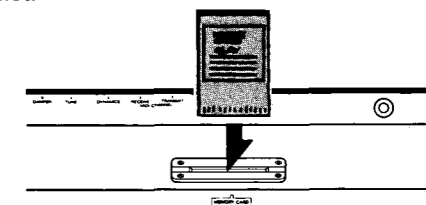
★ When power is first turned on, all of the above MIDI functions are set to their "On" status.

■ ROM MEMORY CARDS

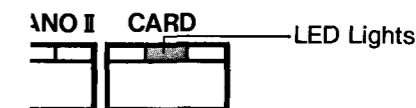
Korg's exclusive ROM Memory Card system allows the user to access any number of sounds in addition to those built-in. A large and growing library of new sounds for your SG-1D and SG-1 can be found at your Korg dealer.

OPERATION OF ROM MEMORY CARD

- Insert ROM Memory Card firmly into the Memory Card slot.



- Depress the "CARD" Preset Selector Button.



- Memory Card sound will now play.

■ KEY TRANSCOPE (SG-1 only)

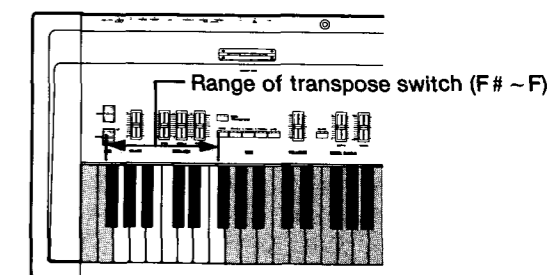
The SG-1 allows the user to transpose the Keyboard above and below Cover a total range of one octave. Key Transpose affects both internal sounds and instruments interfaced via MIDI.

OPERATION OF KEY TRANSCOPE

- Depress and hold the MIDI/TRANSCOPE Button. The LED indicator flashes



- Press a key in the indicated keyboard range.



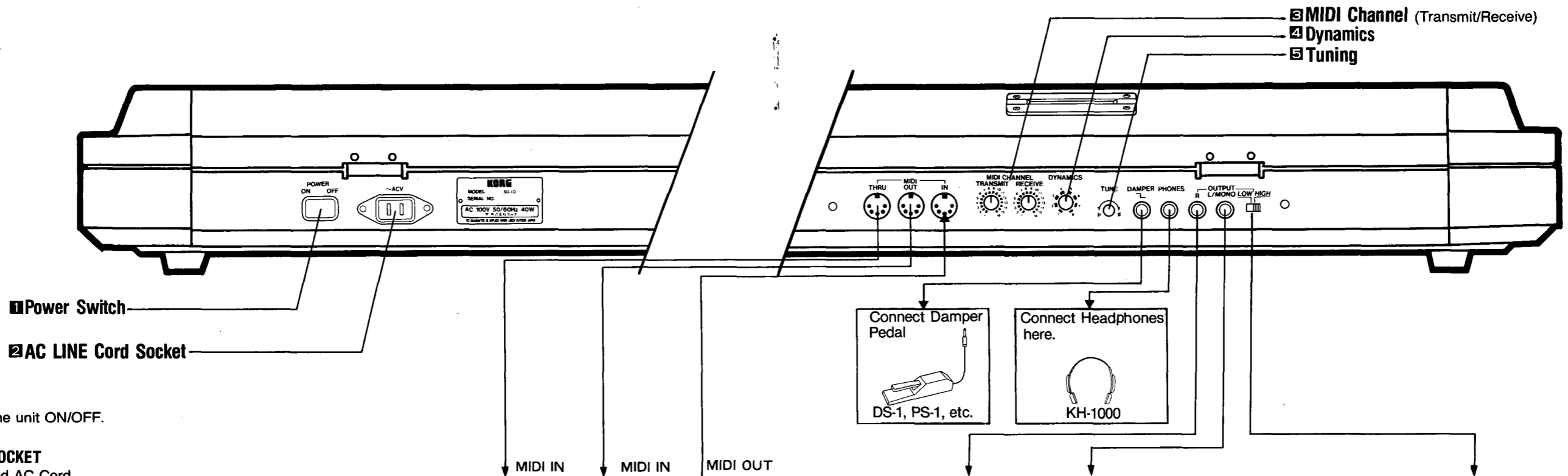
- MIDI/TRANSCOPE LED lights steadily, indicating transposition.



