

A 2008 ~~_____~~



Owner's Manual

THANK YOU

for purchasing our new rhythm unit.

The Digital Percussion Machine DPM-48 is as versatile as a professional drummer, and provides real drum feeling. Twenty-two voices were all digitally recorded, so DPM-48 recreates even the most sensitive overtones. Acoustic drums also has sympathetic sound. (For example, when you pound a snare drum, other drums are also sounding sympathetically.) We also recorded this sympathetic sound digitally to make DPM-48 produce the liveliest sound.

YOU CAN PROGRAM 48 RHYTHM PATTERNS

You can make your own rhythm patterns, and DPM-48 can store 48 patterns. You can also combine and edit these patterns by using 256 addresses in each SONG to compose rhythm sections of three songs. One of the advantages of DPM-48 is that you can store all the patterns and songs you just create in the RAM Cartridge. Additional RAM Cartridge will be available to form your own RAM cartridge Library. The RAM Cartridge is backed up by batteries which prevent all the patterns and songs in the cartridge from being destroyed while the RAM Cartridge is not connected to DPM-48. (Batteries last for about one year.)

PROGRAMMING SECTION & VOICE SECTION ARE CLEARLY SEPARATED

Programming section and voice section of DPM-48 are clearly separated, and each key has only one function. It makes very simple to control and easy to operate. INSERT and ERASE keys will allow you to do the quick editing and easy correction of the program. Furthermore, there are two TEMPO control knobs (NORMAL/FINE) which give you easy and accurate tempo adjustment.

REAL TIME PROGRAM & STEP BY STEP PROGRAM

Pattern programming is very easy and can be done in two different ways.

"Real Time Programming" is one way of making patterns by tapping voice keys along with the Metronome, just like playing real drums or percussions. It is also possible to use DPM-48 at the live performance as a percussion instrument. On the other hand, "Step by Step Programming" is the way of making patterns by filling in necessary voices step by step, just like writing notes in the sheet music. This will allow you to make as complicated patterns as you wish, and even those who are not familiar with any music instruments can enjoy DPM-48.

Of course you can mix up both ways to compose one pattern.

DPM-48 has Automatic Correcting System. Therefore, even if you tap the keys off the beat while programming in real time, DPM-48 will correct them automatically according to the Count and Last-step number.

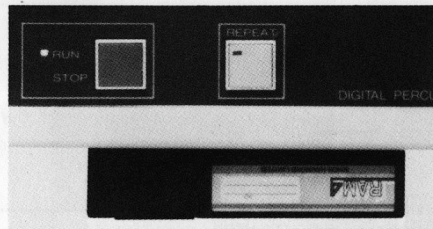
REPEAT FUNCTION MAKES DPM-48 THE "LIVE-MACHINE"

DPM-48 has Repeat Function to repeat a certain part of the song. (manually)

Repeat function is turned on and off by either the REPEAT key (next to the RUN/STOP key) or the foot switch (optional). Repeat function can be programmed in a song. Another usage of the REPEAT key is that switching from one pattern to next pattern to make "Break" or "Fill IN" effect. Which is especially useful for one-man-band.

GENERAL CONTROLS

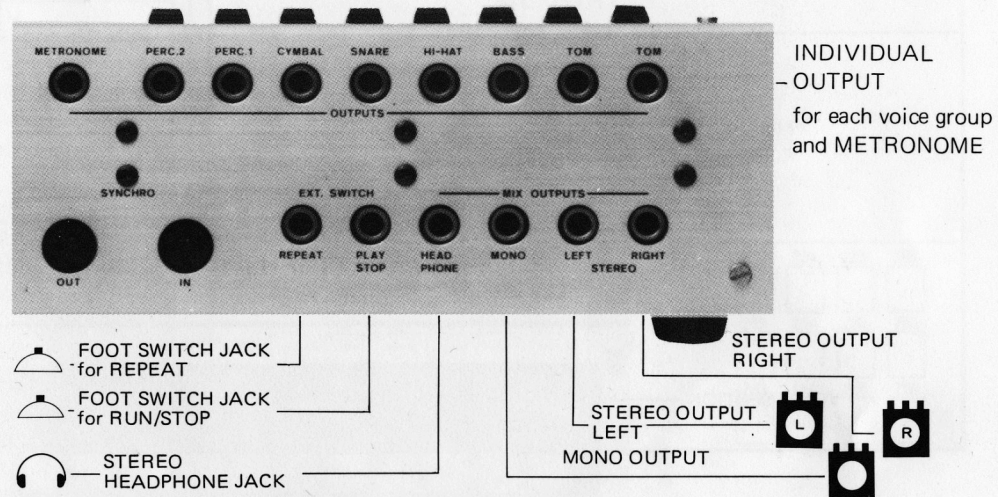
1. Insert the RAM Cartridge in the cartridge slit.



- Turn off DPM-48 before setting or taking out the RAM Cartridge.
- Insert the RAM Cartridge gently with the label side up. Do not insert the RAM Cartridge with unnecessary force. It may cause a great deal of trouble.

