

Technics

ORGAN

SX-GN3(K)

SX-GN5(K)

SX-GN7(K)

SX-GN9(K)



Vol. 1

FOR CANADA

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

POUR CANADA

L'interférence radioélectrique générée par cet appareil numérique de type B ne dépasse pas les limites énoncées dans le Règlement sur les perturbations radioélectriques, section appareil numérique, du Ministère des Communications.

Technics

OWNER'S MANUAL MODE D'EMPLOI INSTRUCCIONES DE MANEJO

Vol. 1

Caution

Voltage (except North America and Europe [excluding U.K.])
Be sure the voltage adjuster (located on the rear panel) is in accordance with local voltage in your area before using this unit. Use a screwdriver to set the voltage adjuster to the local voltage.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

BEFORE YOU PLAY, PLEASE READ THE CAUTIONARY COPY APPEARING ON PAGE 41.

IMPORTANT (for UNITED KINGDOM)

THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

BLUE — NEUTRAL
BROWN — LIVE

As the colours of the wires in the mains lead of this unit may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured BLUE must be connected to the terminal with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal marked with the letter L or coloured RED.

This apparatus was produced to BS 800: 1977.

Attention

Tension (à l'exception de l'Amérique du nord et de l'Europe)
Avant de mettre cet appareil sous tension s'assurer que le sélecteur de tension situé sur le panneau arrière est réglé sur la tension locale. Pour régler le sélecteur de tension utiliser un tournevis plat (-).
Avant toute utilisation, prière de lire l'avertissement apparaissant à la page 79.

Precaución

Tensión (excepto América del Norte y Europa)
Cerciórese de que el ajustador de tensión, situado en el panel posterior, está ajustado al valor de la tensión de su residencia. Efectúe esta comprobación antes de utilizar el instrumento. Para ajustar la tensión emplee un destornillador para posicionar el ajustador de tensión al valor correspondiente.
Antes de empezar a tocar, lea las precauciones de la página 117.

Assembly

Assemble your Technics organ as shown in the following figures.

To disassemble the organ, reverse the procedure.

- To prevent the upper organ part from falling off the lower organ part, secure it firmly with the bolts.

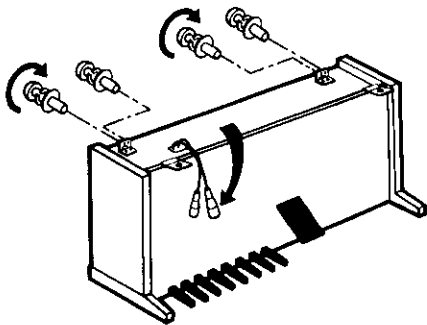
Montage

Procéder au montage de l'orgue Technics en suivant les figures ci-dessous.

Pour démonter l'orgue, suivre l'ordre inverse.

- Attacher solidement la partie supérieure de l'orgue à la partie inférieure avec les boulons afin d'éviter le risque de chute.

1



On the lower organ part, remove the four bolts from the metal joints.

Lay the cords to the front of the lower organ part.

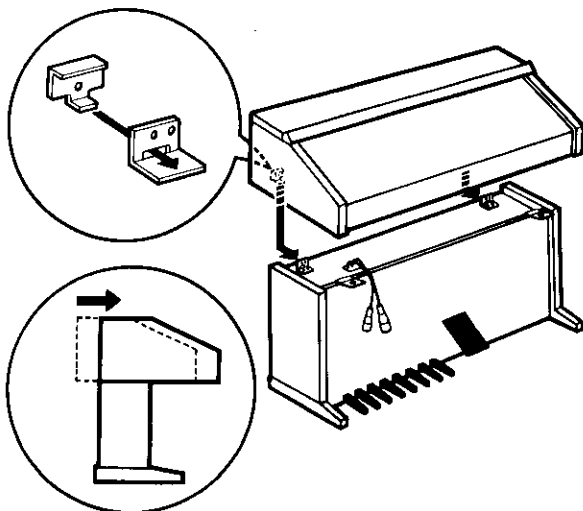
Retirer les quatre boulons des joints métalliques sur la partie inférieure de l'orgue.

Laisser les cordons devant la partie inférieure.

En la parte inferior del órgano, quite los cuatro pernos de las bisagras metálicas.

Deje caer los cordones hacia el frente de la parte inferior del órgano.

2



Place the upper organ part on the lower organ part, making sure to fit the metal pieces together.

Mettez la partie supérieure de l'orgue sur la partie inférieure en réglant que les pièces métalliques s'engrenent bien.

Coloque la parte superior del órgano sobre la parte inferior del órgano, asegurándose de montar las piezas metálicas.

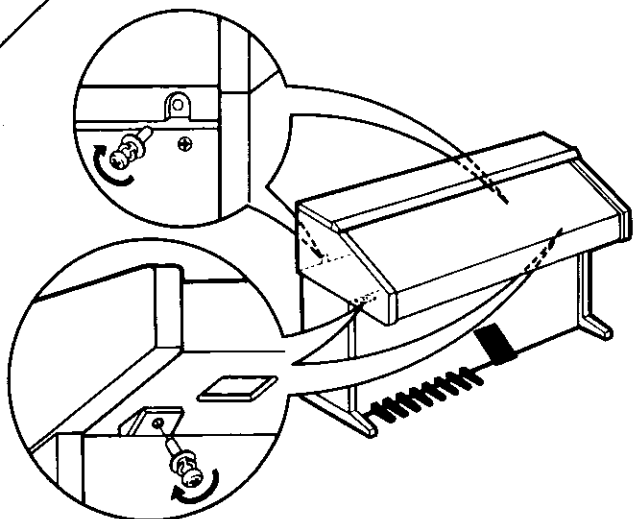
Montaje

Arme su órgano Technics como se indica en las siguientes ilustraciones.

Para desarmar el órgano, invierta el procedimiento.

- Para prevenir que la parte superior del órgano caiga de la parte inferior del órgano, asegúrela firmemente con los pernos.

3

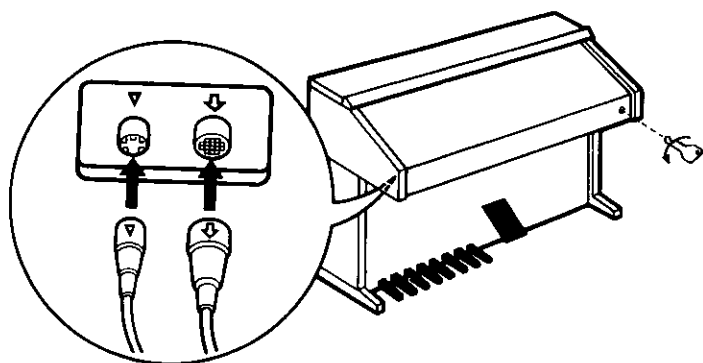


Using the four bolts removed in step 1, secure the upper organ part to the lower organ part as shown in the figure.

En utilisant les boulons retirés dans l'étape 1, fixer la partie supérieure de l'orgue à la partie inférieure, comme montré dans la figure.

Usando los cuatro pernos que quitó en el paso 1, asegure la parte superior del órgano a la parte inferior del órgano como se indica en la ilustración.

4



Connect the two cords from the lower organ part to the respective terminals on the underside of the upper organ part. Unlock the cover with the accessory key.

Brancher les deux cordons de la partie inférieure sur les bornes respectives situées au côté inférieur de la partie supérieure de l'orgue. Ouvrir le couvercle avec la clef incluse.

Conecte los dos cordones de la parte inferior del órgano a los terminales respectivos en la cara inferior de la parte superior del órgano. Abra la cubierta con la llave accesorio.

Technics

SX-GN3(K)/GN5(K)/GN7(K)/GN9(K)

Thank you for purchasing the Technics GN Series Organ.
Your organ is packed with many functions resulting from the synthesis of Technics renowned know-how in the areas of electronics and sound. It is a new-age electronic musical instrument in which is hidden a treasure of unlimited possibilities. From popular to classical, we are sure you will enjoy the wide range of applications.

In addition to the basic functions, your GN Series electronic organ is equipped with various capabilities necessary for composing your original music. In order to help you understand your instrument and to efficiently use the many and colorful functions, the Owner's Manual is organized as shown below.

Basic functions (Vol. 1)

Part I Introduction

A few points to get you started playing right away.

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Maximum control of your instrument with capability to custom-set the various functions

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Practical applications (Vol. 2)

Part V Creating sounds (page 2)

Modify the preset sounds to make exactly the sound you want with the **SOUND EDIT** feature.

Part VI Creating accompaniment patterns (page 9)

Create original accompaniment patterns with the **COMPOSER** feature.

Part VII Recording/playback and editing your keyboard performance (page 17)

Record your performance for automatic playback with the built-in **SEQUENCER**.

External memory and MIDI (Vol. 3)

Part VIII Storing the performance data (page 2)

How to store your performance and the programmed function settings on memory disks.

Part IX MIDI (page 7)

How to use MIDI to exchange performance data with other electronic musical instruments.

Volume 1 comprises a basic explanation of the Technics Organ and its functions. Volumes 2 and 3 detail practical applications, particularly of the many storage functions. A thorough understanding of the basic functions should be acquired before attempting to use the advanced applications.

BASIC FUNCTIONS

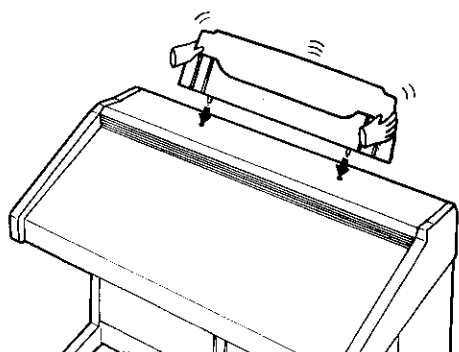
This section comprises an explanation of sounds and effects, rhythm and the fundamental workings of the Technics Organ. The circled numbers on the separate sheet correspond to the section numbers in this instruction manual.

Part I Introduction

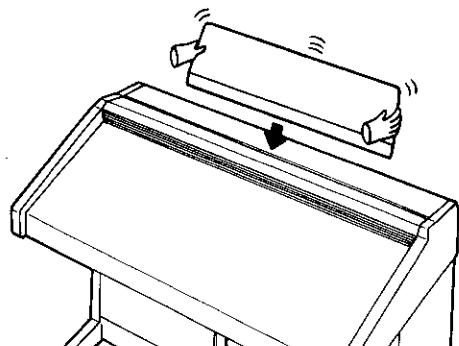
① Getting ready to play

Music stand

GN3/GN5/GN7/GN9: Insert the music stand in the two holes as shown in the figure.



GN3K/GN5K/GN7K/GN9K: Insert the music stand in the groove on the upper panel of the organ.

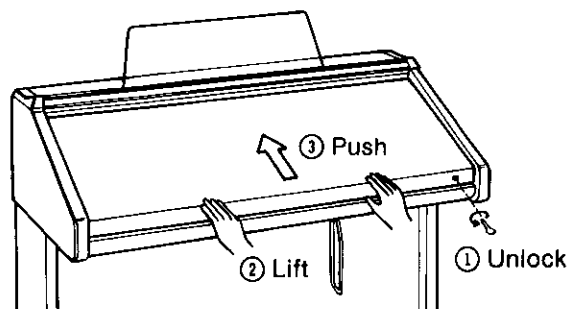


Sliding keyboard cover

Take care to raise the cover gently and not to set heavy objects on the cover.

1. Unlock the cover.
 2. Lift the cover gently.
 3. Push the cover inwards gently and completely.
- Follow the reverse procedure to close the cover.

Note: Open and close the cover slowly.



Power source

1. Plug the power cord into an outlet.
2. Turn the **PLAY** button on.

PLAY



■ STAND BY ■ ON

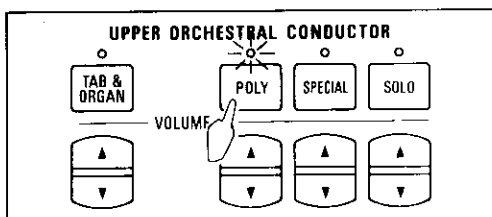
- A minute amount of power is consumed even when the **PLAY** button is off. If the organ is not going to be used for a long time, remove the power cord from the outlet. Note that when the power cord is removed from the outlet, any data stored in the **SEQUENCER** is lost within a few minutes. To preserve the **SEQUENCER** contents, therefore, save the stored data on a memory disk with the Digital Disk Recorder (separately sold on the GN3, GN3K and GN5K).
- Before plugging in or pulling out the power cord, make sure that the **PLAY** button is off.

② Playing your Technics is easy!

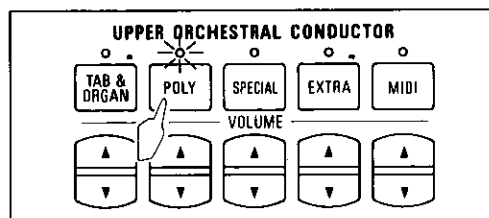
Start with the PIANO sound for the upper keyboard.

1. In the **UPPER ORCHESTRAL CONDUCTOR** section, press the **POLY** button to turn it on.

GN3/GN5

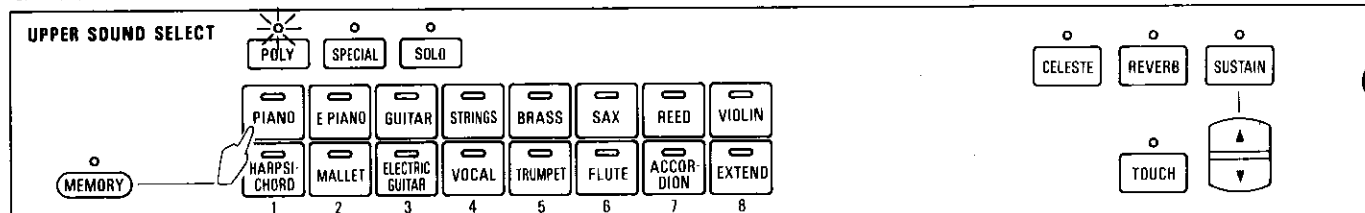


GN7/GN9

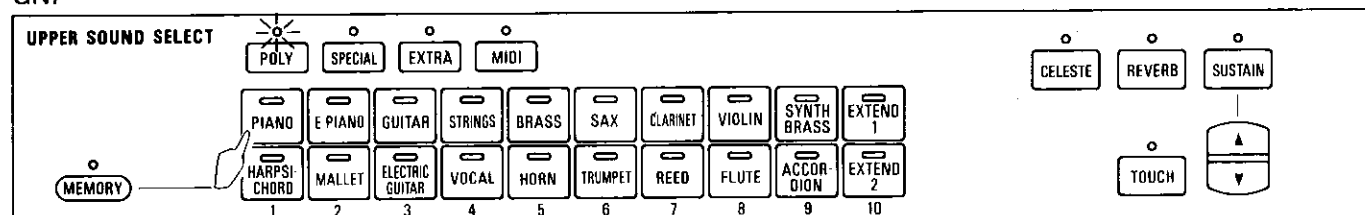


2. In the **UPPER SOUND SELECT** section, press the **PIANO** button to turn it on.

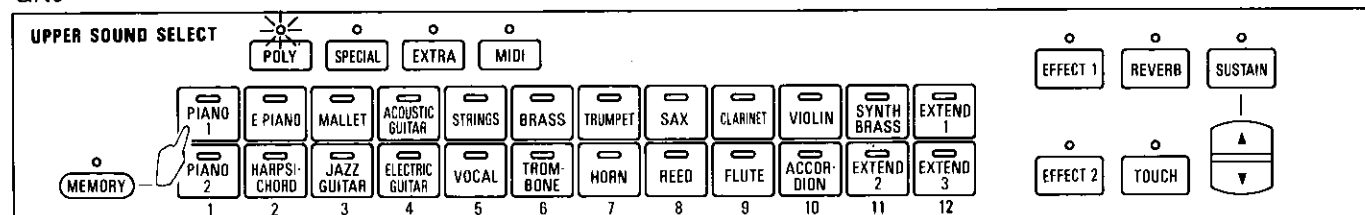
GN3/GN5



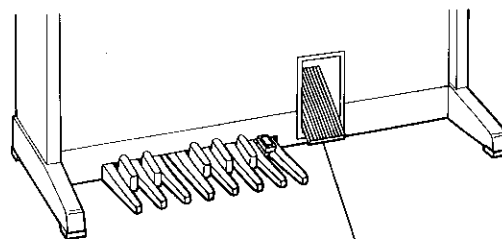
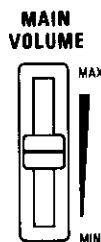
GN7



GN9



3. Set the **MAIN VOLUME** to an appropriate level with the sliding control. While playing a tune on the upper keyboard, modulate the volume with the expression pedal.



Expression pedal

Initialization

Numerous function settings and storage procedures are available with this organ. If you wish to return all settings and memories to the factory-presets, perform the initialization procedure. (Refer to ③ Memory & Control functions.)

③ Listen to the demonstration tune

A demonstration performance has been preset in your organ. Listen to the demonstration and you will hear what kind of performance is possible by using the various capabilities of the GN Series Organ.

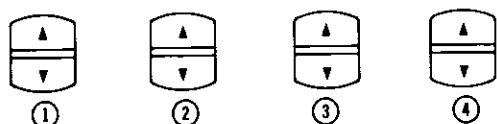
1. Press the **DEMO**  button to turn it on.



The display changes to the following.

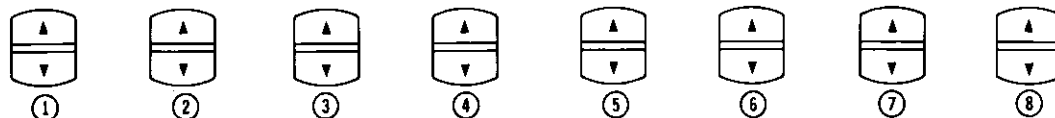
GN3

* DEMO SONG * [START]
SONG#1 JAZZ [/STOP]



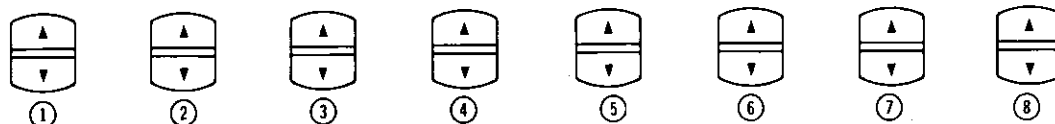
GN5







***** DEMONSTRATION SONG ***** [START]
SONG#1 JAZZ [/STOP]




GN7/GN9

***** DEMONSTRATION SONG ***** [START]
SONG#1 JAZZ [/STOP]



2. Use the  buttons to select a tune number (1 or 2).
3. When either  (GN3) or  (GN5/GN7/GN9) button is pressed, the automatic demonstration performance begins. The tunes are played continuously in order.
 - The demonstration performance stops when the same  or  button is pressed.
4. When you have finished listening to the demonstration performance, press the **DEMO**  button to turn it off and return the display to the normal mode display.

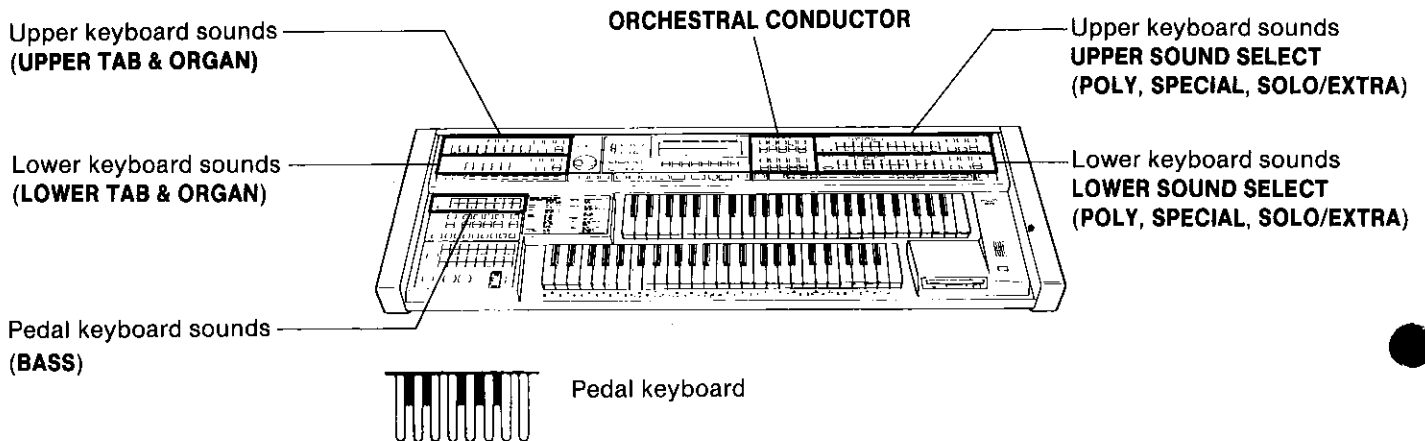
Note:

The other buttons and keys do not function when the **DEMO**  button is on.

Part II Basic creation of sounds and effects

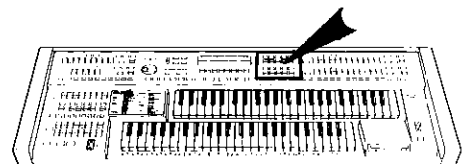
This organ has various sounds for you to choose from as explained below.

Your organ comprises an upper keyboard, lower keyboard and pedal keyboard, for each of which the sounds are selected independently.



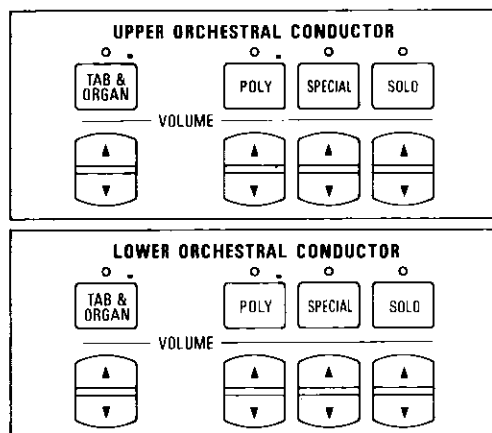
- The sounds for the upper keyboard are selected by part with the **UPPER TAB & ORGAN** and **UPPER SOUND SELECT** buttons.
- The sounds for the lower keyboard are selected by part with the **LOWER TAB & ORGAN** and **LOWER SOUND SELECT** buttons.
- Parts performed on the upper keyboard are selected with the **UPPER ORCHESTRAL CONDUCTOR**, and on the lower keyboard with the **LOWER ORCHESTRAL CONDUCTOR**.
 - The **UPPER** and **LOWER TAB & ORGAN** sounds are set for the respective **TAB & ORGAN** parts.
 - The **SOUND SELECT** sounds can be set for three parts: **POLY**, **SPECIAL** and **SOLO** (GN3/GN5) or **EXTRA** (GN7/GN9). To select a sound for one of the parts, press the corresponding part button first to turn it on, and then select the desired sound.
 - Concerning the **BASS** part, refer to ④ Bass.

④ Orchestral Conductor

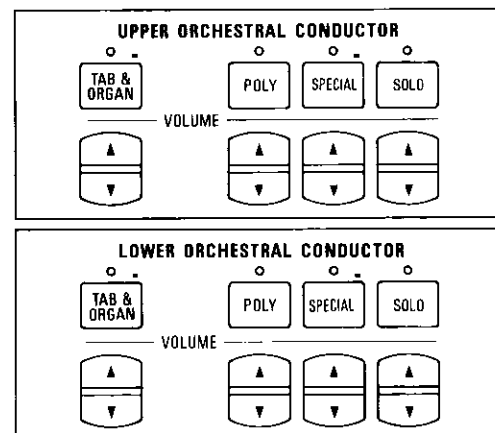


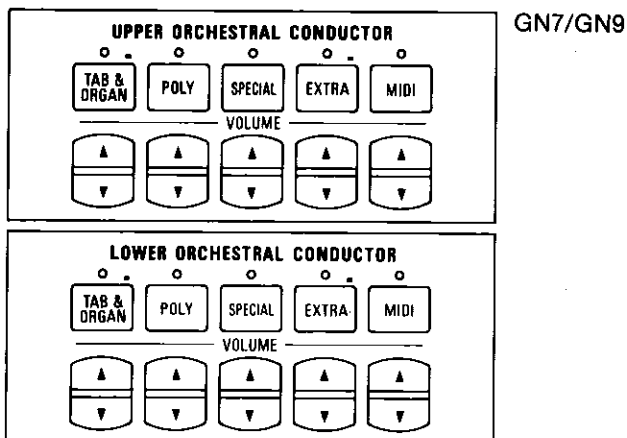
The sounds of the upper and lower keyboards are divided into the **TAB & ORGAN**, **POLY**, **SPECIAL**, **SOLO** (GN3/GN5) and **EXTRA** (GN7/GN9) parts. These parts are centrally controlled by the **ORCHESTRAL CONDUCTOR**, which means you can easily change or mix the sounds even while you are playing.

GN3



GN5





The **POLY**, **SPECIAL** and **SOLO** (GN3/GN5) or **EXTRA** (GN7/GN9) sounds are selected with the buttons in the **SOUND SELECT** section.

Turn on the **ORCHESTRAL CONDUCTOR** button for the part you wish to play. The corresponding indicator lights.

The part for the upper keyboard is selected with the **UPPER ORCHESTRAL CONDUCTOR** buttons and for the lower keyboard with the **LOWER ORCHESTRAL CONDUCTOR** buttons.

- You can combine sounds by turning on two or more buttons in the **ORCHESTRAL CONDUCTOR** at the same time. Parts which cannot be used together are indicated by a ■ mark above the **ORCHESTRAL CONDUCTOR** button:
 GN3: **TAB & ORGAN** and **POLY**;
 GN5: **TAB & ORGAN** and **SPECIAL**;
 GN7/GN9: **TAB & ORGAN** and **EXTRA**.
- GN3/GN5: **UPPER SOLO** and **LOWER SOLO** cannot be used together.
- The **MIDI** button (GN7/GN9) is used when controlling connected MIDI instruments. For detailed information, refer to Vol. 3, page 7.

Number of notes which can be produced simultaneously for each part

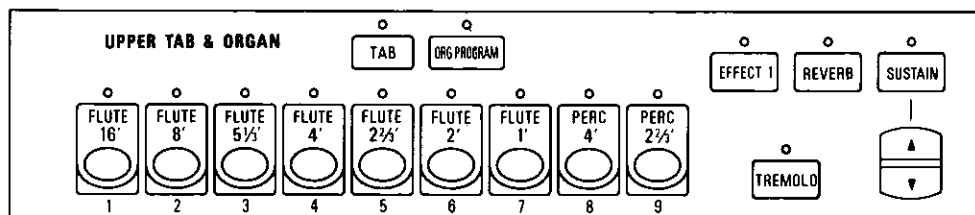
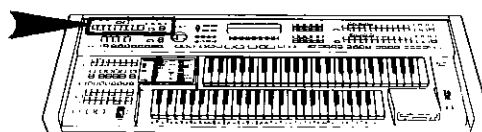
	Key-board	TAB & ORGAN	POLY	SPECIAL	SOLO
GN3	UPPER	8	8	8	1
	LOWER	8	8		
GN5	UPPER	8	8	8	1
	LOWER	8	8	8	

	Key-board	TAB & ORGAN	POLY	SPECIAL	EXTRA
GN7	UPPER	8	8	8	8
	LOWER	8	8	8	8
GN9	UPPER	8	8	8	8
	LOWER	8	8	8	8

- GN3: The maximum number of **SPECIAL** notes which can be produced on both the upper and lower keyboards simultaneously is 8, with priority given to notes played on the upper keyboard.

⑤ Upper Tab & Organ

When the **TAB & ORGAN** button of the **UPPER ORCHESTRAL CONDUCTOR** is on, the **TAB & ORGAN** sounds can be played on the upper keyboard.



TAB sounds

When the **TAB** button is on, you can select **FLUTE** sounds to be played on the upper keyboard. **FLUTE** sounds can be freely combined.

About feet marks

On a pipe organ, musical tones are created by blowing air through pipes of different lengths. Measurements in feet are used to describe the pitch of a rank of pipes. A 4' rank pitch sounds one octave above an 8' rank pitch, a 16' rank pitch one octave below.

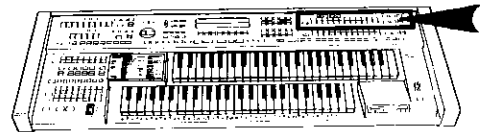
PERC adds a tone with a fast initial attack to any of the **FLUTE** sounds; or it may be used alone. The effect is what you hear when a player strikes a piano key or plucks a banjo string.

ORGAN sounds

When the **ORG PROGRAM** button is on, you can choose from 9 types of organ sounds with the tab buttons.

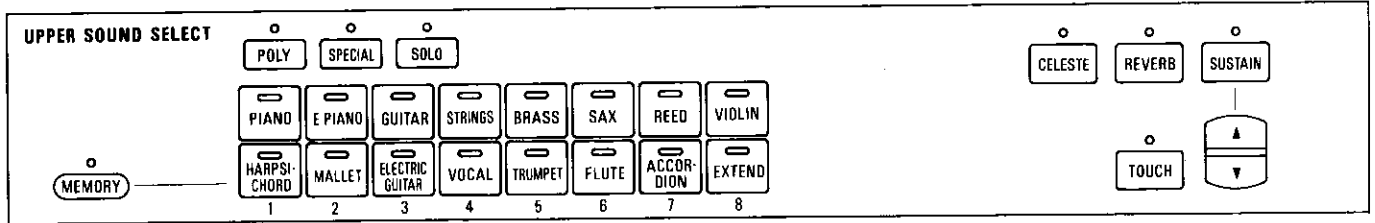
- Select the organ sound by referring to the numbers which are below the **FLUTE** and **PERC** buttons.
- You can choose from factory-preset organ sounds to store in the **ORG PROGRAM 1** through **9** buttons. (Refer to ② Sound Setting functions.)

⑥ Upper Sound Select

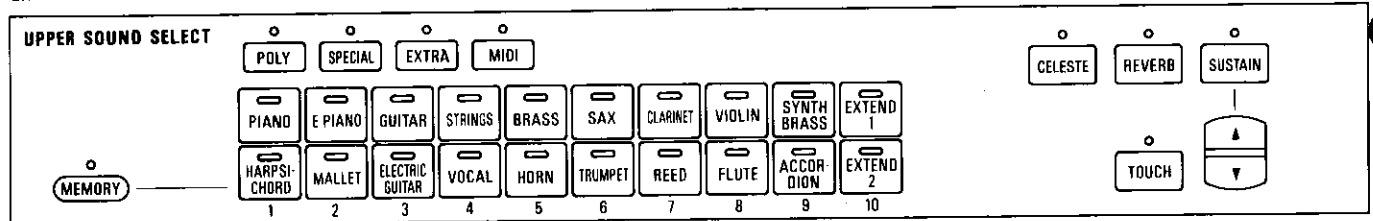


When a **POLY**, **SPECIAL**, **SOLO** (GN3/GN5) or **EXTRA** (GN7/GN9) button in the **UPPER ORCHESTRAL CONDUCTOR** is on, a variety of corresponding sounds can be played on the upper keyboard.

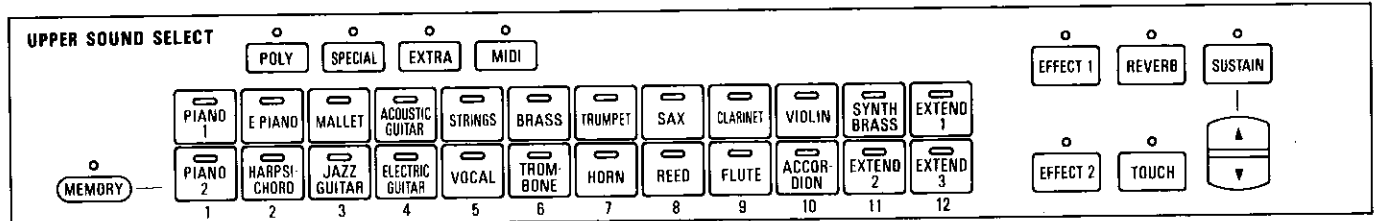
GN3/GN5



GN7



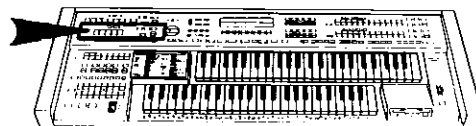
GN9



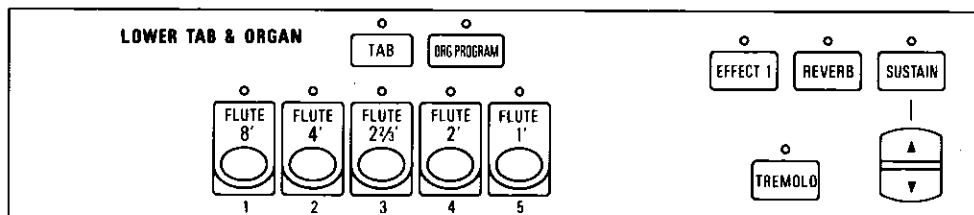
Sounds are selected by first setting the registrations for the **POLY**, **SPECIAL** and **SOLO** (GN3/GN5) or **EXTRA** (GN7/GN9) parts of the **UPPER SOUND SELECT**. The stored sounds are then selected by one touch of an **ORCHESTRAL CONDUCTOR** button. Sounds can be combined by pressing two **ORCHESTRAL CONDUCTOR** buttons at the same time.

- The sounds of the buttons vary depending on the **SOUND SELECT** part you have selected.
- Sounds produced for the **SOLO** part (GN3/GN5) are monophonic.
- There are variations which you can select for the sounds. For details on selecting the desired variation, refer to ⑦ Sound Setting functions.
- For information about the **MIDI** button (GN7/GN9), refer to Vol. 3, page 11.
- The **MEMORY** button is used when storing original sounds you create yourself with the **SOUND EDIT** feature. (Refer to Vol. 2, ⑩ Sound Edit.)

⑦ Lower Tab & Organ



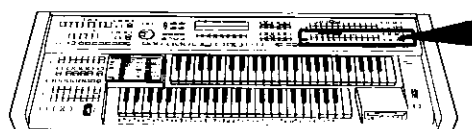
When the **TAB & ORGAN** button of the **LOWER ORCHESTRAL CONDUCTOR** is on, the **TAB & ORGAN** sounds can be played on the lower keyboard.



TAB and **ORGAN** sounds are selected the same way as for the upper keyboard.

