

## II-2 RHYTHM

Press the QUIT key to display "MULTI MENU" on the LCD top line.



MULTI MENU  
1. SEQUENCER

2. RHYTHM  
3. EXTRA FUNCT.  
4. EXT. CONTROL

◆ The second MULTI MENU function is "RHYTHM" and its operation is outlined on the left. If you mistakenly press the ENTER key without operating "RHYTHM", press the QUIT key to exit the mode.

◆ In RHYTHM mode of MULTI MENU, the four jobs below can be performed:

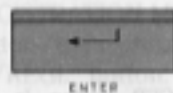
RHYTHM PATTERN EDIT	Allows you to write the Rhythm patterns in real time or by step input, using the keys of the upper and lower keyboards.
RHYTHM INSTRUMENT LEVEL	Allows you to control the volume of all built-in rhythm instruments.
RHYTHM INSTRUMENT PAN	Allows you to control the orientation (direction from the speakers) of all built-in rhythm instruments.
KEYBOARD PERCUSSION ASSIGN	Allows you to assign the rhythm instruments to the keys of the three keyboards.

Use the "V" and "A" keys to display "2. RHYTHM" at the LCD bottom line.



MULTI MENU  
2. RHYTHM

Press the ENTER key.



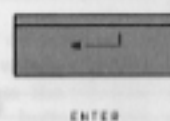
RHYTHM  
1. RHY.PTN.EDIT

[QUIT]

Use the "V" and "A" keys to select a job, then press the ENTER key.



RHYTHM  
2. RHY.INST.LEVEL  
3. RHY.INST.PAN  
4. KBD PERC.ASSGN  
1. RHY.PTN.EDIT



2-(1) RHYTHM  
PATTERN  
EDIT

[→Next Page]

2-(2) RHYTHM  
INSTRUMENT  
LEVEL

[→Page 62]

2-(3) RHYTHM  
INSTRUMENT  
PAN

[→Page 63]

2-(4) KEYBOARD  
PERCUSSION  
ASSIGN

[→Page 64]

When the START switch [▶] is pressed, the rhythm is started according to the executed job.



Switch KEYBOARD PERCUSSION to ON, then play the assigned keys.



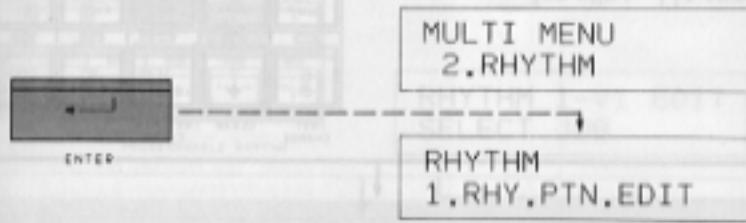
To save the data in the RAM Pack [→Page 74]

## 2-(1) RHYTHM PATTERN EDIT

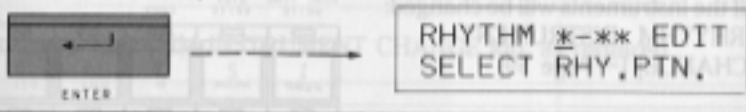
This function allows you to create the desired Rhythm patterns and Fill In patterns, using a combination of six different jobs, including REAL TIME WRITE, STEP WRITE, and so on.



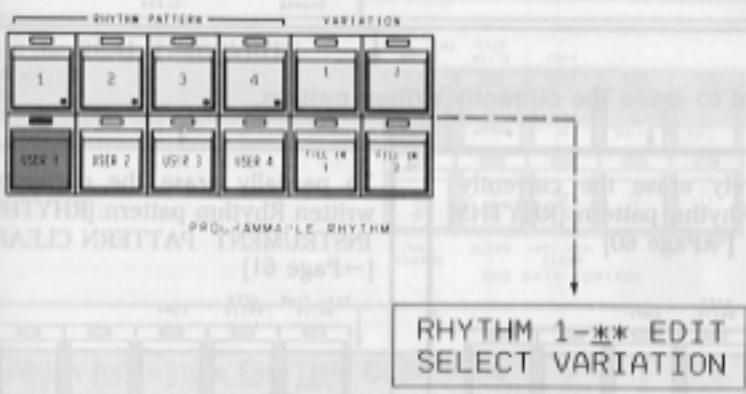
Display "2. RHYTHM" at the LCD bottom line, then press the ENTER key. [→Previous Page]



Press the ENTER key.



Press one of the four flashing USER buttons.



◆ When "1.RHY.PTN.EDIT" is displayed at the LCD bottom line, then the ENTER key is pressed, "\*\*\*" is displayed at the LCD top line and the four USER buttons begin flashing. First press one of the flashing USER buttons to select the pattern to be edited.

◆ When a Reset operation is performed, the below patterns are copied to the USER buttons as pre-edit patterns:

- USER 1 → [04:16 BEAT 1]
- USER 2 → [07: BOUNCE 1]
- USER 3 → [11: 4 BEAT 1]
- USER 4 → [21: WALTZ 1]

◆ When a USER button is pressed, the four buttons of VARIATION 1, 2, FILL IN 1, and 2 begin flashing.

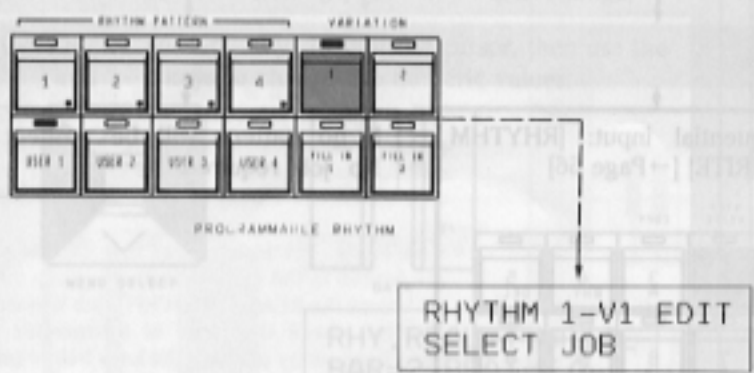
VARIATION 1, 2: Press one of these buttons to edit a Rhythm pattern.