To discontinue Transpose function, depress MIDI/TRANSCOPE and "C" simultaneously. Transpositions are relative to C.

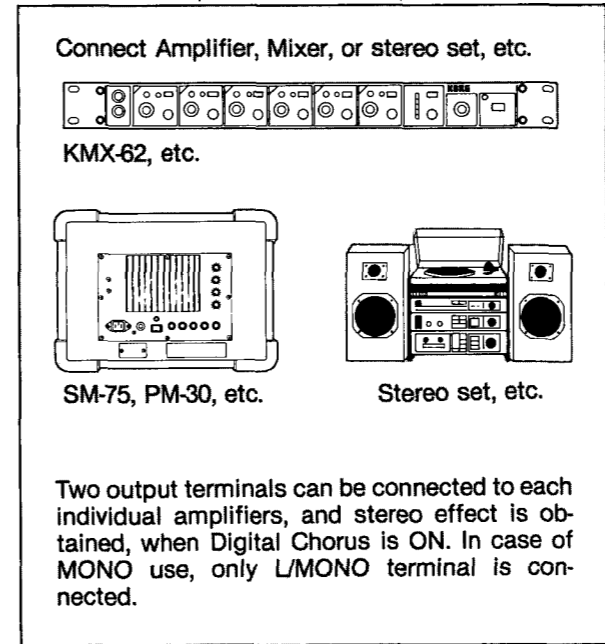
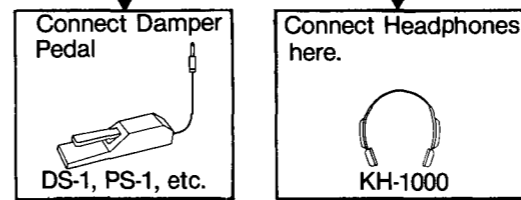
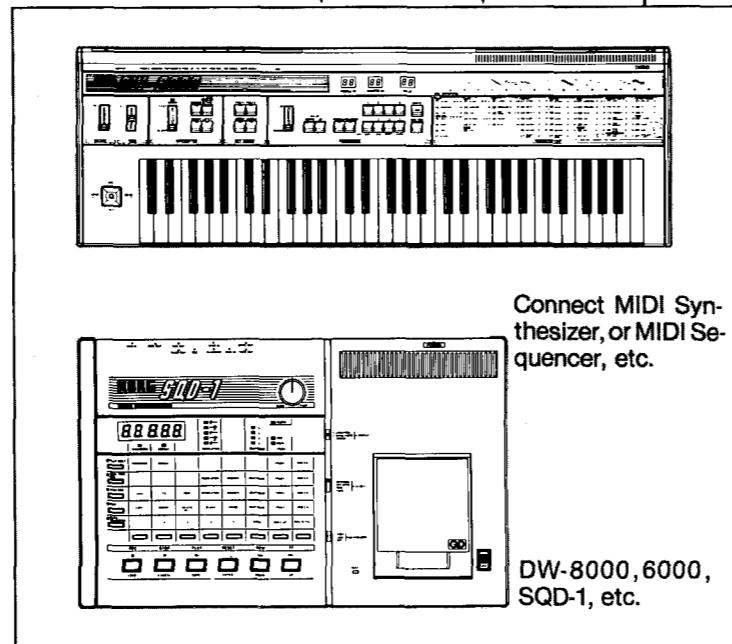
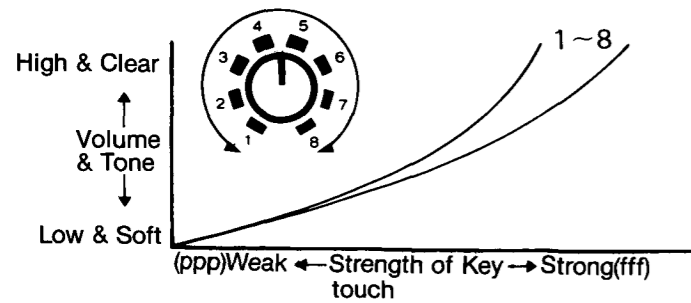
Thus, to transpose the SG-1 up three semitones, E_b is depressed; to transpose down 5 semitones, G is depressed.