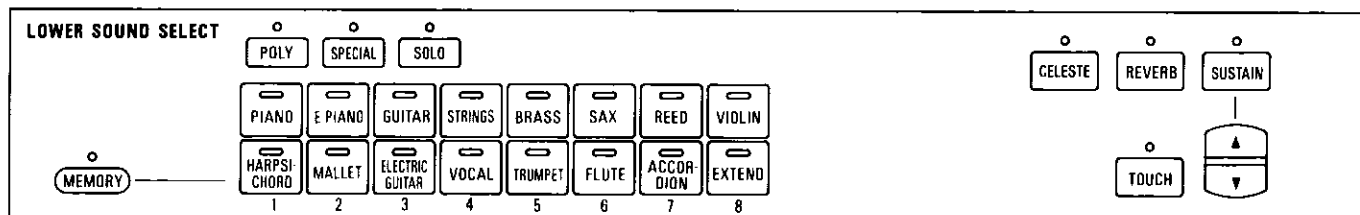
- When the **ORG PROGRAM** button is on, you can choose from 5 types of organ sounds with the tab buttons.
- You can choose from factory-preset organ sounds to store in the **ORG PROGRAM 1** through **5** buttons. (Refer to ⑦ Sound Setting functions.)

⑧ Lower Sound Select

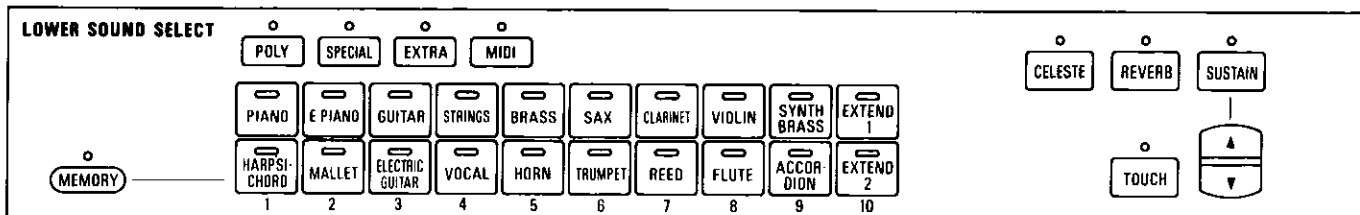


When the **POLY**, **SPECIAL**, **SOLO** (GN3/GN5) or **EXTRA** (GN7/GN9) button in the **LOWER ORCHESTRAL CONDUCTOR** is on, a variety of corresponding sounds can be played on the lower keyboard.

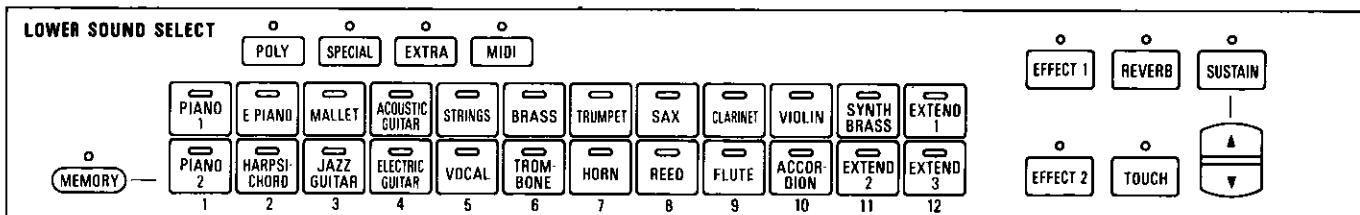
GN3/GN5



GN7

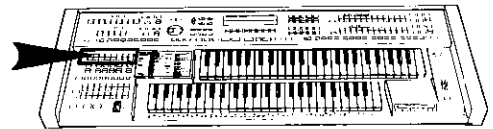


GN9



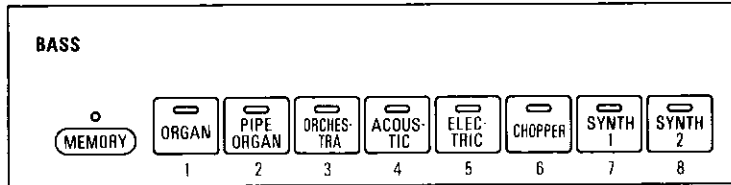
The sounds are selected in the same way as for the **UPPER SOUND SELECT**.

9 Bass

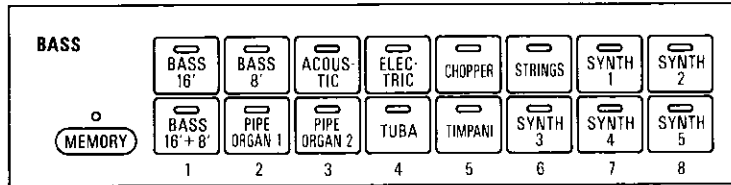


The sound for the pedal keyboard is selected with the **BASS** buttons.

GN3/GN5



GN7/GN9



Select the desired sound for the pedal keyboard by turning on one of the **BASS** buttons.

- The **BASS** sounds are normally monophonic, which means that only one note sounds no matter how many pedals are pressed at the same time. However, if the **BASS** part is set to the POLY mode, up to two notes can sound at the same time. (Refer to ⑦ Sound Setting functions.)
- The **MEMORY** button is used when storing original sounds you create yourself with the **SOUND EDIT** feature. (Refer to Vol. 2, ⑩ Sound Edit.)

When playing the **BASS** part, turn on the **BASS** button in the **VOLUME** section. The indicator lights.

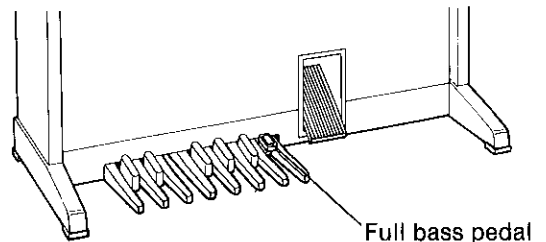


Full bass pedal (GN5/GN7/GN9)

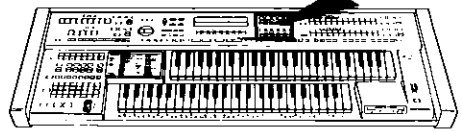
While the full bass pedal is pressed, the **BASS** note corresponding to the lowest note played on the lower keyboard is automatically produced. This means that you can produce **BASS** sounds without actually playing the pedal keyboard. The full bass pedal function is active only as long as the pedal is depressed.

The sounds produced are those selected by the buttons of the **BASS** section.

- The full bass pedal can be programmed so that playing the lower keyboard produces a **BASS** solo as long as the pedal is pressed. (Refer to ⑩ Memory & Control functions.)
- You can use the full bass pedal to turn other functions on and off. (Refer to ⑩ Memory & Control functions.)

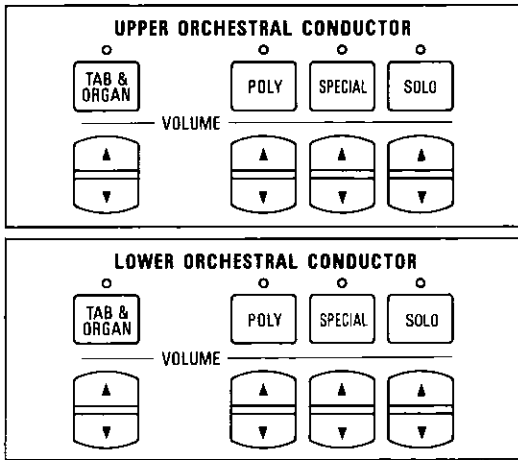


⑩ Volume

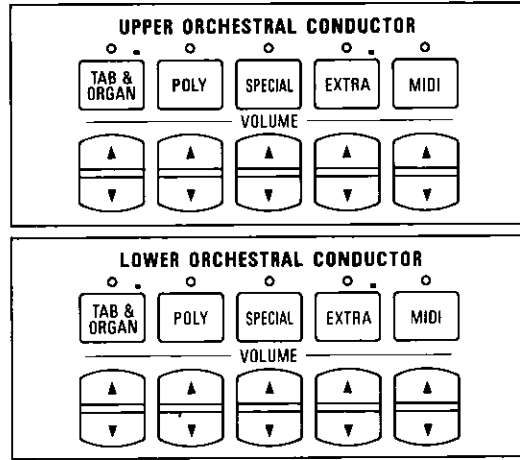




Adjust the volume of each part with the respective  buttons of the **ORCHESTRAL CONDUCTOR**.

GN3/GN5



GN7/GN9



Select from 10 volume levels (including off) for each part. Pressing the  button increases the volume; pressing the  button lowers the volume. The volume for each part appears on the display as a number from 0 to 9 at the right of the sound selected for the respective part.


- GN3: When a **VOLUME** button is pressed, the **MUSICAL DIRECTOR** changes to the volume display. The volume of each part is indicated as a number from 0 to 9. (The normal mode display returns after a few seconds.)

UTB 8	UPL 7	USP 6	USL 7
LTB 7	LPL 6	LSP 5	LSL 4

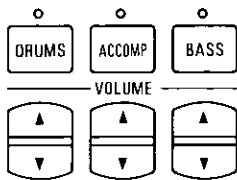
① ② ③ ④

UTB (UPPER TAB) UPL (UPPER POLY)
 USP (UPPER SPECIAL) USL (UPPER SOLO)
 LTB (LOWER TAB) LPL (LOWER POLY)
 LSP (LOWER SPECIAL) LSL (LOWER SOLO)

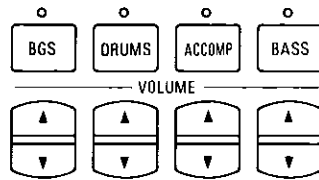
Bass volume

The **BASS** volume is adjusted (0~9) with the **BASS**  buttons in the **VOLUME** section.

GN3/GN5



GN7/GN9

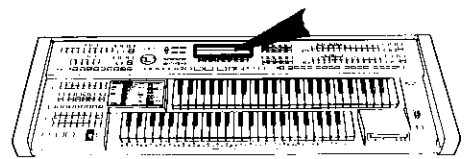


GN3: When a **VOLUME** button is pressed, the **MUSICAL DIRECTOR** changes to the volume display. (The normal mode display returns after a few seconds.)

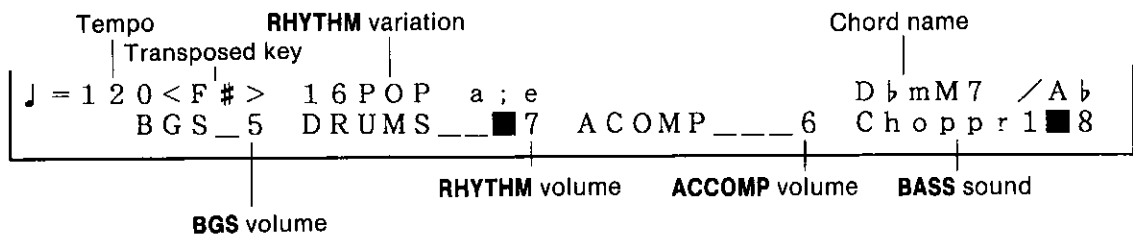
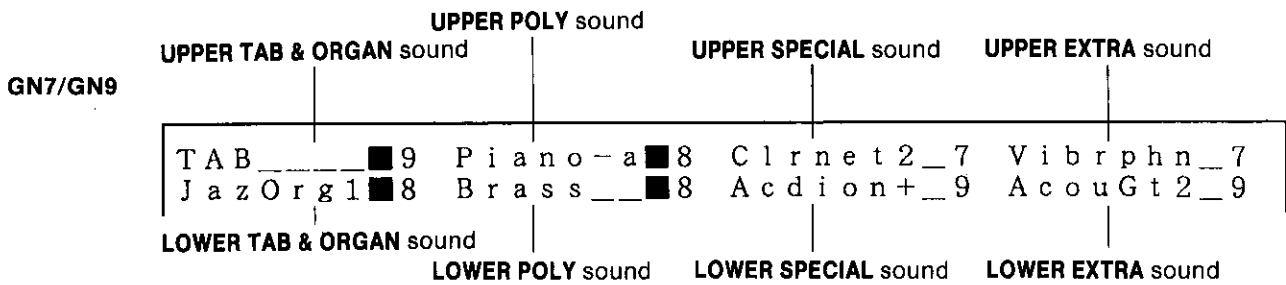
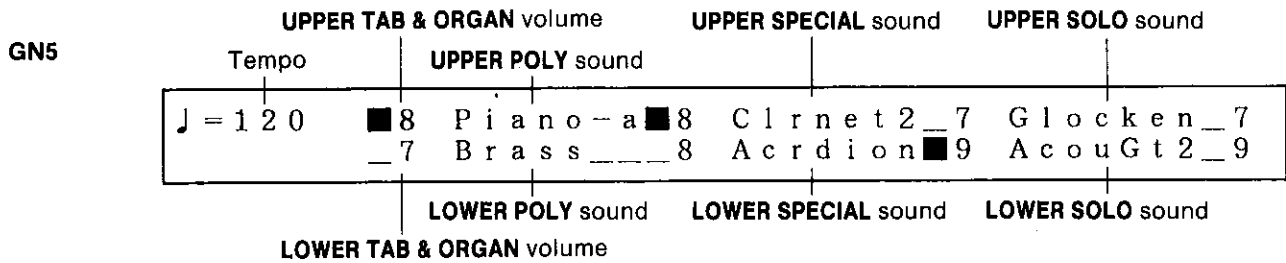
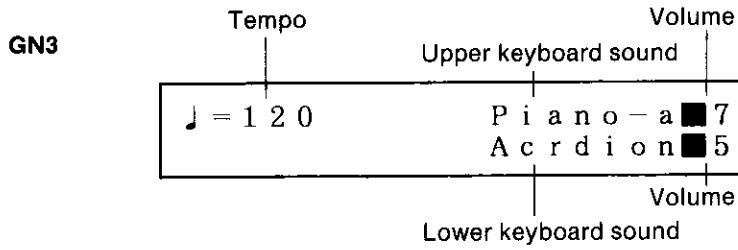
DRM 8	AC 1 : 5	A 2 3 : 6	BAS 6
	ACP 7		

① ② ③ ④
 BASS volume

11 Musical Director: Part 1



The name of the selected sound for each part is shown on the display.

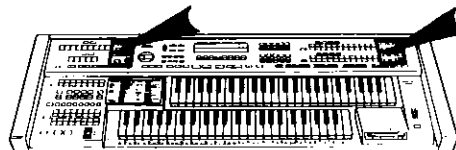


- GN3: Only the sound of the part(s) which is selected in the **SOUND SELECT** section is displayed.
- A ■ next to the sound name in the display indicates that the corresponding part is selected on the **ORCHESTRAL CONDUCTOR**.
- The volume for each part appears on the display as a number from 0 to 9 at the right of the respective sound name.

- The display contrast is adjusted with the **CONTRAST** sliding control.



12 Effect



Try using the effects to see how they add character to the selected sound.

Celeste (GN3/GN5/GN7) / Effect 1 (GN9)



This is the beautiful wide effect of many instruments playing in unison. This effect can be turned on/off for each sound part independently when setting registrations.

- GN3: When the **SPECIAL** part has been selected for both the **UPPER** and **LOWER ORCHESTRAL CONDUCTOR**, the **CELESTE** effect works for both the **UPPER** and **LOWER SPECIAL** part sounds if it is on for either part.

Effect 2 (GN9)



These are various effects of a digital sound processor. For details, refer to 29 Effect functions.

This effect can be turned on/off for each sound part independently when setting registrations.

- The initial setting is **PITCH SHIFT 1**.

Tremolo



TREMOLO is a rapid oscillation in volume which can be used with the **TAB & ORGAN** sounds. The **TREMOLO** effect can be turned on/off with the **TREMOLO** buttons in the **UPPER** and **LOWER TAB & ORGAN** sections.

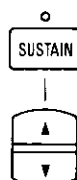
TREMOLO SLOW/FAST button

Choose from two **TREMOLO** speeds with the **TREMOLO SLOW/FAST** button. Turning the button on produces the effect of a speaker rotating very quickly.





The **FAST TREMOLO** speed can be adjusted. (Refer to 29 Effect functions.)

Sustain



SUSTAIN is the gradual fading out of musical tones after the key is released.

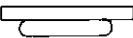
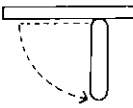
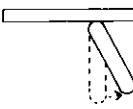
SUSTAIN can be turned on/off for each sound part independently when setting registrations.

The length of the **SUSTAIN** can be adjusted with the  buttons found below each **SUSTAIN** button. When one of the  buttons is pressed, the display changes to the **SUSTAIN-level-setting** display.

- The **SUSTAIN** level can be set from 1 to 8 for each part.
- The display returns to the original display after a few seconds.

Knee lever

By turning the **SUSTAIN** function on beforehand, you can operate the knee lever located under the keyboards with your right knee to turn the **SUSTAIN** effect on and off quickly while you play.

Knee lever	SUSTAIN effect
 Raised position	SUSTAIN effect for each part is enabled/disabled according to the on/off status of the SUSTAIN buttons on the panel. (SUSTAIN cannot be applied to some sounds.)
 Lowered position (off)	SUSTAIN effect is off for all parts, regardless of on/off status of the SUSTAIN buttons on the panel.
 Pressed to the right (on)	SUSTAIN effect for each part is enabled/disabled according to the on/off status of the SUSTAIN buttons on the panel. (The SUSTAIN effect is applied to all the sounds.)

- You can use the knee lever to turn other functions on and off. (Refer to 30 Memory & Control functions.)

Reverb



REVERB creates the feeling of depth by adding an echo to the sound, such as the reverberation during a performance at a concert hall. **REVERB** can be turned on/off for each sound part independently when setting registrations.

- GN3: When the **SPECIAL** part has been selected for both the **UPPER** and **LOWER ORCHESTRAL CONDUCTOR**, the **REVERB** effect works for both the **UPPER** and **LOWER SPECIAL** part sounds if it is on for either part.

REVERB on/off and **REVERB** depth (**DEPTH**) can be set for the whole organ with the **REVERB** buttons located to the left of the **VOLUME** section.



Adjust the amount of **REVERB** with the **DEPTH** buttons. When one of the **DEPTH** buttons is pressed, the display changes to the **REVERB DEPTH**-setting display.

- The **DEPTH** is indicated as a number from 1 to 8 on the display.
- The display returns to the original display after a few seconds.
- You can specify the desired **REVERB** type. (Refer to 29 Effect functions.)

13 Pitch Bend (GN9)

The pitch of the instrument can be continuously changed with the **PITCH BEND** wheel. Using this control, you can produce the effect of bending the strings on a guitar.

The pitch can be raised or lowered by moving the **PITCH BEND** wheel up or down.

- The pitch can be raised or lowered as much as one whole tone.
- When you release your hand from the wheel, it returns automatically to the center position and the pitch bend effect is turned off.
- This effect does not function for the **TAB** and **ORGAN** sounds.
- This effect does not function for the **AUTO PLAY CHORD** accompaniment pattern.
- In the initialized condition, this effect does not function for the lower keyboard sounds. (Refer to 30 Memory & Control functions.)

14 Modulation

GN9: The **MODULATION** switch is located in the center of the **PITCH BEND** wheel. When the switch is on, the vibrato effect is applied to the sounds. Vibrato is the effect of a slight waver in the pitch which can add a rich quality to the sounds.

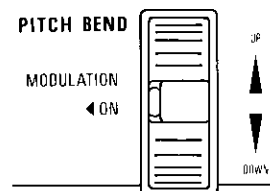
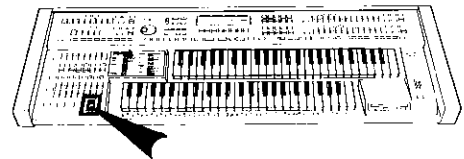
- GN3/GN5/GN7: The **SWITCH ASSIGN** procedure can be used to assign the **MODULATION** function to a foot switch or the knee lever. (Refer to 30 Memory & Control functions.)
- The vibrato depth can be set independently for each part. (Refer to 30 Memory & Control functions.)

Touch



With the **TOUCH** effect, the volume is increased when the keyboard is played harder, as in a piano. If the **TOUCH** button of the **UPPER** or **LOWER SOUND SELECT** is turned on while selecting a sound, this effect is applied to the selected sound.

- GN9: The aftertouch effect can be set on/off. (Refer to 29 Effect functions.) The aftertouch effect is when a key is played and then pressure is applied again to increase the volume or the vibrato effect. This effect does not function for **TAB & ORGAN** sounds.
- The **TOUCH** effect can be set on/off for each sound and each part. The **TOUCH** effect does not function even when you turn on the **TOUCH** button for a part which was set to off. (Refer to Vol. 2, 31 Sound Edit.)
- You can specify the degree of **TOUCH** effect for each keyboard. (Refer to 29 Effect functions.)



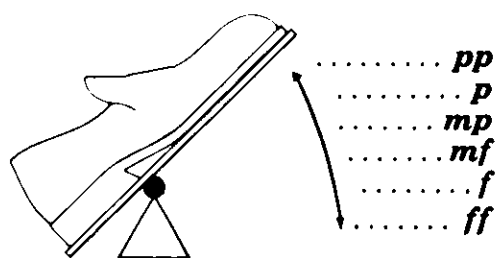
- The vibrato effect does not function for the **TAB** and **ORGAN** sounds.
- This effect does not function for the **AUTO PLAY CHORD** accompaniment pattern.
- In the initialized condition, this effect does not function for the lower keyboard sounds. (Refer to 30 Memory & Control functions.)

15 Expression pedal

The expression pedal regulates the loudness of ALL the organ sounds, regardless of how individual volume controls may be set.

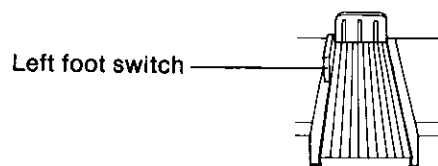
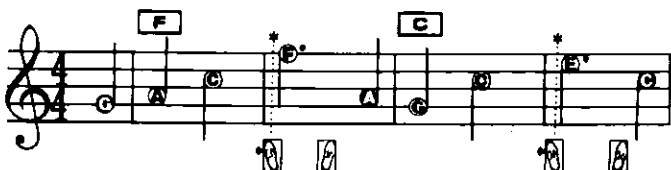
Pushing down with your toe makes the organ louder; pushing down with your heel makes the tone softer.

The "halfway down" position of the pedal represents the medium volume range—this is always a good starting point if dynamic marks don't appear in the music.



16 Glide control

The glide control switch is located on the left side of the expression pedal. When pressed to the left with the side of your foot, it lowers the pitch of the organ about one half-tone. The example below shows how you can achieve the Hawaiian guitar effect. Press the glide switch just before you play the note you want to "bend" (*).



- The glide effect functions fast when the glide control switch is released quickly.
- You can set the pitch change to a whole tone. (Refer to 30 Memory & Control functions.)
- In the initialized condition, this effect does not function for the lower keyboard sounds. (Refer to 30 Memory & Control functions.)
- Other functions can be turned on and off using the glide control. (Refer to 30 Memory & Control functions.)
- The glide effect does not function for some sounds.

17 BGS (GN7/GN9)

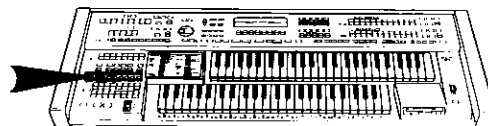
Various preset background sounds such as the chirping of birds and the sound of waves on the beach are available. Use the **BGS** to give your song that special atmosphere.

Select the desired sound by pressing one of the buttons. The following 8 sounds are available.

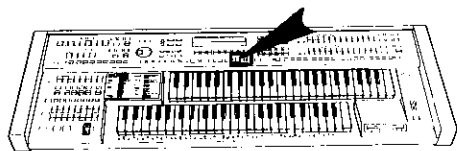
BGS BACKGROUND SOUND



- The sound is produced as long as the button is left on.
- The background sounds can be mixed when two buttons are pressed at the same time. However, if the **RHYTHM** is turned on, only one background sound is produced (the sound from the leftmost button), although both indicators continue to be lit. When the **RHYTHM** is turned off, both background sounds are again heard.
- If the **FADE OUT** button is pressed, the sound dies out slowly.
- Press the **FADE OUT** button twice to turn off the sound immediately.
- To hear the **BACKGROUND SOUND**, the **BGS** button in the **VOLUME** section must be on.
- The volume for the **BACKGROUND SOUND** is adjusted with the **BGS** buttons in the **VOLUME** section.



18 Techni-chord



TECHNI-CHORD transfers the chord notes you play on the lower keyboard to each melody note you play on the upper keyboard.

- **TECHNI-CHORDs** cannot be played using the lowest octave of the upper keyboard.
- The **TECHNI-CHORD** function can be used with the **AUTO PLAY CHORD** function (explained later) for an effective performance.

Set up your organ as follows:

Upper keyboard: **POLY: STRINGS**

Lower keyboard: **TAB: FLUTE 8'**

Pedal keyboard: **ACOUSTIC**

Effect: **REVERB** (lower keyboard)

Now turn on the **TECHNI-CHORD** button and play the example below.



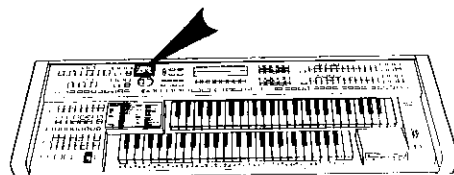
Here is the sound actually produced on the upper keyboard—three-note melody chords!



- You can choose the desired **TECHNI-CHORD** harmony style. (Refer to 20 Memory & Control functions.)
- When two or more parts of the **UPPER ORCHESTRAL CONDUCTOR** are selected at the same time, the **TECHNI-CHORD** function works for only one of the parts. The order of priority is:

- GN3: 1. **POLY/TAB & ORGAN**
2. **SPECIAL**
- GN5: 1. **POLY**
2. **SPECIAL/TAB & ORGAN**
- GN7/GN9: 1. **POLY**
2. **SPECIAL**
3. **EXTRA/TAB & ORGAN**

19 Transpose



The **TRANSCOPE** control is used to shift the tuning (key) of the entire instrument in semitone steps across an entire octave.

Suppose you learn to play a song—in the key of C, for example—and decide you want to sing it, only to find it's either too high or too low for your voice. Your choice is to either learn the song all over again, in a different key, or to use the **TRANSCOPE** feature.

Each press of the **UP** button raises the key of the instrument by one semitone as follows: D^b → D → E^b → E → F → F[#]. Each press of the **DOWN** button lowers the key as follows: B → B^b → A → A^b → G.

- Pressing the two **TRANSCOPE** buttons at the same time will return the organ to the normal pitch.
- The pedal keyboard notes are lowered one octave when 8' pitch notes are transposed higher than a major 3rd, and become one octave higher when 16' pitch notes are transposed to lower than C.
- When the **TRANSCOPE** function is active, pressing the C key will sound the note shown on the display.

20 Voice Setting Computer



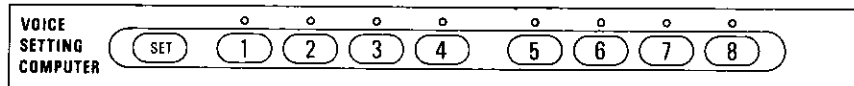
The **VOICE SETTING COMPUTER** allows you to change all the panel settings of the entire organ at the touch of a single button.

■ **Settings which can be stored are:**

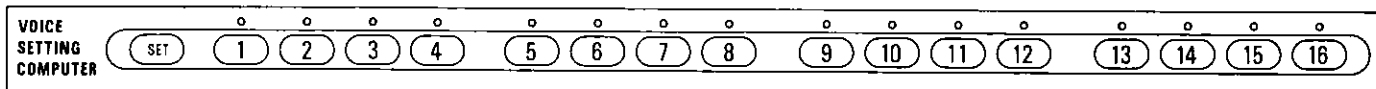
- The sound, effects, and volume for each part
- **ORCHESTRAL CONDUCTOR** status

There are 8 storable memories for the GN3/GN5/GN7 and 16 for the GN9.

GN3/GN5/GN7

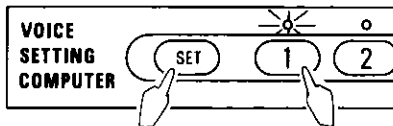


GN9



Try storing the panel settings in **VOICE SETTING COMPUTER** location 1.

1. Select the desired registrations.
2. Turn the desired effects on or off for the selected sounds as desired.
3. With the **SET** button held down, press the 1 button of the **VOICE SETTING COMPUTER**.



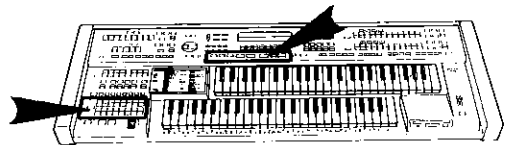
This stores the current panel settings in **VOICE SETTING COMPUTER** location 1.

- When storing the panel settings in a button, any previously stored settings are automatically replaced by the new one.
- You can manually change the selected sounds and effects. The memory contents in the **VOICE SETTING COMPUTER**, however, remain unchanged.
- It is possible to expand the range of storable panel settings. (Refer to 20 Memory & Control functions.)

Part III Playing the rhythm

The **RHYTHM** section enhances the capabilities of your organ with features such as automatic performance of the preset rhythm patterns and accompaniment patterns.

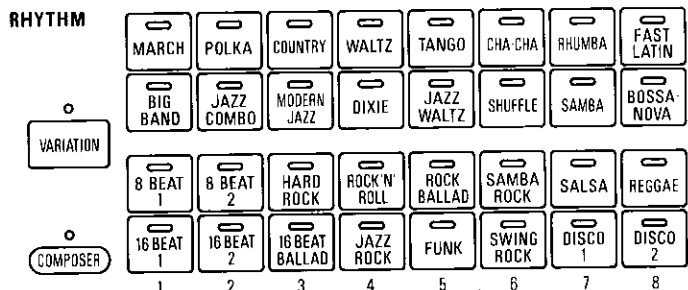
21 Rhythm



The **RHYTHM** section provides automatic performance of rhythm patterns using realistic percussive instrument sounds from a PCM digital sound generator.

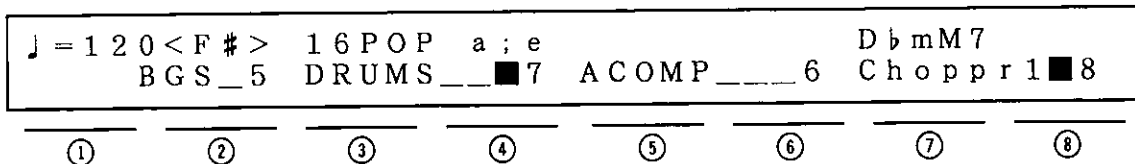
Select a rhythm

Select the desired rhythm pattern by pressing a button in the **RHYTHM** section.



- GN3/GN5: When the **RHYTHM** button to the left of the display is turned on, the name of the selected rhythm pattern is shown.
- GN7/GN9: The name of the selected rhythm pattern is shown on the display. (Refer to ① Musical Director: Part 1.)

RHYTHM



The functions shown on the display are: the transposed key (when **TRANPOSE** is active); the selected rhythm variation, volume (0~9), and on/off (■/—) status; **ACCOMP** volume (0~9), and on/off (■/—) status; the selected **BASS** sound, volume (0~9), and on/off (■/—) status; **BGS** volume (0~9) and on/off (■/—) status (GN7/GN9).


Start the rhythm

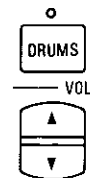
There are 2 ways to start the rhythm.

- Press the **START/STOP** button to start the selected rhythm instantly.
- The rhythm stops when you press the **START/STOP** button again.
- When the **SYNCHRO & BREAK** button is on, the rhythm is started by pressing any key on the lower keyboard or pedal keyboard.
- The rhythm stops when you press the **START/STOP** button.
- If the **AUTO PLAY CHORD** (explained later) is used, however, the rhythm cannot be started with the pedal keyboard.



Adjust the volume

Turn on the **DRUMS** button in the **VOLUME** section, and then adjust the volume with the  buttons.

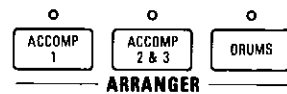
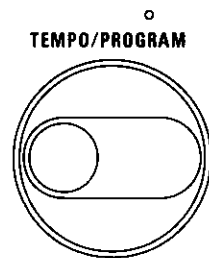


Adjust the tempo

Adjust the tempo of the rhythm with the **TEMPO/PROGRAM** dial.

- The tempo (40~300) is shown on the display as $\text{♩} =$.
- If the green **TEMPO/PROGRAM** indicator is lit, the **TEMPO/PROGRAM** dial cannot be used to adjust the tempo.

- When the **DRUMS** button of the **ARRANGER** section is turned on, the rhythm sounds change or the number of instruments in the rhythm increases.

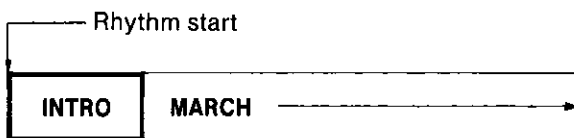


Intro & Ending

This feature lets you begin the rhythm with an introduction or stop the rhythm with an ending pattern.

■ INTRO

This is how to start a song with an **INTRO**.



1. Select **MARCH** in the **RHYTHM** section.
2. Press the **INTRO & ENDING** button to turn it on.



3. Press the **START/STOP** button to start the rhythm.
 - The rhythm starts with an intro, after which the **MARCH** rhythm begins.
 - When the intro is finished, the **INTRO & ENDING** indicator goes out.
 - If the **INTRO & ENDING** button is on, a rhythm with an intro can also be started with the **SYNCHRO START**.

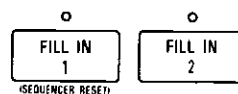
■ ENDING

When the rhythm is on and the **INTRO & ENDING** button is pressed, an ending pattern is produced, and then the rhythm stops.

- As explained later, an ending pattern can also be inserted in the **AUTO PLAY CHORD**. (Refer to ④ Auto Play Chord.)

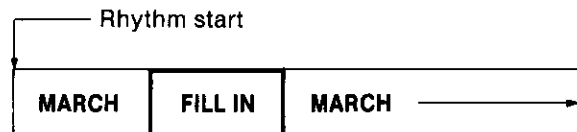
Fill In

If the **FILL IN 1** or **FILL IN 2** button is pressed when the rhythm is on, a fill-in pattern is heard immediately.



- You can change the **FILL IN** pattern. (Refer to ⑩ Memory & Control functions.)

Insert a **FILL IN 1** pattern during the rhythm performance.

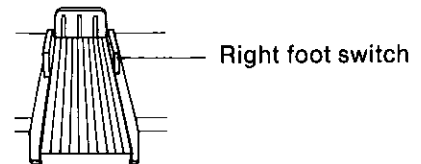


1. Select **MARCH** in the **RHYTHM** section.
2. Press the **START/STOP** button to start the rhythm.
3. Press the **FILL IN 1** button.

Foot switch (GN5/GN7/GN9)

You can use the foot switch located on the right side of the expression pedal to insert a **FILL IN 1** pattern by pressing it to the right with the side of your foot.

- Other functions can be turned on and off with the right foot switch. (Refer to ⑩ Memory & Control functions.)