FILL IN 1, 2: Press one of these buttons to edit a Fill In pattern.

◆ RHYTHM PATTERN EDIT allows you to edit and memorize two Rhythm patterns and two Fill In patterns per USER button.

	USER 1	USER 2	USER 3	USER 4
VARIATION	1 2	1 2	1 2	1 2
FILL IN	1 2	1 2	1 2	1 2

To edit a Rhythm pattern, press either VARIATION 1 or 2.



To edit a Fill In pattern, press either FILL IN 1 or 2.



Press one of the SUB DATA numeric buttons to select the job to be executed.

Press the ENTER key



◆ The jobs that are executed by RHYTHM PATTERN EDIT are displayed on the outside of the SUB DATA CONTROL section.

◆ Once the ENTER key is pressed, the BAR and BEAT settings, the set BAR and BEAT values cannot be changed. If you wish to change them, do the REAL TIME WRITE operation again from the very beginning.

# RHYTHM PATTERN EDIT JOBS

Decide whether or not to edit the currently set pattern or to copy and edit another pattern.

To edit the currently set pattern: No job is required.

To copy and edit a Preset pattern: [RHYTHM PATTERN COPY] [→Page 58]



Decide whether or not to change the currently set instruments.

If the instruments will not be changed: No job is required.

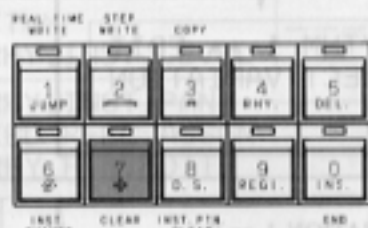
If the instruments will be changed: [RHYTHM INSTRUMENT CHANGE] [→Page 59]



Before writing a pattern, decide whether or not to erase the currently written pattern.

To write without erasing the Rhythm pattern: No job is required.

To entirely erase the currently written Rhythm pattern: [RHYTHM CLEAR] [→Page 60]



To partially erase the currently written Rhythm pattern: [RHYTHM INSTRUMENT PATTERN CLEAR] [→Page 61]



Select the method for pattern writing.

For input in real time: [RHYTHM REAL TIME WRITE] [→Next Page]



For sequential input: [RHYTHM STEP WRITE] [→Page 56]



If no pattern will be written: No job required.

After completing the required jobs, press the "END" button to terminate RHYTHM PATTERN EDIT.



# RHYTHM REAL TIME WRITE

Enter the RHYTHM PATTERN EDIT mode, then press the buttons of the pattern to be edited (in this example, USER 1 and VARIATION 1). [→Page 51]



RHYTHM 1-V1 EDIT  
SELECT JOB

Perform a RHYTHM PATTERN COPY job, as required.

Perform a RHYTHM INSTRUMENT CHANGE job, as required.

Perform a RHYTHM CLEAR of INST. PATTERN CLEAR job, as required.

Press the REAL TIME WRITE Button (1).



◆ In the case USER 1 and VARIATION 1 are pressed, the pressed buttons continue flashing and "1-V1" is displayed on the LCD top line. (The following explanation is based on the example using USER 1 and VARIATION 1.)

◆ Referring to the previous page, before writing a Rhythm pattern, execute the jobs you think are necessary. You can also enter the RHYTHM REAL TIME WRITE job directly without performing other jobs.

	Pattern	Instruments
No job required	Currently set pattern	Currently set instruments
PATTERN COPY	Pattern is changed after copying	Instruments are changed after copying
INSTRUMENT CHANGE	Currently set pattern	Change of currently set instruments
CLEAR	Entirely erases the currently set pattern	Currently set instruments
INSTRUMENT PATTERN CLEAR	Partially erases the currently set pattern	Currently set instruments

## Operation following a RHYTHM CLEAR Job

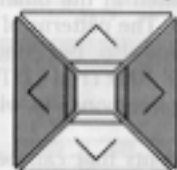
Confirm the number of bars and the beat to be edited.

RHY. REAL T. WRITE  
BAR=2 BEAT=4/4

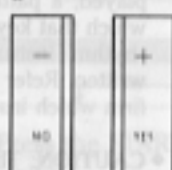
(Change)

(No Change)

Use the ">" and "<" keys to shift the cursor, then use the "+" and "-" keys to change the numeric values.



MENU SELECT

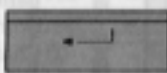


DATA

RHY. REAL T. WRITE  
BAR=2 BEAT=3/4

BAR=1 BEAT=4/4  
BEAT=5/4  
BEAT=1/4  
BEAT=2/4

Press the ENTER key.



ENTER

(To Next Page)

(To Next Page)

◆ By pressing REAL TIME WRITE Button (1), it is automatically determined whether or not a RHYTHM CLEAR job has already been performed, then the LCD changes to one of two types of displays:

**When CLEAR was performed:** The LCD display becomes as shown on the left.

**When CLEAR was not performed:** The LCD display becomes as shown on the next page.

◆ When a REAL TIME WRITE job is entered after entirely erasing the pattern by a RHYTHM CLEAR job, it becomes possible to set the number of bars and the beat for the pattern to be written. First, decide whether or not to change the bar number and beat.

**When change is not required:** Only press the ENTER key.

**When change is required:** Use the ">" and "<" keys to shift the cursor, then use the "+" and "-" keys to change the numeric values.

◆ When writing a Rhythm pattern (when the VARIATION button is pressed), the "BAR" can be set to "2" or "1". When writing a Fill In pattern (when the FILL IN button is pressed), the "BAR" is fixed at "1". In either case, the "BEAT" setting can be selected from a range of 1/4 to 5/4.