Before turning on DPM-48, make sure all the instructions are executed correctly and in order.

2. Connect DPM-48 to an amplifier.



3. Plug in DPM-48

4. Turn on the POWER SWITCH.

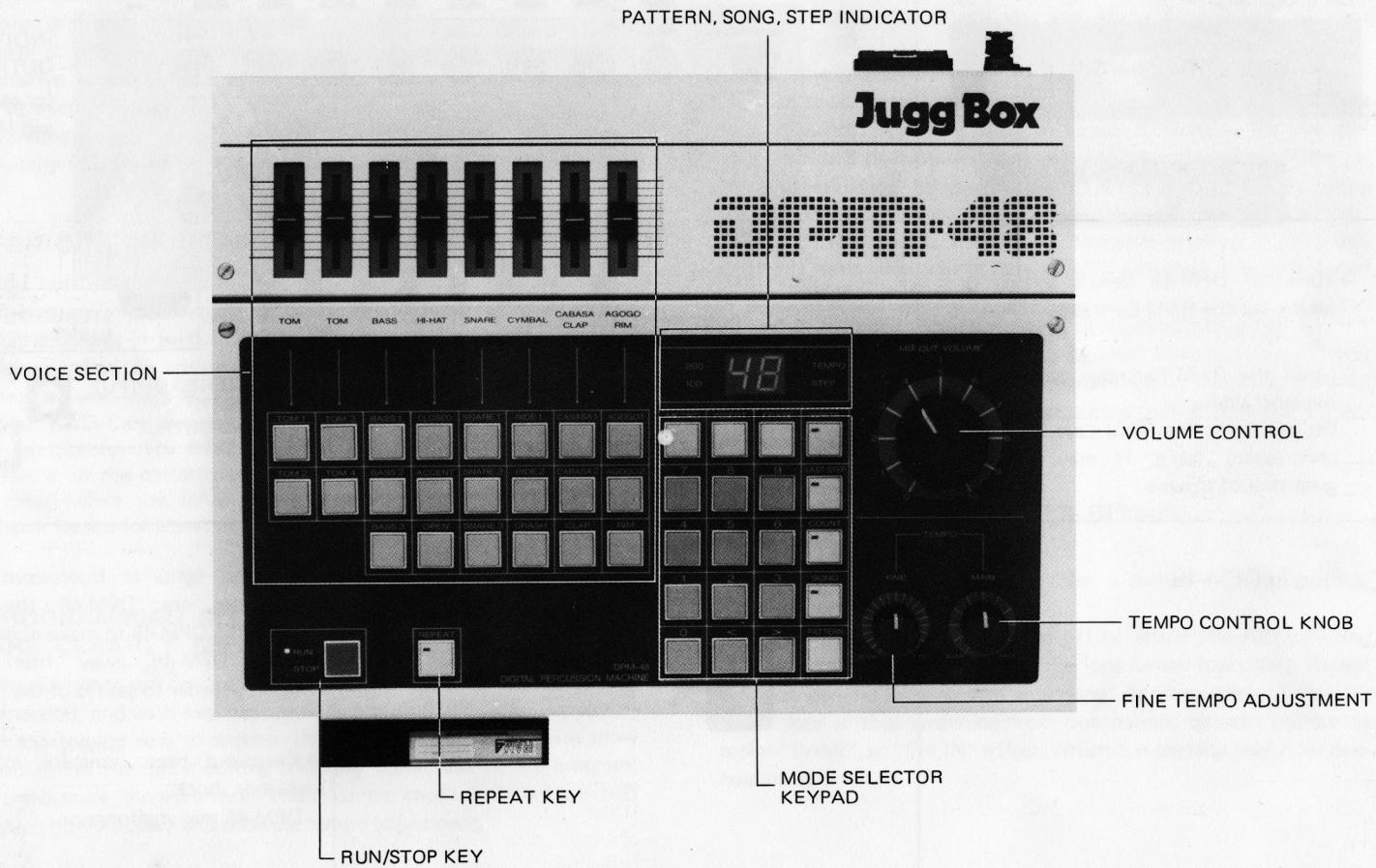


- If neon lights or fluorescent lights are used near DPM-48, they may cause the DPM-48 to make noise. Keep DPM-48 away from these lights in order to get rid of the noise.

- Keep out heat, ^{heat, moisture} moisture, excessive dust or shock. DPM-48 may malfunction.