2. Rear Panel/Connections Procedures



- Power Switch
- AC LINE Cord Socket

- POWER SWITCH
Turns power to the unit ON/OFF.
- AC LINE CORD SOCKET
Connects supplied AC Cord.
- MIDI CHANNEL (TRANSMIT/RECEIVE)
Determines MIDI Transmission and Reception channels.
- DYNAMICS
Varies the SG-1D/SG-1's keyboard dynamic response range, to match a variety of playing styles.



According to amplifier usage, convert High/Low switch as follows.

Terminal of amplifier used	Position of High/Low Switch
Stereo amp. (AUX IN)	High
Guitar amp. (INPUT)	Low
Keyboard amp. (INPUT)	High or Low
PA Mixer, etc. (AUX, INPUT, etc.)	High or Low

- TUNING
Controls the SG-1D/SG-1's overall tuning. Turning it to the left lowers pitch; turning it to the right raises pitch.



SAMPLING GRAND SG-1D MIDI IMPLEMENTATION CHART

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1~16	1~16	Depends on Ch sw setting
	Changed	1~16	1~16	
Mode	Default	3	1 OMNI ON/OFF	
	Messages	×		
	Altered	*****		
Note Number :	True voice	21~108	0~127	
		*****	21~108	
Velocity	Note ON	○ 9nH v=1~127	○ v=1~127	
	Note OFF	× 8nH v=64	×	
After Touch	Key's	×	×	
	Ch's	○	×	
Pitch Bender		○	×	
Control Change	1	○	×	MOD1 MOD2 VOLUME DAMPER See Note 1 SOSTENUTO SOFT PEDAL
	2	○	×	
	7	×	○	
	64	○	○	
	66	×	○	
	67	×	○	
Prog Change	:True #	○ 0~63	○ 0~4	See Note 2
		*****	0~4	
System Exclusive		×	×	
System Common	: Song Pos	×	×	
	: Song Sel	×	×	
	: Tune	×	×	
System Real Time	: Clock	×	×	
	: Commands	×	×	
Aux Messages	: Local ON/OFF	×	○	
	: All Notes OFF	×	○	
	: Active Sence	○	○	
	: Reset	×	×	
Notes	1	Transmitted when DAMPER is ENABLED.		
	2	Received when program change is ENABLED.		

Mode 1: OMNI ON, POLY
Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO
Mode 4: OMNI OFF, MONO

○: Yes
×: No

SAMPLING GRAND SG-1 MIDI IMPLEMENTATION CHART

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1~16	1~16	Depends on Ch sw setting
	Changed	1~16	1~16	
Mode	Default	3	1 OMNI ON/OFF	
	Messages Altered	× *****		
Note Number :	True voice	22~108	0~127	
		*****	21~108	
Velocity	Note ON	○ 9nH v=1~127	○ v=1~127	
	Note OFF	× 8nH v=64	×	
After Touch	Key's	×	×	
	Ch's	×	×	
Pitch Bender		○	×	
Control Change	1	○	×	MOD1 MOD2 VOLUME DAMPER See Note 1 SOSTENUTO SOFT PEDAL
	2	○	×	
	7	×	○	
	64	○	○	
	66	×	○	
	67	×	○	
Prog Change	:True #	○ 0~63	○ 0~4	See Note 2
		*****	0~4	
System Exclusive		×	×	
System Common	: Song Pos	×	×	
	: Song Sel	×	×	
	: Tune	×	×	
System Real Time	: Clock	×	×	
	: Commands	×	×	
Aux Messages	: Local ON/OFF	×	○	
	: All Notes OFF	×	○	
	: Active Sence	○	○	
	: Reset	×	×	
Notes	1	Transmitted when DAMPER is ENABLED. Received when program change is ENABLED.		
	2			

Mode 1: OMNI ON, POLY
Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO
Mode 4: OMNI OFF, MONO

○: Yes
x: No