◆ Once the ENTER key is pressed after completing the BAR and BEAT settings, the set BAR and BEAT values cannot be changed. If you wish to change them, do the REAL TIME WRITE operation again from the very beginning.

(From Previous Page)

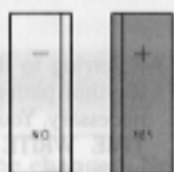
Confirm the Quantize status and Click ON/OFF status.

▶ CLICK=ON  
Q=1/4 CLICK=1/4

Shift the cursor using the "<" and ">" (left/right) keys and the " $\wedge$ " and " $\vee$ " (up/down) keys, then change the numeric value (or ON/OFF status) using the "+" and "-" keys.



MENU SELECT



DATA

OFF

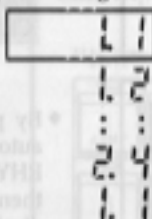
▶ CLICK=ON  
Q=1/6 CLICK=1/4

Q=1/8 CLICK=1/6  
1/12 1/8  
1/16 1/12  
:  
1/96 1/16  
1/4

- When the ENTER key is pressed after setting BAR and BEAT (or when a REAL TIME WRITE job is entered without performing RHYTHM CLEAR), the LCD display becomes as shown on the left. Before starting to write, perform the setting of Quantize and Click.

Q (Quantize)	The length (units) of the notes to be written are set using the "+" and "-" keys. The nine unit types that can be set are: 1/4, 1/6, 1/8, 1/12, 1/16, 1/24, 1/32, 1/48, and 1/96. The larger the denominator of the numeric value, the shorter the note. (See "NOTES" on the next page.)
CLICK ON/OFF	Shift the cursor to the LCD top line using the " $\wedge$ " key, then select the ON/OFF status using the "+" and "-" keys. When CLICK ON is set, a clicking (metronome) sound is produced during writing.
CLICK Quantize	Shift the cursor to the LCD bottom line using the ">" key, then set the Quantize value (clicking units) of Click using the "+" and "-" keys. The five unit types that can be set are: 1/4, 1/6, 1/8, 1/12, and 1/16.

Press the START switch ], then begin writing the pattern.



- Pressing the START switch enables the status wherein a pattern can be written. In the "CLICK=ON" status, a clicking sound is produced and, if RHYTHM CLEAR was not performed, a pre-edit Rhythm pattern is also sounded.

- When the bar number and beat are displayed on the BAR/BEAT display and you reach the end of the last bar that can be written, the BAR/BEAT display returns to "1•1". This operation can be repeated any number of times. Be sure to perform pattern writing viewing this display. In addition, the tempo while writing can be controlled using the TEMPO knob.

### PATTERN WRITE

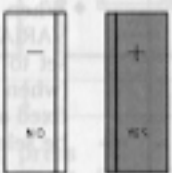
Referring to the [HX RHYTHM LIST], confirm the correspondence between the keys and instruments, then play a key on the upper (or lower) keyboard.



Change the Quantize value, then write the pattern of other instruments.



MENU SELECT



DATA

▶ CLICK=ON  
Q=1/8 CLICK=1/4

(Repeat)

- When a key that sounds a rhythm instrument is played, a pattern is written in the timing within which that key is played. The patterns of multiple rhythm instruments can also be concurrently written. Refer to the [HX RHYTHM LIST] to confirm which instrument corresponds to which key.

- CAUTION:** The instruments that can be written are limited to the eight-instrument group that was set before the REAL TIME WRITE job was entered. You can check the types of instruments which have been set by pressing the keys before pressing the START switch. Regarding the instrument groups that comprise the Preset patterns, see the [HX RHYTHM LIST].

- The general procedure for writing a pattern from scratch after performing RHYTHM CLEAR is as follows:

- 1) First, using a rough Quantize value, write the patterns of the basic instruments (e.g., bass drum, hi-hats, etc.).
- 2) Change to a finer Quantize value, then write the patterns of other instruments while listening to the patterns already written.

(From Next Page)

(To Next Page)

(To Previous Page)

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### PATTERN DELETION

Set the Quantize value of the pattern to be deleted to the same value used during writing.



▶ CLICK=ON  
Q=1/8 CLICK=1/4

While depressing the leftmost key of the lower keyboard, press the key(s) of the instrument(s) to be deleted.



◆ If you could not write a pattern with the desired timing, the pattern can be erased using the procedure shown on the left. While depressing the leftmost key of the lower keyboard, continuously press the key of the instrument(s) to be deleted for the desired length of deletion. After the pattern is deleted, you can rewrite it.

◆ **CAUTION:** Patterns cannot be deleted unless the same Quantize value is set to the same value used for writing such patterns. Moreover, if the patterns of multiple instruments share the same Quantize value, they can be simultaneously deleted.

### NOTES:

● The relationship between Quantize values and notes is shown below. Be sure to refer to this table during input.

Q	Note Duration (Unit)
1/4	
1/6	
1/8	
1/12	
1/16	
1/24	
1/32	
1/48	
1/96	

● The Quantize value becomes the note unit when writing patterns. REAL TIME WRITE, however, also functions to automatically correct the positions where the notes are written according to the set Quantize value. When keys are played to write a pattern, any deviation (forward or backward) in the played timing that is within  $\pm 50\%$  of the note duration set by the Quantize value will be corrected so that the correct timing will be written.

◆ When "MEMORY FULL" is displayed, if a PATTERN DELETE operation is performed without stopping the rhythm, it becomes possible to rewrite the pattern.

◆ When the ENTER key is pressed in the "NO" status, the pattern is restored to its status prior to the performance of the WRITE operation. When the ENTER key is pressed after selecting "YES", the current pattern is saved.

◆ Except when writing numerous notes using a fine Quantize value, the memory will not become full during usual input.

◆ After completing the required WRITE operations, press the START switch and stop the rhythm. The written pattern is saved at the buttons that were pressed upon entering the RHYTHM PATTERN EDIT mode (in the left example, USER 1 and VARIATION 1).

