
SX-AX3/SX-AX5/SX-AX7

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■ Please read your Owner's Manual for detailed explanations concerning each operating procedure.	

How to create a new sound

I. Select a POLY, SOLO or BASS voice for a base.

Choose a preset voice which is similar to the one you want to make.

II. Enter the SOUND EDIT mode.

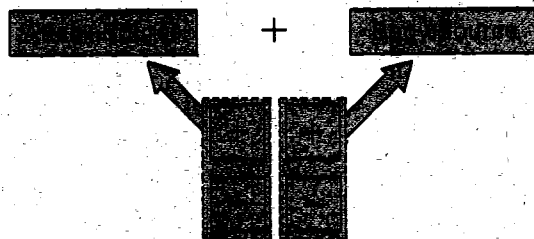
Press the SOUND EDIT button.

SOUND EDIT	ATTACK VARIATION	ATTACK VOLUME	BODY VARIATION	BODY VOLUME	<input type="checkbox"/> HARMONICS
	ATTACK	DECAY	ENVELOPE	SUSTAIN	RELEASE
	<input type="checkbox"/> HARMONICS				<input checked="" type="checkbox"/> TOTAL
	MODULATION				<input type="checkbox"/> TREMOLO
	VARIATION	DEPTH	SPEED	DELAY	<input checked="" type="checkbox"/> VIBRATO
	AUTO BEND	DETUNE	HARMONICS INTERVAL	TOUCH SENSITIVITY	TOTAL VOLUME

(AX5/AX7)

III. Select a PCM ATTACK SOURCE and a BODY SOURCE.

Use the and buttons to select a PCM ATTACK SOURCE and a BODY SOURCE.

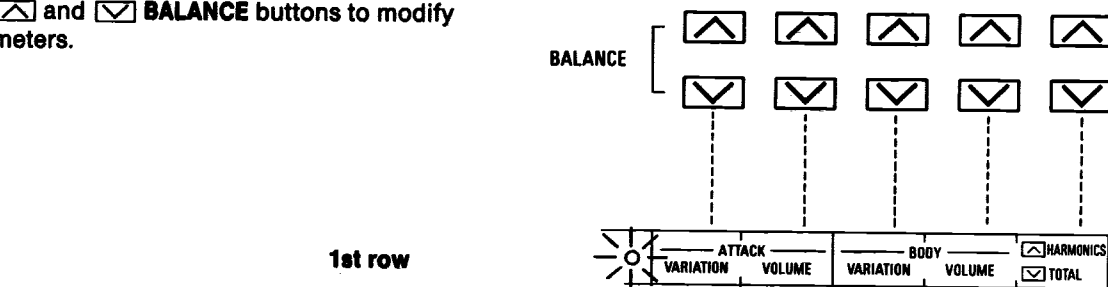


PCM ATTACK SOURCE			BODY SOURCE		
1 HAMMER 1	8 CLICK	1 PIANO	9 ORGAN		
2 HAMMER 2	10 LOOPING NOISE	2 E PIANO	10 STRINGS		
3 PLUCK	11 BOWED ATTACK	3 CLAVI	11 VOCAL		
4 METAL HIT	12 LIPS 1	4 MALLET 1	12 BRASS 1		
5 WOOD HIT	13 LIPS 2	5 MALLET 2	13 BRASS 2		
6 PICK 1	14 BREATH	6 GUITAR 1	14 REED		
7 PICK 2	15 SPECIAL 1	7 GUITAR 2	15 FLUTE		
8 SLAP	16 SPECIAL 2	8 ETHNIC	16 SPECIAL		

(AX5/AX7)

IV. Edit the parameters.

Use the and **BALANCE** buttons to modify the parameters.



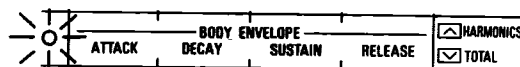
1st row



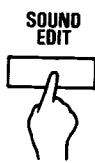
Select the attack source and body source waveforms.



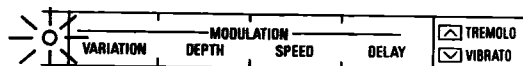
2nd row



Adjust the time and level of each element of the body source envelope.