Arranger



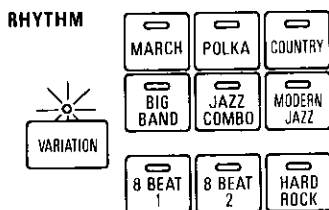
When the **ACCOMP 1** and/or **ACCOMP 2&3** button in the **ARRANGER** section is on, an accompaniment pattern in the chord specified on the lower keyboard sounds in time with the rhythm.

- When the **MEMORY** button in the **AUTO PLAY CHORD** section is on, the accompaniment continues to sound in the specified chord until you specify another chord. (Refer to ⑭ Auto Play Chord.)

Variation

Each **RHYTHM** button accesses a basic rhythm type, but there are also several rhythm variations available for you to choose from.

1. Select the **DISCO 1** rhythm.
2. Press the **VARIATION** button to turn it on.



The display changes to the following.

GN3

SHIFT

♩ = 120 DISCO1 ▶
*DISCO a ; e DISCO b ; e

♩ = 120 DISCO1 ◀
DISCO a DISCO b

GN5

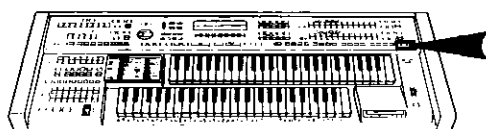
♩ = 120 DISCO1
*DISCO a ; e DISCO b ; e DISCO a DISCO b

GN7/GN9

♩ = 120 DISCO1
*DISCO a ; e DISCO b ; e DISCO a DISCO b

3. Select the desired rhythm variation by pressing either of the corresponding ①, ③, ⑤, ⑦, ⑧ buttons.
 - A * on the display indicates the selected variation.
 - On the GN3, you can select the **SHIFT** display by pressing the **SHIFT** button, located below the display. To return to the original display, press the **NORMAL** button.
4. After selecting a rhythm variation, press the **VARIATION** button to turn it off.
 - For more detailed information concerning rhythm variations, refer to the separate booklet.

22 Keyboard Percussion

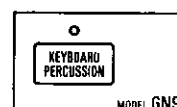


Press the **KEYBOARD PERCUSSION** button on to turn your lower keyboard into a whole band of percussive instruments and other special sounds.

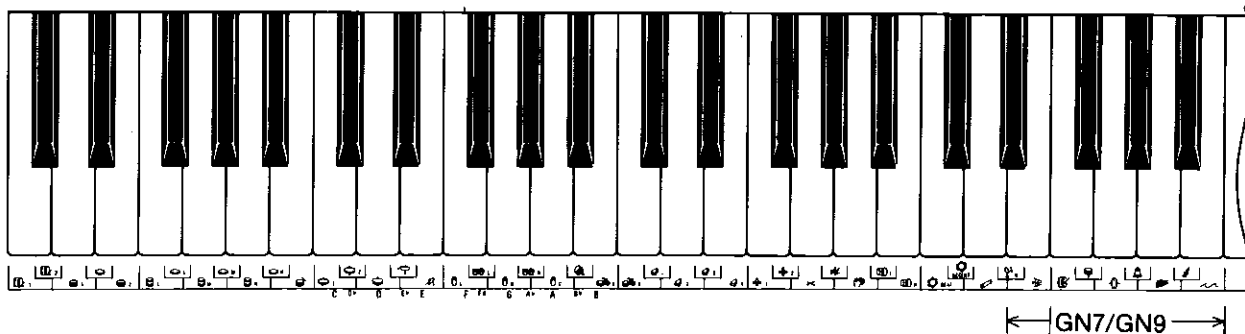
GN3/GN5/GN7



GN9



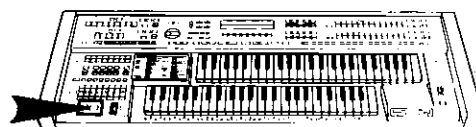
Percussive instrument sounds are produced by the lower keyboard keys as shown here.



- When the **KEYBOARD PERCUSSION** button is on, other sounds groups are not available for the lower keyboard.
- The **KEYBOARD PERCUSSION** volume is adjusted with the **DRUMS** buttons in the **VOLUME** section.

- A maximum of 6 keys can sound at the same time.
- The **KEYBOARD PERCUSSION**'s drum kit style can be changed. (Refer to 30 Memory & Control functions.)

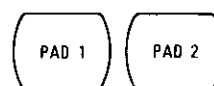
23 Manual Percussion (GN9)



By tapping the **PAD 1** or **PAD 2** button, you can add percussion sounds to your performance at any time.

- The initial sounds set in the **PAD** buttons are:
PAD 1—clashing cymbals; **PAD 2**—wind chimes.
- The **MANUAL PERCUSSION** volume is adjusted with the **DRUMS** buttons in the **VOLUME** section.

MANUAL PERCUSSION

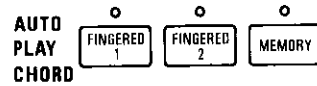


Storing sounds in the PAD buttons

A percussive sound from the **KEYBOARD PERCUSSION** can be stored in each of the **PAD** buttons.

1. Press the **KEYBOARD PERCUSSION** button to turn it on.
 2. While pressing one of the **PAD** buttons, select the desired percussive sound by pressing the appropriate key on the keyboard for about 2 seconds.
- When the name of the selected sound appears on the display, it means that the sound has been stored in the **PAD** button.
 - The **PAD** buttons can be used to turn on/off other functions. (Refer to 30 Memory & Control functions.)

24 Auto Play Chord



Simply by playing a key on the lower keyboard, the **AUTO PLAY CHORD** function automatically plays an accompaniment pattern on the lower keyboard and pedal keyboard which matches the selected rhythm.

Composition of the AUTO PLAY CHORD

The accompaniment pattern which is automatically played comprises 5 parts. These are:

- **ACCOMP 1**
- **ACCOMP 2**
- **ACCOMP 3**
- **BASS**
- **DRUMS** (rhythm pattern)

For the **ACCOMP** and **BASS** parts, the **AUTO PLAY CHORD** function automatically selects sounds which match the rhythm you specified.

- If desired, you can change the **BASS** sound with the buttons in the **BASS** section.

Playing chords

Choose from two ways of playing chords: With the one-finger mode, the chord can be specified by pressing only one key on the lower keyboard. With the fingered mode you indicate the chord by actually playing it on the lower keyboard.

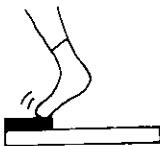
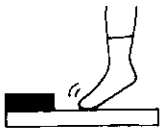
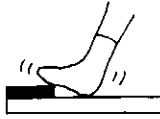
When the **FINGERED 1** button is on, you can specify the chord either with one finger or by playing it. When the **FINGERED 2** button is on, however, the chord is always specified by actually playing it.

One-finger mode

1. Press the **FINGERED 1** button to turn it on.



2. Select a rhythm.
3. Press the **START/STOP** button to start the automatic rhythm.
4. Press a key on the lower keyboard to specify the root note. The major chord (on the lower keyboard) and the bass note (on the pedal keyboard) corresponding to this root note are automatically played in an accompaniment pattern.
 - Minor, seventh and minor seventh chords are also easily produced.

minor chord	seventh chord	minor seventh chord
Play the root note on the lower keyboard and any black pedal.	Play the root note on the lower keyboard and any white pedal.	Play the root note on the lower keyboard and any black pedal and white pedal, at the same time.
Example: Cmin 	Example: C7 	Example: Cmin7 

Fingered mode



1. Press the **FINGERED 2** button to turn it on.
 - The **ACCOMP**, **BASS** and **DRUMS** button in the **VOLUME** section should be on.
 - Confirm that the **ACCOMP 1** and/or **ACCOMP 2&3** button in the **ARRANGER** section is on.
2. Select a rhythm.
3. Press the **START/STOP** button to start the automatic rhythm.
4. Play a chord on the lower keyboard. The accompaniment pattern based on the chord is automatically played.

- The **AUTO PLAY CHORD** can identify 24 chord types. For example: C, C7, CMaj7, Caug, Cmin, Cmin7, Cdim7, Cm7^{b5}, CmM7, C7sus4.

Memory button



When the **FINGERED 1** or **FINGERED 2** button is on and the **MEMORY** button is on, even if you release the keyboard keys, the chord is memorized and is automatically played repeatedly until you play another chord.

Break function



When the **FINGERED 1** or **FINGERED 2** button is on, the **MEMORY** button is off, and the **SYNCHRO & BREAK** button is on, the break function is available. The rhythm starts when the lower keyboard is played and stops when the fingers are removed from the keys. When the keys are pressed again, the rhythm starts from the first beat.

Arranger

The **ACCOMP 1** and **ACCOMP 2&3** parts of the **ACCOMP** pattern can be turned on/off independently with the respective buttons of the **ARRANGER**.

- When both buttons are off, the **ACCOMP** pattern does not sound.



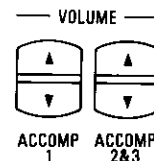
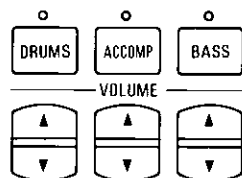
Adjusting the volume

Adjust the volume for each part independently by first turning on the respective button in the **VOLUME** section (**ACCOMP**, **BASS**, **DRUMS**) and then using the buttons.

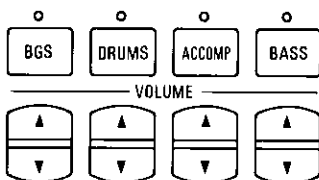
- The volumes for the **ACCOMP 1**, **2** and **3** parts can be adjusted independently. (Refer to 27 Sound Setting functions.)

- GN3: The buttons below the display are used to set the volumes of the **ACCOMP 1** and **ACCOMP 2&3** parts independently.

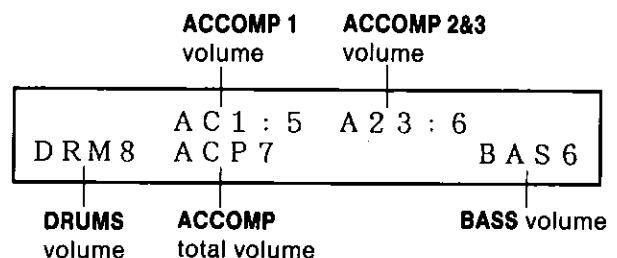
GN3/GN5



GN7/GN9



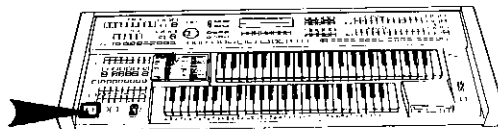
- GN3: When a **VOLUME** button is pressed, the **MUSICAL DIRECTOR** changes to the volume display. (The normal mode display returns after a few seconds.)



25 One Touch Play

With the **ONE TOUCH PLAY** feature, the sounds and effects, etc. matching the selected rhythm are easily set in seconds and you are ready to play immediately.

1. Set a rhythm pattern matching the tune with the **RHYTHM** buttons.
2. Press the **ONE TOUCH PLAY** button until the panel settings change (about 2 seconds).
3. The automatic rhythm begins to play immediately when a key on the lower keyboard is pressed.
 - The **ONE TOUCH PLAY** panel settings differ depending on the selected rhythm variation.



Music style select

If the **ONE TOUCH PLAY** button is pressed for just a second, the music style select function is activated. With this feature, all the organ settings, including the sounds, effects and rhythm, are set according to the selected music style.

1. Press the **ONE TOUCH PLAY** button momentarily.
 - The display changes to the following.

GN3


```
1 : MUSIC STYLE SELECT
1 2/4U. S. MARCH [SET]
```

GN5

```
1 : MUSIC STYLE SELECT
1 2/4U. S. MARCH [SET]
```

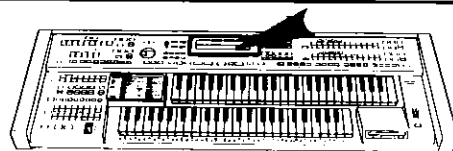
GN7/GN9

```
1 : MUSIC STYLE SELECT
1 2/4U. S. MARCH [SET]
```

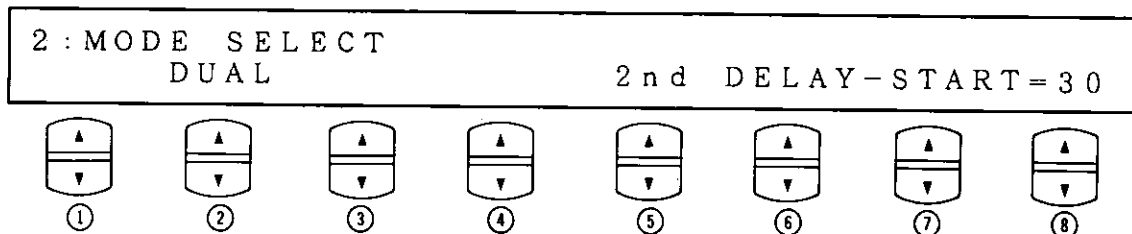
2. Select the music style with the ① or ②  buttons.
 - For detailed information about the available music styles, refer to the separate booklet.
 - The music style can also be selected with the **TEMPO/PROGRAM** dial.
 - If the **ONE TOUCH PLAY** button is pressed again at this time, the music style select function is canceled.
3. By pressing either of the ④ buttons, the organ settings are set for the selected music style.

Part IV Setting the functions

26 Musical Director: Part 2

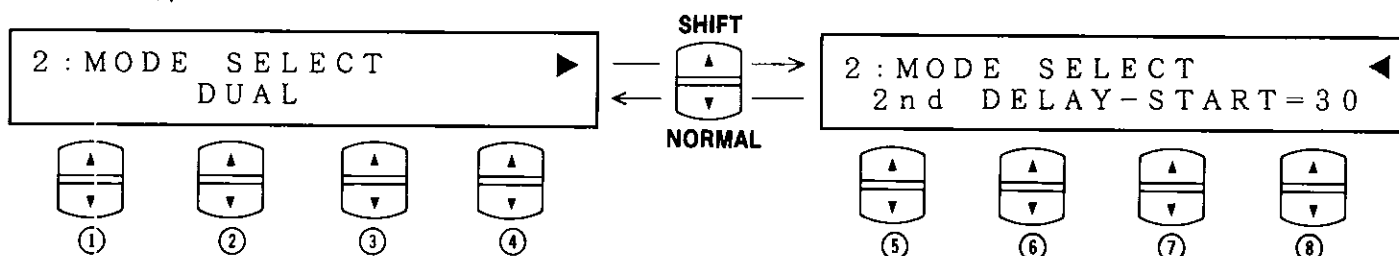


The display is used for setting various functions, but the size of the displays for the GN3, GN5 and GN7/GN9 differs. The GN7/GN9 is a double display, but when setting functions only one of the displays is used. In this Owner's Manual, the display for setting functions will be illustrated for all models as shown here.



The GN3 display

On the GN3, the actual display width is half that of the illustration, and in the normal mode the contents shown on the right half of the illustration are not shown. A ► mark at the right end of the display indicates that the contents of the right half of the display will be shown when the **SHIFT** button (beneath the display) is pressed. To return the display to the normal mode, press the **NORMAL** button.



Page

The respective function-setting displays are called up with these buttons.

When one of these buttons is pressed, the corresponding function-setting display appears. Each display may consist of several numbered "pages." To change the **PAGE**, press the ▲ or ▼ **PAGE** button to go to a higher or lower page number.

About the function-setting buttons

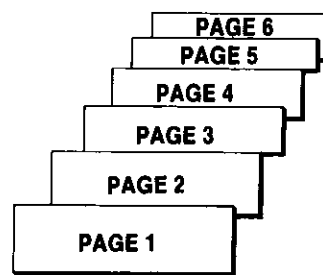
Directly below the display you will see a row of 8 sets of buttons. These are used in conjunction with the display to set the various functions. In this manual, when a button number ①~⑧ is mentioned in an explanation of a function-setting procedure, it refers to the numbers shown in the illustration of the display. For example, "press either ① button" means to press either the ▲ or ▼ button in the ① (leftmost) position.

- On the GN3, however, only 4 sets of buttons beneath the display are used for setting functions. In this case, it should be understood that buttons ①~④ refers to the **NORMAL** display and ⑤~⑧ to the **SHIFT** display. Note that the titles on the upper line of the GN3 display may be abbreviated and therefore differ slightly from those shown in the display illustrations here.

PAGE



PAGE



Tempo/program dial

The **TEMPO/PROGRAM** dial is normally used to adjust the tempo. However, if the indicator below the dial is on while you are setting functions, you can use the **TEMPO/PROGRAM** dial to specify your selection or to set the value indicated on the display. When there are several items on the display which are settable, press either corresponding button once to specify the item you wish to set.

27 Sound Setting functions



In general, the **SOUND SETTING** mode is used for setting sound, effects and volume for each part.

Press the **SOUND SETTING** button to turn it on.

SOUND
SETTING



- The indicator lights.
- The SOUND SETTING display is shown.
- After making the desired settings, press the **SOUND SETTING** button to turn it off.

Manual sound setting

PAGE 1

1 : MANUAL SOUND SETTING
UPLY=B r a s s VARI=1 LPLY=S t r n g s 1 VARI=1

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

This is a procedure for setting the sounds for the **UPPER** and **LOWER ORCHESTRAL CONDUCTOR** parts.

■ POLY, SPECIAL, SOLO (GN3/GN5), EXTRA (GN7/GN9) parts

- Select the part for which you wish to specify the sound. Select the part for the upper keyboard with the ① buttons and for the lower keyboard with the ⑤ buttons.
 - The display codes are: UPLY (**UPPER POLY**), USPC (**UPPER SPECIAL**), USOL (**UPPER SOLO**) (GN3/GN5), UEXT (**UPPER EXTRA**) (GN7/GN9), UORG (**UPPER ORGAN**), LPLY (**LOWER POLY**), LSPC (**LOWER SPECIAL**), LSOL (**LOWER SOLO**) (GN3/GN5), LEXT (**LOWER EXTRA**) (GN7/GN9), LORG (**LOWER ORGAN**).
 - The sounds currently selected for each part are shown on the display.
 - You can check the sound by turning on the **ORCHESTRAL CONDUCTOR** button for the corresponding part.
- Select the sounds for the upper keyboard part with the ② buttons and for the lower keyboard part with the ⑥ buttons.
 - You can also use the buttons on the panel to select the sounds.
- Select the variation for the upper part sound with the ④ buttons and for the lower part sound with the ⑧ buttons. (Refer to the separate booklet.)
 - A + mark following the displayed sound name indicates the **DUAL** mode, a * indicates the **TRIO** mode or **DUET** mode. (For details, refer to ③ Sound Edit.)

■ ORGAN part

1 : MANUAL SOUND SETTING
UORG J a z O r g 1 ---->2 LORG P i p O r g 2 ---->3

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

You can choose from factory-preset organ sounds to store in the 9 **UPPER ORG PROGRAM** buttons and 5 **LOWER ORG PROGRAM** buttons.

- Select UORG (**UPPER ORGAN**) with the ① buttons and LORG (**LOWER ORGAN**) with the ⑤ buttons.
- Press to turn on the **ORG PROGRAM** button in the **UPPER TAB & ORGAN** or **LOWER TAB & ORGAN** section.
- Select the **UPPER ORG PROGRAM** number (1~9) and the **LOWER ORG PROGRAM** number (1~5) with the **FLUTE** and **PERC** buttons on the panel.

- Select the sound for the **UPPER ORGAN** part with the ② buttons and for the **LOWER ORGAN** part with the ⑥ buttons.

ORGAN TYPE	GN3/GN5/GN7	GN9
Jazz Organ <JazOrg>	1~6	1~8
Pipe Organ <PipOrg>	1~3	1~4
Entertainment Organ <EntOrg>	—	1~5


Manual balance

PAGE 2

2 :
UTB ■ UPL ■ USP ■ UEX ■ LTB ■ LPL ■ LSP ■ LEX ■

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

With this procedure the volume for each **UPPER** and **LOWER ORCHESTRAL CONDUCTOR** sound is set.

Adjust the volume with the corresponding  buttons.


- The volume is indicated on the display as a 14-step graphic representation.
- On the GN3/GN5 display, USL and LSL are displayed in place of UEX and LEX, respectively.

Other balance

PAGE 3

3 :	DRM	BGS	BAS	AC1	AC2	AC3	ACP
①	②	③	④	⑤	⑥	⑦	⑧

This procedure is to set the volume for each **RHYTHM** part. The display codes are: "DRM"=**DRUMS** and **KEYBOARD PERCUSSION**, "BGS"=**BACKGROUND SOUND** (GN7/GN9), "BAS"=**BASS**, "ACP"=**ACCOMP** (total volume).

Adjust the volume with the corresponding  buttons.


- The volume is indicated on the display as a 14-step graphic representation.



Other sound setting



PAGE 4

4 :	OTHER SOUND SETTING						
	BASS	Choppr1	VARI=1	ACP1	=E. Grand	VARI=1	
①	②	③	④	⑤	⑥	⑦	⑧

The sounds for the **BASS** (BASS) and **ACCOMP 1~3** (ACP1, ACP2, ACP3) parts are specified the this procedure.

- Select the **ACCOMP** part for which you wish to specify the sound with the corresponding  buttons.
 - The sounds currently selected for each part are shown on the display.

- Select the sounds for the parts with the corresponding  and  buttons.

- You can also use the **LOWER SOUND SELECT** and **BASS** buttons to select the sounds.
- Select the variation for the sounds with the corresponding  and  buttons.


Manual part condition

With this procedure the type of effect and effect on/off for each **UPPER** and **LOWER ORCHESTRAL CONDUCTOR** part is set.

■ GN5/GN7/GN9


PAGE 5

5 :	MANUAL PART CONDITION							
	UTAB	UPLY	USPC	UEXT	LTAB	LPLY	LSPC	LEXT
①	②	③	④	⑤	⑥	⑦	⑧	

Select the part for which you wish to set the effect with the corresponding  buttons.

- The display changes to the following.


- On the GN3/GN5 display, USOL and LSOL are displayed in place of UEXT and LEXT, respectively.

■ GN3: The **PAGE 5** display is as shown below. Select the part with the  buttons.


5	SUSTAIN	VOL	REVRB	CELE	TREM		
UTAB =	ON	5	112	OFF	ON		
①	②	③	④	⑤	⑥	⑦	⑧

■ **SUSTAIN**


Set **SUSTAIN** on/off with the  buttons.

Set the **SUSTAIN** length (1~8) with the  buttons.


■ **VOL**

Set the volume for the specified part (0~127) with the  buttons.


■ **REVERB**

Set **REVERB** on/off with the  buttons.

■ **TONE (GN9)**


Select the kind of tone for the sounds of the specified part with the  buttons. Select from SOFT, NORM and HARD.

■ **EFFECT**

Set **CELESTE** on/off (GN3/GN5/GN7) or **EFFECT 1** on/off (GN9) with the  buttons.

Set **TREMOLO** on/off for the **TAB** part with the  buttons.

- GN9: When a part other than **TAB** or **ORGAN** is specified, the **EFFECT 2** on/off can be set.

- Select the next part for which to set the effect with the  buttons.

Other part condition

With this procedure the type of effect and effect on/off for each RHYTHM part is set.

1. Select the part for which you wish to set the effect with the corresponding $\frac{1}{8}$ buttons.

■ GN5/GN7/GN9

PAGE 6

6 : OTHER PART CONDITION
DRMS BGS BASS ACP1 ACP2 ACP3 AUX

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- BGS and AUX are functions for the GN7/GN9 only.
- The AUX setting is for input from the AUX IN terminal on the rear panel of the organ (GN7/GN9).

- The display changes to the following.

- GN3: The PAGE 6 display is as shown below. Select the part with the ① buttons.

6 SUSTAIN VOL REVRB CELE
ACP1 = ON 5 10 ON ON

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

2. Select the effect for each part.

- Specify **SUSTAIN** on/off with the ② buttons and the **SUSTAIN** length (0~8) with the ③ buttons. (**SUSTAIN** effects can be set for **BASS**, **ACCOMP 1, 2** and **3**.)
- Set the volume (0~127) with the ④ buttons. (The AUX volume cannot be adjusted.)
- Specify **REVERB** on/off with the ⑤ buttons. (GN3/GN5: **REVERB** does not function for the **DRUMS** and **BASS** parts.)

- GN9: Set the kind of tone (**BASS** part only) with the ⑥ buttons.

- Specify **CELESTE** on/off (GN3/GN5/GN7) or **EFFECT 1** on/off (GN9) with the ⑦ buttons. (This effect does not function for the **DRUMS** and **BGS** parts.)

- GN9: Specify **EFFECT 2** on/off with the ⑧ buttons. (This effect does not function for the **DRUMS** and **BGS** parts.)

3. Select the next part with the ① buttons.

Part assign mode

Select the output mode for each part played on the keyboard.

1. Select the part you wish to set with the corresponding $\frac{1}{8}$ buttons.

■ GN5/GN7/GN9

(GN7/GN9)

PAGE 7

7 : PART ASSIGN MODE
UPLY USPC UEXT LPLY LSPC LEXT BASS

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- The display changes to the following.

- GN3: The PAGE 7 display is as shown below. Select the part with the ① buttons.

7 PART ASSIGN MODE
UPLY = SOLO

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

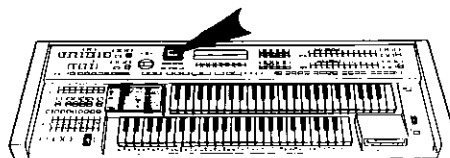
2. Select the mode with the ③ buttons.

POLY	Polyphonic sound is produced for the part.
MONO	The part set to this mode produces monophonic sound with high-note priority.
SOLO	The part set to this mode produces monophonic sound with last-note priority. However, this mode differs from the MONO mode in that when a part set to SOLO is mixed with a part set to POLY on the ORCHESTRAL CONDUCTOR , the sound set to SOLO will not shift to the lower note if the interval between the highest note and the next note is more than one whole tone when you release your finger from the higher note.

- The SOLO mode cannot be selected for the **BASS** part.

3. Select the next part for which to set the mode with the ① buttons.

28 Sustain functions



This procedure sets the sustain functions for each part.

Press the **SUSTAIN** button to turn it on.

After making the desired settings, press the **SUSTAIN** button to turn it off.

SUSTAIN



Manual sustain time

PAGE 1

(GN7/GN9)

1 : UTB	UPLY	USPC	UEXT	LTB	LPLY	LSPC	LEXT
4	5	6	6	6	5	4	7
①	②	③	④	⑤	⑥	⑦	⑧

Specify the **SUSTAIN** length (1~8) for each part with the respective buttons.

• On the GN3/GN5 display, USOL and LSOL are displayed in place of UEXT and LEXT, respectively.

Manual sustain on/off

PAGE 2

(GN7/GN9)

2 : UTB	UPLY	USPC	UEXT	LTB	LPLY	LSPC	LEXT
OFF	OFF	ON	OFF	ON	ON	OFF	OFF
①	②	③	④	⑤	⑥	⑦	⑧

Specify the **SUSTAIN** on/off status for each part with the respective buttons.

• On the GN3/GN5 display, USOL and LSOL are displayed in place of UEXT and LEXT, respectively.

Other sustain time

PAGE 3

3 :	BASS	ACP1	ACP2	ACP3
	3	5	4	7
①	②	③	④	⑤

Specify the length of **SUSTAIN** (1~8) for each part with the respective buttons.

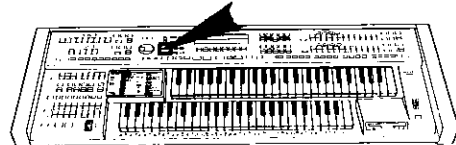
Other sustain on/off

PAGE 4

4 :	BASS	ACP1	ACP2	ACP3
	ON	ON	OFF	OFF
①	②	③	④	⑤

Specify the **SUSTAIN** on/off status for each part with the respective buttons.

29 Effect functions



In the effect-setting mode you can select the type of **REVERB**, store modified reverbs in USER REVERB 1~4, and specify the effect on/off condition for each part.

Press the **EFFECT** button to turn it on.

- The indicator lights.
- When all desired settings have been made, press the **EFFECT** button to turn it off.



Reverb

PAGE 1

(GN3)

1 : REVERB	TOTAL	DEPTH	
SYMPH. HALL	ON	8	

①
②
③
④

(GN5/GN7/GN9)

1 : REVERB	TOTAL	DEPTH	TYPE
ON	8		SYMPH. HALL

①
②
③
④
⑤
⑥
⑦
⑧

Specify the type and depth of the **REVERB**.

- Select the type of reverberation effect with the ① (GN3) or ⑥ (GN5/GN7/GN9) buttons.
 - Select from eight types of **REVERB**: ROOM, HALL, STAGE, CATHEDRAL, SYMPH. HALL, ECHO 1, 2, 3.
- Specify the depth of the reverberation effect with the ④ buttons.
 - Select from reverberation off and levels 1~8.

For USER 1~4, refer to the **PAGE 2** procedure.

- Set the **REVERB** on/off for all parts with the ③ buttons.
 - The **REVERB** indicator on the panel turns on or off depending on this setting.

User reverb

PAGE 2

2 : USER REVERB	DECAY	ECHO-TIME	
USER 4 = ECHO 1	8	8	

①
②
③
④
⑤
⑥
⑦
⑧

You can select one of the **REVERB** types, edit it and then store it in USER 1~4.

- Select from USER 1~4 with the ① buttons.
- Select one of the 8 types of **REVERB** with the ② buttons.
- Set the **REVERB** decay time with the ⑤ buttons.
 - Select from 1~8. The higher the value, the longer the decay time.
- If CATHEDRAL, ECHO1, 2 or 3 was selected in step 3, set the **REVERB** repeat time with the ⑦ buttons.
 - Select from 1~8. The higher the value, the longer the repeat time.

Tremolo

PAGE 3

3 : TREMOLO	HIGH	LOW
SPEED	24.4	5.8

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Set the **FAST TREMOLO** speeds with this procedure. The **FAST TREMOLO** creates an effect like two speakers (HIGH and LOW) rotating at different speeds. Specify the HIGH speed with the ③ buttons or the **TEMPO/PROGRAM** dial. Specify the LOW speed with the ④ buttons or the **TEMPO/PROGRAM** dial.

Effect 2 type (GN9)

PAGE 4

4 : EFFECT2	TYPE	DEPTH
PITCH SHIFT1		5

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

You can select colorful effects to set in the **EFFECT 2** button with this procedure.

1. Select one of the following effect modes with the ③ buttons.

PITCH SHIFT 1, 2: The original pitch changes automatically.

CHORUS 1, 2: Extra depth and width is added to the sound.

FLANGER 1, 2: Flanging the sound.

ECHO 1, 2: An alpine echo.

DELAY 1, 2: The timing of the sound is deliberately off.

AUTO PAN 1, 2: Adjusting the direction from which the sound is heard due to the changes of volume level of the right and left speakers.

EXCITER: The high tones are emphasized.

DISTORTION: A fuzziness is added to the sound.

User (USER 1~4): Refer to the **PAGE 5** procedure.

2. Specify the depth (1~8) of the effect with the ⑥ buttons.

- The higher the value, the greater the amount of effect.

Effect 2 edit (GN9)

PAGE 5

5 : EFFECT2 EDIT	DELY	SPED	DPTH	FDBAK
USER1 = FLANGER1	5	5	5	5

①
②
③
④
⑤
⑥
⑦
⑧

You can select one of the digital effect types, edit it and then register it as USER 1~4.

1. Select from USER 1~4 with the ① buttons.
2. Select one of the types of digital effect with the ③ buttons.
3. Set the parameters of the effect with the ⑤~⑧ buttons.

Type	Parameters			
	⑤	⑥	⑦	⑧
PITCH SHIFT 1	DELAY	—	FINE	—
PITCH SHIFT 2	DELY	NOTE	FINE	FDBAK
CHORUS 1	DELY	SPED	DPTH	WAVE
CHORUS 2	DELY	SPED	DPTH	WAVE
FLANGER 1	DELY	SPED	DPTH	FDBAK
FLANGER 2	DELY	SPED	DPTH	FDBAK
ECHO 1	DELY 1	DELY 2	—	FDBAK
ECHO 2	DELAY	—	—	FDBAK
DELAY 1 (SINGLE)	DELAY	—	—	—
DELAY 2 (DUAL)	DELY 1	DELY 2	—	—
AUTO PAN 1	—	SPED	—	—
AUTO PAN 2	TURN	SPED	—	—
EXCITER	DELAY	—	—	—
DISTORTION	DELAY	—	—	FDBAK

- DELY (DELAY): 1~8
Specify the time it takes for the beginning of the effect after pressing the key. The higher the value, the longer the delay.
- SPED (SPEED): 1~8
Specify the speed of the effect. The higher the value, the faster the speed.
- DPTH (DEPTH): 1~8
Specify the depth of the effect. The higher the value, the greater the depth.
- FDBAK (FEEDBACK): 1~8
Specify the degree of effect feedback. The higher the value, the more feedback.
- FINE: 1~8 (PITCH SHIFT 1), -10~+10 (PITCH SHIFT 2)
Fine-tune the pitch of the effect.
- NOTE: -12~+12
Specify the amount of key shift for PITCH SHIFT 2. A value of 1 means a shift of one semitone. + values raise the pitch and - values lower the pitch.
- WAVE: 1~8
Specify the degree of waving for the effect. The higher the value, the more waving.
- TURN (LEFT/RIGHT)
Specify the rotation direction for the effect in which a seeming rotation in the sound is produced by changing the volume in each speaker.

Initial touch sensitivity

PAGE 4 (GN3/GN5/GN7) / PAGE 6 (GN9)

(GN9)

6 : INITIAL TOUCH SENSITIVITY
UPPER = 5 LOWER = 5 BASS = 5

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Set the degree of initial touch effect for each keyboard. Set the touch effect for the upper keyboard (UPPER) with the ② buttons, for the lower keyboard (LOWER) with the ④ buttons, and for the pedal keyboard (BASS) with the ⑥ buttons.

- Select from 0~9. The higher the value, the greater the change in volume corresponding to how hard or softly the keyboard is played.

Touch sense part setting

PAGE 5 (GN3/GN5/GN7) / PAGE 7 (GN9)

(GN9)

7 : TOUCH SENSE PART SETTING
UPLY : INITIAL = ON AFTER = OFF TOTAL = ON

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Set the touch sense effect for each part.

1. Select the part with the ① buttons.
 - Select from UPLY, USPC, USOL (GN3/GN5)/UEXT (GN7/GN9), LPLY, LSPC, LSOL (GN3/GN5)/LEXT (GN7/GN9), UTAB, LTAB, BASS, ACP1, ACP2 and ACP3.
2. Specify initial touch effect on/off with the ④ buttons.
 - On the GN9, specify aftertouch on/off with the ⑥ buttons (except for the **TAB**, **ORGAN**, **ACCOMP** and **BASS** parts) and total (initial touch and aftertouch) on/off with the ⑧ buttons.
 - The **TOUCH** effect is turned on and off with the **TOUCH** buttons in the **UPPER** and **LOWER SOUND SELECT** sections.
 - The touch sense effect does not function for edited sounds for which the **INITIAL TOUCH** and **AFTER TOUCH** are set to **OFF**. (Refer to Vol. 2, ③ Sound Edit, **PAGE 11** and **PAGE 12**.)