Perform the WRITE operations again, as required.

Patterns can be written to the other USER buttons using the same procedure.

### When the Memory is FULL

Press the START switch to stop the rhythm.

MEMORY FULL  
STOP RHYTHM!!!

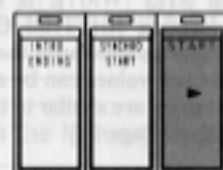


Using the "+" and "-" keys, decide whether or not to save the pattern, then press the ENTER key.



RHY.R.T.W. 1-V1  
SAVE PTN.? Y/N

Press the START switch to terminate writing.



RHYTHM 1-V1 EDIT  
SELECT JOB

Press the END button (0) to terminate RHYTHM PATTERN EDIT. When the rhythm is started, the edited pattern is produced.



# RHYTHM STEP WRITE

Enter the RHYTHM PATTERN EDIT mode, then press the buttons of the pattern to be edited. [→Page 51]



RHYTHM 1-V1 EDIT  
SELECT JOB

Perform a RHYTHM PATTERN COPY, INSTRUMENT CHANGE, CLEAR and/or INSTRUMENT PATTERN CLEAR job, as required.

Press the STEP WRITE (2) button.



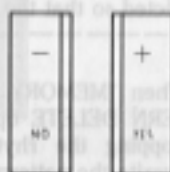
## Operation following a RHYTHM CLEAR Job

Set the number of bars and the beat to be edited. [→PAGE 53]

RHY. STEP WRITE  
BAR=2 BEAT=4/4

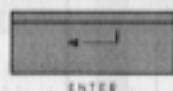


MENU SELECT



DATA

Press the ENTER key.



ENTER

Set the Quantize and Click values.

CLICK=ON  
Q=1/4 CLICK=1/4



MENU SELECT



DATA



Press the START switch [▶], then begin writing the pattern.

BAR BEAT +/- ■■  
1 1 1/4

◆ When USER 1 and VARIATION 1 are pressed, the pressed buttons continue flashing and "1-V1" is displayed at the LCD top line.

◆ Before writing a Rhythm pattern, refer to Page 52 and 53, then perform the jobs you think are necessary. You can also directly start with the RHYTHM STEP WRITE job without performing other jobs.

◆ By pressing STEP WRITE Button (2), similar to the case of REAL TIME WRITE, it is automatically determined whether or not a RHYTHM CLEAR job has already been performed.

**When CLEAR was performed:** The LCD display becomes as shown on the left so that the number of bars and the beat can be set. The operating method and so on are similar to the case of REAL TIME WRITE. [→Page 53]

**When CLEAR was not performed:** "Q" and "CLICK" are displayed on the LCD so that the Quantize and Click values can be set.

◆ Once the ENTER key is pressed after completing the BAR and BEAT settings, the set BAR and BEAT values cannot be changed.

◆ When the ENTER key is pressed after setting BAR and BEAT (or when STEP WRITE is entered directly without performing RHYTHM CLEAR), the LCD displays changes as shown on the left so that the Quantize and Click values can be set. The operating method and so on are similar to the case of REAL TIME WRITE. [→Page 54]

◆ When the START switch is pressed, you enter the status wherein a pattern can be written, but the rhythm is not started.

◆ The LCD display changes as shown on the left to indicate the position where writing will begin. The value below "BAR" indicates the bar number, the value below "BEAT" indicates the beat number, and the numerical value below "+/-" indicates your position within the beat according to the currently set Quantize value.

(To Next Page)

(From Previous Page)

### PATTERN WRITING

Use the "+" and "-" keys to determine the position to begin writing, then press the keys of the upper (or lower) keyboard to write a pattern.

NO YES DATA

BAR	BEAT	+/-	■ ■ ■
1	2	1/4	
1	3	1/4	
:	:	:	
:	:	:	
2	4	1/4	
1	1	1/4	

To write other Instrument patterns, use the "Λ" key to change the LCD display then use the "+" and "-" keys to change the Quantize value.

NO YES DATA

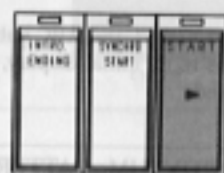
CLICK=ON  
Q=1/8 CLICK=1/4

(Repeat)

**PATTERN DELETION** While depressing the leftmost key of the lower keyboard, press the key(s) of the instrument(s) to be deleted. [→Page 55]

When the Memory becomes full [→Page 55]

Press the START switch to terminate writing.



RHYTHM 1-V1 EDIT  
SELECT JOB

Press the END button (0) to terminate RHYTHM PATTERN EDIT. When the rhythm is started, the edited pattern is produced.

◆ The general procedure for writing a pattern with RHYTHM STEP WRITE is as follows:

- 1) Set the Quantize value(s) of the instrument(s) to be written first. (In the left example,  $Q=1/4$ )
- 2) Press the "+" key to advance the LCD display to the position where you will begin writing. By pressing the "-" key, you can return the LCD display to previously displayed values. (In the left example, the display advances in the order of  $1/4 \rightarrow 1/4 \rightarrow 1/4$  and so on. When the Quantize value is set to  $1/8$ , however, it will advance in the order of  $1/8 \rightarrow 2/8 \rightarrow 1/8 \rightarrow 2/8 \rightarrow 1/8$  and so on.)
- 3) Press the key corresponding to the instrument to be written, then write one note. Next, use the "+" key to advance the LCD display to the next position to be written and repeat the WRITE operation. You can also press multiple keys to concurrently write multiple Instrument patterns. (See the [HX RHYTHM LIST] for the relationship between the instruments and keys.)
- 4) Press the "Λ" key to return the LCD display to "Q" and "CLICK", then set the Quantize value(s) for the instrument(s) to be written next.
- 5) Press the "v" key to change the LCD display, then perform Steps 2) and 3) above.
- 6) Perform Steps 4) and 5) the required number of times.