3rd row



Adjust the parameters of tremolo and vibrato effects.



4th row



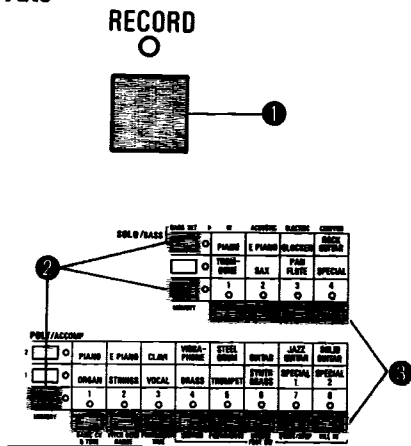
(AX5/AX7)

Modify parameters of other effects.

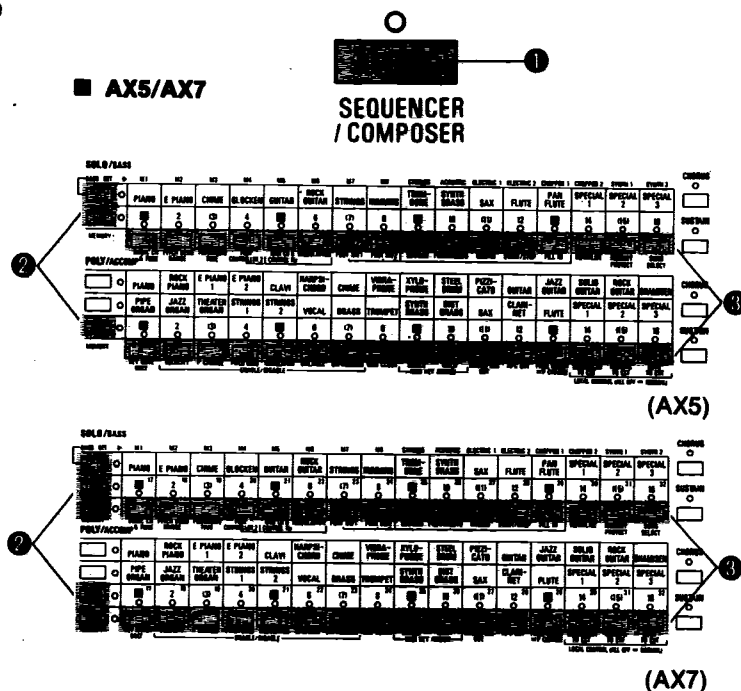
V. Store the new sound in a MEMORY button.

Press the **RECORD** button ①. Press a **MEMORY** button ② and a number button ③ to store the edited voice.

■ AX3

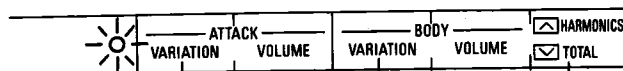


■ AX5/AX7



Parameters

First row parameters (AX3)



Refer to table 1

Refer to table 2

- TOTAL
To set BASIC + HARMONICS
- HARMONICS
To set HARMONICS separately

■ Table 1: PCM ATTACK VARIATION (AX3)