DPM-48
OVERVIEW

GENERAL CONTROLS



DPM-48

FUNCTIONS & MEMORIES

FUNCTIONS OF DPM-48			
PROGRAM		PLAY	
PATTERN ①	STEP PROGRAM	PATTERN	⑧
	REALTIME PROGRAM		
SONG ⑭	SONG PROGRAM	SONG	⑨

STOP

RUN

○ PAGE

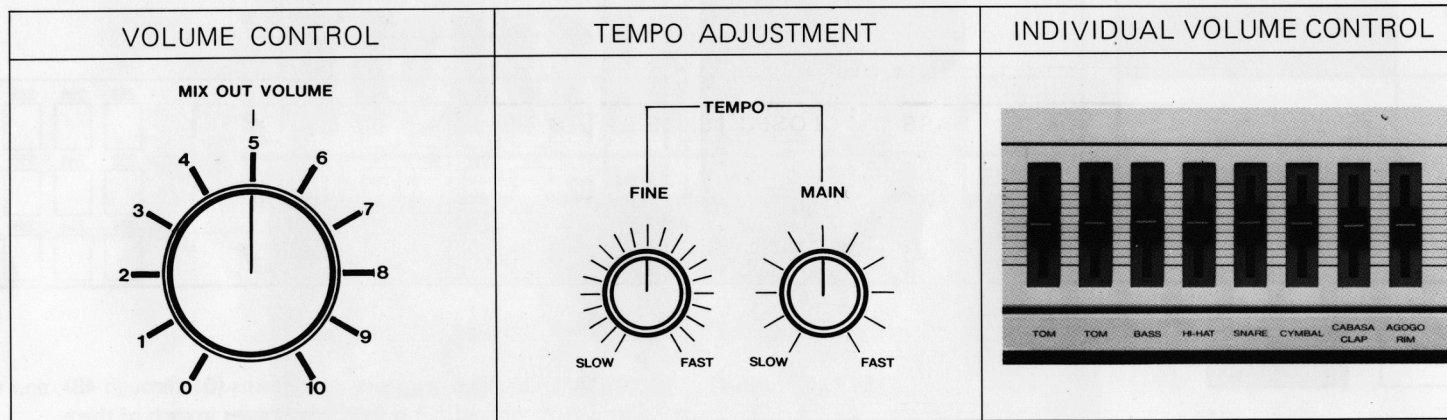
MEMORIES			
PATTERN	01	01 02 03 04	26 27 28 29 30 31 32
	48	01 02 03 04	26 27 28 29 30 31 32
SONG	01	01 02 03 04	253 254 255 256
	02	01 02 03 04	253 254 255 256
	03	01 02 03 04	253 254 255 256

A RAM Cartridge can store 48 patterns (01 through 48), and three songs (01 through 03) with 256 addresses in each of them.

SETTING

Before playing DPM-48, be sure to make all the necessary connections.

Refer to page three and set DPM-48 like a picture below.



MIX OUT VOLUME controls entire loudness of DPM-48. This volume works only when using MIX OUTPUT (STEREO or MONO output).

Set the tempo roughly by MAIN control, and precisely by FINE control.

These sliders are to adjust the balance of eight voice groups. There will be no sound coming out if you set these volumes at 0.

VOICE SECTION

Voice section of DPM-48 consist of drums part and percussion part.
Check each voice by pressing each voice key.


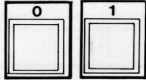
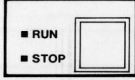
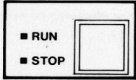


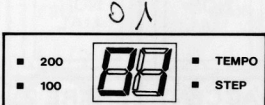

DRUMS					PERCUSSIONS		
TOM 1 HIGH	TOM 3 HIGH	BASS 1 NOR- MAL	CLOSED NOR- MAL	SNARE 1 NOR- MAL	RIDE 1 NOR- MAL	CABASA1 NOR- MAL	AGOGO1 HIGH
TOM 2 LOW	TOM 4 LOW	BASS 2 ACCENT	ACCENT	SNARE 2 ACCENT	RIDE 2 ACCENT	CABASA2 ACCENT	AGOGO2 LOW
		BASS 3 Through GATE ECHO	OPEN	SNARE 3 Through GATE ECHO	CRASH	CLAP	RIM

Within each vertical row, only one voice can be played simultaneously.
If two keys in the same row are pressed at the same time, you may have
an undesired sound.

with wind in suit


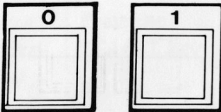
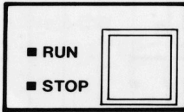
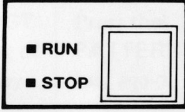





PATTERN PLAY

DPM-48 can play a same rhythm pattern over and over.
 The RAM Cartridge, which is supplied with DPM-48, is shipped with pre-programmed rhythm patterns.
 Please listen to these patterns first.

	1.	2.	3.	4.	5.
PROCEDURE	Set DPM-48. Adjust tempo.	Press the PATTERN key.	Input the pattern number of your choice by using number keys. If the number is between 1 and 9, input 0 first, like 01, 02, etc.	Press the RUN/STOP key.	Press the RUN/STOP key again to stop playing.
					