◆ **CAUTION:** The instruments that can be written are limited to the eight-instrument group that was set before the STEP WRITE job was entered. You can check the types of instruments which have been set by pressing the keys before pressing the START switch.

◆ When the "+" key is continuously depressed, the written pattern is sounded at the currently set tempo so you can check if it is correctly written.

◆ The written pattern can be deleted by the same operation used for REAL TIME WRITE. When performing deletion, be sure to use the same Quantize value used for writing.

#### NOTE:

● Even the detailed notes that are hard to input in REAL TIME WRITE mode can be input without error in STEP WRITE mode. To perform writing efficiently, first input the basic Instrument patterns in REAL TIME WRITE mode, then input the detailed notes in STEP WRITE mode.

◆ The operation in case "MEMORY FULL" is displayed on the LCD is similar to the case of REAL TIME WRITE.

◆ When the required writing is completed, press the START switch. The written pattern is saved in the buttons that were pressed upon entering the RHYTHM PATTERN EDIT mode (in the left example, USER 1 and VARIATION 1).

Perform a WRITE operation again, as required.

Patterns can be written to the other USER buttons using the same procedure.



# RHYTHM PATTERN COPY

Enter the RHYTHM PATTERN EDIT mode, then press the buttons of the pattern to be edited. [→Page 51]



RHYTHM 1-V1 EDIT  
SELECT JOB

Press the COPY button (3).



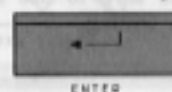
RHY.PTN.COPY ^V  
45:USER 1 V1J

Use the "V" and "A" keys to select the Rhythm pattern to be copied.



RHY.PTN.COPY ^V  
01:8 BEAT 1 V1J  
02:8 BEAT 1 V2  
:  
43:WALTZ 2 V1  
44:WALTZ 2 V2  
45:USER 1 V1  
:  
52:USER 4 V2

Press the ENTER key.



ABC.PTN.COPY ^V  
45:USER V1J

Use the "V" and "A" keys to select the Accompaniment pattern to be copied.



ABC.PTN.COPY ^V  
01:8 BEAT 1 V1J  
02:8 BEAT 1 V2  
:  
43:WALTZ 2 V1  
44:WALTZ 2 V2  
45:USER 1 V1  
:  
52:USER 4 V2

Press the ENTER key.



RHYTHM 1-V1 EDIT  
SELECT JOB

Press the END button (0) to terminate RHYTHM PATTERN EDIT. When the rhythm is started, the copied pattern is produced.

◆ Though the USER 1 and VARIATION 1 buttons were pressed for the left example, the procedure below can also be performed by pressing the FILL IN button in place of the VARIATION button.

◆ When the COPY button is pressed, the LCD display changes as shown on the left. The source Rhythm pattern to be copied is shown on the LCD bottom line. At the moment the COPY button is pressed, the pattern shown on the LCD bottom line becomes the destination pattern of the COPY operation.

◆ When a VARIATION button is pressed upon entering the RHYTHM PATTERN EDIT mode, "V1" or "V2" is displayed at the right of the LCD bottom line so that the Rhythm pattern can be copied. When a FILL IN button is pressed at such time, "F1" or "F2" is displayed so that a Fill In pattern can be copied.

◆ Each time the "V" key is pressed, the pattern number displayed on the LCD bottom line is advanced by one and the source pattern changes in correspondence. By pressing the "A" key, you can return to the preceding pattern number.

◆ The source pattern to be copied can be selected using the SUB DATA numeric buttons in place of the "V" and "A" keys. Input the pattern number using the SUB DATA numeric buttons, then press the ENTER key. The pattern numbers are as follows:

01-44: The numbers corresponding to the Preset patterns. "01" and "02" correspond to "V1" and "V2" (or "F1" and "F2") of 8 BEAT 1, and "43" and "44" correspond to "V1" and "V2" (or "F1" and "F2") of WALTZ 2.

45-52: The numbers corresponding to the four USER patterns.

◆ When the pattern to be copied is displayed, then the ENTER key is pressed, that pattern is saved.

◆ When the ENTER key is pressed, then the COPY operation of the Rhythm (or Fill In) pattern is terminated, the LCD displays changes as shown on the left so that the Auto Accompaniment pattern (ABC pattern) synchronized with the Rhythm can be copied.

When the ABC pattern is copied, the patterns of RHYTHMIC CHORD and MELODIC CHORD that correspond to the source pattern as well as the Bass pattern of AUTO BASS CHORD are saved at the USER button.

◆ The operating method is similar to that for copying a Rhythm pattern and such pattern can also be selected using the SUB DATA numeric buttons.

◆ When the ENTER key is pressed, the ABC pattern is saved, the LCD returns to its initial display, and other jobs can be selected.

To perform other RHYTHM PATTERN EDIT jobs [→Pages 53, 56, 59, 60, and 61]

◆ **CAUTION:** When a pattern is copied, the instruments (an eight-instrument group) of that pattern are also saved at the destination pattern. [→HX RHYTHM LIST]

# RHYTHM INSTRUMENT CHANGE

Enter the RHYTHM PATTERN EDIT mode, then press the buttons of the pattern to be edited. [→Page 51]



RHYTHM 1-V1 EDIT  
SELECT JOB

Press the INST. CHANGE button (6).



INST. CHANGE 1.Ride

Use the "v" and "∧" keys to display the instrument to be changed on the LCD bottom line.



INST. CHANGE 2.HH  
3.SD-1  
4.Tom  
5.Syn-drum  
6.BD  
7.Hand-Claps  
8.Crash  
1.Ride

While depressing the key corresponding to the instrument to be newly assigned, press the ENTER key.



INST. CHANGE 7.SD-2

(Repeat)

Press the ENTER key.



RHYTHM 1-V1 EDIT  
SELECT JOB

Press the END button (0) to terminate RHYTHM PATTERN EDIT. When the rhythm is started, the pattern containing the changed instrument(s) is produced.