30 Memory & Control functions



Press the **MEMORY & CONTROL** button to turn it on.

- The indicator lights.
- The display changes to the memory mode; an explanation of **PAGE 1** and **PAGE 3** appears in Part VIII: Storing the performance data. Use the **PAGE** buttons to get the displays relating to the functions explained here.
- After making the desired settings, press the **MEMORY & CONTROL** button to turn it off.

MEMORY & CONTROL



Initialize

PAGE 2

2 : INITIAL SETTING
ALL [SET]

① ② ③ ④

The memory contents of the organ can be initialized.

1. The functions to be initialized are selected by the ② buttons.

- ALL:** Initializes all functions such as the status of sounds and effects, **VOICE SETTING COMPUTER**, **SOUND SELECT** storable memories, **COMPOSER** and **SEQUENCER**.
- COMPOSER:** Initializes the **COMPOSER** memories and sets them to the factory presets.
- SOUND MEM.:** Initializes the **SOUND SELECT** storable memories of all parts and sets them to the factory presets.
- SEQUENCER:** Initializes the memory contents of all tracks.

2. Press either ④ button to change to the following confirmation display.

2 : INITIAL SETTING
SURE? [NO] [YES]

① ② ③ ④

3. Press either ④ button for [YES] to execute the initialization procedure. Press either ③ button for [NO] to cancel the initialization procedure.

Techni-Chord

PAGE 4

4 : TECHNICHORD
TYPE=CLOSE

① ② ③ ④

Select the desired **TECHNI-CHORD** harmony style with the ③ buttons.

- Select from four styles: CLOSE, OPEN 1, OPEN 2, DUET.

Tune

PAGE 5

5 : TUNE SCALE
440.0 Hz PIANO TUNE

① ② ③ ④

With this function you can fine-tune the pitch of the entire organ. This is convenient when playing with other instruments.

Adjust the pitch with the ① buttons or the **TEMPO/PROGRAM** dial. The pitch is shown on the display.

- The pitch is adjustable within a range of 427.3 to 453.0 Hz.

Scale

Select from 2 modes with the ③ buttons.

- E. TEMPERA: One octave is divided into pitches of 12 equally spaced intervals.
- PIANO TUNE: Standard piano tuning, in which the lower pitches are tuned slightly lower and the higher pitches are tuned slightly higher.

VSC memory mode

PAGE 6

6 : VSC MEMORY MODE
NORMAL *EXPAND

① ② ③ ④

Set the range of panel settings which are stored in the **VOICE SETTING COMPUTER** locations.

1. Press either ① button to select NORMAL. Press either ③ button to select EXPAND.
- A * mark indicates the selected mode.

Mode	Panel settings which are stored
NORMAL	<ul style="list-style-type: none"> • Sounds, effects and volumes for each part • ORCHESTRAL CONDUCTOR status
EXPAND	In addition to the above settings: <ul style="list-style-type: none"> • RHYTHM selection • ARRANGER status • AUTO PLAY CHORD status • BGS status (GN7/GN9) • Tempo setting

Glide setting

PAGE 7

7 : GLIDE SETTING
RANGE=WHOLE LOWER PART=EN

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Set the range of pitch change for the glide effect with the ③ buttons.

- Select HALF (half-tone) or WHOLE (whole tone).
- Enable/disable the glide effect for the lower keyboard parts with the ⑦ buttons.
- When set to EN, the glide effect functions for the lower keyboard part.
- The enable/disable status of **PITCH BEND** (GN9) and **MODULATION** for the lower keyboard part is set at the same time.

- The glide effect does not function for some sounds.
 - In the **SOUND EDIT** mode, if the glide effect is set to ON with the **PAGE 12** procedure, the glide effect also functions for the edited sound. (Refer to Vol. 2, ⑩ Sound Edit.)
- When set to DIS, the glide effect does not function for the lower keyboard.

Vibrato depth

PAGE 8

8 : VIBRATO DEPTH
PART=USPC 1

① ② ③ ④

On the GN9, the vibrato is usually controlled with the **MODULATION** switch. However, on the GN3/GN5/GN7, the **SWITCH ASSIGN** procedure can be used to assign the **MODULATION** function to a foot switch or the knee lever. (Refer to the **PAGE 9** procedure.)

Specify the depth of the vibrato for each part.

1. Select the part with the ② buttons.
- **VIBRATO DEPTH** can be set for UPLY, USPC, UEXT/USOL, LPLY, LSPC, LEXT/LSOL, ACP1, ACP2, ACP3 and BASS parts.
2. Set the vibrato depth (1~10) with the ④ buttons.
- The vibrato effect can be applied to the **BASS** part even when the **BASS** is played on the lower keyboard (for example, by using the full bass pedal [GN5/GN7/GN9] or when storing in the **COMPOSER**).

Switch assign

PAGE 9

9 : SWITCH ASSIGN
FTSWL=STRT/STOP [SET] ALL INITIAL [SET]

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Assign the desired functions to the foot switches, PAD 1 and 2, knee lever and full bass pedal.

1. Specify the switch with the ① buttons.
2. Select the desired function for the specified switch with the ② buttons.
3. The function is set as specified when either ④ button is pressed.

Switch Initialize

Returns the switch functions to the initialized settings.

1. When either ⑧ button is pressed the display asks if you are sure you wish to execute this function.
2. Press either ⑧ button for [YES] to execute. To cancel, press either ⑦ button for [NO].

Functions which can be assigned are as shown here.

Function	Display	KNEE (Knee lever)	FTSWL (Left foot switch)	FTSWR (Right foot switch) (GN5/GN7/GN9)	FBP (Full bass pedal) (GN5/GN7/GN9)	PAD 1/2 (GN9)
VSC on/off	VSC1~8 (GN3/GN5/GN7), VSC1~16 (GN9)	○	○	○	—	○
VSC increment	VSC INC	○	○	○	—	○
START/STOP on/off	STRT/STOP	○	○	○	—	○
FILL IN 1	FILLIN1	○	○	○*	—	○
FILL IN 2	FILLIN2	○	○	○	—	○
ENDING	ENDING	○	○	○	—	○
SUSTAIN on/off	SUSTAIN	○*	○	○	—	○
GLIDE on/off	GLIDE	○	○*	○	—	○
TECHNI-CHORD on/off	TECHNI-CD	○	○	○	—	○
PAD 1/2** (GN9)	PAD 1/2	○	○	○	—	—
Punch in/out	PUNCH SW	○	○	○	—	—
TREMOLO on/off	TREMOLO	○	○	○	—	○
MODULATION on/off	MOD SW	○	○	○	—	○
FINGERED on/off	FINGERED 1/2	—	—	—	○	—
MEMORY on/off	MEMORY	—	—	—	○	—
Full bass pedal on/off	FULL BASS	—	—	—	○*	—
BASS solo on/off***	BASS SOLO	—	—	—	○	—
Off	OFF	—	—	—	—	○*

* indicates the initialized (default) setting.

** When PAD is set to OFF, the knee lever or a foot switch can be assigned the sound of a particular PAD switch.

*** When the BASS solo function is assigned to the full bass pedal, you can play the BASS part by pressing the full bass pedal with your foot and playing the keys on the lower keyboard. In this case the sounds assigned to the lower keyboard are not produced.

Drums setting

PAGE 10

10 : DRUMS SETTING
STYLE = ROCK

① ② ③ ④

Select the **KEYBOARD PERCUSSION** which fits the musical genre.

- The sounds which change are those found in a drum kit, such as bass drum, snare drums, etc.

Select the desired genre with the ② buttons.

- Choose from ROCK, STANDARD, ELECTRIC and HARD ROCK.

Fill in pattern select

PAGE 11

11 : FILL IN PATTERN
FILL IN1 TYPE = RANDOM

① ② ③ ④

You can select the type of **FILL IN** pattern for each rhythm type.

1. Specify the **FILL IN** button (1 or 2) with the ① buttons.
 2. Choose from A, B, C, D and RANDOM with the ④ buttons. When RANDOM is selected, one of the four types is selected randomly whenever the specified **FILL IN** button is pressed.
- The initialized settings are: FILL IN1—RANDOM, FILL IN2—A.

Pad setting (GN9)

PAGE 12

12 : PAD SETTING
PAD1 = Wndchim

① ② ③ ④

Assign the desired type of percussion sound and instrument to **PAD 1** and **PAD 2**.

1. Specify PAD 1 or 2 with the ① buttons.
 2. Select the type of instrument (from **KEYBOARD PERCUSSION**) with the ② buttons. (Refer to the separate booklet.)
- Before assigning a percussion sound to a **PAD**, be sure to set **PAD** to OFF on **PAGE 9**.

Program output part select (GN7/GN9)

PAGE 12

(GN7) / PAGE 13

(GN9)

(GN9)

13 : PROGRAM OUTPUT PART SELECT
UPPER = UTAB LOWER = LTAB

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Select the sound part to be output from the **PROGRAM** terminal in the **SEPARATED LINE OUT** area located on the rear panel of the organ.

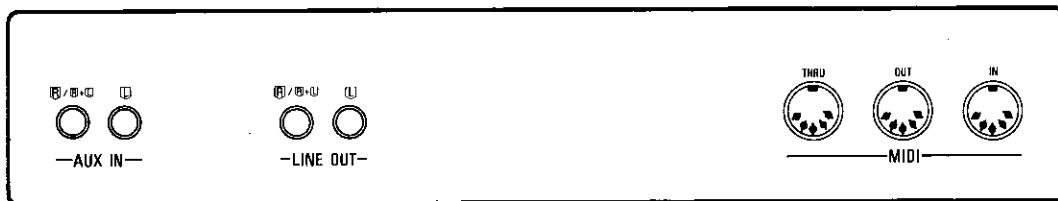
1. Select the part to be output on the upper keyboard with the ② buttons.
 - Select one from UTAB, UPOLY, USPCL, UEXTR, ACMP1 and OFF.
2. Select the part to be output on the lower keyboard with the ⑥ buttons.
 - Select one from LTAB, LPOLY, LSPCL, LEXTR, AC2&3 and OFF.

Options and connections

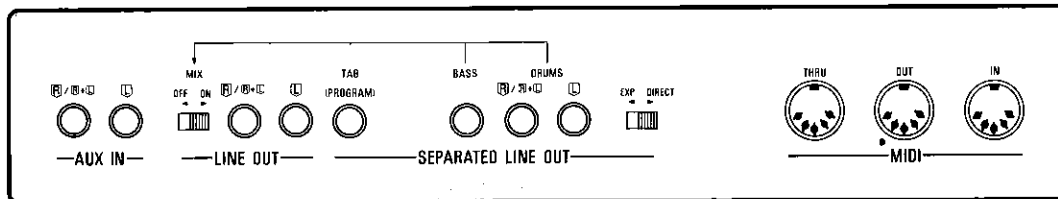
This page shows the optional accessories that are available for your Technics organ. These can make your instrument more versatile and fun to play than it already is.

Also indicated are the many possible connections to the rear panel and the front panel.

Rear panel



(GN3/GN5)



(GN7/GN9)

AUX IN (input level 500 mV, 33 kΩ)

Other instruments such as a synthesizer can be connected to the organ so that the signal is output from the organ. This terminal runs through the expression pedal circuit and you can control the volume of the connected instrument with the expression pedal. To receive monaural sound, connect instruments to the R/R+L terminal. (In this case, do not use the L terminal.)

LINE OUT (output level 300 mV, 600 Ω)

By plugging into the Technics Keyboard Amp or a high-power amplifier, the sound can be reproduced at high volume. It can also be used as a recording terminal for a tape recorder. Use the R/R+L terminal when outputting monaural sound. (In this case, do not use the L terminal.) Use the LINE OUT terminal on the front panel when connecting a pin-jack.

SEPARATED LINE OUT (GN7/GN9)

The signals of the **BASS**, **DRUMS**, and **TAB** parts can be output independently from this terminal. From the **TAB (PROGRAM)** terminal, you can also output signals other than **TAB**. (Refer to page 39.)

MIX ON/OFF (GN7/GN9)

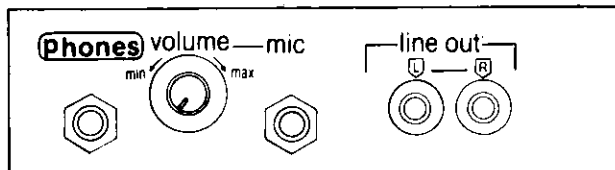
When the **MIX ON/OFF** selector is set to **ON**, the **SEPARATED LINE OUT**'s **BASS** and **DRUMS** signals are also output from the **LINE OUT** terminal. When the **MIX ON/OFF** selector is set to **OFF**, the **SEPARATED LINE OUT**'s **BASS** and **DRUMS** signals are output only from their respective terminals.

EXP/DIRECT (GN7/GN9)

When the **EXP/DIRECT** selector is set to **EXP**, the outputs from the **SEPARATED LINE OUT**'s **BASS** and **DRUMS** terminals respond to expression pedal changes; when set to **DIRECT**, these outputs do not change in response to changes in the expression pedal.

Front panel

(Below the lower keyboard)

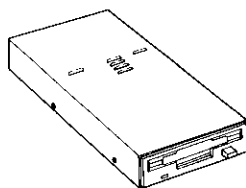


PHONES

For silent practice headphones may be used. When plugged in, the organ's speaker system is automatically switched off, and entire organ is heard only through the headphones.

MIC (input level 7.5 mV, 10 kΩ)

A microphone can be connected to this terminal for output from the organ's speakers. You can, for example, sing while you play the organ, and both sounds are heard from the organ's speakers. Control the output level with **VOLUME** control.



SY-FD20
Digital Disk Recorder
(optional for GN3/GN3K/GN5K)

Cautions for safest use of this unit

Installation location

1. A well-ventilated place.

Take care not to use this unit in a place where it will not receive sufficient ventilation, and not to permit the ventilation holes to be covered by curtains, or any similar materials.

2. Place away from direct sunlight and excessive heat from heating equipment.

3. A place where humidity, vibration and dust are minimized.

Power source

1. Be sure the line voltage selector is in accordance with local voltage in your area before connecting the plug to the socket.

2. DC power cannot be used.

Handling the power cord

1. Never touch the power cord, or its plug, with wet hands.

2. Don't pull the power cord.

Metal items inside the unit may result in electric shock or damage.

Do not permit metal articles to get inside the unit.

Be especially careful with regard to this point if children are near this unit. They should be warned never to try to put anything inside.

If, nevertheless, some such article does get inside, disconnect the power cord plug from the electrical outlet, and contact the store where the unit was purchased.

If water gets into the unit . . .

Disconnect the power cord plug from the electrical outlet, and contact the store where it was purchased.

As a precaution, it is suggested that flower vases and other containers which hold liquids not be placed on the top of this unit.

If operation seems abnormal . . .

Immediately turn off the power, disconnect the power cord plug from the electrical outlet, and contact the store where it was purchased.

Discontinue using the unit at once. Failure to do so may result in additional damage or some other unexpected damage or accident.

A word about the power cord . . .

If the power cord is scarred, is partially cut or broken, or has a bad contact, it may cause a fire or serious electrical shock if used. NEVER use a damaged power cord for any appliance. Moreover, the power cord should never be forcibly bent.

Don't touch the inside parts of this unit.

Some places inside this unit have high voltage potential. Never try to remove the top or back panels of this unit, or to touch inside parts by hand or with tools.

Contact someone who is qualified in order to inspect the inside, or to replace a fuse, if such becomes necessary. Never attempt to do these things yourself.

Maintenance

The following suggestions will assist you in keeping the unit in top condition.

- Be sure to switch the instrument off after use, and do not switch the unit on and off in quick succession, as this places an undue load on the electronic components.
- To keep the luster of the surface and buttons, simply use a clean, damp cloth; polish with a soft, dry cloth. Polish may be used but do not use thinners or petro-chemical-based polishes.
- A wax-based polish may be used on the cabinet, although you will find that rubbing with a soft cloth will suffice.

**SERVICE MUST BE CARRIED OUT
BY DEALER OR OTHER QUALIFIED PERSON.**

Technics SX-GN3(K)/GN5(K)/GN7(K)/GN9(K)

Merci pour l'acquisition de l'orgue Technics de la série GN.

Votre orgue dispose de nombreuses fonctions qui prouvent la réussite totale du savoir-faire renommé de Technics, dans les domaines de l'électronique et de la recherche des sons. C'est un instrument de musique électronique de la nouvelle génération, un vrai trésor à possibilités illimitées. De la musique populaire à la musique classique, vous apprécierez de vastes applications variées.

En plus des fonctions de base, votre orgue électronique de la série GN est muni des moyens divers qui sont nécessaires pour la composition de votre musique originale. Dans le but de vous aider à comprendre votre instrument et à vous servir de nombreuses fonctions, ce mode d'emploi est organisé comme suit.

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Partie V Création des sons (page 42)

Modifier les sons présélectionnés pour produire exactement un son désiré à l'aide de la caractéristique de **SOUND EDIT**.

Partie VI Création des patterns d'accompagnement (page 49)

Créer les patterns d'accompagnement originaux à l'aide de la caractéristique **COMPOSER**.

Partie VII Enregistrement/reproduction et édition de votre exécution sur le clavier (page 57)

Enregistrer le jeu en vue de la reproduction automatique sur **SEQUENCER** incorporé.

Mémoire externe et MIDI (Tome 3)

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Comment emmagasiner sur les disques de mémoire le jeu et les réglages de fonctions programmés

Partie IX MIDI (page 27)

Comment utiliser MIDI pour faire échanger les informations du jeu avec d'autres instruments de musique électroniques.

Specifications

		SX-GN3(K)	SX-GN5(K)	SX-GN7(K)	SX-GN9(K)
KEYBOARD		UPPER KEYBOARD 49 KEYS, LOWER KEYBOARD 49 KEYS, PEDAL KEYBOARD 13 KEYS	UPPER KEYBOARD 49 KEYS, LOWER KEYBOARD 49 KEYS, PEDAL KEYBOARD 13 KEYS, FULL BASS PEDAL		
PRESET SOUNDS	ORCHESTRAL CONDUCTOR (UPPER/LOWER)	TAB & ORGAN, POLY, SPECIAL, SOLO VOLUME		TAB & ORGAN, POLY, SPECIAL, EXTRA, MIDI VOLUME	
	SOUND SELECT (UPPER/LOWER)	PIANO, HARPSICHORD, ELECTRIC PIANO, MALLET, GUITAR, ELECTRIC GUITAR, STRINGS, VOCAL, BRASS, TRUMPET, SAX, FLUTE, REED, ACCORDION, VIOLIN, EXTEND		PIANO, HARPSICHORD, ELECTRIC PIANO, MALLET, GUITAR, ELECTRIC GUITAR, STRINGS, VOCAL, BRASS, HORN, SAX, TRUMPET, CLARINET, REED, VIOLIN, FLUTE, SYNTH BRASS, ACCORDION, EXTEND 1, 2	PIANO 1, 2, ELECTRIC PIANO, HARPSICHORD, MALLET, JAZZ GUITAR, ACOUSTIC GUITAR, ELECTRIC GUITAR, STRINGS, VOCAL, BRASS, TROMBONE, TRUMPET, HORN, SAX, REED, CLARINET, FLUTE, VIOLIN, ACCORDION, SYNTH BRASS, EXTEND 1, 2, 3
	TAB	<UPPER> FLUTE 16', 8', 5-1/3', 4', 2-2/3', 2', 1' PERC 4', 2-2/3' <LOWER> FLUTE 8', 4', 2-2/3', 2', 1			
	ORGAN	<UPPER> 9 PRESETS <LOWER> 5 PRESETS			
	BASS	ORGAN, PIPE ORGAN, ORCHESTRA, ACOUSTIC, ELECTRIC, CHOPPER, SYNTH 1, 2		BASS 16', BASS 8', ACOUSTIC, ELECTRIC, CHOPPER, STRINGS, SYNTH 1, 2, BASS 16'+8', PIPE ORGAN 1, 2, TUBA, TIMPANI, SYNTH 3, 4, 5	
SOUND EDIT	PARAMETERS	TONE ASSIGN MODE (NORMAL, DUAL, DUET, TRIO), TONE SELECT, VOLUME (LEVEL, KEY BALANCE), PITCH (KEYSHIFT, DETUNE), ENVELOPE (ATTACK & DECAY, RELEASE), VIBRATO (DEPTH, SPEED, DELAY), REPEAT (SPEED), TREMOLO (SPEED), AUTOBEND & TRILL (PATTERN, DEPTH, SPEED), PITCH RELEASE (DEPTH, TIME), INITIAL TOUCH (VOLUME, AUTOBEND & TRILL), GLIDE (ON, OFF), SUSTAIN (ON, OFF), AFTER TOUCH (VOLUME, MODULATION) (GN9), SOUND NAME			
	MEMORY	UPPER 8, LOWER 8, BASS 8		UPPER 10, LOWER 10, BASS 8	UPPER 12, LOWER 12, BASS 8
EFFECT	EFFECT 1	---			SOUND SELECT, TAB & ORGAN (UPPER/LOWER)
	EFFECT 2	---			SOUND SELECT (UPPER/LOWER)
	CELESTE	SOUND SELECT, TAB & ORGAN (UPPER/LOWER)			
	REVERB	SOUND SELECT, TAB & ORGAN (UPPER/LOWER), DEPTH			
	TOUCH	SOUND SELECT (UPPER/LOWER)			
	SUSTAIN	SOUND SELECT, TAB & ORGAN (UPPER/LOWER), BASS, LEVEL			
	TREMOLO	TAB & ORGAN (UPPER/LOWER), SLOW/FAST			
	PITCH BEND	---			<input type="radio"/> (PITCH BEND WHEEL)
	MODULATION	---			<input type="radio"/> (ON/OFF)
TRANSCOPE		<input type="radio"/>			
TECHNI-CHORD		<input type="radio"/>			
BACKGROUND SOUND		---			
RHYTHM	PATTERN	MARCH, POLKA, COUNTRY, WALTZ, TANGO, CHA-CHA, RHUMBA, FAST LATIN, BIG BAND, JAZZ COMBO, MODERN JAZZ, DIXIE, JAZZ WALTZ, SHUFFLE, SAMBA, BOSSA NOVA, 8 BEAT 1, 2, HARD ROCK, ROCK 'N' ROLL, ROCK BALLAD, SAMBA ROCK, SALSA, REGGAE, 16 BEAT 1, 2, 16 BEAT BALLAD, JAZZ ROCK, FUNK, SWING ROCK, DISCO 1, 2, VARIATION			
	CONTROL	START/STOP, SYNCHRO & BREAK, FILL IN 1, 2, INTRO & ENDING, TEMPO			
	KEYBOARD PERCUSSION	39 KEYS		48 KEYS	
	MANUAL PERCUSSION	---			PAD 1, 2
AUTO PLAY CHORD		FINGERED 1, 2, MEMORY			
ARRANGER		ACCOMP 1, ACCOMP 2 & 3, DRUMS			
ONE TOUCH PLAY		<input type="radio"/> (ONE TOUCH PLAY, MUSIC STYLE)			
VOICE SETTING COMPUTER		SET, 1~8			SET, 1~16
COMPOSER		5 TRACKS (ACCOMP 1, 2, 3, BASS, DRUMS), MEMORY.....1~8 INPUT MODE: REAL TIME, STEP EDITING FUNCTIONS: COPY, RECORDING CHORD SELECT			
SEQUENCER	TRACK	8 TRACKS			8x2 TRACKS
		PART (UPPER, LOWER, BASS, CHORD, UPPER POLY, LOWER POLY, DRUMS, CONTROL)			
		STORAGE CAPACITY: APPROX. 6,000 NOTES		STORAGE CAPACITY: APPROX. 15,000 NOTES	
		INPUT MODE: REAL TIME, STEP EDITING FUNCTIONS: PUNCH IN/OUT, TRACK ASSIGN, SONG ALL CLEAR, TRACK CLEAR, TRACK MERGE, MEASURE DELETE, MEASURE ERASE, MEASURE INSERT, MEASURE COPY, VELOCITY CHANGE, QUANTIZE DEMONSTRATION TUNE			
MUSICAL DIRECTOR	LIQUID CRYSTAL DISPLAY (20 LETTERSx2 LINES), SHIFT/NORMAL BUTTON, CONTRAST	LIQUID CRYSTAL DISPLAY (40 LETTERSx2 LINES), CONTRAST	LIQUID CRYSTAL DISPLAY (40 LETTERSx4 LINES), CONTRAST		
CONTROL		PAGE, TEMPO/PROGRAM DIAL, BALANCE, VOLUME, SHIFT (GN3)			

	SX-GN3(K)	SX-GN5(K)	SX-GN7(K)	SX-GN9(K)
MIDI	PART: 12 PARTS, BASIC CHANNEL (1-16), MIDI INPUT SELECT (CONDUCTOR/DIRECT, APC/DIRECT), MIDI OUTPUT SELECT (KEYBOARD/CONDUCTOR, TECHNI-CHORD ON/OFF, APC/CHORD) MIDI FUNCTION SELECT <COMMON> INITIAL, NOTE ONLY, TRANSPOSE OUT, PROGRAM CHANGE MODE, SONG SELECT, REAL TIME COMMAND, MIDI CLOCK, MIDI LOAD <PART> OCTAVE SHIFT, PROGRAM CHANGE, VSC PROGRAM CHANGE, SUSTAIN, AFTER TOUCH (GN9), PITCH BEND (GN9), MODULATION (GN9), VOLUME, TREMOLO, CELESTE (GN3/GN5/GN7), EFFECT 1 (GN9), EFFECT 2 (GN9), EXPRESSION, INTRO, MIDI APC, DRUMS TYPE LOCAL CONTROL, MIDI OUT, VSC PROGRAM CHANGE, VSC LOCAL CONTROL			
EXTERNAL MEMORY	DIGITAL DISK RECORDER (GN3[K], GN5K...OPTIONAL SY-FD20/GN5, GN7[K], GN9[K]...INCLUDED)			
TERMINALS	HEADPHONE, LINE OUT (R, L), MIC, AUX IN (R/R+L, L), LINE OUT (R/R+L, L), MIDI (IN, THRU, OUT)		HEADPHONE, LINE OUT (R, L), MIC, AUX IN (R/R+L, L), LINE OUT (MIX ON/OFF, R/R+L, L), SEPARATED LINE OUT (TAB, BASS, DRUMS [R/R+L, L], EXP/DIRECT), MIDI (IN, THRU, OUT)	
OTHERS	POWER SWITCH, MAIN VOLUME, EXPRESSION PEDAL, KNEE LEVER, FOOT SWITCH			
OUTPUT	100W	150W	200W	
SPEAKERS	20cmX2, TWEETERX2, 13cmX6cmX2 (MONITOR)	30cmX1, 20cmX1, TWEETERX2, 13cmX6cmX2 (MONITOR)	30cmX1, 20cmX3, TWEETERX2, 13cmX6cmX2 (MONITOR)	
POWER REQUIREMENT	290W, 240 VA (CANADA)	440W, 360 VA (CANADA)	550W	550W, 460 VA (CANADA)
	AC 120/220/240V 50/60 Hz, AC 120V 60 Hz—NORTH AMERICA, AC 220V 50/60 Hz—EUROPE (EXCEPT FOR ENGLAND)			
DIMENSIONS (WxHxD)	GN3 122.3cmX120cmX60.1cm (48-5/32"X47-1/4"X23-21/32")	GN5 122.3cmX121.4cmX60.1cm (48-5/32"X47-25/32"X23-21/32")	GN7 124.5cmX122cmX60.1cm (49-1/32"X48-1/32"X23-21/32")	GN9 124.5cmX122cmX60.1cm (49-1/32"X48-1/32"X23-21/32")
	GN3K 122.3cmX117.5cmX60.1cm (48-5/32"X46-1/4"X23-21/32")	GN5K 122.3cmX117.5cmX60.1cm (48-5/32"X46-1/4"X23-21/32")	GN7K 122.3cmX120cmX60.1cm (48-5/32"X47-1/4"X23-21/32")	GN9K 122.3cmX120cmX60.1cm (48-5/32"X47-1/4"X23-21/32")
NET WEIGHT	GN3 84 kg (185.2 lbs.)	GN5 87 kg (191.8 lbs.)	GN7 96 kg (211.6 lbs.)	GN9 96 kg (211.6 lbs.)
	GN3K 85 kg (187.4 lbs.)	GN5K 87 kg (191.8 lbs.)	GN7K 89 kg (196.2 lbs.)	GN9K 90 kg (198.4 lbs.)

- In some markets, some models may not be available.
- Dans certains pays, il se peut que certains modèles ne soient pas disponibles.

MEMO



Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

Printed in Japan
Imprimé au Japon

ENGLISH FRANÇAIS ESPAÑOL

QQTG0010B
Se1089K1119

Technics

ORGAN

SX-GN3(K)

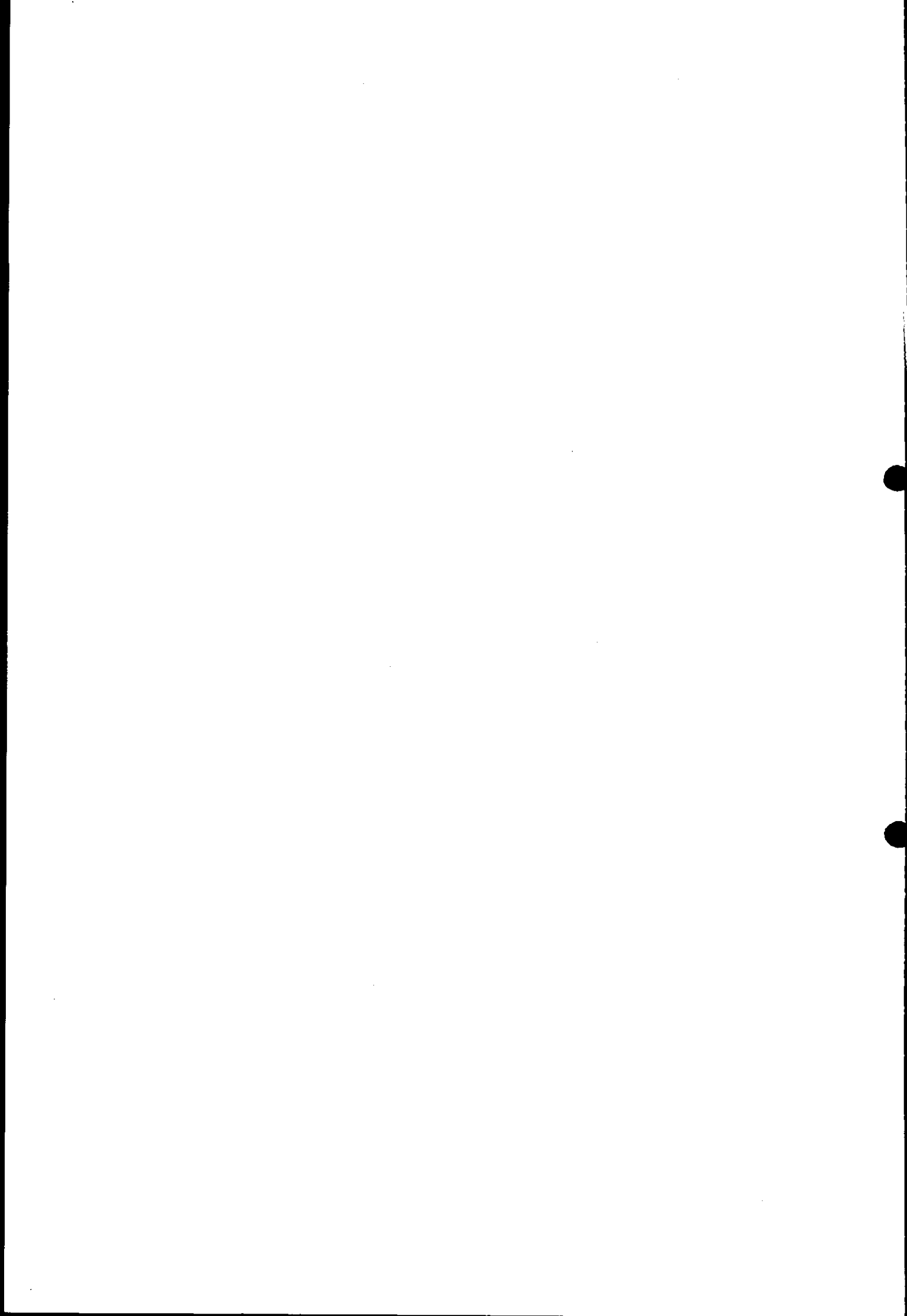
SX-GN5(K)

SX-GN7(K)

SX-GN9(K)



Vol. 2



Technics

OWNER'S MANUAL INSTRUCTIONS D'EMPLOI INSTRUCCIONES DE MANEJO

Vol. 2

PRACTICAL APPLICATIONS

This volume describes the storage functions incorporated in your Technics Organ, including how to use the **SOUND EDIT** to create unique sounds, the **COMPOSER** to make original rhythm patterns, and the **SEQUENCER** to record your performance.

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APPLICATIONS PRATIQUES

Ce tome traite des fonctions de mémorisation dont est pourvu l'orgue Technics et explique comment manipuler **SOUND EDIT** pour la création de sons tout nouveaux aussi que **COMPOSER** pour les motifs de rythme originaux et comment enregistrer vos exécutions dans **SEQUENCER**.

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Partie V Création des sons	
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Partie VI Création des motifs d'accompagnement	
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Partie VII Enregistrement/reproduction et édition de votre exécution de clavier	
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APLICACIONES PRACTICAS

Este tomo describe las funciones de almacenamiento incorporadas en el Organó Technics, inclusive cómo usar el **SOUND EDIT** para crear tonos nuevos, el **COMPOSER** para crear patrones originales de ritmo y el **SEQUENCER** para grabar su interpretación.

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ENGLISH

FRANÇAIS

ESPAÑOL

Part V Creating sounds

31 Sound Edit

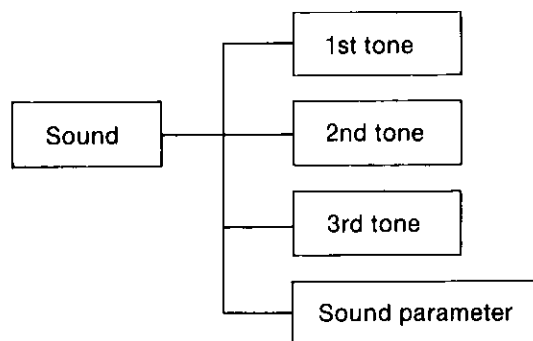
In the **SOUND EDIT** mode, you modify the various elements of a source (preset) sound as desired to make a new and unique sound which can then be stored in a **MEMORY** location.

Composition of the SOUND EDIT

By way of definition, we shall call the preset voices "sounds," each of which is comprised of a "sound parameter" and "tones" which are digitally recorded.

A sound may be made up of at most three tones, which we shall call the 1st, 2nd and 3rd tones. (Not all sounds are made up of three tones.)