GROUP \ VARIATION		1	2	3	4	5
1	HAMMER 1	PIANO				
		4	4 H	6	∩ 4	∩ 6
2	HAMMER 2	ELECTRIC PIANO				
		3	3 H	5	∩ 3	∩ 3 H
3	PLUCK	HARPSICHORD				
		3	3 L	5	∩ 3	∩ 3 L
4	METAL HIT	VIBRAPHONE		GLOCKEN 1	GLOCKEN 2	COWBELL
		4	6	3	3	3
5	WOOD HIT	XYLOPHONE			CLAVES	
		4	6	∩ 4	4	6
6	PICK 1	ACOUSTIC GUITAR		SOLID GUITAR	JAZZ GUITAR	MUTE GUITAR
		4	5	5	5	5
7	PICK 2	ELECTRIC BASS		ACOUSTIC BASS	DISTORTION GUITAR	
		5	∩ 5	4	4	∩ 4
8	SLAP	SLAP BASS			HAND CLAP	
		3	3 L	5	∩ 4	∩ 4 L
9	CLICK	ELECTRIC ORGAN			CLICK 1	CLICK 2
		3	5	∩ 3	3	3
A	LOOPING NOISE	STRINGS			PAN FLUTE	
		3	∩ 2	∩ 3	2	3
b	BOWED ATTACK	BOWED STRINGS 1			BOWED STRINGS 2	
		2	2 H	3	3	3 H
c	LIPS 1	TRUMPET			TROMBONE 1	TROMBONE 2
		4	4 L	∩ 4	4	4
d	LIPS 2	SAXOPHONE			CLARINET	
		3	3 L	∩ 3	4	4 H
E	BREATH	FLUTE			PAN FLUTE	
		3	3 H	4	3	3 H
F	SPECIAL 1	CONGA 1	CONGA 2	CONGA 3	TOM	BASS DRUM
		∩ 4	5	5	∩ 4	∩ 4
G	SPECIAL 2	METAL CABASA	HI-HAT CLOSED	RIM SHOT	ELEC SNARE DRUM	CLASH CYMBAL
		4	4	4	∩ 4	∩ 4

<Reference of Table 1>

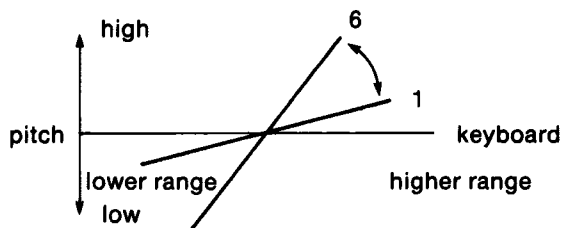
null : standard
 ʌ : short time
 ˘ : slow attack



Waveform name

null: standard
 L: pitch is lower than standard
 H: pitch is higher than standard

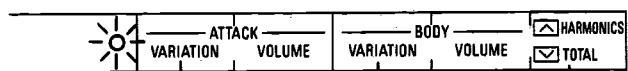
Relation between pitch and keyboard (pitch key follow)



■ Table 2: BODY VARIATION (AX3)

VARIATION		1	2	3	4	5
1	PIANO	PIANO		SYNTHESIZER PIANO		
		1	2	1	2	3
2	E PIANO	ELECTRIC PIANO				
		1	2	3	4	5
3	CLAVI	CLAVI		HARPSICHORD		ZITHER
		1	2	1	2	
4	MALLET 1	VIBRAPHONE		GLOCKEN	CHIME	
		1	2		1	2
5	MALLET 2	XYLOPHONE				
		1	2	3	4	5
6	GUITAR 1	JAZZ GUITAR	ACOUSTIC GUITAR	SOLID GUITAR	MUTE GUITAR	DISTORTION GUITAR
7	GUITAR 2	ACOUSTIC BASS		ELECTRIC BASS		SLAP BASS
		1	2	1	2	
8	ETHNIC	STEEL DRUM	AFRICAN		ORIENTAL	
			1	2	1	2
9	ORGAN	JAZZ ORGAN			THEATER ORGAN	
		1	2	3	1	2
A	STRINGS	STRINGS			SLOW STRINGS	
		1	2	3	1	2
b	VOCAL	VOCAL				
		1	2	3	4	5
c	BRASS 1	TRUMPET		TROMBONE		BRASS ENSEMBLE
		1	2	1	2	
d	BRASS 2	SYNTHESIZER BRASS				
		1	2	3	4	5
e	REED	SAXOPHONE			CLARINET	
		1	2	3	1	2
f	FLUTE	FLUTE			PAN FLUTE	
		1	2	3	1	2
g	SPECIAL (SLOW ATTACK)	PIANO	VIBRAPHONE	CHIME	GUITAR	STEEL DRUM

First row parameters (AX5/AX7)



Refer to table 3

Refer to table 4

TOTAL

To set BASIC + HARMONICS

HARMONICS

To set HARMONICS separately

■ Table 3: PCM ATTACK VARIATION (AX5/AX7)