◆ Though the USER 1 and VARIATION 1 buttons were pressed for the left example, the procedure below can also be performed by pressing the FILL IN button in place of the VARIATION button.

◆ When the INST. CHANGE button is pressed, the LCD display changes as shown on the left. The LCD bottom line displays the names of the eight instruments currently assigned to the pattern to be edited. [→HX RHYTHM LIST]

◆ Each time the "v" key is pressed, the instrument name displayed at the LCD bottom line is advanced by one. By pressing the "∧" key, you can return to the preceding instrument name. Display the name of instrument to be changed.

◆ After displaying the instrument to be changed on the LCD bottom line, press the key corresponding to the instrument you wish to newly assign while referring to the [HX RHYTHM LIST]. While the instrument is being sounded and its key is being pressed, its name is displayed on the LCD bottom line so that the assigned instrument can be checked.

◆ When the ENTER key is pressed while depressing the key (of the upper or lower keyboard) corresponding to the instrument, the display of the LCD bottom line changes to display the new instrument.

◆ Using the same operation, try replacing several other instruments with new instruments, as required.

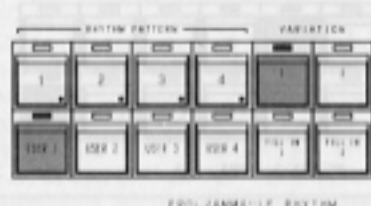
◆ When the ENTER key is pressed, the changed instruments are saved, and the LCD returns to its initial display so that other jobs can be selected.

To perform other RHYTHM PATTERN EDIT jobs [→Pages 53, 56, 60, and 61]

Patterns can be written to the other USER buttons using the same procedure, as required.

# RHYTHM CLEAR

Enter the RHYTHM PATTERN EDIT mode, then press the buttons of the pattern to be edited. [→Page 51]



RHYTHM 1-V1 EDIT  
SELECT JOB

Press the CLEAR button (7).



RHY.PTN. 1-V1  
CLEAR PTN.? Y/N

(YES)

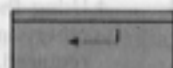
(NO)

Press the "+/YES" key.



RHY.PTN. 1-V1  
CLEAR PTN.? Y/N

Press the ENTER key.



ENTER

(YES)

(NO)

"CLEARED!" is displayed on the LCD bottom line for about two seconds.

RHY.PTN. 1-V1  
CLEARED!

The LCD returns to its initial display so that other jobs can be selected.

RHYTHM 1-V1 EDIT  
SELECT JOB

Select the Rhythm REAL TIME WRITE job or STEP WRITE job, then write a pattern. [→Pages 53 and 56]

◆ Though the USER 1 and VARIATION 1 buttons were pressed for the left example, the procedure below can also be performed by pressing the FILL IN button in place of the VARIATION button.

◆ When the CLEAR button is pressed, the LCD display changes as shown on the left, prompting you to decide whether or not to perform a RHYTHM CLEAR job.

**When RHYTHM CLEAR is not required:** Only press the ENTER key.

**When RHYTHM CLEAR is required:** Perform the operation described below.

◆ Press the "+/YES" key, shift the cursor below "Y", then press the ENTER key. All instrument patterns of the pattern to be edited will be erased.

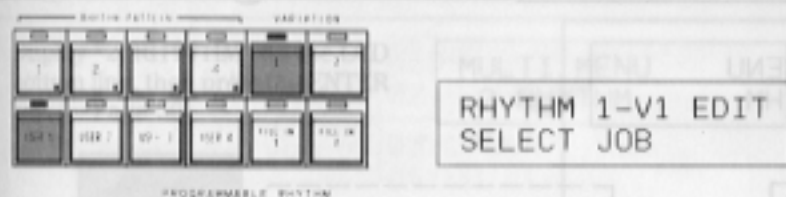
## NOTE:

● When the RHYTHM CLEAR job is executed, the pattern (sounding of its instruments) is completely erased, but the data on the eight instruments assigned to that pattern remains saved. To change the instruments, perform a RHYTHM INSTRUMENT CHANGE job. [→Previous Page] Moreover, by performing a RHYTHM PATTERN COPY job before performing RHYTHM CLEAR, you can copy the instrument data together with the pattern. [→Page 58]

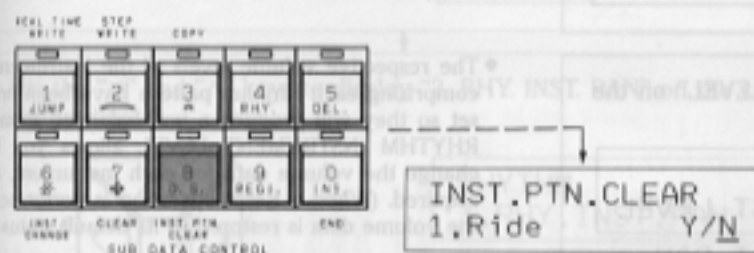
● **CAUTION:** Even when RHYTHM CLEAR is executed, the ABC pattern saved in the Rhythm pattern to be edited will remain without being erased. When a completely new Rhythm pattern is written after executing RHYTHM CLEAR, therefore, the new pattern may not synchronize well with the Auto Accompaniment patterns. In case you write a completely new Rhythm pattern, enter the RHYTHM PATTERN COPY job before executing RHYTHM CLEAR, and copy the ABC pattern of the Rhythm pattern closest to the pattern you plan to write. [→Page 58]

# RHYTHM INSTRUMENT PATTERN CLEAR

Enter the RHYTHM PATTERN EDIT mode, then press the buttons of the pattern to be edited. [→Page 51]



Press the INST. PTN. CLEAR button (8).



Use the "V" and "A" keys to display the name of the Instrument you wish to delete on the LCD bottom line.