The procedure by which you combine these tones and edit the sound parameters to create new sounds is very simple.



Furthermore, you specify the **MODE** by which each tone is generated.

NORMAL: The standard mode in which only 1 type of tone is used.

DUAL: When two tone types are used the sounds are layered (both tones are assigned to the whole keyboard).

DUET: When two tone types are used, each tone is assigned to a different portion of the keyboard.

TRIO: When three tone types are used, each tone is assigned to a different portion of the keyboard.

MODE	1 key	2 keys	3 keys
NORMAL	1st	1st	1st
DUAL	1st 2nd	1st 2nd	1st 2nd
DUET	1st 2nd	1st 2nd	1st 2nd
TRIO	1st 2nd 3rd	1st 2nd 3rd	1st 2nd 3rd

How to use the SOUND EDIT mode

- I.
- II.
- III.

3 : TONE SELECT
1st 01 : Piano - a

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Modify and set the tones which comprise the sound.

1. When there are multiple tones, select the tone you wish to modify first (1st, 2nd or 3rd) with the ① buttons.
2. Specify the kind of tone with the ② buttons. (Refer to the separate booklet.)

When the NORMAL mode is selected, the tone indication (1st, 2nd, 3rd) is not displayed.

4 : VOLUME
1st LEVEL = 100 1st KEY-BALANCE = +50

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

LEVEL

Set the volume of each tone.

1. When there are multiple tones, select the tone you wish to modify first with the ① buttons.
2. Specify the volume "LEVEL" (0~100) with the ③ buttons.
 - The higher the number, the louder the sound.

KEY-BALANCE

With the key balance effect, you can specify an increase in volume proportionate to the increase or decrease in pitch.

1. If the DUAL mode has been selected, select the tone you wish to modify first with the ⑤ buttons.
 - For a + value: The loudness increases as you play higher on the keyboard.
 - For a - value: The loudness increases as you play lower on the keyboard.
2. Specify the amount of key balance effect (-50~+50) with the ⑧ buttons.

5 : PITCH
1st KEY-SHIFT = -24 1st DETUNE = +10

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

KEY-SHIFT

The pitch of the keyboard of the played key can be shifted up or down.

1. When there are multiple tones, select the tone you wish to modify first with the ① buttons.
2. Set the amount of key shift (-24~+24) with the ④ buttons.
 - Note that a value of 1 means a shift of one semitone.
 - To raise (or lower) the pitch one octave, set the value to +12 (or -12).
 - To raise (or lower) the pitch two octaves, set the value to +24 (or -24).

DETUNE

The detune effect shifts the pitch of each tone.

1. When there are multiple tones, select the tone you wish to modify first with the ⑤ buttons.
2. Set the amount of pitch change (-50~+50) with the ⑦ buttons.
 - When set to a + value, the tone will be high in relation to the keyboard tuning; when set to a - value, the tone will be low in relation to the keyboard tuning. The higher the absolute value, the greater the change in pitch.

6 : ENVELOPE
 2 n d ATTACK&DECAY=30 2 n d RELEASE = 30

①

②

③

④

⑤

⑥

⑦

⑧

Set the change in volume over time for each tone.

ATTACK & DECAY

Set the attack and decay time.

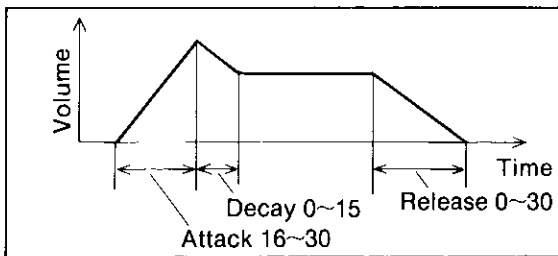
- When there are multiple tones, select the tone you wish to modify first with the ① buttons.
- Set the attack and decay value (0~30) with the ④ buttons.
 - Attack time (16~30)—the higher the value, the slower the attack.
 - Decay time (0~15)—the higher the value, the slower the decrease.

RELEASE

The release time is the time elapsed from when the key is released to when the sound is no longer audible.

- When there are multiple tones, select the tone you wish to modify first with the ⑤ buttons.
- Specify the release time (0~30) with the ⑧ buttons. The higher the value, the longer it takes for the sound to die out.
 - Note that there are some sounds which do not die out when the release time is set to 30.

Envelope



7 : VIBRATO
 DEPTH=30 2 n d SP=18 DELAY= 9 2 n d =ON

①

②

③

④

⑤

⑥

⑦

⑧

Set the vibrato effect.

- Specify the depth of the vibrato (0~30) with the ② buttons.
 - The higher the value, the greater the change in pitch.
- Specify the vibrato speed (0~30) with the ④ buttons.
 - The higher the value, the faster the speed.
- If the DUAL mode has been selected, however, select the tone to modify with the ③ buttons and the corresponding speed with the ④ buttons.
- Specify the time elapsed (0~30) from when the keyboard key is pressed until the vibrato effect is applied to the sound with the ⑥ buttons.
 - The higher the value, the longer it takes until the vibrato effect is applied.
- When there are multiple tones, select a tone with the ⑦ buttons. Select vibrato on/off for the selected tone with the ⑧ buttons.
 - When the NORMAL mode is selected, the vibrato on/off is set with the ⑧ buttons, but not for each tone. (There is only one tone in the NORMAL mode.)

8 : REPEAT		TREMLO	
SPEED = 30	1 s t = OFF	SPEED = 30	

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

REPEAT

The repeat function provides a mandolin effect by automatically repeating played notes.

1. Specify the repeat speed (0~30) with the ② buttons. The higher the value, the faster the repeat speed.
2. When there are multiple tones, select a tone with the ③ buttons. Select repeat on/off for the selected tone with the ④ buttons.
 - When the NORMAL mode is selected, the repeat on/off cannot be selected for each tone.

TREMLO

Set the **TREMLO** speed (0~30) with the ⑥ buttons.

- The **TREMLO** can be applied to sounds from the following parts:
 - GN3: **POLY**
 - GN5: **POLY**
 - GN7: **POLY, EXTRA**
 - GN9: **POLY, SPECIAL, EXTRA**

9 : AUTOBEND & TRILL			
PATTERN = A1	DEPTH = -30	SPEED = 30	1 s t = OFF

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

For AUTOBEND & TRILL there are 15 available patterns. (Refer to the separate booklet.)

1. Select the desired bend pattern (A1~5, B1~5, C1~5) with the ② buttons.
2. Specify the amount of pitch bend (-30~+30) with the ④ buttons.
 - The higher the absolute value, the greater the degree of pitch bend.
3. Specify the time it takes for the set pitch change (auto bend pitch) to become the played pitch (normal pitch) (0~30) with the ⑥ buttons.
 - The higher the value, the shorter the time.
4. When there are multiple tones, select a tone with the ⑦ buttons. Select pitch bend on/off for the specified tone with the ⑧ buttons.
 - When the NORMAL mode is selected, the AUTOBEND & TRILL on/off cannot be selected for each tone.

10 : PITCH RELEASE			
DEPTH = +30	TIME = 30	1 s t = OFF	

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Set a continuous change in the pitch during the release period.

1. Specify the amount of pitch bend (-30~+30) with the ② buttons.
 - When set to a + value, the auto bend pitch is higher than the played pitch. At +30, the auto bend pitch is about one whole tone higher than the played pitch.
 - When set to a - value, the auto bend pitch is lower than the played pitch. At -30, the auto bend pitch is about one whole tone lower than the played pitch.
2. Specify the time it takes for the played pitch to become the auto bend pitch (0~30) with the ④ buttons.
3. When there are multiple tones, select a tone with the ⑤ buttons. Select PITCH RELEASE on/off for the specified tone with the ⑥ buttons.
 - When the NORMAL mode is selected, the PITCH RELEASE on/off cannot be selected for each tone.
 - The PITCH RELEASE is applied corresponding to the setting for the release time on **PAGE 6**.

11 : INITIAL TOUCH
 1st VOLUME = + 5 AUTOBEND & TRILL = OFF

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Set the degree of keyboard touch response.

1. If the DUAL mode has been selected, select the tone you wish to modify first with the ① buttons.
2. Specify the level of keyboard touch response (-10~+10) with the ③ buttons.
 - When set to a + value, the harder the keyboard is played, the louder the sound.
 - When set to a - value, the harder the keyboard is played, the softer the sound.

3. If AUTOBEND & TRILL was set to on (on PAGE 9), you can specify the relation between the auto bend effect and how hard the keyboard is played. Select on/off with the ⑧ buttons.
 - ON: The AUTOBEND & TRILL effect is applied only when the keyboard is played hard.
 - OFF: The AUTOBEND & TRILL effect is applied at all times.
 - You can check the effect during the **SOUND EDIT** procedure by turning on the **TOUCH** button for the specified part.

12 : GLIDE SUSTAIN AFTER TOUCH
 OFF OFF VOL = OFF MOD = OFF

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

When the glide effect is applied, the sound starts from a semitone below the played pitch and glides up to the normal pitch.

Select glide on/off with the ② buttons.

- When set to on, the glide effect can be applied with the left foot switch. (Refer to ⑩ Glide control.)

Set the **SUSTAIN** on/off with the ④ buttons.

Set the **AFTER TOUCH** effect (GN9).

- When VOL is set to ON with the ⑥ buttons, the volume increases the harder the keys are pressed.
- When MOD is set to ON with the ⑧ buttons, the vibrato effect is more pronounced the harder the keys are pressed.
- You can check the effect during the **SOUND EDIT** procedure by turning on the **TOUCH** button for the specified part.

13 : SOUND NAME
 H r m n i c a

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Assign a name to your newly created sound.

1. Move the cursor with the **TRANPOSE** buttons.
2. Select the alphanumeric characters of the name with the **TEMPO/PROGRAM** dial.
 - The name you specify may have up to 7 characters.

FISHER

III. Store the new sound in a MEMORY location.

PAGE 14

14: MEMORY WRITE
UP/LY NO=07 [WRITE]

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Store your new sound in a **MEMORY** number in the **SOUND SELECT** section.

1. Use the ① buttons to select the **UPPER** or **LOWER** part in which to store the new sound.
 - If you specified a **BASS** sound, it is not possible to select the part.
2. Select the **MEMORY** number with the ② buttons or the **TEMPO/PROGRAM** dial. For a sound in the **UPPER** or **LOWER SOUND SELECT** section, specify a number 1~8 (GN3/GN5), 1~10 (GN7) or 1~12 (GN9). For a **BASS** sound, specify a number 1~8.
3. When either ④ button is pressed, the display asks if you are sure you wish to store the new sound in the specified location.
4. Pressing either ④ button for [YES] stores the sound. To cancel the **MEMORY WRITE** procedure, press either ③ button for [NO].
 - The memory areas of **UPPER** and **LOWER** are compatible. The sound edited for **UPPER** can be stored in the memory area of **LOWER**.
 - When a **PAGE** other than **PAGE 1** is displayed, you can specify the memory number another way. While pressing the **MEMORY** button in the **SOUND SELECT** section, press the desired number button. The display changes to **PAGE 14**, and the memory number selection is shown at ②.
 - To select an edited sound, first turn on the **MEMORY** button for the corresponding part, and then press the memory number button in which the sound is stored.

Part VI Creating accompaniment patterns

32 Composer

With the **COMPOSER** function you create and store your own accompaniment pattern, specify the desired chord and then play back your original accompaniment pattern automatically at the touch of a finger.

The five parts comprising the accompaniment pattern are **DRUMS, BASS, ACCOMP 1, 2 and 3**, each of which is stored independently.

You can use either or both of the two methods of storing your pattern. Real-time recording allows you to store your pattern exactly as you play it on the keyboard, and step recording lets you store the notes one by one, just as you might write a musical score. Choose the method which is most convenient, depending on the characteristics or the performance technique of the musical piece concerned.

How to store an accompaniment pattern: outline

Setting up	Page
A. Enter the COMPOSER mode.	..... 10
↓	
B. Select a memory number. Specify a name for the new pattern.	..... 10
↓	
C. Specify the number of measures in the pattern and the time signature.	..... 11
↓	
Creating a pattern	
D. Real-time recording	..... 11
↓	
E. Step recording	..... 12
↓	
F. Copying a pattern	..... 13
↓	
Exit the COMPOSER mode	..... 14

Please refer to each heading for detailed explanations.

Setting up

In the first step, we establish the overall information for the new pattern—its memory number, name, the number of measures and the time signature.

A. Enter the COMPOSER mode.

Press the **COMPOSER RECORD** button to turn it on.

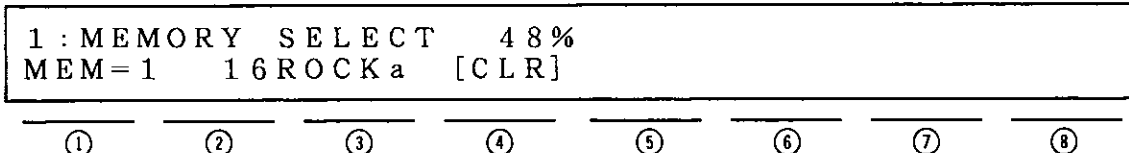
- The indicator lights.

COMPOSER



B. Select a memory number. Specify a name for the new pattern.

PAGE 1



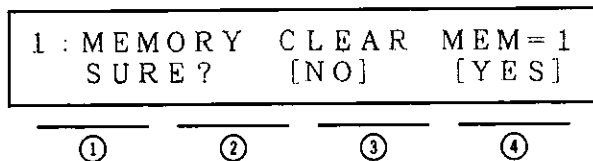
- Select a memory number in which to store the new accompaniment pattern.
 - Select a memory number (1~8) with the ① buttons. You can also use the 1~8 buttons in the **RHYTHM** section.



- Specify a name for the accompaniment pattern.
 - The name you specify may have up to 7 characters.
 - Press either ③ button. Move the cursor to the left or right with the **TRANPOSE** buttons to specify the location of the character. The **TEMPO/PROGRAM** dial (or the ③ buttons) is used to specify the alphanumeric character.
 - If you select one of the **COMPOSER 1~8** buttons in the **RHYTHM** section and then immediately press a **COMPOSER PART** button, the display automatically changes to **PAGE 3** and you can begin recording at once.

- There is a limit to the memory capacity of the **COMPOSER**. The amount of memory remaining is indicated by % in the upper row at ④. Note that the indicated memory capacity reflects the total of all eight **COMPOSER** memories (1~8). In the initialized condition, preset accompaniment patterns are stored in the memory numbers 1~8, so, about 50% is displayed as the remaining storage capacity. If you erase the stored patterns by performing the **MEMORY CLEAR** operation in step 2 below, the remaining storage capacity increases. (If the storable data were thought of in terms of number of notes, the storage capacity would be approximately 1,800 notes.)

- When creating a new pattern in a memory number, you must first erase the contents.
 - Press either ④ button to get the **MEMORY CLEAR** display.



- Press either ④ button for [YES] to clear the memory number. Press either ③ button for [NO] to cancel the **MEMORY CLEAR** function.

C. Specify the number of measures in the accompaniment pattern and the time signature.

1. **PAGE 2**

```

2 : BAR SET          MEM = 1
   BAR = 2    BEAT = 4 / 4
    
```

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- Specify the number of measures in the accompaniment pattern (1~8) with the ② buttons.
- Specify the time signature with the ④ buttons.
 - Select one of the following: 1/2~4/2, 1/4~8/4, 2/8~16/8.
 - The default setting is 2 measures, 4/4 time.
 - The number of measures and time signature of a pattern already recorded cannot be changed.

Creating a pattern

The accompaniment pattern is composed of five parts—**DRUMS**, **BASS**, **ACCOMP 1**, **2** and **3**—each of which is formed independently. Two methods of creating the patterns—real-time recording and step recording—are explained below.

D. Real-time recording

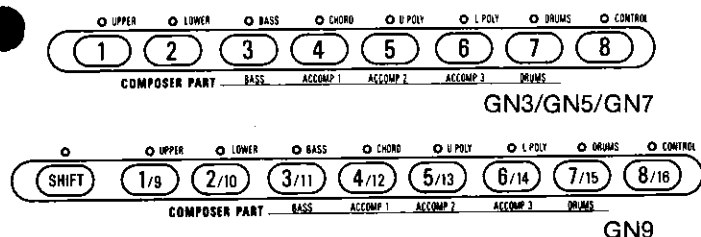
1. **PAGE 3**

```

3 : REALTIME REC          MEM = 1
Q = OFF J = 1 2 0 M = 1 [CLR] ERS : [ALL] [INST] VOL
    
```

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- Specify the part you are going to play first by pressing the corresponding **COMPOSER PART** button (**SEQUENCER** track buttons 3~7).



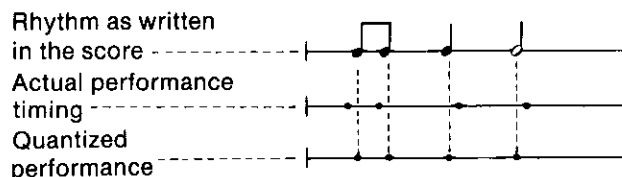
- Specify the sounds and effects. Select the sounds for the **ACCOMP** parts with the **LOWER SOUND SELECT** buttons.
- To clear the specified part, press either of the ④ buttons.
- Set the desired quantize level with the ① buttons. The default setting is OFF.
 - Select from $\frac{1}{8}$, $\frac{2}{10}$, $\frac{3}{11}$, $\frac{4}{12}$, $\frac{5}{13}$, $\frac{6}{14}$, $\frac{7}{15}$, $\frac{8}{16}$, OFF.
- Press the **START/STOP** button to turn it on, and play the accompaniment pattern.
 - Confirm that the **ACCOMP 1** and/or **ACCOMP 2&3** button in the **ARRANGER** section is on.
 - The metronome sound will be heard.
 - The pattern stored in the selected memory number plays back.
 - You can regulate the tempo with the **TEMPO/PROGRAM** dial. You can record at a slow tempo and play back at a fast tempo. The pitch does not change.

About quantizing

Quantizing corrects the timing of a pattern as it is being recorded. For example, the rhythm will be corrected to the preset quantize level when the rhythm is out of sync or when the different parts do not seem to match because the timing is slightly off.

Because the performance is revised according to the specified quantized level, the smallest note unit which occurs in the performance should be specified.

Example: When the following music piece is performed and set to a quantize level of $\frac{1}{8}$.



■ **Notes concerning playing the pattern**

- Play the selected part (**ACCOMP 1, 2, 3, BASS, DRUMS**) on the lower keyboard.
- The tempo is shown at position ② and the number of measures at position ③ of the display.
- Record the performance in C major for correct chord progressions during playback. To record with another chord, follow the **PAGE 6** procedure before recording.
- The accompaniment pattern of the length specified in the **PAGE 2** menu is repeatedly played back, during which time any newly played notes are added to those already recorded.
- **PITCH BEND (GN9)** and **MODULATION** effects can also be stored in the memory.
- When you perform the **MEMORY CLEAR** operation on the **PAGE 1** display, the **DRUMS** part sounds change to those of the **ROCK** genre, regardless of the **DRUMS SETTING** status. (Refer to Vol. 1, page 39.) (When you want to play **DRUMS** sounds of another genre [**STANDARD, ELECTRIC, HARD ROCK**], use the **PAGE 5** procedure in the **COMPOSER** mode to copy a preset rhythm pattern which uses the desired **DRUMS** sounds.)

[ALL]

The performance recorded in the **COMPOSER PART** selected is erased for as long as either of the ⑥ buttons is pressed.

[INST]

If the **DRUMS** part was specified, the **DRUMS** part is cleared instrument by instrument. Hold down either ⑦ button and specify the instrument sound to be deleted by pressing the instrument key on the keyboard, after which that instrument only will be erased for as long as the ⑦ button is kept pressed.

VOL

If either ⑧ button is pressed, the display changes to the balance display. The **DRUMS** part and **BASS** part volumes can be adjusted with the corresponding buttons.

- GN3: The volumes for **ACCOMP 1, 2 and 3** can be adjusted on the **SHIFT** display.

Maximum number of notes which can sound simultaneously

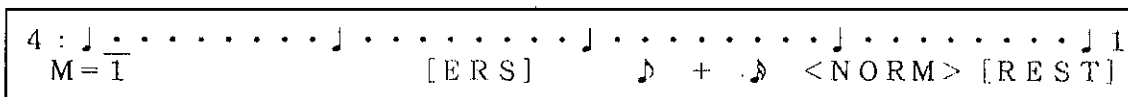
	GN3/GN5	GN7/GN9
ACCOMP 1	4 notes	4 notes
ACCOMP 2	3 notes	4 notes
ACCOMP 3		
BASS	1 note	1 note
DRUMS	6 notes	6 notes

6. Select the next part to be stored by pressing the corresponding **COMPOSER PART** button.
 - When the **START/STOP** button is on, the part already stored is played back. Store the next part in time with this.

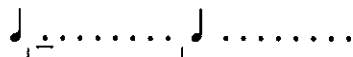
E. Step recording

When beginning recording with step recording, first follow steps A, B and C.

1. **PAGE 4**



2. Select the **COMPOSER** part you wish to store first by pressing the corresponding **COMPOSER PART** button (**SEQUENCER** track buttons 3~7).
- Specify the sounds and effects. Select the sounds for the **ACCOMP** parts with the **LOWER SOUND SELECT** buttons.
3. Press the **START/STOP** button to play back the accompaniment pattern stored in the selected memory number.
4. Specify the first measure you wish to store with the ① buttons.
5. Specify the timing. Move the cursor with the **TRANPOSE** buttons to the position (note) you wish to record.



The 8 steps in this space represent one quarter note. In other words, each step represents one thirty-second note. If you try to store triplets, the timing may not fit evenly into the 1/32-note steps. However, if you specify triplet-type notes (indicated by a 3 on the display) in step 6 below, the correct timing is automatically stored.

6. Specify the note length with the ⑤ buttons.
 - The following note lengths can be specified.



- Note lengths other than these can be stored. Use the ⑥ buttons to specify the note length to be added to the note length specified for ⑤. The note lengths which can be specified for ⑥ are the same as those for ⑤; however, when you do not wish to add note lengths, specify the no-note indication at ⑥.

Gate time

You can set the actual length of the produced sound ("gate time") for the desired legato or staccato effect. Specify the gate time with the ⑦ buttons before pressing the keyboard key.

The relation of gate time to note length is as follows:

- <TENU> (tenuto) 100%
- <NORM> (normal) 80%
- <STAC> (staccato) 50%
- <CUTT> (cutting) 25%

7. Press the desired lower keyboard key.

When the key is released, the note is stored along with the pitch and strength with which the key was pressed ("velocity").

- A position at which a note has been stored is indicated by a * mark.
- When a note is recorded, the cursor automatically moves the specified note length to the next unrecorded position.
- Chords can also be stored in **ACCOMP 1, 2 and 3**.
- No matter which key's pattern you want to record, play and store as C key scale. If not, the playback tune will not be correct. However, if so desired, the chord can be changed to another chord by following the **PAGE 6** procedure before recording.

[REST]

A rest is specified by pressing the ⑧ buttons. The length of the rest is specified the same as for note length. If a rest is specified, the cursor automatically moves the specified length of the rest.

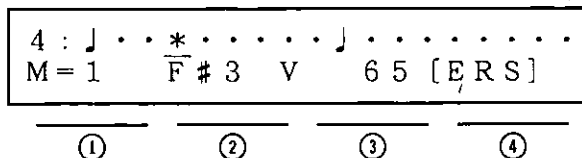
- Step positions at which no note has been recorded are played back as rests.

Repeat steps 4~7 to continue storing notes.

■ **Correcting the data**

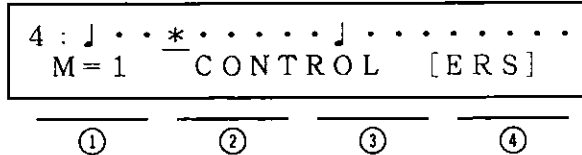
You can erase or correct data which has been input.

1. **PAGE 4**



2. Use the **TRANPOSE** buttons to move the cursor and search the input data.

- If the cursor is moved to a * position at which more than one type of data is stored, the display of the stored data changes each time a **TRANPOSE** button is pressed.
- GN9: When the **MODULATION** switch or **PITCH BEND** wheel is used, the display changes as follows:



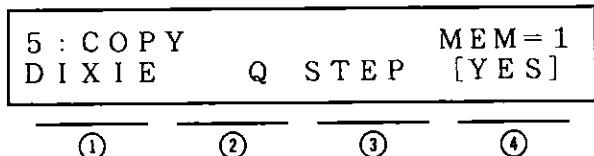
- In this case, the contents of control data are displayed.
3. To erase the displayed data, press either ④ button.
4. Correct the displayed data, if desired.
- Even for a performance which was stored with the real-time recording method, data can be erased using the step recording mode.

F. Copying a pattern

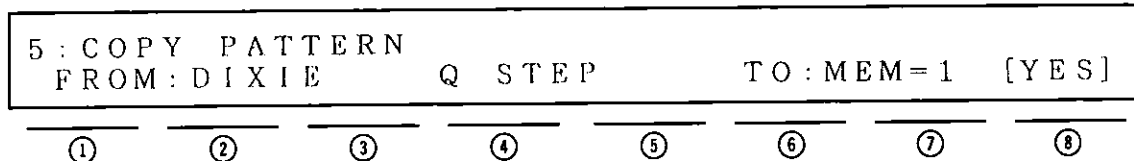
One convenient way of creating an accompaniment pattern is to copy parts of preset or **COMPOSER** rhythm patterns. The copied pattern can then be edited using the real-time recording method and/or the step recording method.

PAGE 5

(GN3)



(GN5/GN7/GN9)



2. Select the rhythm pattern from which you wish to copy a part with the ① buttons (GN3), the ② buttons (GN5/GN7/GN9) or with the buttons in the **RHYTHM** section.
- **AUTO PLAY CHORD** patterns are selected for the **BASS** and **ACCOMP**.
3. Select a variation with the ③ buttons (GN3) or ⑤ buttons (GN5/GN7/GN9).
4. After the variation is selected, press either ④ button (GN3) or ⑧ button (GN5/GN7/GN9) to complete the selection of the preset pattern.

Setting the chord for the pattern

To facilitate correct chord changes during playback, the pattern is stored as a C scale performance. To store a performance in another scale, follow the procedure below.

1. PAGE 6

```
6 : REC CHORD      MEM = 1
   KEY = C # <MAJ > <NORM >
```

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

2. Specify the root note of the playback recorded chords with the ② buttons.
3. Select <MAJ> (major) or <MIN> (minor) with the ③ buttons.
4. Select <NORM> (normal) or <7th> with the ④ buttons.

<NORM>: When a 7th tone is included in the recorded sound, if a 7th chord is specified during playback, it changes to a 7th chord.

<7th>: When a 5th tone or 7th tone is included in the recorded sound, if a 7th chord is specified during playback, it changes to a 7th chord.

Exit the COMPOSER mode

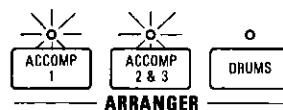
Press the **COMPOSER RECORD** button to turn it off.

COMPOSER



Playing back your stored accompaniment pattern

1. In the **RHYTHM** section, first press the **COMPOSER** button to turn it on. Then select the memory number (1~8) of the accompaniment pattern you wish to have played back.
2. When the **START/STOP** button is pressed, the **DRUMS** part starts to play back.
3. Press either **FINGERED 1** or **FINGERED 2** of the **AUTO PLAY CHORD** to turn it on.
 - Check that the **ACCOMP 1** and/or **ACCOMP 2&3** button in the **ARRANGER** section is on.
4. Specify the chord on the lower keyboard.
 - You can change the method of specifying chords by pressing the **AUTO PLAY CHORD**'s **FINGERED 1** or **FINGERED 2** button.
 - The **INTRO & ENDING** and **FILL IN** buttons do not function for odd-meter patterns.



Example of creating an accompaniment pattern

1. Press the **COMPOSER RECORD** button to turn it on. The indicator lights, and the display changes to the **COMPOSER** mode display.

2. **PAGE 1**

```
1 : MEMORY SELECT 48%
MEM=1 16ROCKa [CLR]
```

① ② ③ ④

3. Select "1", either with the ① buttons, or with the **COMPOSER** memory buttons in the **RHYTHM** section.
4. Press either ④ button.

5. **PAGE 2**

```
* 2 : BAR SET MEM=1
BAR=2 BEAT= 4/4
```

① ② ③ ④

6. Set the number of measures to "2" with the ② buttons. Set the time signature to "4/4" with the ④ buttons.

Step record the DRUMS part

Begin recording with the **DRUMS** part—the "heart" of the rhythm.

PAGE 4

```
4 : J . . . . . J . . . . . [ERS]
M=1
```

① ② ③ ④

3. Use the **TRANPOSE** buttons to move the cursor to the note position you wish to record.
4. Store the desired percussion sound by playing the corresponding lower keyboard key.

2. Press the **SEQUENCER** track 7 (**DRUMS**) button to turn it on.

Example: Store a hi-hat pattern.

Measure 1

```
4 : J * * * * . . . J * * * * * J * * * * . . . J * * * * * J 1
M=1 [ERS] <NORM> [REST]
```

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Step record the BASS part

1. PAGE 4

4 : 1							
M = 1		[E R S]				< NORM > [R E S T]	
①	②	③	④	⑤	⑥	⑦	⑧

2. Press the **SEQUENCER** track 3 (**BASS**) button to turn it on.
 - Specify measure "1" with the ① buttons.
 - Use the **TRANPOSE** buttons to move the cursor to the beginning of the first beat.
 - Specify the note length with the ⑤ buttons.
 - Information on rests is on page 13.

Measure 1

Note length											
Keyboard key	C	C	—	G	B \flat	C	—	C	G	B \flat	C
Rest	—	—	○	—	—	—	○	—	—	—	—

Measure 2

Note length										
Keyboard key	—	C	B \flat	C	C	C	—	B \flat	C	C
Rest	○	—	—	—	—	—	○	—	—	—

Real-time record the ACCOMP part

1. PAGE 3

3 : REALTIME REC			
Q =	= 120	M = 1	[CLR]
①	②	③	④

2. Press the **SEQUENCER** track 4 (**ACCOMP 1**) button to turn it on.
 - Set the quantize level to with the ① buttons.
3. Set the tempo with the **TEMPO/PROGRAM** dial.
4. Play the **ACCOMP** pattern on the lower keyboard.
5. When you have finished storing the **ACCOMP** part, press the **COMPOSER RECORD** button to turn it off.

Part VII Recording/playback and editing your keyboard performance

33 Sequencer

This section of your manual comprises several articles designed to help you efficiently master the **SEQUENCER** functions.

It is suggested that you begin reading in order from the first article. However, it is not absolutely necessary to master all the functions to enjoy the **SEQUENCER** feature. Once you have acquired a basic understanding of how the **SEQUENCER** works, you may prefer to go directly to the steps which cover your particular interests.

INSTR

	Page
A. Real-time recording	19
B. Playing back the recorded performance	20
C. Multi-track recording	21
D. Correcting your recorded performance (punch in/out)	21
E. Step recording	23
• Storing chord progressions	
• Storing rhythm progressions	
• Storing the melody	
• Storing control data	
F. Tracks and parts (track assign)	33
G. Editing the recorded performance	34

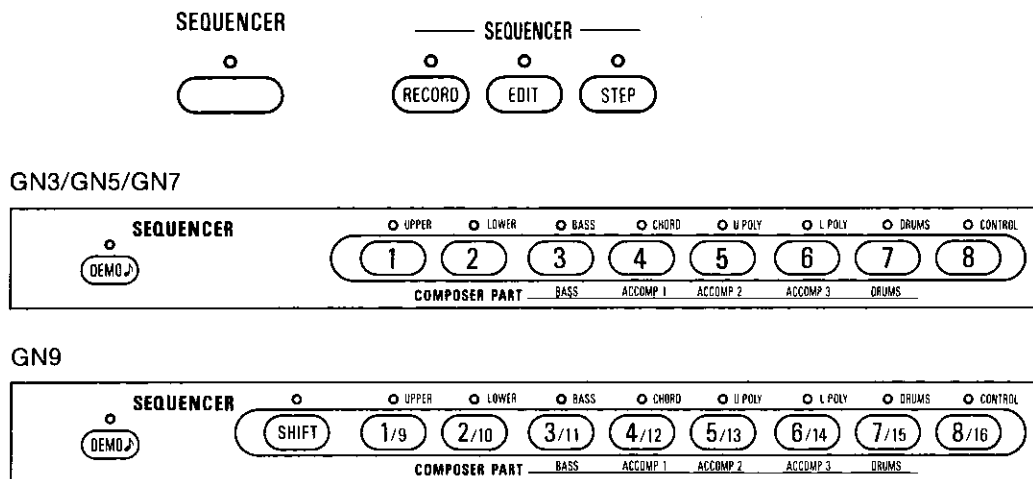
What is a sequencer?

The sequencer is a special feature that allows you to record the data of your keyboard performance and to have it played back (automatic playback). It is useful when you want to keep your performance or check it later.

Also, because the **SEQUENCER** comprises 8 separate tracks the multi-track recording feature can be used to record a complicated piece of music.

As with the **COMPOSER**, both the real-time recording method and the step recording method are available.

Sequencer buttons and their functions



SEQUENCER: Set the functions during playback (page 20).

RECORD: For real-time recording and correcting portions of your performance (punch in/punch out) (page 21).

EDIT: For editing a recorded performance (page 34).

DEMO ♪ : For playing back the preset demonstration performance. (Refer to Vol. 1, ③ Listen to the demonstration tune.)

Track buttons: For selecting the performance parts to record. You can assign a track to each part as desired. (Refer to "Track assign," page 33.)

- There are 8 tracks (1~8) available for recording. On the GN9, an additional 8 tracks (9~16) are available for editing.

SEQUENCER parts and their contents

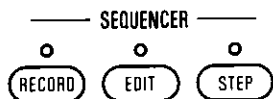
Part	Contents
UPPER	Upper keyboard performance; selected sounds, effects, volumes for all upper keyboard parts; on/off status of the UPPER ORCHESTRAL CONDUCTOR buttons.
LOWER	Lower keyboard performance; selected sounds, effects, volumes for all lower keyboard parts; on/off status of the LOWER ORCHESTRAL CONDUCTOR buttons.
BASS	Pedal keyboard performance; selected sounds, effects, volume for the BASS part; the BASS performance on the lower keyboard when the full bass pedal is depressed.
CHORD	The chord progression for the AUTO PLAY CHORD and COMPOSER accompaniment pattern are stored in this part with the step recording method. • For recording, refer to section "E. Step recording."
U POLY	The performance, sounds, effects, volumes, etc. for the UPPER POLY part.
L POLY	The performance, sounds, effects, volumes, etc. for the LOWER POLY part.
DRUMS	The lower keyboard performance using the KEYBOARD PERCUSSION .
CONTROL	The operation of the sound, effect and volume controls for each part and of the expression pedal.