GROUP \ VARIATION		0	1	2	3	4	5	6	7	8	9
1	HAMMER 1	PIANO 1						PIANO 2			SANTUR
		4	4 H	6	6 H	∩ 4	∩ 6	4 L	4	∩ 4 L	4
2	HAMMER 2	ELECTRIC PIANO						ELECTRIC GRAND			
		3	3 H	5	5 H	∩ 3	∩ 3 H	4	6	∩ 4	∩ 6 H
3	PLUCK	HARPSICHORD						PLUCK BASS	SHAMISEN	SANZA	
		3	3 L	5	5 L	∩ 3	∩ 3 L	3	5	3	4
4	METAL HIT	VIBRAPHONE				GLOCKEN 1		GLOCKEN 2	COWBELL	CAN	GLASS
		4	6	∩ 4	∩ 6	3	5	3	3	4	3
5	WOOD HIT	XYLOPHONE 1				XYLOPHONE 2		CLAVES		STICK (RIM SHOT)	
		4	6	∩ 4	∩ 6	3	5	4	6	∩ 3	∩ 5
6	PICK 1	ACOUSTIC GUITAR				SOLID GUITAR		JAZZ GUITAR		MUTE GUITAR	
		4	5	∩ 4	∩ 5	4	5	4	5	4	5
7	PICK 2	ELECTRIC BASS				ACOUSTIC BASS		DISTORTION GUITAR		PIZZICATO	
		5	5 H	∩ 5	∩ 5 H	4	5	4	∩ 4	∩ 4	5
8	SLAP	SLAP BASS				HAND CLAP		SLAP 1		SLAP 2	
		3	3 L	5	5 L	∩ 4	∩ 4 L	4	4 L	4	4 L
9	CLICK	ELECTRIC ORGAN				CLICK 1		CLICK 2		METAL CABASA	FINGER SNAP
		3	5	∩ 3	∩ 5	3	5	3	5	∩ 3	∩ 4
10	LOOPING NOISE	STRINGS 1			STRINGS 2			PAN FLUTE		FLUTE	GLASS HARMONICA
		3	∩ 2	∩ 3	3	∩ 2	∩ 3	2	3	3	∩ 3
11	BOWED ATTACK	BOWED STRINGS 1				BOWED STRINGS 2		BOWED STRINGS 3		BOWED STRINGS 4	
		2	2 H	3	3 H	3	3 H	3	3 H	3	3 H
12	LIPS 1	TRUMPET						TROMBONE			
		3	3 L	4	4 L	∩ 4	∩ 4 L	4	4 H	∩ 4	∩ 4 H
13	LIPS 2	SAXOPHONE						CLARINET			
		3	3 L	4	4 L	∩ 3	∩ 3 L	4	4 H	∩ 4	∩ 4 H
14	BREATH	FLUTE				PAN FLUTE				SHAKUHACHI	
		3	3 H	4	4 H	3	3 H	4	4 H	3	3 H
15	SPECIAL 1	CONGA 1	CONGA 2	CONGA 3	TOM	BASS DRUM	TIMPANI	POP	BREAKING GLASS 1	BREAKING GLASS 2	FINGER SNAP
		∩ 4	5	5	∩ 4	∩ 4	5	5	∩ 4	∩ 4	4
16	SPECIAL 2	METAL CABASA	HI-HAT CLOSED	RIM SHOT	E SNARE DRUM	CLASH CYMBAL	HA-	WIND CHIME 1	WIND CHIME 2	STREAM 1	STREAM 2
		4	4	4	∩ 4	∩ 4	3	1	1	2	1

null : standard

⌒ : short time

⌒* : very short time

⌒ : slow attack

<Reference of Table 3>



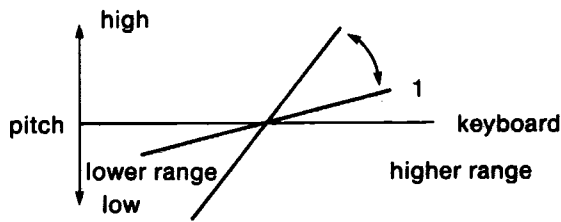
Waveform name

null: standard

L: pitch is lower than standard

H: pitch is higher than standard

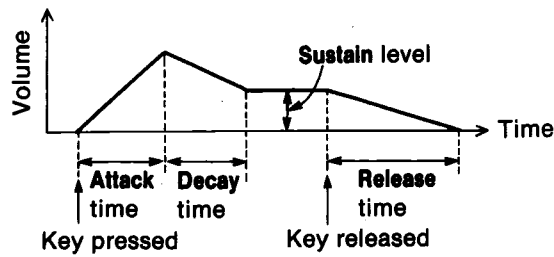
Relation between pitch and keyboard (pitch key follow)