DISPLAY					
NOTE	<ul style="list-style-type: none"> • When the power switch is turned on, the PATTERN key is usually already on. (the red light in the key is on) In this case, you don't have to press the PATTERN key again. • Pattern numbers are from 01 to 48. Therefore, if you input numbers other than these numbers, "E" (Error) will appear in the Display window. If the Display window shows "E" (error), input the correct number. • RAM Cartridge, supplied with DPM-48, is shipped with the pre-programmed patterns in pattern numbers 01 thru 24. 				

SONG PLAY

A song is constructed by combining 48 PATTERNS, 01 through 48. The DPM-48 is shipped with a sample SONG already programmed in the RAM cartridge (SONG 01). Let's listen to it.

	1.	2.	3.	4.	5.
PROCEDURE	Set DPM-48 in a normal position. Adjust the tempo.	Press the SONG key.	Input the SONG number of your choice by using number keys. (ex; 01)	Press RUN/STOP key.	When the RUN/STOP key is pressed again, the SONG stops.
					
DISPLAY		SONG NUMBER 	Shows the SONG number you just input. 	While a song is being played, the display shows address numbers. Blinking numbers 01, 02, 03 ... 	Display shows the SONG number. 
NOTE		<ul style="list-style-type: none"> If the SONG key is already on, you don't have to press it again. 	<ul style="list-style-type: none"> When you input the SONG number, be sure to input number 0 first. Otherwise, the display shows "E" (Error). If the display indicates "E", input the correct number: 	<ul style="list-style-type: none"> You can stop the song play in the middle of the tune by pressing RUN/STOP key. When the programmed patterns are exhausted, the SONG stops automatically. DPM-48 is shipped with the sample song already programmed in the song number 01. 	

PROGRAM the PATTERN

Let's take the rhythm pattern on the page 12 as an example, and input this pattern.

There are two ways to input the rhythm pattern.

1. STEP PROGRAMMING


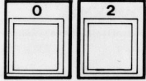

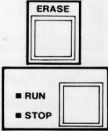

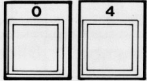

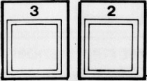










(Program the pattern step by step)

2. REAL TIME PROGRAMMING

(Programming in tempo along with the METRONOME)

You can try these two ways depending on the patterns and situations.

Procedures No. 1 through No. 9 are necessary for both STEP PROGRAMMING and REAL TIME PROGRAMMING.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
PROCEDURE	Set DPM-48 in the normal position. Press PATTERN key.	Input the pattern number in which you want to write the pattern. (Example; 02)	Press the WRITE key.	Erase the existing pattern. Press RUN/STOP key along with the ERASE key.	Press the COUNT key.	Input the COUNT number of your choice by using keypad. (Example; 04)	Press the LAST STEP key.	Input the LAST STEP number of your choice by using keypad. (Example; 32)	Press the PATTERN key again.
									
DISPLAY	PATTERN number 	PATTERN number 	PATTERN number 	PATTERN number 	Shows old COUNT number 	Shows COUNT number 	Shows old LAST STEP number 	Shows the LAST STEP number you input 	PATTERN number 
NOTE			<ul style="list-style-type: none"> If the protect switch of the RAM Cartridge is ON, the display shows "E" (Error) when you press the WRITE key. Make sure that protect switch is OFF. 		Shows either one of 03, 04, 06, 08.		Display shows the LAST STEP number of the old pattern.		These are the basic procedure for PATTERN PROGRAMMING. both STEP PROGRAMMING and REAL-TIME PROGRAMMING.

ROCK

COUT 04

LAST STEP 32

STEP 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32


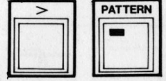



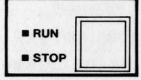



OH o
CH x
SD1
BD1

STEP INPUT	PROCEDURE	10. Press key and call the first step. 	11. Input all the necessary voices in the first step. In this case, press CH (CLOSED HI-HAT) & BD-1 (BASS DRUM-1) keys.	12. Press key and proceed to the next step. (In this case, press it twice to get to the step number 03).	13. Input necessary voices. In this case, press OH (OPEN HI-HAT) & BD-1 (BASS DRUM-1) keys.	14. Continue proceeding step by step and input all the necessary voices. STEP PROGRAMMING is completed when the key is pressed.
	DISPLAY					If you press the PATTERN key while you are programming, the Display shows the pattern number.
REAL TIME INPUT	PROCEDURE	Press the METRONOME key, and then press the RUN/STOP key. (The very moment when you press the RUN/STOP key is the first beat of the pattern.) →	Input all the necessary voices by pressing each voice key just like playing a real instrument along with the METRONOME. (METRONOME sound always represent a quarter note.) It is easy to input voices in the following order. 1. CH (CLOSED HI-HAT) 2. OH (OPEN HI-HAT) 3. BD-1.(BASS DRUM-1) 4. SD-1 (SNARE-1) 			
	DISPLAY	PATTERN number 	TEMPO light turns on at the every first beat of the pattern.			