A. Real-time recording

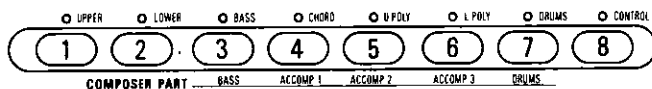
Explained here are the basic procedures of real-time recording. These procedures are also used for advanced applications such as multi-track recording (explained later).

[1] Preparing to record

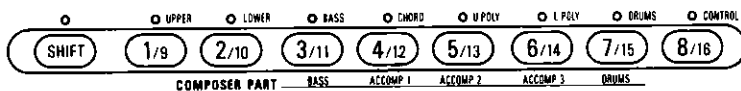
1. Set the registration—sound, effects, volume, etc.—for the part you are going to record first.
2. Press the **RECORD** button to turn it on.
 - The indicators for the tracks which can be stored will flash.



3. Select the part you wish to record first with the track buttons (1~8).



GN3/GN5/GN7



GN9

- The indicator of the button you pressed flashes slowly.
- Of the **UPPER** (or **U POLY**), **LOWER** (or **L POLY**), **BASS** and **CONTROL** parts, you can press two or more track buttons (the indicators flash) to store multiple parts at the same time.
- When recording in the **U POLY** or **L POLY** track, turn on the **POLY** button in the respective **ORCHESTRAL CONDUCTOR** section.
- Track 4 (**CHORD**) cannot be recorded with the real-time recording method. If you wish to record, refer to "track assign" on page 33 and use the procedure in order to specify a melody part.
- When the track button 7 (**DRUMS**) is on, the **KEYBOARD PERCUSSION** function is set on the lower keyboard and no sound is produced for the other part.

4. PAGE 1

1 : REALTIME	M 13	METRONOME	
UPLY J = 120	MEM : 30%	<ON>	



5. Set the tempo for recording. Use the **TEMPO/PROGRAM** dial to set the tempo.
 - The part selected for recording is displayed at ①.
 - When recording multiple parts at one time, the part whose track button was turned on last is displayed.
 - The tempo is indicated at ② as $J =$. The tempo is normally set to that indicated in the musical score.
 - You can record at a slow tempo and play back at a fast tempo. The pitch does not change.
6. If desired, you can turn on the metronome sound by pressing either of the ③ buttons to display <ON>.
 - The metronome beat matches the time signature of the selected rhythm.

ZC-021

[2] Record the performance

Press the **START/STOP** button to start the rhythm and begin recording. Recording can begin just by starting to play the keyboard.

- When the metronome is on, it sounds for two measures of blank play, after which recording begins. In this case, the rhythm does not start.
- When the **START/STOP** button is turned on with the metronome off, the rhythm starts to sound and recording begins.
- When the metronome is off, you can also use the **SYNCHRO START** function to begin the recording by playing on the lower keyboard. (Refer to Vol. 1, page 20.)
- At this time, playing the keyboard will produce the sounds of the selected part.
- The remaining **SEQUENCER** storage capacity is indicated by % on the portion of the display above the ④ buttons. The storage capacity of the memory is common to all the **SEQUENCER** tracks. (If all storable data were thought of in terms of notes, the storage capacity would be approximately 6,000 [GN3/GN5]/15,000 [GN7/GN9] notes.)
- The volume is adjusted with the **VOLUME** buttons for each part. Press the **SOUND SETTING** button to turn it on and, while monitoring the display, adjust the volume.
- On the GN9, the aftertouch function cannot be stored.
- When you press the full bass pedal with your foot, the **BASS** part which you play on the lower keyboard is also stored as the **BASS** part of the **SEQUENCER**.
- When the **BASS** solo function is assigned to the full bass pedal, the **BASS** part which you play on the lower keyboard is also stored as the **BASS** part of the **SEQUENCER**. (Refer to Vol. 1, ⑩ Memory & Control functions.)

[3] End the recording

Press the **RECORD** button to turn it off.

■ Storing the AUTO PLAY CHORD

The **AUTO PLAY CHORD** accompaniment pattern can be stored in the **LOWER** part.

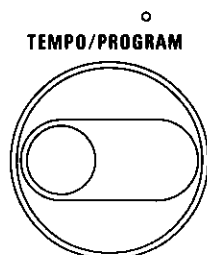
1. Prepare the **SEQUENCER** for real-time recording of the **LOWER** part.
2. Press the **FINGERED 1** button to turn it on.
3. Press the **ACCOMP 1** or **ACCOMP 2&3** button in the **ARRANGER** section to turn it on.
4. Start the rhythm.
5. Play the chords on the lower keyboard.
 - Do not use the one-finger mode. The chords must be specified using the fingered mode.
6. Press the **RECORD** button to turn it off and end the recording procedure.

B. Playing back the recorded performance

1. Press the track buttons for the parts of the performance you wish to have playback.
2. Press the **SEQUENCER RESET** button.



3. Adjust the playback tempo with the **TEMPO/PROGRAM** dial.



4. Press the **START/STOP** button. Automatic playback of the recorded performance begins.



- At the end of the song, the performance stops.
- If the **START/STOP** button is pressed again during performance, the performance stops. If you press the **START/STOP** button again, the performance will continue from the point at which it stopped; however, the rhythm will not be heard.
- If you wish to replay the performance from the beginning, press the **SEQUENCER RESET** button.
- When automatic playback is begun at a point after the stored rhythm start, the rhythm will not start.

Functions for playback

When the **SEQUENCER** button is pressed on, the following playback functions are available.



Measure: You can specify the measure at which you wish playback to start.

Reset: The performance returns to measure 1.

Fast forward: You can use the fast forward function while listening to the recorded performance.

Playback tempo: The playback tempo can be freely adjusted.

Note concerning the SEQUENCER

When many tracks are used at one time, or when the number of notes stored in a track is extremely large, the timing may lag during playback.

If this occurs, decrease the number of tracks used at the same time, or use the **TRACK CLEAR** procedure to erase the contents of those tracks not being used for playback.


```

1 : SEQ PLAY
M 1  [FF] ♩ = 1 2 0

```

① ② ③ ④

■ Set the playback tempo.

Adjust the playback tempo with the **TEMPO/PROGRAM** dial. The tempo is displayed as ♩ = at ④.

■ Reset

During playback, stop the performance and press either ② button to return to the first measure of the performance.

■ Fast forward

During playback, stop the performance and, while listening to the recorded performance, fast forward by pressing either ③ button.

■ Set the first measure of playback

1. During playback, stop the performance and press either ① button. The display changes to the following.

```

1 : MEASURE SETTING
M1 2 5  [NO] [YES]

```

① ② ③ ④

2. Use the **TEMPO/PROGRAM** dial to specify the first measure from which you wish playback to begin.

3. To move to the specified measure, press either ④ button for [YES]. If you do not wish to move to the specified measure, press either ③ button for [NO].

4. Press the **START/STOP** button to begin playback of the recorded performance.

C. Multi-track recording

When recording multiple parts of a tune, you can record one part while listening to the part or parts already recorded.

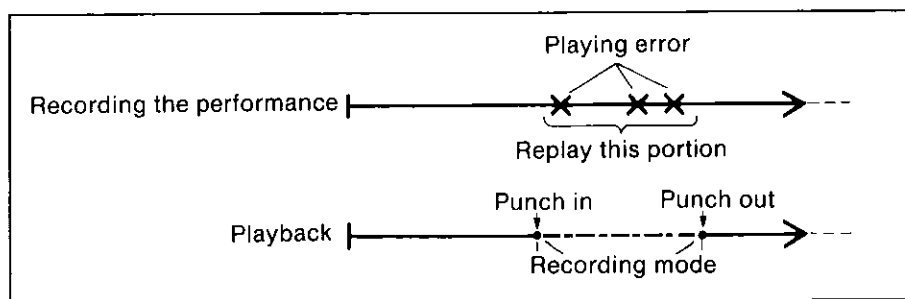
1. Press the **RECORD** button to turn it on.
2. Select a track and record the part of this track first.
3. Press the **RECORD** button to turn it off and confirm that the indicator for the previously recorded track is on.
4. Press the **RECORD** button again to turn it on.
5. Press the track button for the part you wish to record next. Its indicator flashes.
 - Confirm at this time that the indicator for the track you recorded in step 2 is lit.

6. Press the **START/STOP** button. The part which was recorded first is played back. Record the second part in time with this.
7. When you have finished recording all the parts, press the **RECORD** button to turn it off.

D. Correcting your recorded performance (punch in/punch out)

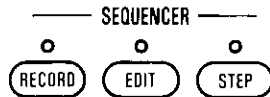
"Punch in" means that the mode is switched from playback to recording on the spot; "punch out" is the reverse, where the mode is immediately switched from recording to playback.

The punch in/out feature is very convenient when you wish to correct only a selected portion of a recorded performance, for example, when you made a mistake in playing.



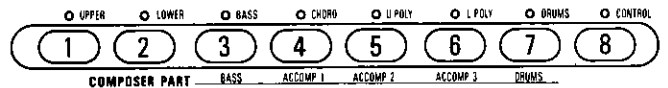
[1] Setting up

1. Press the **RECORD** button. The indicator lights.

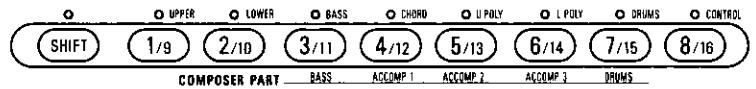


2. Press to turn on the track button (1~8) for the track you are going to punch in/out. The indicator flashes slowly.

- For a multi-track recording you can, for example, correct a track or tracks while monitoring other recorded tracks. To do so, press to turn on the buttons for the tracks you wish to monitor BEFORE you press the **RECORD** button in step 1. The indicators light.

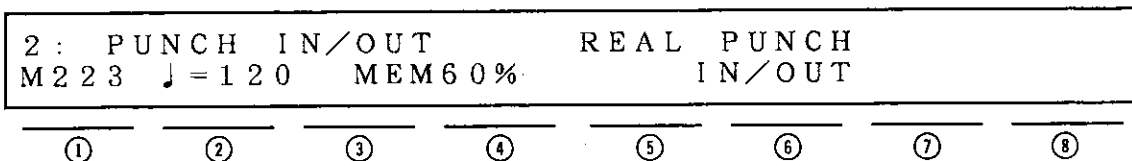


GN3/ GN5/ GN7



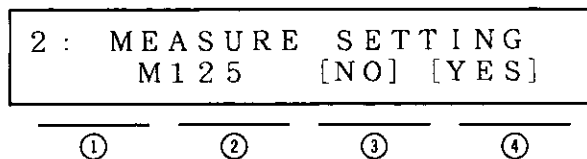
GN9

3. **PAGE 2**



■ Set the measure

Press either ① button. The display changes to the following.



Use the **TEMPO/PROGRAM** dial to specify the first measure from which you wish playback to begin. Press either ④ button for [YES] to move to the specified measure. Press either ③ button for [NO] to cancel the MEASURE SETTING procedure.

■ Set the tempo

Adjust the playback tempo with the **TEMPO/PROGRAM** dial. The tempo is displayed at ②.

- The remaining **SEQUENCER** storage capacity is indicated by % on the portion of the display above the ④ buttons.

[2] Punch in/out

■ Specify the timing of the punch in and punch out.

1. Press the **START/STOP** button to begin playback of the recorded tracks.
2. Press either ⑥ button to specify the punch in point.
 - Punch in automatically begins when you play the keyboard corresponding to the part you are correcting.
3. Replay (re-record) the keyboard from the punch in point.
4. Press either ⑥ button to specify the punch out point.
 - You can specify the punch in/out point with the foot switch or knee lever. Refer to Vol. 1, ⑩ Memory & Control functions, for the setting.

[3] Ending punch in/out

1. Press **START/STOP** to stop playback.
2. Press the **RECORD** button to turn it off.

E. Step recording

Step recording is simply a method of making a tune by storing the sounds note-by-note instead of by playing the keyboard directly as in the real-time mode. For storing the data contents, the step recording function is divided into 4 modes.

<CHORD>

Store the chord progression of the tune.

- During playback the stored chord progression becomes the automatic accompaniment of the **AUTO PLAY CHORD**. (Refer to page 23.)

<RHY>

Store the rhythm pattern sequence and the timing of the intro, fill-ins, ending. (Refer to page 25.)

<MELODY>

Use the keyboard to store performance contents such as the melody line, the accompaniment, and also the **KEYBOARD PERCUSSION** performance. (Refer to page 26.)

<CTL>

The rhythm tempo and rhythm start/stop, and the panel settings (sounds, volumes, effects, etc.) for all the parts can be stored. (Refer to page 29.)

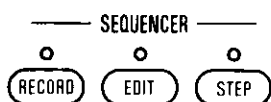
Storing chord progressions

By storing the chord progressions beforehand, the **AUTO PLAY CHORD** automatically performs the chord sequence when you play back the tune stored in the **SEQUENCER**.

With step recording, the chords are easily stored in order one by one.

[1] Preparing to store chords

1. Press the **STEP** button to turn it on.
 - The indicator lights.



2. PAGE 1

1 : STEP REC SELECT
<CHORD> [YES]

① ② ③ ④

■ Set to the chord-storing mode.

3. Select the <CHORD> indication with the ② buttons.
 - The indicator of the track assigned the chord part flashes. (The initial setting is track 4.)
 - If the track indicator does not flash, assign the chord part to a track using the TRACK ASSIGN mode. (Refer to page 33.)
4. Press either ④ button to select [YES].
 - The indicator of the track assigned the chord part flashes. The display changes to the next **PAGE**.

GN3

2 : C 7 s u 4 ♪ ♪
M 6 5 ▶◀ ♪ ◦ ▶

① ② ③ ④

[REP] [END]

⑤ ⑥ ⑦ ⑧

GN5/GN7/GN9

2 : C 7 s u 4 ♪ ♪ ♪ ◦ [REP] [END]

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

[2] Storing chords

Select the length of the chord to be stored with the ③ and ④ buttons (GN3) or the ③~⑥ buttons (GN5/GN7/GN9) while pressing the chord keys on the keyboard.

- Store the chord length according to the time signature of the selected rhythm. For example, if you selected a rhythm with a 6/4 time signature, you would specify a one-measure chord by ◦ + ♩.
- The time signature of the preset rhythms is 4/4, except for the following rhythms:
8/4: **JAZZ COMBO** (COMBO F)
MODERN JAZZ (MODERN a)
DIXIE (DIXIE)
6/4: **JAZZ WALTZ, WALTZ**
- The name of the chord you play appears on the display.
- If a **FILL IN** button or the **INTRO & ENDING** button is pressed, the specified pattern is stored at that timing.
- An intro can only be inserted at the beginning of a measure.
- To store a space with no chord, store the chord length with the buttons which correspond to the note length without playing a chord on the keyboard.
- The total number of measures is displayed at ①.

■ Reset

To return to the first measure, press either ② button.

■ Chord search

Use the **TRANPOSE** buttons to move forward or backward one chord at a time.

[3] Finish storing chords

Press either ⑦ button or either ⑧ button to exit the chord-storing mode.

- For repeat play during playback, press either ⑦ button for [REP].
- To simply end chord storage (no repeat), press either ⑧ button for [END].

[4] Playback

1. Turn on the button for the track in which the chord progression is stored.
2. Press **START/STOP**.
 - The automatic accompaniment plays following the stored chord progression.



For example, to store a chord progression

C ◦	C ◦	F ♩ G7 ♩	C ♩ Am ♩
			FILL IN

1. Press the **STEP** button to turn it on.
2. **PAGE 1** Set to the chord-storing mode.
3. **PAGE 2**

1st measure

C chord: While pressing the keys for a C chord on the keyboard, press the button which corresponds to a whole note (◦).

- The measure indication (M above the ① buttons) changes from 1 to 2.

2nd measure

C chord: Store the 2nd measure the same as you did the 1st measure.

- The measure indication changes from 2 to 3.

3rd measure

F chord: While pressing the keys for an F chord on the keyboard, press the button which corresponds to a half note (♩).

G7 chord: While pressing the keys for a G7 chord on the keyboard, press the button which corresponds to a half note (♩).

- The measure indication changes from 3 to 4.

4th measure

FILL IN: Press a **FILL IN** button.

C chord: While pressing the keys for a C chord on the keyboard, press the button which corresponds to a half note (♩).

Am chord: While pressing the keys for an Am chord on the keyboard, press the button which corresponds to a half note (♩).

4. Press either ⑧ button.

Modifying or correcting programmed chords

Chords which are already stored can easily be changed. Just move to the desired measure and replace the stored chord with a different chord.

1. Press the **STEP** button to turn it on.
2. **PAGE 1** Set to the chord-storing mode.

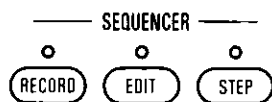
3. **PAGE 2**

- a) Press the **TRANPOSE UP** button 4 times. The G7 chord is displayed.
 - b) While pressing the keys for a F chord on the keyboard, press the button which corresponds to a half note (♩).
4. Press the **STEP** button to turn it off.

Storing rhythm progressions

The automatic rhythm sequence can be stored measure by measure with the **RHYTHM** and **COMPOSER** buttons.

1. Use the track assign procedure (refer to page 33) to assign the rhythm track to the desired track number.
2. Press the **STEP** button to turn it on.



3. PAGE 1

1 : STEP REC SELECT
 <RHY> [YES]

① ② ③ ④

- **Set to the rhythm-storing mode.**
- 4. Select the <RHY> indication with the ② buttons.
- 5. Press either ④ button to select [YES].
- The display automatically changes to the next **PAGE**.

PAGE 2

2 : RHY STEP REC ♩ = 1 2 0
M 4 7 SWING R SWNG R b [TMP] [ERS] [REP] [END]

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

■ Storing the rhythm progression

- a) Select the measure with the ① buttons.
- b) Select the desired rhythm change.
 - At the point you want to start (stop) the rhythm, store the rhythm start (stop) by pressing the **START/STOP** button.
 - When the ① buttons are used to specify a measure in which rhythm change data is stored, the stored rhythm name and rhythm variation are displayed. If desired, the rhythm variation can then be changed with the ④ buttons.

These rhythm selections can be stored:

- The rhythm pattern from the **RHYTHM** section (including **COMPOSER** locations)
- Rhythm start/stop
- **INTRO** on
- **FILL IN** and **ENDING** points
- Changes in the tempo

■ Storing the tempo

- a) Select the measure for storing the tempo change with the ① buttons (see step a) of "Storing the rhythm progression").
- b) Adjust the tempo with the **TEMPO/PROGRAM** dial. The tempo is displayed as ♩ = at ⑤.
- c) Press either ⑤ button to store the tempo.

■ **ERS:** Pressing either ⑥ button erases the data which is displayed.

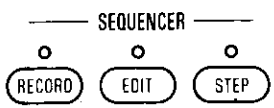
■ Exit the rhythm-storing mode.

6. Press a ⑦ or ⑧ button to end the storing procedure.
REP: Press either ⑦ button for repeat play during playback.

Storing the melody

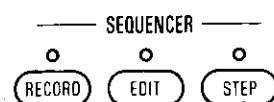
With step recording, the melody of a tune is created by storing one note at a time.

Each quarter note can be stored in 8 parts, in other words, thirty-second notes.

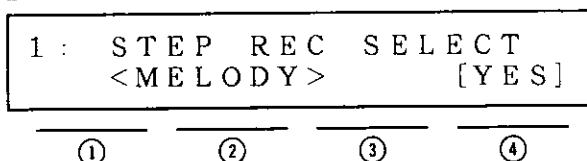
Furthermore, although the pitch and velocity of the stored sound are specified by playing the keyboard, the note length, touch response, gate time (tenuto, staccato etc.), and rests are all specified with the  buttons.

[1] Preparing to store

1. Press the **STEP** button to turn it on. The indicator lights.



2. **PAGE 1**

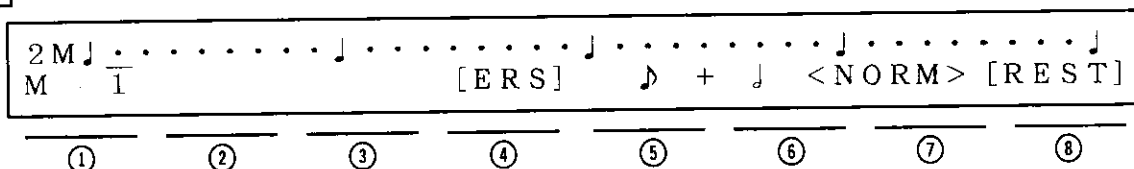


3. Select the <MELODY> indication with the ② buttons.
4. To select the recording part, press one track button whose indicator is flashing. (The indicators for the tracks which are assigned melody parts flash.)
 - The indicator of the selected track flashes.
5. Press either ④ button.
 - The display automatically changes to the following **PAGE**.

[2] Storing a melody

The melody is stored note by note. When a note is stored, the relevant panel settings (sound, volume, effect, pitch bend, etc.) for the selected part are also stored.

1. **PAGE 2**



2. Specify the measure you wish to record with the ① buttons.
 - The ► mark at the right end of the display indicates beats in a measure which cannot be completely shown on one display (for example, 5/4 time signature).
3. Use the **TRANSPOSE** buttons to move the display cursor to the desired note position.



The 8 steps in this space represent one quarter-note beat. In other words, you can set the cursor at a timing as small as 1/32-note timing.

- Stored positions are indicated by * on the display.
- When storing triplets it may not be possible to match the timing exactly with the 1/32-note steps; but if you store by selecting triplet-type notes (indicated by a 3 on the display) in step 4 below, the correct timing is automatically stored.

4. Specify the length of the note with the ⑤ buttons.
 - You can select from the following note lengths:



- Note lengths other than these can be stored. Use the ⑥ buttons to specify the note length to be added to the note length specified in ⑤. The note lengths which can be specified for ⑥ are the same as those for ⑤; however, when you do not wish to add note lengths specify off (no note) for ⑥.

■ Gate time

You can set the actual length of the produced sound precisely for the desired tenuto or staccato effect. Specify the gate time with the ⑦ buttons before pressing the keyboard key.

The relation of gate time to note length is as follows:

- <TENU> (tenuto) 100%
- <NORM> (normal) 80%
- <STAC> (staccato) 50%
- <CUTT> (cutting) 25%

5. Press the keyboard keys.

Play the keyboard to specify the pitch and touch response.

By playing and then releasing the key, the note is stored.

- Stored note positions are indicated by * on the display.
- Chords can also be stored.
- The cursor moves the length of the stored note.

■ [REST]

A rest is specified by pressing the ⑧ buttons instead of playing the keyboard. The length of the rest is specified with the ⑤ and ⑥ buttons the same as for note length.

If a rest is specified, the cursor automatically moves the specified length of the rest.

- Step positions at which no note has been recorded are played back as rests.

■ Storing sound, volume and effects

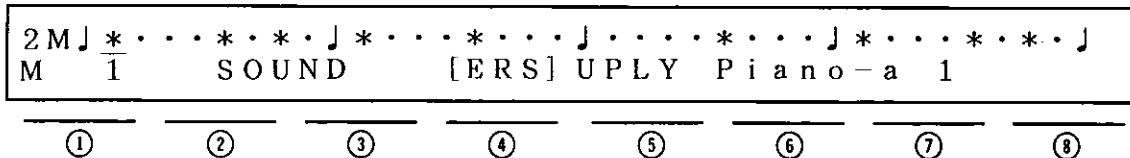
If the panel settings for the sound, volume and/or effects of the part you are storing are changed, the changes are stored at the point indicated by the cursor.

Changing the sound

a) Use the TRANSPOSE buttons to move the display cursor to the desired note position.

b) Change the sound with the buttons in the SOUND SELECT section.

- To change the variation, first press the TRANSPOSE DOWN button once. The display changes as shown below:

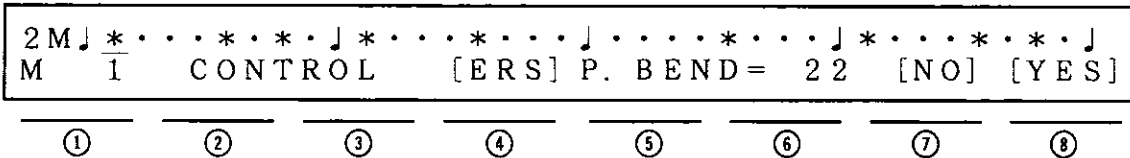


- The stored sound appears at ⑥. The variation can be selected with the ⑦ buttons.

Storing pitch bend data (GN9) and modulation on/off

a) Use the TRANSPOSE buttons to move the cursor to the desired position.

b) When the MODULATION switch or PITCH BEND wheel is used, the display changes as follows:



c) Store the data. The data appears at ② and the function name appears at ⑤.

Press either ⑧ button for [YES] to store the data. To cancel the data storage, press either ⑦ button for [NO].

6. Continue storing notes by repeating steps 2~5.

- When you have finished storing one measure, the display changes automatically to the next measure.

■ [ERS]

Press either ④ button to erase the stored data at the cursor position.

—ZC—ST—

[3] Correcting data

Stored data can easily be corrected by moving the cursor to the desired position and replacing the stored data with new data.

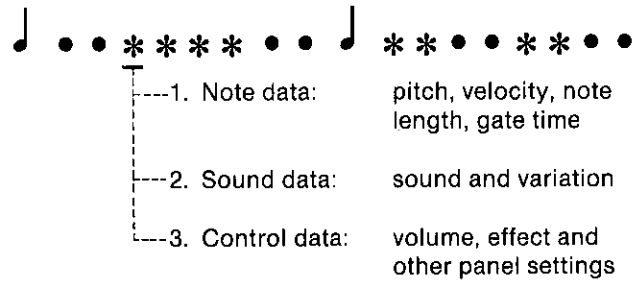
1. Move the cursor to the desired position with the **TRANPOSE** buttons. The stored data is displayed.

PAGE 2

2 M	♪ *	• • • *	• • • *	• • • *	♪ *	• • • *	• • • *	• • • *
M	1	F #	3	V	20	[ERS]		
	①		②		③			④

2. Correct the data

Because the stored data can be divided into the following three types, when correcting the data, it is necessary to do so on the respective edit displays.



- If all three types of data are stored at a * point, the display changes each time the **TRANPOSE UP** button is pressed to show the data in order of type: 1 → 2 → 3.
- If only one type of data is stored at a * point, the cursor moves to the next * position when the **TRANPOSE UP** button is pressed.

The procedures above can also be used to correct data which was stored with real-time recording.

■ Note data

- The pitch of the note is displayed at ②. When a chord is stored, one note is displayed and sounds each time the **TRANPOSE UP** button is pressed.
- The velocity of the note (how hard the keyboard was played) is displayed at ③ as a number (0~127). Press a ③ button; you can then use the **TEMPO/PROGRAM** dial to change the velocity.
- The displayed note data is erased if either ④ button is pressed for [ERS].
- The new data is added in the cursor position by playing the keyboard.

■ Program change (sound change) data

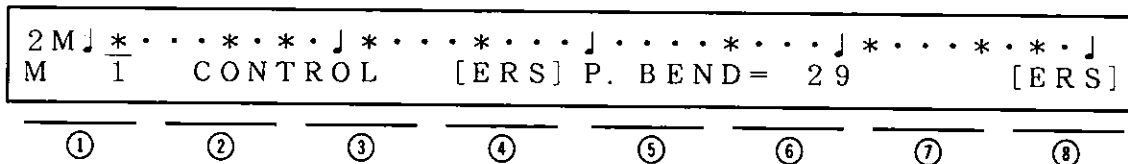
PAGE 2

2 C	♪ *	• • • *	• • • *	• • • *	♪ *	• • • *	• • • *	• • • *	♪ *	• • • *	• • • *	• • • *	• • • *	♪ *
M	1	SOUND	[ERS]	UPLY	Piano	-a	1							
	①		②		③		④		⑤		⑥		⑦	⑧

1. Press either ④ button while this display appears to erase any sound data stored at the cursor position.
2. Store the correct data.
 - The sound is selected with the buttons on the panel.
 - To change the variation, first press the **TRANPOSE DOWN** button once to display the sound name, then select the variation with the ⑦ buttons.

■ Control change data

PAGE 2



- The name of the function is indicated at ⑤. The function is changed with the panel switches (P. BEND, START, STOP, MODULATION).
- If either ④ button is pressed while this display appears, any control data stored at the cursor position is erased.

[4] Exit the storage mode

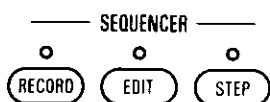
When all storage has been completed, press the **STEP** button to turn it off.

For details concerning playback, refer to "Playback" on page 20.

Storing control data

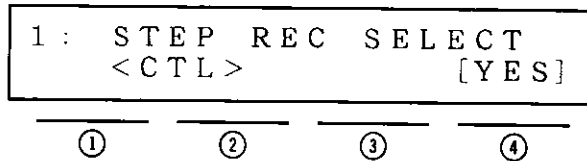
If desired, the step recording method can be used to store only the control data. Control data for all parts can be stored.

1. Press the **STEP** button to turn it on. The indicator lights.



- Specify the <CTL> indication with the ② buttons.
- The indicator of the track assigned to the control track flashes.
 - In the initial state, track 8 is assigned.
- Press either ④ button for [YES].
- The display automatically changes to the next **PAGE**.

PAGE 1



■ Program change (sound change) data

- Specify the measure with the ① buttons and move the cursor to the desired position with the **TRANPOSE** buttons.
- Specify the sound with the buttons on the panel.
 - To change the variation, press the **TRANPOSE DOWN** button once.

PAGE 2



3. Specify the variation with ⑦ buttons.

[ERS]

If either ④ button is pressed while this display appears, any sound data stored at the cursor position is erased.

■ **Control change data**

1. Specify the measure with the ① buttons and move the cursor to the desired position with the **TRANPOSE** buttons.
2. If the panel settings for the sound, volume and/or effects of the part you are storing are changed, the changes are stored at the point indicated by the cursor.

PAGE 2

2 C	J *	* . . . *	* . . . *	J *	* . . . *	* . . . *	J *	* . . . *	* . . . *	J *	* . . . *	* . . . *	J *
M	1	CONTROL		[ERS]	P. BEND=	2 2	[NO]	[YES]					
①	②	③	④	⑤	⑥	⑦	⑧						

PITCH BEND (GN9), MODULATION

- The function name appears at ⑤ and ⑥.
3. Press either ⑧ button for [YES] to store the data. To cancel the data storage, press either ⑦ button for [NO].

To change the variation, press the **TRANPOSE UP** button once. The name of the stored rhythm is displayed at ⑤. Select the variation with the ⑧ buttons.

RHYTHM

When you use the **RHYTHM** button to change the rhythm, the rhythm and the rhythm variation are stored.

Correcting data

Stored data can easily be corrected by moving the cursor to the desired position and replacing the stored data with new data.

- If either ④ button is pressed while the [ERS] display appears, the indicated data stored at the cursor position is erased.

Erase the expression data

PAGE 2

J . . . *	* . . . *	J *	* . . . *
EXP. =	9 4	[ERS]	
①	②	③	④

Expression pedal data stored in the real-time recording mode can also be erased. If the cursor is moved and this display appears, the expression pedal data stored at the cursor position is erased when either ⑧ button is pressed.

- The numerical value of the volume appears at position ②.
- To erase the data, press either ④ button for [ERS].

If **FILL IN 1**, **FILL IN 2** or **ENDING** is stored, two * marks are displayed. The first * indicates the button-on data, the second * the button-off data. To erase the data, move the cursor to the first * to display **FILL IN 1**, **FILL IN 2** or **ENDING**.

Exit the storage mode

When you have finished recording, press the **STEP** button to turn it off.

An example of storing in the Sequencer

Registration:

- Melody 1 UPPER POLY (ELECTRIC PIANO)
- Melody 2 LOWER POLY (HARPSICHORD)
- Melody 3 GN3: LOWER SPECIAL (REED)
GN5/GN7/GN9: LOWER TAB & ORGAN (FLUTE 4')
- BASS SYNTH 1
- Tempo J = 100

Step record the DRUMS part.

1. Press the **STEP** button to turn it on.

2. **PAGE 1**

1 :	STEP REC	SELECT	[YES]
	<MELODY>		
①	②	③	④

• Select <MELODY> with the ② buttons.

3. Press the **SEQUENCER** track 7 button.

- Press either ④ button for [YES] to change to the **PAGE 2** display.

PAGE 2

2 M J	.....	J	.....
M	1		[ERS]
①	②	③	④

- Use the **TRANPOSE** buttons to move the cursor to the beginning of the first beat.
 - Record each instrument by pressing the corresponding keys on the lower keyboard.
4. Press the **STEP** button turn it off.

■ Example (1st measure)

2 M J * . . . * . . . J * . . . * . . . J * . . . * . . . J * . . . * . . . J
M I [ERS] ♪ <NORM> [REST]
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Step record the BASS part.

1. Press the **STEP** button to turn it on.

2. **PAGE 1**

1 : STEP REC SELECT
<MELODY> [YES]
① ② ③ ④

- Select <MELODY> with the ② buttons.
3. Press the **SEQUENCER** track 3 button to turn it on.
- Press either ④ button for [YES] to change to the **PAGE 2** display.

PAGE 2

2 M J * . . . * . . . J * . . . * . . . J * . . . * . . . J * . . . * . . . J
M I [ERS] ♪ <NORM> [REST]
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- Select **SYNTH 1** with the **BASS** buttons.
 - Use the **TRANPOSE** buttons to move the cursor to the beginning of the first beat.
4. First, store the first measure.
- Select ♪ with the ⑤ buttons.
 - Since the **BASS** part is composed of eighth notes, play the eight notes of the measure one after the other on the pedal keyboard.
 - If the **BASS** solo function is assigned to the full bass pedal, the **BASS** part can be stored by playing the lower keyboard. (Refer to Vol. 1, ③⑩ Memory & Control functions.)
 - Continue as in the 1st measure until the 8th measure.
5. Press the **STEP** button to turn it off.

Real-time record the UPPER POLY part.

1. Confirm that the indicators of the recorded **BASS** and **DRUMS** tracks are lit.
2. Press the **RECORD** button to turn it on.
3. Press the **SEQUENCER** track 5 button.
- Confirm that the **POLY** indicator is lit in the **UPPER ORCHESTRAL CONDUCTOR**.

4. **PAGE 1**

1 : REALTIME M 1
UPLY J = 100 MEM : 30
① ② ③ ④

- Set the tempo to J=100 with the **TEMPO/PROGRAM** dial.

5. Press the **START/STOP** button and begin to play on the upper keyboard.
 - You can play while listening to the parts already recorded.
6. Press the **RECORD** button to turn it off after playing.

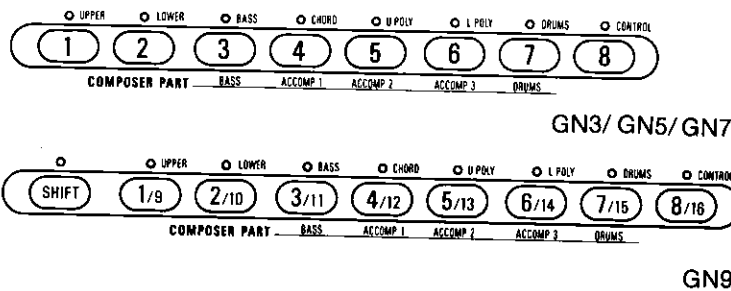
■ **Recording other parts**

Record the other parts by pressing **SEQUENCER** buttons 6 and 2 as for the **UPPER POLY** part.