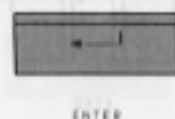
INST. PTN. CLEAR  
2. HH Y/N  
3. SD-1 Y/N  
4. Tom Y/N  
5. Syn-drum Y/N  
6. BD Y/N  
7. Hand-Claps Y/N  
8. Crash Y/N  
1. Ride Y/N



Press the "+/YES" key.

INST. PTN. CLEAR  
2. HH Y/N

When the ENTER key is pressed, the Instrument pattern is deleted. The LCD returns to its initial display so that a RHYTHM PATTERN EDIT job can be selected.



2. HH  
CLEARED!

RHYTHM 1-V1 EDIT  
SELECT JOB

(Repeat)

Enter a REAL TIME WRITE job or STEP WRITE job, then rewrite the deleted Instrument pattern. [→Pages 53 and 56]

◆ Though the USER 1 and VARIATION 1 buttons were pressed for the left example, the procedure below can also be performed by pressing the FILL IN button in place of the VARIATION button.

◆ When the INST. PTN. CLEAR button is pressed, the LCD display changes as shown on the left. The LCD bottom line displays the names of the eight instruments currently assigned to the pattern to be edited.

◆ Each time the "V" keys is pressed, the instrument display on the LCD bottom line is advanced by one. By pressing the "A" key, you can return to the preceding instrument. Display the name of the instrument to be deleted.

◆ After displaying the name of the instrument to be deleted on the LCD, press the "+/YES" key to shift the cursor below "Y". Next, when the ENTER key is pressed, the pattern of the instrument displayed on the LCD is deleted.

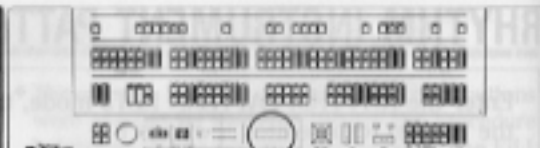
◆ When one RHYTHM INSTRUMENT PATTERN CLEAR job is executed, only one Instrument pattern can be deleted. To delete multiple Instrument patterns, repeat the same job the required number of times.

◆ A RHYTHM INSTRUMENT PATTERN CLEAR job only deletes the pattern of an instrument but does not delete the data assigned to that instrument. It is convenient to execute this job if you wish to rewrite only a specific Instrument pattern.

When the END button (0) is pressed and the rhythm is started, the rhythm pattern consisting of the instruments that were not deleted is produced.

## 2-(2) RHYTHM INSTRUMENT LEVEL

This function allows you to change the respective volume levels of any of the built-in rhythm instruments.



Display "2. RHYTHM" on the LCD bottom line, then press the ENTER key. [→Page 50]



ENTER

MULTI MENU  
2.RHYTHM

RHYTHM  
1.RHY.PTN.EDIT

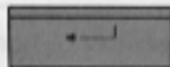
Use the "v" and "∧" keys to display "2. RHY. INST. LEVEL" on the LCD bottom line.



MENU SELECT

RHYTHM  
2.RHY.INST.LEVEL  
3.RHY.INST.PAN  
4.KBD PERC.ASSGN  
1.RHY.PTN.EDIT

Press the ENTER key.



ENTER

RHY.INST.LVL   
PRESS ANY KEY

Press the key corresponding to the instrument for which you wish to change the volume.



RHY.INST.LVL   
HH closed =12

Use the "+" and "-" keys to change the volume.



DATA

RHY.INST.LVL   
HH closed =15

(Repeat)

Press the ENTER (or QUIT) key to exit the mode.



ENTER

MULTI MENU  
2.RHYTHM

◆ The respective volume levels of the instruments comprising each Rhythm pattern have been preset so they will produce a well-balanced sound. RHYTHM INSTRUMENT LEVEL allows you to change the volume data for each instrument, as required. (When a Reset operation is performed, the volume data is restored to its default status.)

◆ When "2. RHY. INST. LEVEL" is selected and the ENTER key is pressed, the "PRESS ANY KEY" message is displayed on the LCD bottom line. Press the key corresponding to the instrument for which you wish to change the volume. [→HX RHYTHM LIST]

◆ When a key of the upper or lower keyboard is pressed, the name of the instrument corresponding to that key is displayed. The currently set volume level is displayed on the right of the instrument name.

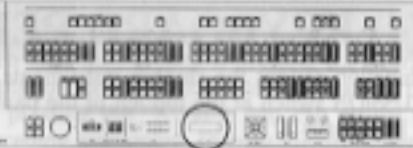
◆ After displaying the instrument for which you wish to change the volume on the LCD bottom line, use the "+" and "-" keys to increase or decrease the volume level. (Variable width: 0-15)

◆ If you wish to change the volume data for multiple instruments, repeat the above operation once for each instrument.

◆ If the START switch is pressed before pressing the ENTER key, the rhythm is started so you can check the changed volume level.

## 2-(3) RHYTHM INSTRUMENT PAN

This function allows you to change the respective orientation (direction of sound from the speakers) of any of the built-in rhythm instruments.



Display "2. RHYTHM" on the LCD bottom line, then press the ENTER key. [→Page 50]



ENTER

MULTI MENU  
2.RHYTHM

RHYTHM  
1.RHY.PTN.EDIT

Use the "v" and "∧" keys to display "2. RHY. INST. PAN" on the LCD bottom line.



MENU SELECT

RHYTHM  
3.RHY.INST.PAN

4.KBD PERC.ASSGN  
1.RHY.PTN.EDIT  
2.RHY.INST.LEVEL

Press the ENTER key.



ENTER

RHY.INST.PAN   
PRESS ANY KEY

Press the key corresponding to the instrument for which you wish to change the panning.



RHY.INST.PAN   
HH closed =R2

Use the "+" and "-" keys to change the panning value.



DATA

RHY.INST.PAN   
HH closed =R3

(Repeat)

Press the ENTER (or QUIT) key to exit the mode.