PRECAUTIONS FOR THE PATTERN PROGRAMMING

● As it shows in the example, the step diagram is written with the smallest unit (smallest notes or rests). This means that the percussion's decay time is so short that we consider a quarter note ♩ like ♩ ♩ ♩ ♩. If we input ♩ ♩ ♩ ♩ for as a quarter note, the result will be that you'll hear the sound four times. Therefore, ♩ will be written like ♩ ♩ ♩ ♩, and ♩ be like ♩ ♩ ♩ ♩

● If you want to add any voices to the existing pattern, repeat the procedure from No. 10. If you want to scrape certain voices or steps, take a necessary procedure written on the Page 17.




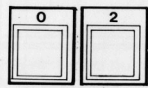

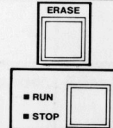

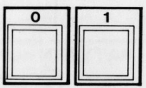

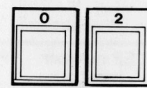












<p>15.</p> <p>After you input all the necessary voices into all steps, press  key until the display shows the pattern number.</p>	<p>16.</p> <p>Press the WRITE key again. Then the red light in the key goes off, and shows the programming is completed.</p>	<p>17.</p> <p>Listen to the rhythm pattern you just input to confirm the pattern was input correctly. (PATTERN 02) *Refer to Page 8 for the operation.</p>	
			
<p>STEP number PATTERN number</p> 	<p>PATTERN number</p> 		
<p>When you finish the input of all the necessary voices, press RUN/STOP key again to stop the rhythm.</p>	<p>Press WRITE key again. Then the red light in the key goes off, and shows the programming is completed.</p>	<p>Listen to the rhythm pattern you just input to confirm the pattern was input correctly. (PATTERN 02) *Refer to Page 8 for the operation.</p>	
			
<p>PATTERN number</p> 	<p>PATTERN number</p> 		

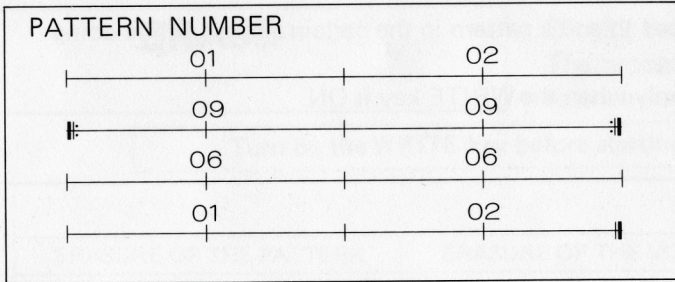
PROGRAM the SONG

In this chapter, we are going to construct a rhythm part for a tune by combining rhythm patterns.

As it stated in Page 5, DPM-48 has memory capacity of three songs (01 through 03) with 256 addresses in each SONG. You can put rhythm pattern numbers into these addresses to play them continuously in order.

Repeat signs can be programmed in a SONG. Let's input the example on the next page in the SONG number 02.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
PROCEDURE	Set DPM-48 in the normal position.	Press the SONG key.	Input the SONG number of your choice (01~03) by using keypad. (Example; 02)	Press the WRITE key.	Erase old SONG by pressing the RUN/STOP key along with the ERASE key.	Press  key to call the first address of the SONG.	Input the Pattern number of your choice in the address 01 by using keypad. (Example; 01)	Press  key, and call the next address to input a pattern number 02 should be blinking in the display.	Input the Pattern number of your choice in the address 02 by using keypad. (Example; 02)
									
DISPLAY		SONG number 	SONG number you just input. 			Blinking Address number. 		Blinking Address number. 	
NOTE	<ul style="list-style-type: none"> When you press the SONG key, the display shows the SONG number 01. 					If you keep pressing the  key, address numbers go on automatically. Leave your finger from the key as soon as you press the key.		Pattern input is completed when the  key is pressed. Pattern number can not be input until you press the  key.	



ADDRESS & PATTERN NUMBER

01	02	03	04	05	06	07	08
01	02	98	09	09	99	06	06
09	10	11	12	13	14	15	16
01	02	00					

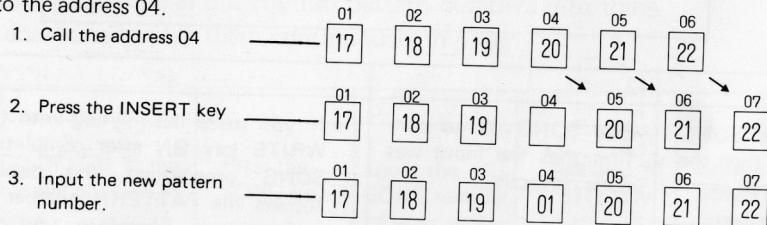
<p>10.</p> <p>Repeat the procedure No. 6 through No. 9, and input all the necessary pattern numbers in the example tune. There are 256 addresses in each SONG. Numbers between 100 and 199 are indicated by the red light in front of 100. Address numbers over 200 are indicated by the red lights in front of both 100 and 200.</p>	<p>11.</p> <p>After having finished all the necessary input, press the key again.</p>	<p>12.</p> <p>Press the SONG key and then the WRITE key.</p>	<p>13.</p> <p>Play SONG 02 to confirm that the input was done correctly.</p>	<ul style="list-style-type: none"> • If you press the key with the WRITE key ON after completing SONG programming, the display shows the PATTERN number in each address. Therefore, you can check the contents of each address visually.
<p>Shows Address number blinking</p>	<p>Blinking Address number</p>	<p>Shows SONG number</p>		
<p>PATTERN number</p>				
<p>PATTERN number 98 represents and 99 represents respectively. *Refer to Page 18.</p>	<p>Do not forget to press the key at the end.</p>			<ul style="list-style-type: none"> • In case you programmed a wrong pattern number in the address, scrape the number by using the ERASE key and then input right pattern number by using the INSERT KEY. (Refer to Page 16, 17)