F. Tracks and parts (track assign)

Each **SEQUENCER** track is assigned a part, such as **UPPER**, **LOWER**, **BASS**, and so forth. Assigning the parts to tracks just means that you can select which part(s) of your **SEQUENCER** performance to record or play back.

In the initial state, parts are automatically assigned to tracks as follows:



You can assign a part to each track with the track-assign function, if desired.

- Press the **SEQUENCER** button to turn it on.



- Assign a part to a track.

2. PAGE 2

2 :	TRACK ASSIGN	L. CNT MIDI	TRACK
TR 1	PART=UPLY [YES]	<ON> OUT= 3CH	[INI]
①	②	③	④
⑤	⑥	⑦	⑧

- Select a track with the ① buttons.
GN9: It is only necessary to assign parts to tracks 1~8, because the parts for tracks 1 and 9, 2 and 10, ... 8 and 16 are always the same.
- Select the part for the specified track with the ③ buttons.
- Press either ④ button; the confirmation display appears. Press either ④ button for [YES] to execute; press either ③ button for [NO] to cancel.

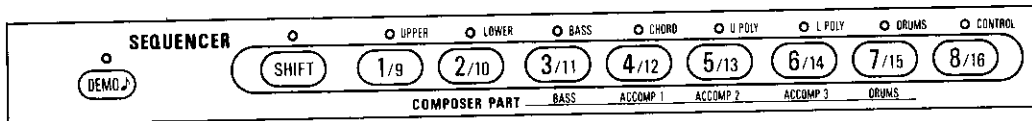
The **SEQUENCER** parts are:

Melody parts	UPPER, LOWER, BASS, UPPER POLY, LOWER POLY, UPPER SPECIAL, LOWER SPECIAL, UPPER SOLO (GN3/GN5), UPPER EXTRA (GN7/GN9), LOWER SOLO (GN3/GN5), LOWER EXTRA (GN7/GN9), ACCOMP 1, ACCOMP 2, ACCOMP 3, BASS, DRUMS
Control parts	CONTROL, CHORD, RHYTHM

- For melody parts, it is possible to assign one part to more than one track, but it is not possible to assign more than one part to a track.
- When you are finished assigning tracks, press the **SEQUENCER** button to turn it off.

About the GN9 tracks

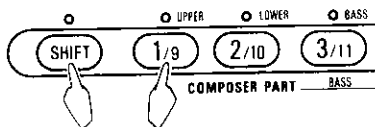
On the GN9, each **SEQUENCER** track 1~8 has a corresponding "reverse side" track (9~16) which can be accessed by utilizing the **SHIFT** button to the left of the tracks. These "reverse side" tracks can be effectively used to increase the recording and editing capabilities of the **SEQUENCER**.



Relation of tracks and "reverse side" tracks

Track	1	2	3	4	5	6	7	8
Reverse side track	9	10	11	12	13	14	15	16

When the **SEQUENCER** is stopped, if you hold down the **SHIFT** button and press a track button, the data in the track and the data in the "reverse side" track are exchanged.



- The indicators for the tracks which are exchanged light while the **SHIFT** button is pressed.

Repeat the **SHIFT** procedure to return to the original track.

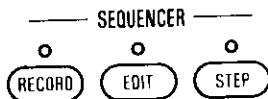
- For recording and playback, only tracks 1~8 can be used; however, for editing, all tracks 1~16 can be used.
- The track assign function is effective only for tracks 1~8. The same parts are automatically assigned to the corresponding "reverse side" track.

G. Editing the recorded performance

The edit feature allows you to modify a performance after recording it in the **SEQUENCER** tracks. Performance data is easily erased, corrected or merged, making it an especially convenient tool for creating your original tunes.

Enter the edit mode

Press the **EDIT** button to turn it on. The indicator lights.

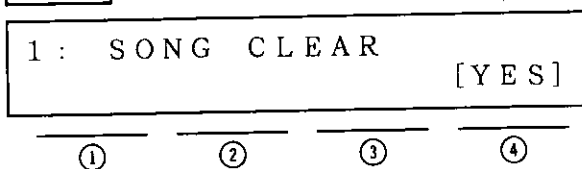


- Remember to turn off the **EDIT** button by pressing it again whenever you have finished using the editing functions.

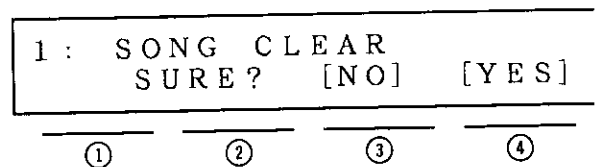
Song clear

- To erase the recorded contents of all tracks 1~8 (song all clear).

1. PAGE 1



- When either ④ button is pressed, the display asks if you are sure you wish to clear the tracks.



- Pressing either ④ button for [YES] erases the contents from all tracks. To cancel the SONG CLEAR procedure, press either ③ button for [NO].

Track clear

- To erase the contents of a specific track.

1. **PAGE 2**

```
2 : TRACK CLEAR
   TRACK NO= 3 [YES]
```

① ② ③ ④

2. Select the track you wish to clear with the ③ buttons.
3. When either ④ button is pressed, the display asks if you are sure you wish to clear the track.

```
2 : TRACK CLEAR TR3
   SURE? [NO] [YES]
```

① ② ③ ④

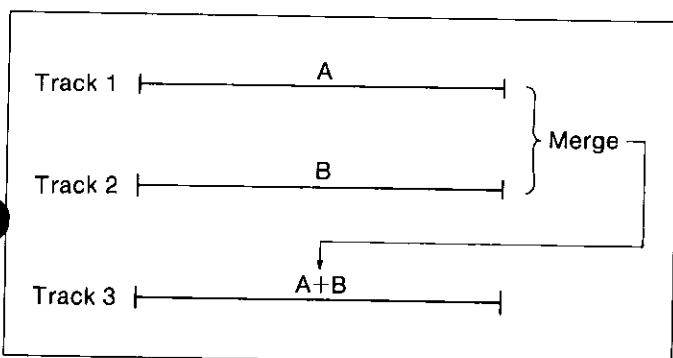
4. Pressing either ④ button for [YES] erases the contents from the specified track. To cancel the TRACK CLEAR procedure, press either ③ button for [NO].

Track merge

- To merge the recorded contents of two tracks and store in a third track.

Tracks to be merged must be assigned the same **SEQUENCER** part. It is not possible to mix data from different parts in one track.

Example:



1. **PAGE 3**

```
3 : TRACK MERGE
   TR 1+TR 2→TR 3 [YES]
```

① ② ③ ④

2. Select the two tracks you wish to merge with the ① and ② buttons.
 - The two source tracks will be cleared when the merge procedure is executed.
3. Specify the track number in which to record the merged data with the ③ buttons.
 - Control tracks, **RHYTHM** tracks and **CHORD** tracks cannot be merged.
 - The destination track is automatically assigned the same **SEQUENCER** part as the source track. On the GN9, the "reverse side" destination track is also automatically assigned the same part.
4. When either ④ button is pressed, the display asks if you are sure you wish to merge the tracks.

```
3 : TR 1+TR 2→TR 3
   MRG : SURE? [NO] [YES]
```

① ② ③ ④

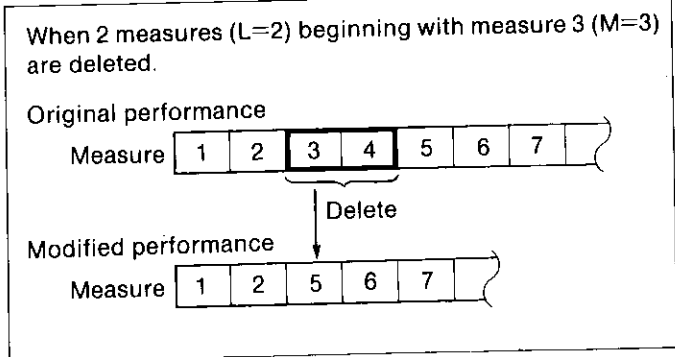
5. Pressing either ④ button for [YES] merges the two tracks into one. To cancel the TRACK MERGE procedure, press either ③ button for [NO].

Measure delete

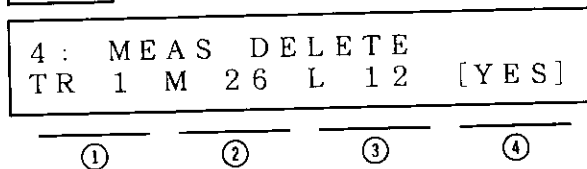
■ To delete measures.

The specified measures are deleted from the recorded track. The length of the performance accordingly decreases by the number of deleted measures.

Example:



1. PAGE 4



- Specify the track you wish to modify with the ① buttons.
 - If <ALL> is selected, the measures are deleted from all the tracks at one time.
 - MEAS DELETE is not possible in **CHORD** tracks and **RHYTHM** tracks in which the repeat function has been stored. Even if <ALL> is selected, the MEAS DELETE will not be executed if such tracks are present. For the GN9, the same is true even if such tracks are "reverse side" tracks.
- Specify the first measure to delete with the ② buttons.
- Specify the length of the deletion (number of measures) with the ③ buttons.
- When either ④ button is pressed, the display asks if you are sure you wish to delete the measures.

```

4 : TR 1 M 26 L 12
DEL : SURE? [NO] [YES]
  
```



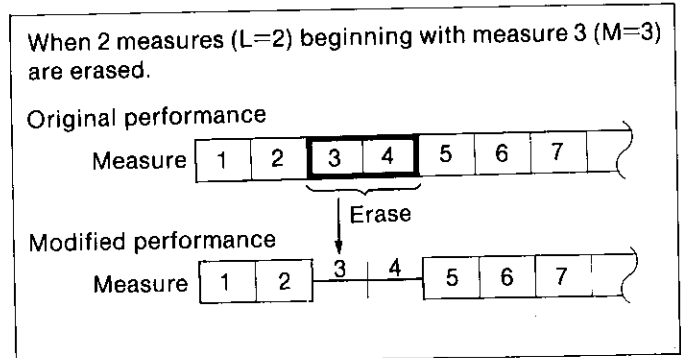
- Pressing either ④ button for [YES] deletes the specified measures. To cancel the MEAS DELETE procedure, press either ③ button for [NO].

Measure erase

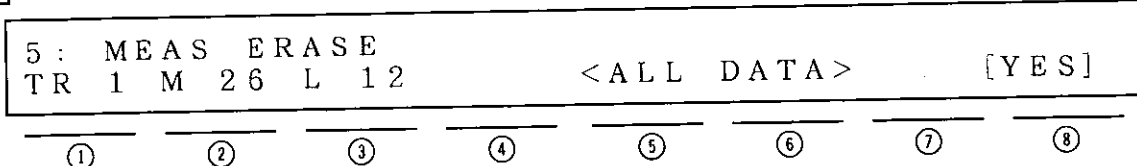
■ To erase measure contents.

The recorded contents of specified measures are erased from the track, but the length of the performance does not change.

Example:



1. PAGE 5



- Specify the track you wish to modify with the ① buttons.
 - If <ALL> is selected, data is erased from the specified measures of all the tracks at one time.
 - MEAS ERASE is not possible in **CHORD** tracks and **RHYTHM** tracks in which the repeat function has been stored. Even if <ALL> is selected, the MEAS ERASE will not be executed if such tracks are present. For the GN9, the same is true even if such tracks are "reverse side" tracks.
- Specify the first measure to erase with the ② buttons.
- Specify the length of the erasure (number of measures) with the ③ buttons.

■ To erase specific types of data from measures.

- Select the type of data to erase with the ⑥ buttons.

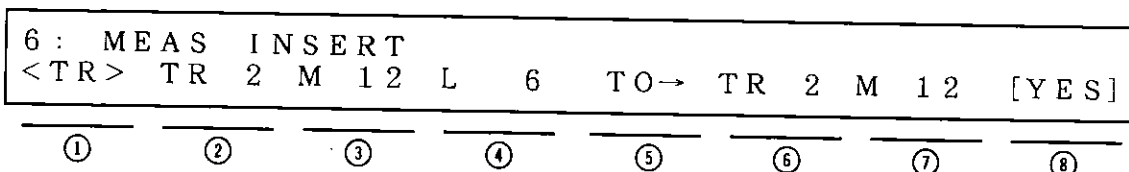
<ALL> All performance data is erased.
 <NOTE> Only keyboard performance data (pitch, note length, touch response, etc.) is erased.
 <CTL> Only control data (volume, etc.) is erased.

- When either ⑧ button is pressed, the display asks if you are sure you wish to erase the data from the specified measures.
- Pressing either ⑧ button for [YES] erases the data from the specified measures. To cancel the MEAS ERASE procedure, press either ⑦ button for [NO].

Measure Insert

■ To insert specified measures at a specified point.

1. **PAGE 6**

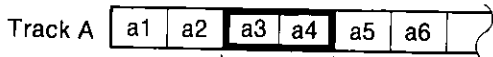


2. Select <TR> or <ALL> with the ① buttons.

<TR> The measures are inserted in the specified track only.

When 2 measures from track A beginning with measure 3 are inserted to track B from the beginning of measure 2.

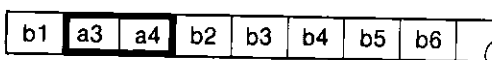
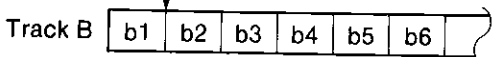
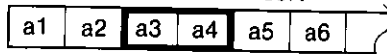
Original performance data



Insert



Performance data after insert

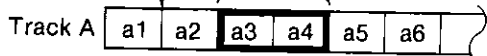


• Track A and track B must be assigned the same part.

<ALL> The measures are inserted in all tracks at the same time.

When 2 measures beginning with measure 3 are inserted to the same track from the beginning of measure 2.

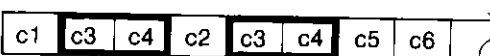
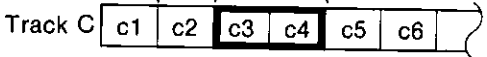
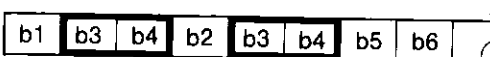
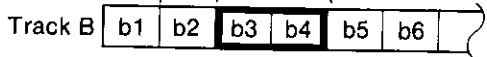
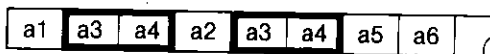
Original performance data



Insert



Performance data after insert



3. Specify the source track (track A) with the ② buttons.
 - MEAS INSERT is not possible in **CHORD** tracks and **RHYTHM** tracks in which the repeat function has been stored.
4. Specify the first measure from which to copy (measure a3) with the ③ buttons.
5. Specify the number of measures to copy with the ④ buttons.
6. Specify the destination track (track B) with the ⑥ buttons.
7. Specify the insert point (measure b2) with the ⑦ buttons.

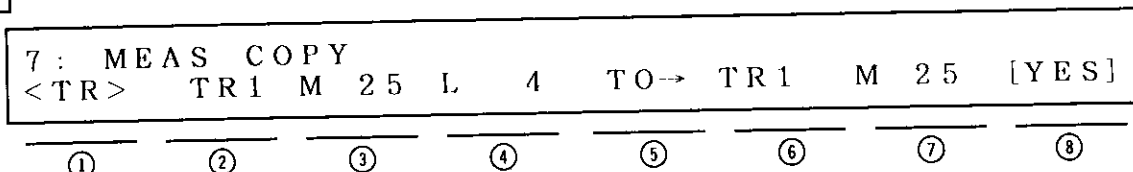
8. The specified number of measures are inserted at point b2 on track B when either ⑧ button is pressed.
 - The length of the destination track increases by the specified number of measures, but the source track remains unchanged.
 - If <ALL> is specified in step 2, it is not necessary to specify the source track and the destination track.

Measure copy

■ To copy specified measures to a track.

Copy measures from one track to another track.

1. PAGE 7

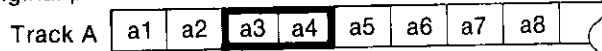


2. Select <TR> or <ALL> with the ① buttons.

<TR> The specified measures are copied to the specified track only.

When 2 measures from track A beginning with measure 3 are copied to track B beginning with measure 2.

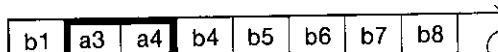
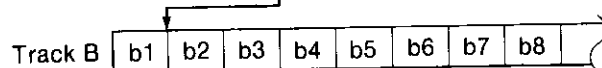
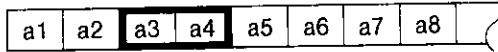
Original performance data



Copy



Performance data after copy

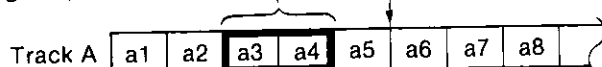


- Track A and track B must be assigned the same part.

<ALL> The specified measures are copied to all tracks at the same time.

When 2 measures beginning with measure 3 are copied to the same track beginning with measure 6.

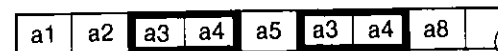
Original performance data



Copy



Performance data after copy



- Specify the source track (track A) with the ② buttons.
 - MEAS COPY is not possible in **CHORD** tracks and **RHYTHM** tracks in which the repeat function has been stored.
- Specify the first measure from which to copy (measure a3) with the ③ buttons.
- Specify the number of measures to copy with the ④ buttons.
- Specify the destination track (track B) with the ⑥ buttons.
- Specify the beginning of the copy point (measure b2) with the ⑦ buttons.

- When either ⑧ button is pressed, the display asks if you are sure you wish to copy the measures to the specified tracks.

7 : TIM 25 L 4 → T2 M 25			
CPY : SURE? [NO] [YES]			
①	②	③	④

- Pressing either ⑧ button for [YES] copies the measures to the specified tracks. To cancel the MEAS COPY procedure, press either ⑦ button for [NO].
 - If <ALL> was selected in step 2, it is not necessary to specify the source track and the destination track.

Velocity change

■ Modify the recorded velocity in specified measures.

1. **PAGE 8**

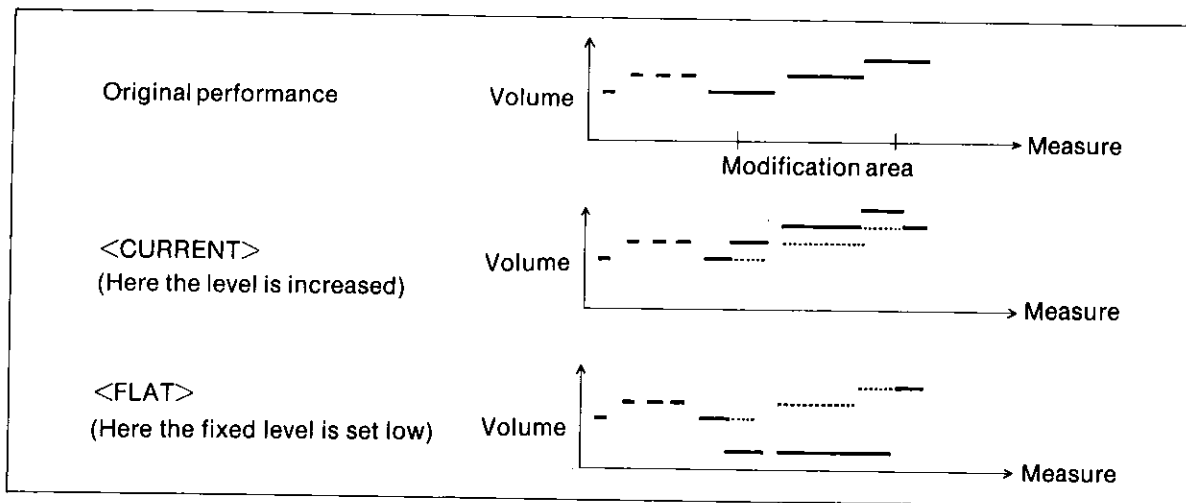
```

8 : VELO CHANGE
TR 3 M112 L 8          <CURRENT>+ 48 [YES]
    
```

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

2. Specify the track with the ① buttons.
3. Specify the start point (measure number) of the velocity change with the ② buttons.
4. Specify the duration of the change (number of measures) with the ③ buttons.
5. Select the type of change with the ⑥ buttons.
 - <CURRENT> The recorded velocity is increased or decreased by a specified amount.
 - If <CURRENT> change is selected, the ⑦ buttons are used to specify a change in the velocity within a range of 0~±127.
 - <FLAT> The recorded velocity is set at a fixed level.
 - If <FLAT> is selected, the ⑦ buttons are used to specify a velocity within a range of 0~127.
6. When either ⑧ button is pressed, the display asks if you are sure you wish to store the specified velocity.
7. Pressing either ⑧ button for [YES] stores the specified velocity. To cancel the VELO CHANGE procedure, press either ⑦ button for [NO].

Example:



Quantize

■ To quantize the recorded performance in specified measures.

1. **PAGE 9**

```

9 : QUANTIZE
TR 2 FROM M 26 L 13  ♩3 [YES]
    
```

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

2. Select the track you wish to modify with the ① buttons.
3. Specify the first measure to modify with the ③ buttons.
4. Specify the length of the modification (number of measures) with the ④ buttons.
5. Select the desired quantize level with the ⑤ buttons.
 - Select from ♩₃, ♩, ♩₃, ♩, ♩₃, ♩, ♩.
6. When either ⑧ button is pressed, the display asks if you are sure you wish to quantize the specified measures.
7. Pressing either ⑧ button for [YES] quantizes the specified measures. To cancel the QUANTIZE procedure, press either ⑦ button for [NO].

Summary of SEQUENCER recording

Part	Keyboard	Method		Step record select	Recording contents
		Real-time	Step		
UPPER	Upper keyboard	○	○	<MELODY>	<ul style="list-style-type: none"> • Upper keyboard performance • UPPER ORCHESTRAL CONDUCTOR status • Sound and effect data for UPPER parts • PITCH BEND data (GN9) • MODULATION on/off • Glide data • START/STOP • FILL IN • INTRO & ENDING
LOWER	Lower keyboard	○	○	<MELODY>	<ul style="list-style-type: none"> • Lower keyboard performance • LOWER ORCHESTRAL CONDUCTOR status • Sound and effect data for LOWER parts • PITCH BEND data (GN9) • MODULATION on/off • Glide data • START/STOP • FILL IN • INTRO & ENDING
UPPER POLY, UPPER SPECIAL, UPPER SOLO (GN3/GN5), UPPER EXTRA (GN7/GN9)	Upper keyboard	○	○	<MELODY>	<ul style="list-style-type: none"> • Keyboard performance of each part • Panel data for each part (sound etc.) • PITCH BEND data (except DRUMS) (GN9) • MODULATION on/off (except DRUMS) • START/STOP • FILL IN • INTRO & ENDING
LOWER POLY, LOWER SPECIAL, LOWER SOLO (GN3/GN5), LOWER EXTRA (GN7/GN9), ACCOMP 1, 2, 3	Lower keyboard				
BASS	Pedal keyboard (or lower keyboard with full bass pedal function)				
DRUMS	Lower keyboard				
CHORD	—	—	○	<CHORD>	<ul style="list-style-type: none"> • Chord • FILL IN • INTRO & ENDING
RHYTHM	—	—	○	<RHY>	<ul style="list-style-type: none"> • START/STOP • FILL IN • INTRO & ENDING • RHYTHM selection (including COMPOSER 1~8) • Tempo
CONTROL	—	○	○	<CTL>	<ul style="list-style-type: none"> • Panel data of all parts • PITCH BEND data (GN9) • MODULATION on/off • Glide data • Tempo • RHYTHM selection (including COMPOSER 1~8) • START/STOP • FILL IN • INTRO & ENDING • Expression pedal data

The **SEQUENCER** counts the number of measures according to the time signature of the selected rhythm.

- When recording or playing back of the **MELODY** and **CONTROL** tracks, the number of measures corresponds to the time signature of the rhythm which was selected at the beginning.

- If the **RECORD**, **STEP** or **EDIT** button is pressed when the **RHYTHM** track indicator is lit, the number of measures during real-time recording, step recording or editing corresponds to the time signature of the rhythm which is stored in the **RHYTHM** track. (For this reason, if the time signature is modified by changing the rhythm, it is a good idea to store the rhythm change data in the **RHYTHM** track first.)

- The time signature of the preset rhythms is 4/4, except for the following rhythms:

- 8/4: **JAZZ COMBO** (COMBO F)
MODERN JAZZ (MODERN a)
DIXIE (DIXIE)

- 6/4: **JAZZ WALTZ**, **WALTZ**

Partie V Création des sons

31 Sound Edit

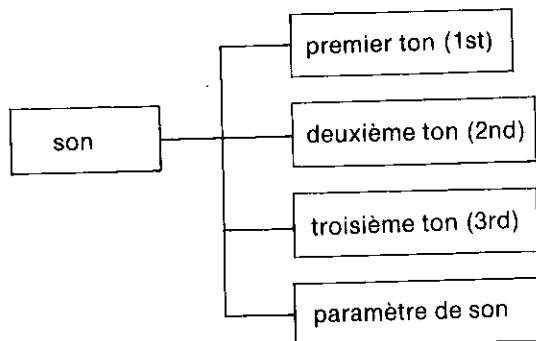
Dans le mode **SOUND EDIT**, on modifie les divers éléments d'un son de source (préréglage) comme désiré, pour obtenir un son nouveau et unique qui peut être emmagasiné alors dans un emplacement **MEMORY**.

Composition de SOUND EDIT

Comme définition, nous appellerons les voix préréglées "sons" dont chacun est muni d'un "paramètre de son" et de "tons" enregistrés numériquement.

Un son peut être composé tout au plus de trois tons, que nous appellerons le premier, deuxième et troisième tons. (Les sons ne sont pas tous composés de trois tons.)

Très simple est la procédure par laquelle on combine ces tons et compose les paramètres de son pour créer de nouveaux sons.



De plus, on spécifie **MODE** qui va déterminer la production de chaque ton.

NORMAL: Le mode standard qui permet d'utiliser seulement un type de ton.

DUAL: Quand deux types de ton sont utilisés, les sons sont recouverts (les deux tons sont assignés au clavier entier).

DUET: Quand deux types de ton sont utilisés, chaque ton est assigné à une portion différente du clavier.

TRIO: Quand trois types de ton sont utilisés, chaque ton est assigné à une portion différente du clavier.

MODE	1 touche	2 touches	3 touches
NORMAL	1st	1st	1st
DUAL	1st 2nd	1st 2nd	1st 2nd
DUET	1st 2nd	1st 2nd	1st 2nd
TRIO	1st 2nd 3rd	1st 2nd 3rd	1st 2nd 3rd

Comment utiliser le mode SOUND EDIT

- I. Introduire le mode **SOUND EDIT**.
- II. Modifier les divers paramètres comme désiré.
- III. Emmagasiner le nouveau son dans un emplacement **MEMORY**.

Technics

ORGAN

SX-GN3(K)

SX-GN5(K)

SX-GN7(K)

SX-GN9(K)



Vol. 3



Technics

**OWNER'S MANUAL
MODE D'EMPLOI
INSTRUCCIONES DE MANEJO**

Vol. 3

EXTERNAL MEMORY and MIDI

This volume explains how to save your performance with the **DIGITAL DISK RECORDER**. Furthermore, this volume explains how to use the MIDI functions to communicate with connected instruments.

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MEMOIRE EXTERNE et MIDI

Ce tome décrit comment sauvegarder votre exécution à l'aide de **DIGITAL DISK RECORDER**. Egalement il explique comment utiliser la fonction MIDI pour communiquer avec les instruments connectés.

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MEMORIA EXTERNA y MIDI

Este tomo explica como conservar su ejecución con el **DIGITAL DISK RECORDER**. Además, este tomo explica como usar las funciones MIDI para comunicar con instrumentos conectados.

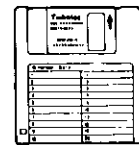
	página
Parte VIII Almacenamiento de los datos de la ejecución	
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ENGLISH
FRANCAIS
ESPAÑOL

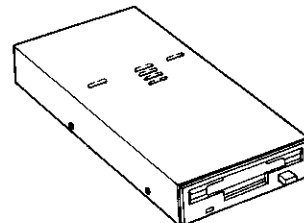
Part VIII Storing the performance data

34 Digital Disk Recorder SY-FD20

Data for up to 20 performances—including all panel settings, button memories and **SEQUENCER** contents—can be stored on one SY-D20 digital memory disk (floppy disk) using the Digital Disk Recorder (included on the GN5, GN7(K) and GN9(K); for the GN3, GN3K and GN5K, the SY-FD20 is an option). The storable internal memory is fixed at a limited capacity, but this external memory device expands the storable memory infinitely. By recording performance data, one simple procedure lets you load the recorded settings into the organ panel at any time.



Memory Disk SY-D20



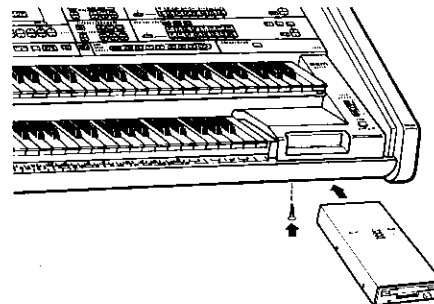
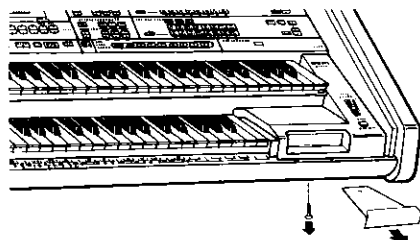
SY-FD20

Digital Disk Recorder (sold separately on GN3, GN3K and GN5K)

Installing in your organ (GN3, GN3K, GN5K)

If the Digital Disk Recorder is not already installed in your organ, follow this procedure.

1. Make sure that the power to the organ is turned off.
2. Remove the cover from the connector unit by first removing the screw.
3. Insert the Digital Disk Recorder and push it in firmly and completely. Then, secure the Digital Disk Recorder to the organ with the screw you removed in step 2.

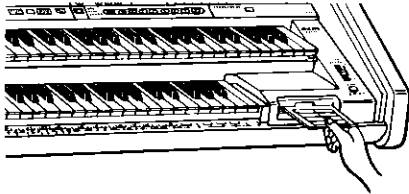


Disk format

New memory disks can be used only after they have been formatted. Follow the procedure below to format a new disk or erase the contents of a stored disk.

- This procedure clears the entire contents of the disk.
- Reformat a disk if it cannot be saved to or loaded from properly because of exposure to a magnetic field.
- If using commercially available floppy disks other than the SY-D20 memory disk, be sure to use 3.5 inch 2DD (double-side, double-density, double-track) floppy disks.

1. Insert the disk into the Digital Disk Recorder slot as shown in the illustration. Push it all the way in until you hear a click.



2. Press the **MEMORY & CONTROL** button to turn it on. The display changes to the following.

PAGE 1

```
1 : MEMORY # = 0 1
DISK          SAVE  LOAD
```

① ② ③ ④

3. **PAGE 3**

```
3 : MEMORY # = 0 1
DEL VERIFY          FRMAT
```

① ② ③ ④

4. Select **FRMAT** by pressing either ④ button. The display changes to the following.

PAGE 3'

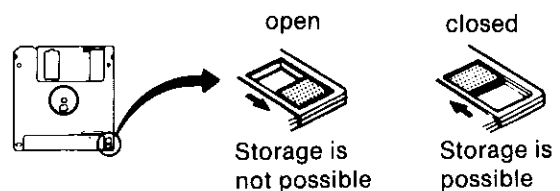
```
3' FORMAT          SURE ?
[NO]                [YES]
```

① ② ③ ④

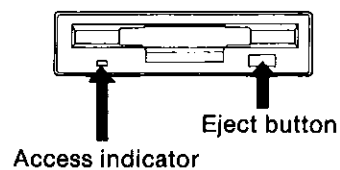
5. To execute the disk format, press either ④ button for [YES].
 - If you do not wish to format the disk, press either ① button for [NO].
 - Formatting is completed when "COMPLETED" appears on the display.
6. Press the **MEMORY & CONTROL** button to turn it off.

■ Preventing erasure of stored contents

The memory disk is provided with a write protect window. To retain the disk contents, open the window as illustrated.



To prevent data loss, do not remove the memory disk from the Digital Disk Recorder or turn off the power when the access indicator is lit.



Saving a performance

1. Insert the memory disk into the slot of the Digital Disk Recorder.
2. If desired, the **VOICE SETTING COMPUTER**, **SOUND EDIT** and **COMPOSER** memories can be stored at this time.
3. Select the desired sounds, effects and rhythm with the buttons on the panel.
4. Store your performance in the **SEQUENCER**. This is the data which is going to be saved in the memory disk.
5. Press the **MEMORY & CONTROL** button to turn it on. The display changes to the following.

PAGE 1

```
1 : MEMORY  # = 0 1 _____
DISK          SAVE  LOAD
```

① ② ③ ④

6. Select SAVE with the ③ buttons. The display changes to the following.

PAGE 1'

```
1' SAVE  NAME  SURE ?
[NO] # 0 1 _____ [YES]
```

① ② ③ ④

7. Assign the song number with the ② buttons or the **TEMPO/PROGRAM** dial.
 - If data has already been saved on the memory disk, the number and name of the recorded tune are shown on the display.
 - You can assign a number from 1 to 20.
 - When the recorded notes for each tune are many, recording 20 tunes may not be possible. If the "DISK FULL!" indication appears on the display, erase a stored tune on the memory disk by performing the **DELETE** operation on **PAGE 3** of the **MEMORY & CONTROL** function (refer to "Other Digital Disk Recorder functions" on page 6), or use a new memory disk.

8. You can store a name for the tune after pressing either ③ button.
 - The name may contain up to 6 characters.
 - Use the **TEMPO/PROGRAM** dial to select the alphanumeric characters.
 - Use the **TRANPOSE** buttons to move the cursor to the left or right.
 - The name can be cleared by pressing both **TRANPOSE** buttons at the same time.
9. Save the song on the memory disk by pressing either ④ button for [YES].
 - If you do not wish to save the tune, press either ① button for [NO] to cancel the procedure and return the display to **PAGE 1**.
 - When you specify a song number in which a tune is already stored and then press a ④ button for [YES], the "SONG OVERWRITE OK?" message appears. Pressing a ④ button for [YES] again will save the new tune in the song number and erase the previously stored data. Pressing a ① button for [NO] will cancel the procedure.

The display will indicate that the data has been saved on the memory disk.

```
1' SAVE  NAME  SURE ?
" SAVE  COMPLETED ! "
```

① ② ③ ④

10. Press the **MEMORY & CONTROL** button to turn it off.
 - You can now remove the memory disk from the Digital Disk Recorder.