ENTER

MULTI MENU  
2.RHYTHM

◆ The respective panning levels of the instruments comprising each Rhythm pattern have been preset so they will produce a well-balanced sound. RHYTHM INSTRUMENT PAN allows you to change the panning data for each instrument, as required. (When a Reset operation is performed, the panning data is restored to its default status.)

◆ When "3. RHY. INST. PAN" is selected and the ENTER key is pressed, the "PRESS ANY KEY" message is displayed on the LCD bottom line. Press the key corresponding to the instrument for which you wish to change the panning. [→HX RHYTHM LIST]

◆ When a key of the upper or lower keyboard is pressed, the name of the instrument corresponding to that key is displayed. The currently set panning value is displayed on the right of the instrument name. The displayed panning values consist of seven types:

(Left) ← (Center) → (Right)  
L3 • L2 • L1 • C • R1 • R2 • R3

◆ After displaying the instrument for which you wish to change the panning value on the LCD bottom line, use the "+" and "-" keys to shift the panning.  
 "+" key: The sound is panned rightward each time this key is pressed.  
 "-" key: The sound is panned leftward each time this key is pressed.

◆ If you wish to change the panning for multiple instruments, repeat the above operation once for each instrument.

◆ If the START switch is pressed before pressing the ENTER key, the rhythm is started so you can check the changed panning value.

## 2-(4) KEYBOARD PERCUSSION ASSIGN

This function assigns the rhythm instruments to be sounded, when the KEYBOARD PERCUSSION switch at the top left of the panel is switched to ON, to the keys of the three keyboards.



Display "2. RHYTHM" on the LCD bottom line, then press the ENTER key. [→Page 50]

MULTI MENU  
2.RHYTHM

ENTER

RHYTHM  
1.RHY.PTN.EDIT

Use the "V" and "A" keys to display "4. KBD PERC. ASSGN" on the LCD bottom line.



RHYTHM  
4.KBD PERC.ASSGN  
1.RHY.PTN.EDIT  
2.RHY.INST.LEVEL  
3.RHY.INST.PAN

Press the ENTER key.



KBD PERC. ASSGN  
01:Ride cym

Press any key to confirm the currently assigned instrument.



KBD PERC. ASSGN  
01:Ride cym

KBD PERC. ASSGN  
07:SD-1 light G3

### Operation for Deleting All Currently Assigned Data

While depressing the leftmost white key on the lower keyboard, press the ENTER key.

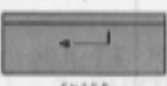


KBD PERC. ASSGN  
ALL CLEAR ? Y/N

Press the "+/YES" key to shift the cursor, then press the ENTER key.



KBD PERC. ASSGN  
ALL CLEAR ? Y/N



◆ When the ENTER key is pressed, the LCD display changes as on the left. The LCD bottom line displays the instrument number and name.

◆ If you wish to confirm which instrument is currently assigned to which key before starting a new assignment operation, just press any key. If an instrument was assigned to the pressed key, that instrument will be sounded, and the instrument name and the key position will be displayed on the LCD bottom line while that key is being pressed. If no instrument was assigned, no sound is produced and the LCD display remains unchanged.

◆ When a Reset operation is performed, all instruments are assigned to the respective keys of the upper and lower keyboards as the default status. Performing the operation on the left lets you delete all such assignment data in one stroke and eliminates the time required for disassigning unnecessary instruments. In addition, the operation on the left should also be performed when you wish to change all of the previously assigned data.

◆ When the ENTER key is pressed while depressing the leftmost white key of the lower keyboard, "ALL CLEAR?" is displayed on the LCD bottom line. To execute "ALL CLEAR", shift the cursor below "Y", using the "+/YES" key, then press the ENTER key.

(To Next Page)

(From Previous Page)

### ASSIGNMENT

Use the "v" and "∧" keys to display the instrument to be assigned on the LCD bottom line.



MENU SELECT

KBD PERC. ASSIGN  
02:Ride cym  
03:Crash cym  
04:HH closed  
:  
:  
60:Castanets  
01:Ride cym

While depressing the leftmost black key of the lower keyboard, press the key to be assigned.



KBD PERC. ASSIGN  
02.Ride cym G3

(Repeat)

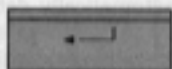
(Repeat)

### DISASSIGNMENT

Press the key(s) to be disassigned while depressing the leftmost white key of the lower keyboard.



Press the ENTER key to exit the mode.



ENTER

MULTI MENU  
2.RHYTHM

When the KEYBOARD PERCUSSION switch, located at the top left of the panel, is switched to ON and the assigned keys are played, the rhythm instruments are sounded.



KEYBOARD PERCUSSION

◆ Each time the "v" key is pressed, the instrument display on the LCD bottom line is advanced by one. By pressing the "∧" key, you can return to the preceding instrument. Display the instrument that you wish to assign.

◆ The instrument to be assigned can also be selected using the SUB DATA numeric buttons in place of the "v" and "∧" keys. Enter the instrument number using the SUB DATA numeric buttons, then press the ENTER key. See the [HX RHYTHM LIST] regarding the instrument numbers.

◆ When a key is pressed while depressing the leftmost black key of the lower keyboard, the instrument displayed on the LCD at that time is assigned to the pressed key. The position of the assigned key is displayed on the right of the LCD bottom line.

◆ Instrument assignment can be performed for all keys of the upper, lower, and pedal keyboards (excluding the leftmost white and black keys of the lower keyboard).

◆ If you wish to assign the same instrument to multiple keys, press the keys to be assigned while depressing the leftmost black key of the lower keyboard.

◆ To assign other instruments to other key(s), change the LCD instrument display, then repeat the ASSIGN operation. Note, however, that multiple instruments cannot be assigned to a single key.

◆ To delete the assigned data for individual keys, press the key to be disassigned while depressing the leftmost white key of the lower keyboard, as shown on the left. If multiple keys are pressed, multiple sets of data can be simultaneously disassigned.