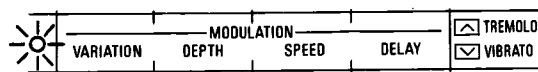
■ Table 4: BODY VARIATION (AX5/AX7)

GROUP \ VARIATION		0	1	2	3	4	5	6	7	8	9
1	PIANO	PIANO				SYNTHESIZER PIANO					
		1	2	3	4	1	2	3	4	5	6
2	E PIANO	ELECTRIC PIANO								- ELECTRIC GRAND -	
		1	2	3	4	5	6	7	8	1	2
3	CLAVI	CLAVI				- HARPSICHORD -			- ZITHER -		
		1	2	3	4	1	2	3	1	2	3
4	MALLET 1	VIBRAPHONE				- GLOCKEN -			- CHIME -		
		1	2	3	4	1	2	3	1	2	3
5	MALLET 2	XYLOPHONE					- MARIMBA -		- GLASS HIT -		
		1	2	3	4	5	1	2	1	2	3
6	GUITAR 1	- JAZZ GUITAR -		- ACOUSTIC GUITAR -		- SOLID GUITAR -		- MUTE GUITAR -		- DISTORTION GUITAR -	
		1	2	1	2	1	2	1	2	1	2
7	GUITAR 2	PIZZICATO	HARP	- ACOUSTIC BASS -		ELECTRIC BASS			- SLAP BASS -		
				1	2	1	2	3	1	2	3
8	ETHNIC	STEEL DRUM	- AFRICAN -			- SHAMISEN -		- ORIENTAL -			
			1	2	3	1	2	1	2	3	4
9	ORGAN	- JAZZ ORGAN -					- PIPE ORGAN -		- THEATER ORGAN -		
		1	2	3	4	5	1	2	1	2	3
10	STRINGS	- STRINGS -				SLOW STRINGS		- SYNTHESIZER STRINGS -			SOLO VIOLIN
		1	2	3	4	1	2	1	2	3	
11	VOCAL	- VOCAL -							- HUMMING -		
		1	2	3	4	5	6	7	1	2	3
12	BRASS 1	- TRUMPET -			- TROMBONE -			- HORN -			BRASS ENSEMBLE
		1	2	3	1	2	3	1	2	3	
13	BRASS 2	- SYNTHESIZER BRASS -									
		1	2	3	4	5	6	7	8	9	10
14	REED	- SAXOPHONE -			- CLARINET -			HARMONICA	OBOE	- BASSOON -	
		1	2	3	1	2	3			1	2
15	FLUTE	- FLUTE -						- PAN FLUTE -			GLASS HARMONICA
		1	2	3	4	5	6	1	2	3	
16	SPECIAL (SLOW ATTACK)	PIANO	E PIANO	HARPSICHORD	VIBRAPHONE	GLOCKEN	CHIME	XYLOPHONE	GUITAR	STEEL DRUM	AFRICAN

Second row parameters



Third row parameters



■ VARIATION

	0	1	2	3	4	5	6	7	8	9
VIBRATO	OFF									
TREMLO	OFF									

B: BASIC
H: HARMONICS

Fourth row parameters



(AX3)

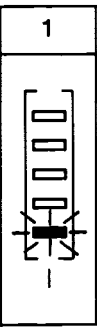
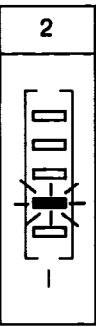
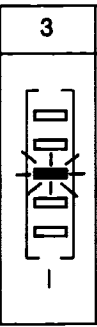
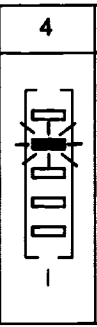



(AX5/AX7)