INSERT



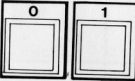





The INSERT key is used to add a pattern in the certain address, while doing the SONG programming.
 INSERT can be done only when the WRITE key is ON.

EXAMPLE

Let's INSERT the Pattern 01 into the address 04.



Now the address 04 has become empty and rest of the pattern numbers moved back one address each.

<p>1. Call the desired address by going through the same procedure as the song programming. Press the > key four times to get to the address 04.</p> 	<p>2. When the address 04 appears, press the INSERT key.</p> 	<p>3. Input the new pattern number.</p> 	<p>4. Complete the insertion of the new pattern by pressing the > key.</p> 	<h3>PRECAUTIONS</h3> <ul style="list-style-type: none"> ○ If you leave the address empty after pressing the INSERT key, the song will stop at this address. Do not forget to input the new pattern number. ○ If the address is empty, the ERASE key doesn't work. Therefore, input some number before erasing.
<p>Address number blinks.</p> 	<p>Address number blinks.</p> 	<p>PATTERN number</p> 	<p>Shows Address number 05 blinks.</p> 	
<p>The display shows the pattern number after each address number blinks a couple of times.</p>	<p>The address 04 starts blinking and showing the address has become empty. At the same time, all the pattern numbers after this address have moved back one address each.</p>	<p>If you leave the address empty, the song stops at this address. Therefore, make sure input the new pattern number.</p>	<p>Input of the new pattern number is not completed until pressing the > key, so do not forget to press the > key.</p>	

ERASE

You can erase patterns, songs, and voices by pressing combinations of the ERASE key and other key.

The procedures of erasure are slightly different depends on what you want to erase and the situation.

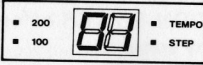




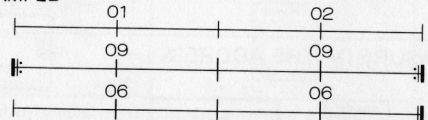



Turn on the WRITE key before starting any erasure.



PATTERN PROGRAMMING	ERASURE OF THE PATTERN	ERASURE OF THE VOICE	ERASURE OF THE STEP	<p>If the PROTECTION SWITCH of the RAM cartridge is ON, the ERASE key will not work.</p> <p>Be sure to turn off the PROTECTION SWITCH before doing any erasure.</p>																																
	<p>Press the RUN/STOP key, while press and holding the ERASE key.</p>	<p>Press corresponding voice key, while press and holding the ERASE key.</p>	<p>Press the RUN/STOP key while press and holding the ERASE key.</p>																																	
	<p>You can erase all the contents of the pattern while its number is shown in the Display window. (See Page 12)</p>	<p>You can erase individual voice in a pattern which number is shown in the Display window. Voice Erasing is done in every vertical raw of the Voice Section.</p>	<p>You can erase all the contents of each STEP , while its number is blinking in the Display window.</p>																																	
SONG PROGRAMMING	ERASURE OF THE SONG		ERASURE OF THE ADDRESS																																	
	<p>Press the RUN/STOP key while press and holding the ERASE key.</p>		<p>Press RUN/STOP key while holding the ERASE key.</p>																																	
<p>You can erase all the contents of each Song while its number (01, 02, or 03) is shown in the Display Window. (See Page 14)</p>		<p>You can erase the Pattern Number of each address. After erasing the content (Pattern Number) of the certain address, all the pattern numbers after this address moved forward one address each automatically to prevent leaving the address empty.</p> <p>(EX.)</p> <table style="margin-left: 20px;"> <tr> <td></td><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td> </tr> <tr> <td></td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td> </tr> <tr> <td></td><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td> </tr> <tr> <td></td><td>11</td><td>12</td><td>13</td><td>15</td><td>16</td><td>17</td><td>18</td> </tr> </table> <p>We just erased the Pattern 14 in the address 04. Therefore, all the contents (Pattern Numbers) in the addresses 15 and after move forward one address each automatically.</p>				01	02	03	04	05	06	07		11	12	13	14	15	16	17		01	02	03	04	05	06	07		11	12	13	15	16	17	18
	01	02	03	04	05	06	07																													
	11	12	13	14	15	16	17																													
	01	02	03	04	05	06	07																													
	11	12	13	15	16	17	18																													