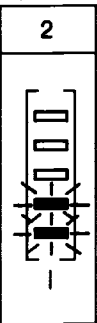
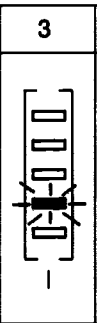
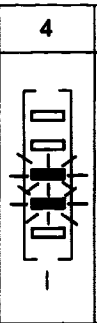
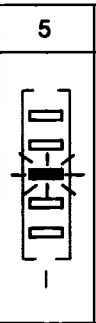
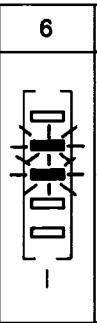
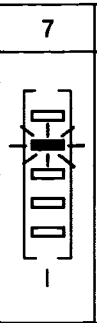
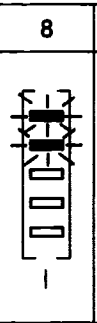

	0	1	2	3	4	5	6	7	8	9	
AUTO BEND	(BASIC)	OFF	OFF		OFF		OFF		OFF		PORTAMENTO
	(HARMONICS)	OFF									PORTAMENTO
HARMONICS INTERVAL	(semi-tone)	-12	-7	-5	0	5	7	12	17	19	24
	(note)	(-C)	(-F)	(-G)	(C)	(+F)	(+G)	(+2C)	(+2F)	(+2G)	(+3C)

AX3 Relation between level and Indicator

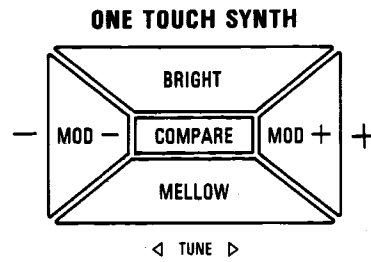
■ ATTACK VARIATION/BODY VARIATION

Level	1	2	3	4	5
Display					

■ Other parameters

Level	0	1	2	3	4	5	6	7	8	9
Display										

One Touch Synth



With the **ONE TOUCH SYNTH** feature, by merely pressing one button, you can modify the parameters and effects of the currently selected voice.

Change the brightness of the tone with the **BRIGHT** and **MELLOW** buttons.

Change the amount of effect, such as vibrato or tremolo, with the **MOD-** and **MOD+** buttons.

■ MOD- ↔ MOD+

Relation between MOD level and type effect

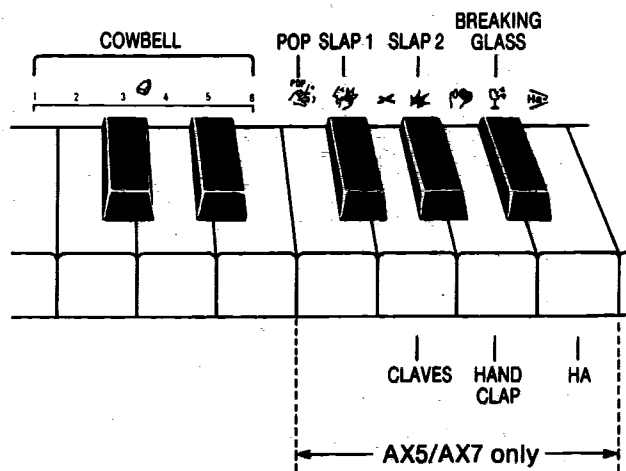
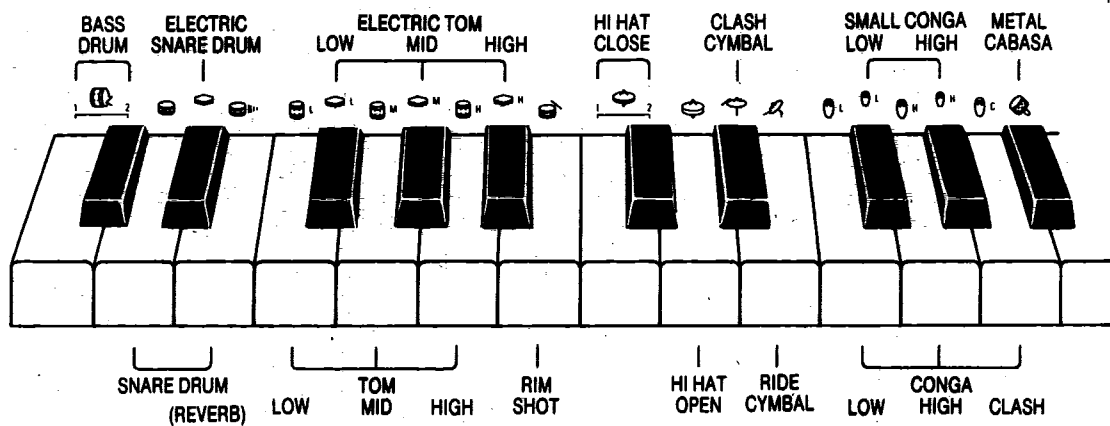
5	Octave vibrato
4	Honky tonk
3	Funny voice
2	Ensemble
1	Delay vibrato
0	Preset data
-1	MOD Cancel
-2	Organ tremolo
-3	Vibe tremolo
-4	Mandolin tremolo
-5	Octave tremolo