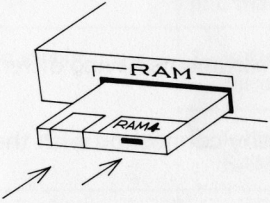
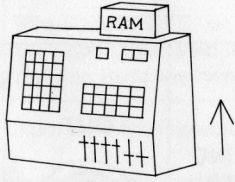
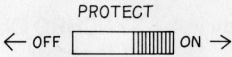
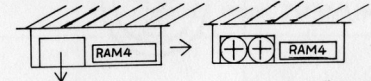
REPEAT & BREAK

The REPEAT key allows you to repeat (or D.C., D.S.) or to break while playing a Song or a Pattern.

PATTERN PLAY	1.	2.	3.	4.	<p>Repeat function can be controlled by the foot switch (optional) instead of pressing the REPEAT key.</p> <p>The REPEAT key will make DPM-48 play the next pattern number once while playing any one of the Patterns No. 01 ~ No. 47. Therefore, if you input drums fill-in or break pattern in the next pattern number, (Ex. if the pattern number 05 is used for the basic rhythm pattern, then the Pattern number 06) you can use them as "fill-in" or "break".</p> <p>If the prevailing pattern number is 48, or the WRITE key is ON, the REPEAT key does not work.</p>
	<p>Set DPM-48 and play the PATTERN 01. (See Page 8)</p> 	<p>While DPM-48 is playing the Pattern 01, press the REPEAT key.</p>  			
	<p>DPM-48 plays the Pattern 01 over and over.</p>	<p>DPM-48 will play complete pattern 01. When you press the REPEAT key, the red light in the key turns on at the same time.</p>	<p>After finishing Pattern number 01, DPM-48 plays the next pattern number 02, once. As soon as it starts playing the pattern 02, the red light in the REPEAT key goes off.</p>	<p>After finishing playing the complete pattern 02 once, DPM-48 will go back to the pattern 01 again.</p>	
SONG PLAY	<p>EXAMPLE</p> 				<p>This can be controlled by the foot switch (optional) instead of pressing the REPEAT key.</p> <p>This REPEAT function is very convenient for improvisations.</p> <ul style="list-style-type: none"> The REPEAT sings (98) and (99) should be used as a pair, and can be used as many times as you wish. However, the repeat sings can't be overlapped each other like the picture below. 
	<p>ON</p>  <p>If you turn on the REPEAT key while playing a song, DPM-48 keeps repeating the section between 98 and 99. In the example above, the DPM-48 keeps repeating between 98 and 99.</p>	<p>OFF</p>  <p>If you press the REPEAT key again to turn it off while repeating the section between 98 and 99, DPM-48 will go on to the next section after finished playing the repeat section.</p>			

RAM CARTRIDGE






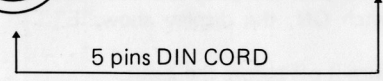
RAM cartridge stores Patterns and Songs.

DPM-48 does not work WITHOUT THE RAM CARTRIDGE	INSERT THE RAM CARTRIDGE CORRECTLY	YOU DON'T HAVE TO REMOVE THE RAM CARTRIDGE
<p>Insert the RAM cartridge into DPM-48 before turning on the power switch. If you put the RAM cartridge in and out of DPM-48 while the power is on, it may cause an error (E) or malfunction.</p> <p>DPM-48 does not work without the RAM cartridge. Make sure to set the RAM cartridge (at the right place) before turning on the DPM-48.</p>	 <p>Insert the RAM cartridge straight into the cartridge slit with the label side up as shown above. If it's hard to insert the RAM cartridge, try it again after pulling it out of the slit once. If you insert it with excessive force, it may cause a trouble.</p>	<p>You don't have to remove the RAM cartridge from the DPM-48 everytime after the operation. When you put DPM-48 in the gig bag, be sure to put it with the RAM cartridge side up in order to prevent excessive force on the RAM cartridge.</p> 
<p>After YOU REMOVE THE RAM CARTRIDGE</p>	<p>DO NOT FORGET THE PROTECTION SWITCH</p>	<p>CHANGING THE BATTERIES</p>
<p>After you remove the RAM cartridge from the DPM-48 to set an optional new RAM cartridge, keep the programmed RAM cartridge in the special bag being supplied with the optional RAM cartridge. This bag protects your important program from the static electricity.</p>	<p>There is the Protection switch in the RAM cartridge to prevent erasing the program by accident. After input the program, try to keep it ON.</p>  <p>If you try to input the program with the Protection switch ON, the display shows "E" (error). Make sure to turn it off before the input.</p>	<p>Each RAM cartridge contains batteries to protect the program. The durability of the batteries is about one year. To change the batteries, follow the instructions below.</p> <ol style="list-style-type: none"> 1. Insert the RAM Cartridge into DPM-48, and turn on DPM-48. 2. Open the lid and change the two batteries together. (Use only SR-44 type batteries.)  <p>Slide the lid to open Put the new batteries with the + side up.</p>

EXTERNAL CONTROLS

The DPM-48 has a couple of SYNCHRO terminals to make it possible to do the synchronized performance with the other electronic instruments.