Keyboard Percussion

Press the **KEYBOARD PERCUSSION** button on to turn your keyboard into a whole band of percussive instruments and other special sounds.



<Percussive keyboard>



One Touch Play

ONE TOUCH
PLAY

23 preset sound combinations for all rhythms

If this button is pressed, the appropriate voice and effect registration for the rhythm chosen are automatically set. Therefore, immediate play is possible if a rhythm is selected and this button is pressed for several seconds until the panel indicators change. The **AUTO PLAY CHORD** is automatically selected and the keyboard is split. Play the melody on the right keyboard and chords on the left.

Use the **CONDUCTOR** and **POLY, SOLO** voice buttons if you want to change sounds on the right keyboard. Press **RHYTHM** and **ONE TOUCH PLAY** buttons if you want to play the preset again.

RHYTHM

4	<input type="checkbox"/>	<input type="radio"/>	MARCH/ COUNTRY	WALTZ/ JAZZ	SWING	SHUFFLE	BALLAD
3	<input type="checkbox"/>	<input type="radio"/>	TANGO/ RHUMBA	BOSSA- NOVA	SAMBA	GUA- RACHA	SALSA
2	<input type="checkbox"/>	<input type="radio"/>	8 BEAT	16 BEAT	REGGAE	SWING ROCK	DISCO
1	<input type="checkbox"/>	<input type="radio"/>	ROCK 1	ROCK 2	ROCK 3	POP 1	POP 2
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	LEVEL	INST CANCEL	TIE	TOUCH	PART CLEAR	TRIPLET	
			COMPOSER				

RHYTHM	(RHYTHM VARIATION)	COMBINATION OF SOUNDS
MARCH/COUNTRY	(1 or 2)	MARCHING BAND
	(3 or 4)	COUNTRY & WESTERN
WALTZ/JAZZ	(1 or 2)	PIANO SOLO (AX3), CLARINET SOLO (AX7/AX5)
	(3 or 4)	JAZZ ORGAN
SWING		JAZZ COMBO
SHUFFLE		ROCK & ROLL BAND
BALLAD		COUNTRY BALLAD
TANGO/RHUMBA	(1 or 2)	TRUMPET SOLO (AX3), SAXOPHONE SOLO (AX5/AX7)
	(3 or 4)	LATIN BAND (AX3), TRUMPET SOLO (AX5/AX7)
BOSSANOVA		LATIN GUITARS (AX3), ORGAN BOSSA (AX5/AX7)
SAMBA		LATIN COMBO
GUARACHA		CARIBBEAN BAND
SALSA		SALSA BRASS
8 BEAT		EASY LISTENING (AX3), ROCK & ROLL PIANO (AX5/AX7)
16 BEAT		SLOW 16
REGGAE		REGGAE BAND
SWING ROCK		SYNTHESIZER (AX3), SYNTHESIZER BRASS (AX5/AX7)
DISCO		DISCO BRASS
ROCK 1		OUTER SPACE
ROCK 2		ROCK GUITAR
ROCK 3		ORIENTAL SYNTHESIZER
POP 1		STEVIE BAND
POP 2		DISTORTION BRASS