1. Use DIN cord to connect the SYNCHRO terminal of DPM-48 to the SYNCHRO terminal of the other instruments.
2. DPM-48 might not synchronize with the instruments having different tempo clock.
3. Make sure to stop DPM-48 before making any connection with the SYNCHRO Terminals.

<p>CONTROLLING OTHER INSTRUMENT FROM DPM-48</p>	<p style="text-align: center;">SYNCHRO</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>OUT</p>  </div> <div style="text-align: center;"> <p>IN</p>  </div> </div> <p style="text-align: center;">5 pins DIN CORD</p> <p style="text-align: right;">SYNCHRO IN of the other instrument</p> 	<p>In this situation, RUN/STOP and TEMPO of both instruments are controlled only from DPM-48.</p> <p>You can't control the DPM-48 from the other.</p>
<p>CONTROLLING DPM-48 FROM THE OTHER INSTRUMENT</p>	<p style="text-align: center;">SYNCHRO</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>OUT</p>  </div> <div style="text-align: center;"> <p>IN</p>  </div> </div> <p style="text-align: center;">5 pins DIN CORD</p> <p style="text-align: right;">SYNCHRO OUT of the other instrument</p> 	<p>In this situation, RUN/STOP and TEMPO of both instruments are controlled only from the other instruments.</p> <p>The RUN/STOP key and TEMPO control of DPM-48 don't work in this situation.</p>

CHECK LIST

The following symptoms can show up as a result of the misuse.
Please check the situation once again before calling for a repair.

MODE	SITUATIONS	CHECK POINT	PROCEDURE
PATTERN PROGRAMMING	1. When you are making the input of the voices step by step, no sound comes out even if you press a voice key.	Are you trying to input more than one voice from the same vertical row into the same step?	You can input only one voice from each vertical row into one STEP.
	2. The display shows "E" (error) and can't input anything.	1. Is the RAM cartridge inserted correctly?	Insert the RAM cartridge into the slit correctly.
		2. Is the protection switch of the RAM cartridge ON?	Turn OFF the Protection Switch.
3. The SCALE (Last Step, Count) of the Pattern changes without giving any orders.	Are you playing the pattern with the WRITE key ON?	When you WRITE, set or confirm the Scale (Last Step, Count) before pressing RUN key.	
SONG PROGRAMMING	The display shows "E" (error) and can't make the input.	Is the protection switch of the RAM cartridge ON?	Turn OFF the Protection Switch.
SONG PLAY	Song doesn't start even if when you press the RUN key.	Is the first address left empty?	Input any Pattern number into first address, then erase it.
ERASE	When you are programming a SONG, the ERASE key does not work.	Is the address you are trying to erase empty?	Input any Pattern number into the address, then erase it.
INSERT	The INSERT key doesn't work.	If there are already pattern numbers in all the addresses, you can't insert (anything).	
REPEAT	The REPEAT key doesn't work.	Are you playing the Pattern number 48?	Since the Pattern number 48 is the last pattern number, the REPEAT key does not work.
OVER ALL OPERATION	DPM-48 doesn't work steadily.	If the RAM cartridge is not set correctly, DPM-48 doesn't work correctly.	

SPECIFICATION

☒ SOUND SOURCE SECTION

- VOICE / 22 DIGITAL OSCILLATION
(TOMTOM1.2.34) (BASS DRUM 1.2.3)
(HI-HAT Close, Accent, Open) (SNARE 1.2.3)
(CYMBAL Ride 1.2, Crash)
(CABASA 1.2) (CLAP) (AGOGO 1.2) (RIM)
- INDIVIDUAL VOLUME CONTROLS / 8
- TOTAL VOLUME (MIX OUT) / 1

☒ PROGRAM

PROGRAM / PATTERN / SONG

REAL TIME INPUT / STEP INPUT

- PATTERNS 48
- SONG PROGRAM 3 (256 ADDRESS PER SONG)
- REPEAT FUNCTIONS

☒ MODE SELECTORS

- COUNT (4, 8, 3, 6)
- LAST STEP (1 ~ 32)
- AUTO CORRECT
- ERASE
- INSERT
- RAM CARTRIDGE (backed up)

OUTPUT

- INDIVIDUAL OUTPUT
- STEREO OUTPUT
- MONO OUTPUT
- HEADPHONE OUTPUT / 1 (STEREO)
- SYNCHRO / IN / OUT (5P DIN)
- EXTERNAL TRIGGER TERMINAL IN
- RUN / STOP FOOT SWITCH
- REPEAT FOOT SWITCH
- 350(W) x 260(D) x 100(H)m/m 4.5kg