Loading the stored data

1. Insert the memory disk into the slot of the Digital Disk Recorder.
2. Press the **MEMORY & CONTROL** button to turn it on. The display changes to the following.

PAGE 1

```
1 : MEMORY # = 0 1
DISK          SAVE  LOAD
```

① ② ③ ④

3. Select LOAD with the ④ buttons. The display changes to the following.

PAGE 1'

```
1' LOAD NAME SURE?
[NO] # 0 1 [YES]
```

① ② ③ ④

4. Select the number of the tune you wish to load with the ② buttons.
5. Load the data into the organ's memory by pressing either ④ button for [YES].
 - If you do not wish to load the data, press either ① button for [NO] to cancel the procedure and return the display to PAGE 1.
 - When the load procedure is executed, the memory contents of the organ's **SEQUENCER** are erased.
 - The display will indicate that the data has been loaded into the organ's internal memory.

```
1' LOAD NAME SURE?
" LOAD COMPLETED ! "
```

① ② ③ ④

6. Press the **MEMORY & CONTROL** button to turn it off.
 - The memory disk can now be removed from the Digital Disk Recorder.
7. Press the **START/STOP** button and the automatic playback of the loaded tune begins.

Medley play

You can specify continuous automatic playback of songs recorded on a memory disk (up to 20 songs).

1. Insert the memory disk into the Digital Disk Recorder.
2. Press the **SEQUENCER** button to turn it on.

3. PAGE 3

```
3 : MEDLEY PLAY
<OFF> SONG 2 ↔ SONG 15
```

① ② ③ ④

4. Select the number of the first song for playback with the ③ buttons.
 - Select from numbers in which songs have already been stored (1~20).

5. Select the number of the last song for playback with the ④ buttons.
 - Specify a song number higher than the number specified as the first song number.
6. Select MEDLEY PLAY <ON> with the ① buttons.
 - The specified songs are played back in numerical order. At this time, if the **START/STOP** button is pressed, playback of the next song begins.
 - To cancel MEDLEY PLAY, select <OFF> with the ① buttons.

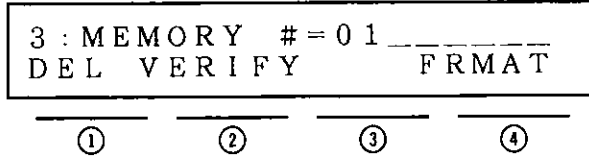
Other Digital Disk Recorder functions

■ Data delete, data confirm

Perform the following while monitoring the **MUSICAL DIRECTOR**.

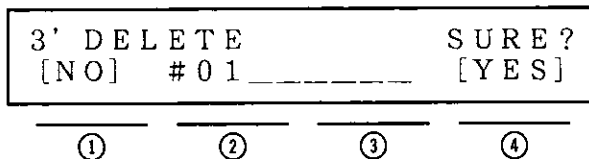
1. Turn on the **MEMORY & CONTROL** button.

2. PAGE 3



DELETE

The display changes to the following when you press either ① button for DELETE.

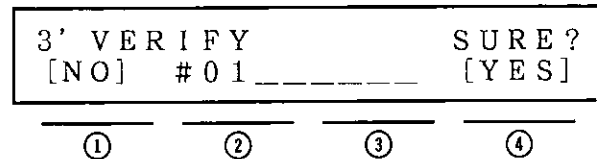


The delete procedure is used to erase one song at a time.

- Specify the number and name of song data to be deleted with ② buttons or the **TEMPO/PROGRAM** dial.
- Press either ④ button to execute deletion of data.
 - You can cancel the data delete procedure by pressing either ① button (display returns to **PAGE 3**).

VERIFY

The display changes to the following when you press either ② button on **PAGE 3** for VERIFY.



When data has been saved using the **PAGE 1 SAVE** procedure, VERIFY compares the data of the organ memory with that of the memory disk.

- Select the number and name of the song to be verified with the ② buttons or the **TEMPO/PROGRAM** dial.
- Press either ④ button to start verification.
 - You can cancel the data verification procedure by pressing either ① button (display returns to **PAGE 3**).
 - The following display appears after completion of data verification.

"COMPLETED!" The data in the organ memory matches that of the memory disk.

"ERROR!" The data in the organ memory does not match that of the memory disk.

- Do not use VERIFY after loading data with the **PAGE 1 LOAD** procedure, as the data check may not be correct.

FORMAT

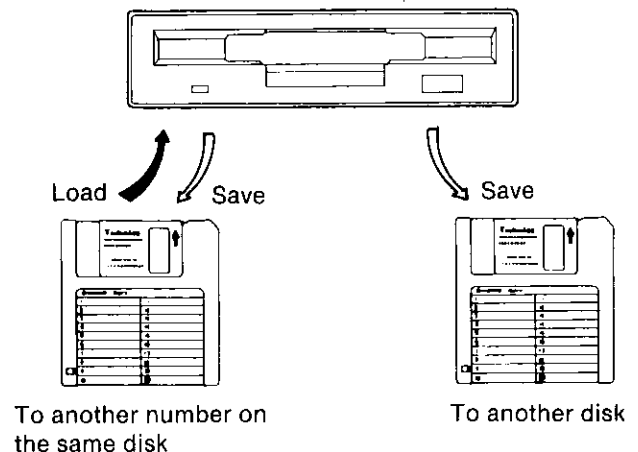
The display changes to the format display when you press either ④ button on **PAGE 3** for FRMAT. (See page 3.)

3. Turn off the **MEMORY & CONTROL** button when the operation is completed.

■ Copying songs

A tune saved on a memory disk can be copied to another number on the same disk or to another disk.

- First, load the song data into the memory. Insert the disk with the song you wish to copy into the Digital Disk Recorder, and follow the load procedure on page 5 to load the desired song.
- When the "COMPLETED" indication appears, the loading operation is completed. If copying to a different disk, remove the source disk from the Digital Disk Recorder and insert the destination disk with the data protect off.
- Follow the save procedure on page 4 to save the data to the destination disk.



Part IX MIDI

What is MIDI?

MIDI (Musical Instrument Digital Interface) is the international standard for digital communication of electronic musical instrument data.

This means that any equipment which has a MIDI terminal—such as electronic musical instruments and personal computers—can easily exchange digital data with other MIDI equipment without resorting to complicated conversions or connections.

What can you do with MIDI?

Control another connected MIDI instrument

By playing on one MIDI instrument, you can produce a performance on one or more connected MIDI instruments. If different sounds and effects are assigned to each instrument, one person playing on one instrument can produce an ensemble performance of many instruments. Another use would be to centrally control the sounds, effects and volumes of connected instruments on one instrument.

Automatic performance on the instrument

If performance data for a MIDI instrument is stored in a computer or MIDI sequencer, the stored data can be used for automatic performance of the MIDI instrument.

Synchronized performance

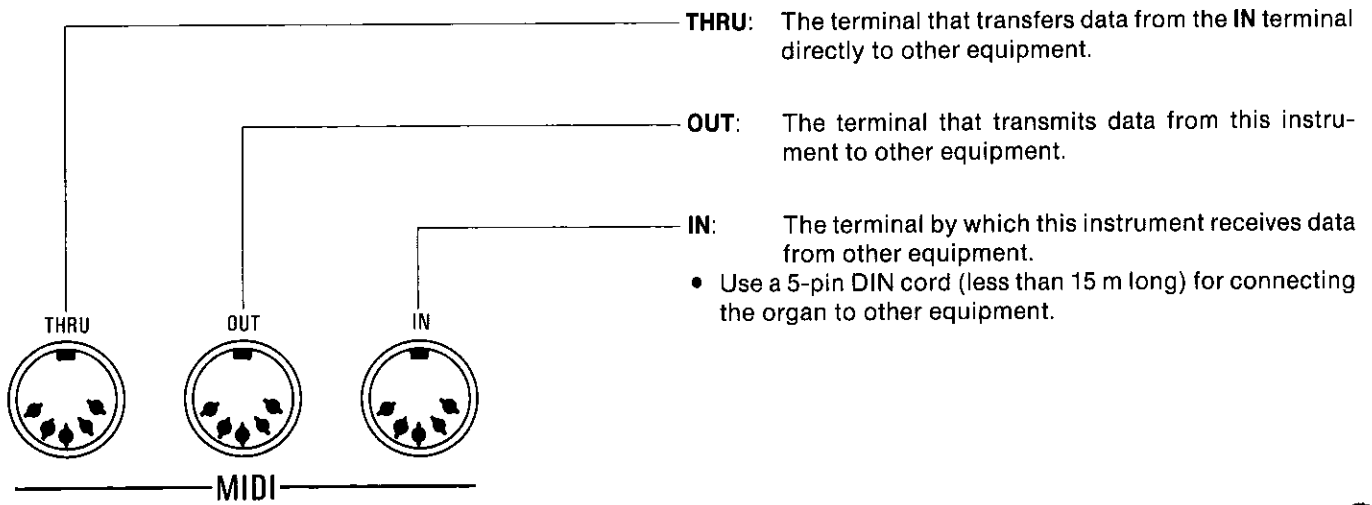
Play along with a connected MIDI sequencer or rhythm machine for a synchronized performance.

Summary of the MIDI functions

- Basic channel (PAGE 1)
- MIDI input select (PAGE 2)
 - CONDUCTOR/DIRECT
 - APC/DIRECT
- MIDI output select (PAGE 3)
 - KEYBOARD/CONDUCTOR
 - TECHNI-CHORD on/off
 - APC/CHORD
- MIDI function select (PAGE 4)
 - Common to all parts
 - INITIAL
 - NOTE ONLY
 - Transpose out
 - Program change mode
 - Song select
 - Real time command
 - CLOCK
 - MIDI data load
 - Independent for each part
 - Octave shift
 - Program change
 - VSC program change
 - SUSTAIN
 - AFTER TOUCH (GN9)
 - PITCH BEND
 - MODULATION
 - VOLUME
 - EXPRESSION
 - INTRO
 - TREMOLO
 - CELESTE (GN3/GN5/GN7)/EFFECT 1 (GN9)
 - EFFECT 2 (GN9)
 - MIDI APC
 - Drums type
- LOCAL CONTROL on/off (PAGE 5)
 - MIDI OUT on/off
- VSC program change (PAGE 6)
- VSC LOCAL CONTROL (PAGE 7)
- MIDI functions of the SEQUENCER (SEQUENCER PAGE 2)

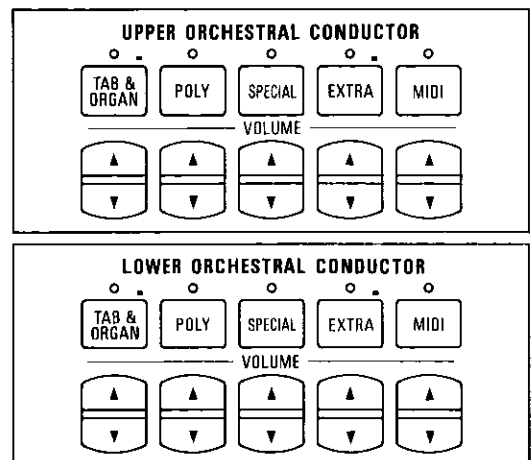
About the MIDI terminals

I/O-PORT



About the MIDI buttons in the ORCHESTRAL CONDUCTOR (GN7/GN9)

Simply by turning the **MIDI** buttons in the **ORCHESTRAL CONDUCTOR** on and off during your performance, you can easily control the sound output on/off status of connected MIDI instruments (external instruments). Thus the MIDI function can be used to expand the organ sounds. (Refer to page 11, "KEYBOARD mode and CONDUCTOR mode".)



Setting MIDI functions

Enter the MIDI-function-setting mode by pressing the **MIDI** button to turn it on. The indicator lights.

- After setting, press the **MIDI** button to turn it off.



Basic channel

There are 16 basic channels (1~16) for MIDI signals. The channels on the transmission side and receiving side must match before keyboard on/off data, sound data, effect data, etc. can be exchanged.

PAGE 1

```
1 : BASIC CHANNEL SELECT
UPLY : 1
```

① ② ③ ④

1. Select the part for which to set the functions with the ① buttons. The basic channel currently assigned to the specified part is shown.
 - Select from the following 12 parts:
 - UPPER POLY
 - UPPER SPECIAL
 - UPPER SOLO (GN3/GN5)/EXTRA (GN7/GN9)
 - LOWER POLY
 - LOWER SPECIAL
 - LOWER SOLO (GN3/GN5)/EXTRA (GN7/GN9)
 - BASS
 - ACCOMP 1
 - ACCOMP 2
 - ACCOMP 3
 - DRUMS
 - CONTROL
2. Assign a basic channel with the ② buttons.
 - Select from basic channels 1~16.
 - The same basic channel cannot be assigned to two or more parts. If you selected a channel which has already been set, "USED" is displayed.

■ If "USED" is displayed...

```
1 : BASIC CHANNEL SELECT
UPLY : 1 ----> 3 USED ▶ BASS : 3
```

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- The basic channel you attempted to assign is shown at ③. The basic channel currently set is shown.

To change the basic channel assigned to the other part, use the following procedure.

1. Change the basic channel assigned to the other part with the ⑥ buttons to free the channel.
2. When "USED" is not displayed at ⑧, the basic channel you specified with the ② buttons will be set automatically.
 - When "USED" is displayed, perform the step 1 operation again.

The default settings are as follows:

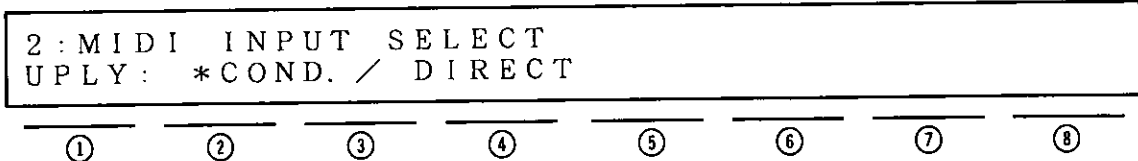
MIDI part		Channel
GN3/GN5	GN7/GN9	
UPLY		1 ch
USPC		6 ch
USOL	UEXT	4 ch
LPLY		2 ch
LSPC		7 ch
LSOL	LEXT	8 ch
BASS		3 ch
ACP1		5 ch
ACP2		9 ch
ACP3		10 ch
DRMS		15 ch
CTRL		16 ch

MIDI Input select

Set the mode for MIDI key note input.

■ CONDUCTOR mode and DIRECT mode

1. PAGE 2



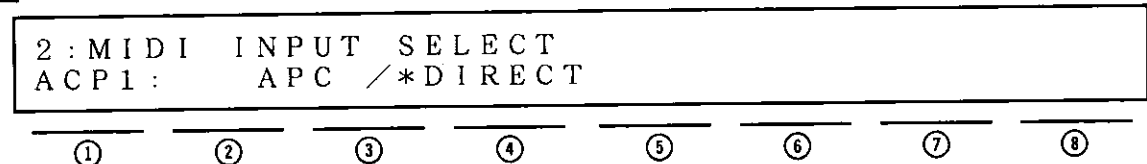
2. Select UPLY or LPLY with the ① buttons.
3. Select CONDUCTOR (COND.) mode or DIRECT mode with the ② or ④ buttons.

Mode	Contents	Application examples
CONDUCTOR (COND.)	Key note data for the UPLY or LPLY part is received; sounds, etc. for the organ are assigned by the ORCHESTRAL CONDUCTOR . (If key note data is received for another part, the sound is output for that part.)	Use when only one basic channel is used to receive signals.
DIRECT	Key note data for all parts is received. When data is received for the POLY part, the POLY part sound is output. ORCHESTRAL CONDUCTOR is inoperative.	The organ can be used as a sound generator when each part is played independently on the connected instrument. Useful when more than one basic channel is used to receive signals.

- The default setting is COND.

■ ACCOMP 1: APC (AUTO PLAY CHORD) mode and DIRECT mode

1. PAGE 2



2. Select ACP1 with the ① buttons.
3. Select APC or DIRECT with the ② or ④ buttons.

Mode	Contents
APC	The AUTO PLAY CHORD function produces an accompaniment pattern based on the chords in the key note data input received for the ACCOMP 1 part. •At this time, turn on the ACCOMP 1 and/or ACCOMP 2&3 button in the ARRANGER section and start the rhythm.
DIRECT	The ACCOMP 1 sound is produced just as it is played on the keyboard for the key note data input. •At this time, turn off the ACCOMP 1 and ACCOMP 2&3 button in the ARRANGER section, or stop the rhythm.

- The default setting is DIRECT.

MIDI output select

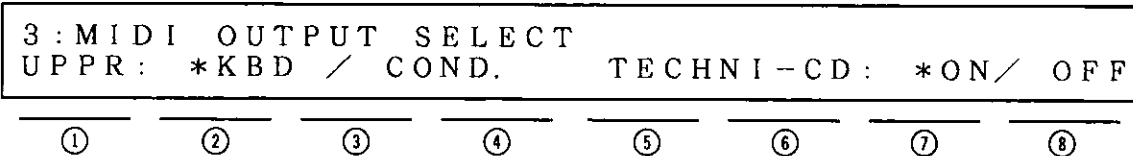
Set the MIDI output mode.

■ KEYBOARD mode and CONDUCTOR mode

Specify how the organ's keyboard performance data is output to the MIDI terminals.

- On the GN3/GN5, there are no **MIDI** buttons in the **ORCHESTRAL CONDUCTOR** section and the **MIDI** button on status is always selected, in other words, the keyboard performance data output to the MIDI terminals is always enabled.


1. PAGE 3



2. Select UPPR or LOWR with the ① buttons.
3. Select KBD or COND. with the ② or ④ buttons.

Mode	Contents	Application examples
KEYBOARD (KBD)	The keyboard performance data output can be enabled/disabled with the MIDI buttons in the ORCHESTRAL CONDUCTOR section. When these buttons are on, the performance data on the upper and lower keyboards is output, respectively, as the UPPER POLY and LOWER POLY parts, regardless of the ORCHESTRAL CONDUCTOR status. When these buttons are off, the keyboard performance data is not output.	Because one basic channel is used to output the keyboard performance, this setting is convenient when you wish to control one connected instrument using one keyboard.
CONDUCTOR (COND.)	Each part of the upper and lower keyboard performances is controlled by the respective ORCHESTRAL CONDUCTOR . When the MIDI buttons in the ORCHESTRAL CONDUCTOR are on, the keyboard performance data is output according to the ORCHESTRAL CONDUCTOR status. When they are off, the keyboard performance data is not output.	Because you can use multiple basic channels to output the performance data, this setting is convenient when you wish to control several connected instruments.

- The default setting is KBD.

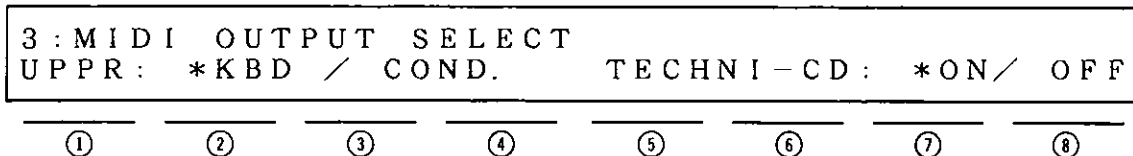
To send sound change (program change) data and/or effect on/off data (**CELESTE**, **TREMOLO**, **EFFECT 1/EFFECT 2** [GN9]) in the **KEYBOARD** mode, the **MIDI** button in the **SOUND SELECT** section should be on. In the **KEYBOARD** mode, the volume of the connected instrument can be controlled with the  buttons below the **MIDI** button in the **ORCHESTRAL CONDUCTOR**.

- In the **CONDUCTOR** mode, when the **MIDI** button in the **ORCHESTRAL CONDUCTOR** is on, changes in the volume, sound and effects for each part are output.

■ TECHNI-CHORD on/off

When the **TECHNI-CHORD** button is on, keyboard notes created by the **TECHNI-CHORD** function can be output for the **UPPER POLY**, **SPECIAL** and **EXTRA** (GN7/GN9) parts.

1. PAGE 3

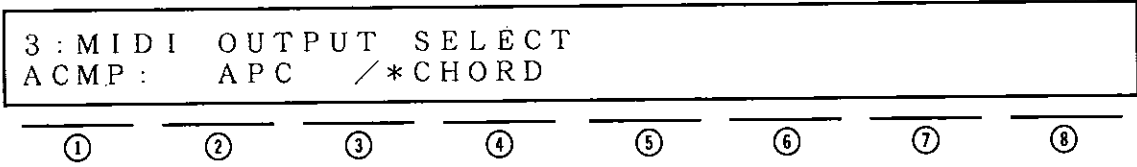


2. Select UPPR with the ① buttons.
 3. To output **TECHNI-CHORD** key note data, press either ⑦ button. If you do not wish to output **TECHNI-CHORD** key note data, press either ⑧ button (originally pressed key note data will be output).
- The default setting is ON.

■ **APC (AUTO PLAY CHORD) mode and CHORD mode**

Select whether or not to output **AUTO PLAY CHORD** automatic accompaniment pattern data.

1. **PAGE 3**



2. Select ACMP with the ① buttons.
3. Select APC or CHORD with the ② or ④ buttons.

Mode	Contents
APC	When the FINGERED 1 or 2 button is on and the rhythm is started, the ACCOMP and BASS automatic accompaniment pattern data which follows the chord progression played on the lower keyboard is output on the ACCOMP 1, 2, 3 and BASS basic channels.
CHORD	When the FINGERED 1 or 2 button is on, chord data played on the lower keyboard is output on the ACCOMP 1, 2, 3 and BASS basic channels.

- The default setting is CHORD.

IS-CZIF

Set the functions which are common to all MIDI parts

1. **PAGE 4**

4 : MIDI FUNCTION SELECT
COMMON : INITIAL [SET]

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

2. Select COMMON with the ① buttons.
3. Select the function you wish to set with the ② buttons.
4. Select the desired settings with the ④ buttons.

Function	Setting	Contents
INITIAL	[SET] → YES	Initialize the MIDI settings.
	[SET] → NO	The initialization procedure is canceled.
NOTE ONLY	ON	Of the channel voice message, only note on/off and all-note-off data is transmitted/received.
	OFF*	All channel voice message data used in the organ can be transmitted/received.
TRANS. OUT (transpose out)	ON	The note number of the transposed note is output.
	OFF*	The note number of the played key is output.
P-CHG MD (program change mode)	NORM*	When the SOUND SELECT's MEMORY button is on, the program change numbers correspond to the order of the buttons as they are lined up from the leftmost button of the bottom row and beginning with 0.
	TECH	Program change numbers are standardized among all Technics models which are set to this mode: the program change number assigned to a given sound on one model is assigned to the same sound on all models in the same mode. When the SOUND SELECT's MEMORY button is on, program change number data is not transmitted/received for the memory number buttons.
SONG SEL. (song select)	EN*	Song number data can be transmitted/received.
	DIS	Song number data is not transmitted/received.
RTIME CMD (real time command)	EN*	Start/stop, continue, song position pointer data can be transmitted/received.
	DIS	Above data is not transmitted/received.
CLOCK	INTRNL*	The organ's internal clock only is used to control the performance. The clock of the connected equipment is disabled.
	MIDI	The clock of the external equipment is used to control the performance. The organ's clock is disabled.
MIDI LOAD	EN*	When the operation to load the memory disk is performed, the stored MIDI settings are automatically recalled.
	DIS	Stored MIDI settings are not recalled.

* indicates the default setting.

TECHNICS

Set the functions which are independent for each part

1. PAGE 4

4 : MIDI FUNCTION SELECT
UPPLY : OCT. SHIFT = 0
① ② ③ ④

Data for the functions below can be exchanged only when the MIDI basic channels are matched.

OCT. SHIFT

(Octave shift)

[-3, -2, -1, 0, +1, +2, +3]

Set the octave shift value for received/transmitted key notes with the ④ buttons.

- Octave shift is set for MIDI **OUT** data only; however, the MIDI **OUT** and MIDI **IN** octave shifts are linked. For example, if the MIDI **OUT** octave shift is set to +1, the MIDI **IN** octave shift is automatically set to -1.
- The initialized setting is 0.

P-CHNG

(Program change)

Enable or disable the exchange of program change (**SOUND SELECT**) data. **BACKGROUND SOUND** program change data (GN7/GN9) can be received with the **CONTROL** part; **RHYTHM** change data can be received with the **DRUMS** part.

- Variations are specified on this organ.
- The initialized setting is [EN].

VSC P-CHG

(VSC program change)

Enable or disable exchange of program change data using the **UPPER POLY** channel and **VSC** buttons 1-8.

- The initialized setting is [DIS].

SUSTAIN

Enable or disable exchange of sustain on/off data.

AFTER TOUCH (GN9)

Enable or disable the exchange of aftertouch data.

- The initialized setting is [DIS].

PITCH BEND

Enable or disable exchange of pitch bend data.

- For the GN3/GN5/GN7, only data receiving is possible.

MODULATION

Enable or disable exchange of modulation on/off data.

- For the GN3/GN5/GN7, only data receiving is possible.

2. Select the desired part with the ① buttons.

3. Select the MIDI function with the ② buttons.

4. Select [EN] to enable data exchange or [DIS] to disable data exchange for the specified function with the ④ buttons.

VOLUME

Enable or disable exchange of volume data for each part.

- Main volume data is included in the **CONTROL** part.

EXPRESSION

Enable [EN] or disable [DIS] exchange of expression data.

INTRO

Enable or disable exchange of intro, fill-in and ending on/off data.

- Data exchange is possible only between models in the same GN3/GN5/GN7/GN9 series.

TREMOLO

Enable or disable the exchange of tremolo data.

- The initialized setting is [EN].

CELESTE (GN3/GN5/GN7)/EFFECT 1 (GN9)

Enable or disable exchange of celeste on/off data.

EFFECT 2 (GN9)

Enable or disable exchange of **EFFECT 2** on/off data.

MIDI APC

Enable or disable the exchange of data for on/off status of **AUTO PLAY CHORD**'s **FINGERED 1** or **2** button.

TYPE

Select **NORM** or **TECH** with the ④ buttons.

- When **NORM** is selected, the **KEYBOARD PERCUSSION** instrument sounds correspond to the organ's key note numbers.
- When **TECH** is selected, the **KEYBOARD PERCUSSION** instrument types correspond to the same key note numbers for connected Technics instruments set to this mode.

Parts for which these functions can be set are indicated by ○.

	UPLY	USPC	UEXT/ USOL	LPLY	LSPC	LEXT/ LSOL	BASS	ACP1	ACP2	ACP3	DRUMS	CTRL
OCT. SHIFT	○	○	○	○	○	○	○	○	○	○	○	—
P-CHNG	GN3/GN5	○	○	○	○	○	○	○	○	○	○	—
	GN7/GN9	○	○	○	○	○	○	○	○	○	○	○
VSC P-CHG	○	—	—	—	—	—	—	—	—	—	—	—
SUSTAIN	○	○	○	○	○	○	○	○	○	○	—	—
AFTER TOUCH (GN9)	○	○	○	○	○	○	—	—	—	—	—	—
PITCH BEND	○	○	○	○	○	○	○	○	○	○	—	—
MODULATION	○	○	○	○	○	○	○	○	○	○	—	—
VOLUME	○	○	○	○	○	○	○	○	○	○	○	○
EXPRESSION	—	—	—	—	—	—	—	—	—	—	—	○
INTRO	—	—	—	—	—	—	—	—	—	—	○	—
TREMOLO	○	—	—	○	—	—	—	—	—	—	—	—
CELESTE (GN3/GN5/GN7)	○	○	○	○	○	○	—	○	○	○	—	—
EFFECT 1 (GN9)	○	○	○	○	○	○	○	○	○	○	—	—
EFFECT 2 (GN9)	○	○	○	○	○	○	○	○	○	○	—	—
MIDI APC	—	—	—	—	—	—	○	—	—	—	—	—
TYPE	—	—	—	—	—	—	—	—	—	—	○	—

VSC local control

Set local control on/off and MIDI OUT on/off settings for each part with the **VSC** buttons.

1. PAGE 7

```
7 : VSC LOCAL CONTROL
VSC = 1 / LOCAL CTL = EN ▶ UPLY : LOCAL CTRL = ON
```

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

2. Select a **VSC** number (1~8 [GN3/GN5/GN7] or 1~16 [GN9]) with the ① buttons.
3. Select EN or DIS with the ④ buttons.
EN: Local control on/off and MIDI OUT on/off can be controlled by pressing the **VSC** buttons.
DIS: The **VSC** buttons do not function to control the local control on/off and MIDI OUT on/off.
4. Select the part with the ⑤ buttons.
5. Specify LOCAL CTRL or MIDI OUT with the ⑦ buttons.
LOCAL CTRL (local on/off):
Specify whether or not sound is produced from the organ's sound generator when the keyboards are played. Select LOCAL CTRL ON/OFF with the ⑧ buttons.
MIDI OUT:
Specify whether the MIDI signal is output when the keyboards are played. Select MIDI OUT ON/OFF with the ⑧ buttons.

MIDI functions of the Sequencer

Data stored in the organ's **SEQUENCER** can be transmitted through MIDI OUT; and data received through MIDI IN can be stored in the organ's **SEQUENCER**.

■ Transmit

Enable or disable MIDI output of **SEQUENCER** data (during automatic performance of the **SEQUENCER**).

1. Press the **SEQUENCER** button to turn it on.

2. PAGE 2

```
2 : TRACK ASSIGN                      L. CNT MIDI                      TRACK
TR 1 PART=UPOLY [YES]                      <ON> OUT= 3CH [INI]
```

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

3. Specify the track with the ① buttons.
4. For sound output of the specified track by the organ's sound generator, select <ON> with the ⑤ buttons. Select <OFF> for no sound output by the organ.
5. Specify the basic channel of the selected track with the ⑦ buttons.
 - If the basic channel is set to off, no MIDI data is transmitted.

For tracks assigned to **CHORD**, the **AUTO PLAY CHORD** performance data is transmitted on the basic channels assigned to the **BASS**, **ACCOMP 1**, **2** and **3** parts.

No basic channel should be specified for **SEQUENCER** tracks assigned to **UPPER** and **LOWER** parts. Performance data output conforms to the MIDI OUTPUT SELECT setting.

- For tracks assigned to **CHORD**, **UPPER**, **LOWER**, "--ch" is displayed.

On the control track, only the expression control change data and **BGS** program change data are transmitted.

■ Reception

Unlike transmission, specify the basic channel for the reception parts.

1. Specify the basic channels for the parts to receive data. (Refer to the section on basic channel setting.)
2. Set the **SEQUENCER** track specified in the above step to the real-time recording mode.
3. When the data is input through this channel, recording starts.

Initialization

You can initialize the part assign, basic channel and MIDI OUT on/off for each track.




1. Press either ⑧ button.
2. The settings for the specified track are initialized by pressing either ⑧ button for [YES]. Press either ⑦ button for [NO] if you wish to leave the settings as they are and cancel the initialization procedure.
 - When the track settings are initialized, the stored song is erased, and the track assign and basic channel settings return to the default settings. The local control is set to ON.

Symptoms which appear to be signs of trouble

The following changes in performance may occur in the Technics organ but do not indicate trouble:

Phenomenon	Remedy
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■ Sounds and Effects

The buttons, keys, etc. malfunction.	<ul style="list-style-type: none"> • Turn off the PLAY button once, then turn it on again. • If the above procedure is not successful, turn off the PLAY button once. Then, while pressing 16 BEAT 1, 16 BEAT 2 and 16 BEAT BALLAD in the RHYTHM section at the same time, turn the PLAY button on again. (Note that, in this case, the stored contents of the SEQUENCER, COMPOSER, etc. are erased.)
When a key is pressed, it does not sound.	The buttons and keys do not function when the DEMO  button is on. Press the DEMO  button to turn it off.
The sound of a part cannot be heard.	<ul style="list-style-type: none"> • The corresponding volume is set to off in the ORCHESTRAL CONDUCTOR. Use the  buttons below the display to adjust the volume for that part to an appropriate level. • The LOCAL CONTROL for the part is set to OFF. Set the LOCAL CONTROL to ON. (Refer to Vol. 3, page 16.)
When the TAB & ORGAN is selected in the ORCHESTRAL CONDUCTOR , it does not sound.	If all the FLUTE and PERC buttons are off while the TAB & ORGAN button is on, it does not sound. Turn on the FLUTE or PERC button to select the sound. (Refer to Vol. 1, page 9.)
When many keys are pressed at the same time, some sounds cannot be heard.	<ul style="list-style-type: none"> • The DUAL mode is selected. (Refer to Vol. 2, page 3.) • MONO or SOLO mode is selected with the PART ASSIGN function. (Refer to Vol. 1, page 30.)
The sound of the lower keyboard or pedal keyboard does not stop.	This occurs if the lower keyboard is played when the FINGERED 1 or 2 and the MEMORY buttons are on. Turn off the MEMORY button.
The knee lever, foot switch(es) and full bass pedal do not operate properly. For example, the knee lever does not turn the SUSTAIN function on and off.	Any functional on and off operation other than the factory presets are storable in these switches. For example, the knee lever can turn the TECHNI-CHORD on and off. Store your favorite functions to turn them on and off. (Refer to Vol. 1, page 38.)

■ Rhythm

The rhythm does not start.	<ul style="list-style-type: none"> • The DRUMS button in the VOLUME section is turned off. (Refer to Vol. 1, page 21.) • A COMPOSER number button in which no data is stored has been selected. • When a SEQUENCER track button(s) is on, the rhythm will not start unless the rhythm part has been stored. • When the clock mode is set to MIDI, the rhythm does not start if no MIDI clock signal is received from another instrument. When using only the organ, return the clock mode to the internal clock, for example by turning off the PLAY button once. (Refer to Vol. 3, page 13.)
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■ AUTO PLAY CHORD

The ACCOMP 1 , 2 or 3 part does not sound when the automatic accompaniment is used.	<ul style="list-style-type: none"> • When both the ACCOMP 1 and 2&3 buttons of the ARRANGER are off, the ACCOMP part of the AUTO PLAY CHORD or COMPOSER function does not sound. Turn on the desired ACCOMP 1 or 2&3 button. (Refer to Vol. 1, page 25.) • When the lower keyboard is played with the KEYBOARD PERCUSSION, ACCOMP and BASS automatic accompaniment patterns do not sound. Play the chord on the lower keyboard after pressing the KEYBOARD PERCUSSION button to turn it off.
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■ SOUND EDIT

When a chord is played on the keyboard, each key sounds different.	DUET or TRIO mode sound is composed of multiple tones. When a chord is played, different tones are assigned to each key.
--	--

■ COMPOSER

Storage is not possible.	<ul style="list-style-type: none"> •The remaining storage capacity of the COMPOSER memory is 0. Erase any COMPOSER memory number in which a pattern is stored. Save it in a memory disk (SY-D20), if necessary. •In the real-time recording mode, press the START/STOP button when the display is PAGE 3, and recording will start.
The setting of the time signature or the number of measures is not possible.	The time signature or the number of measures cannot be changed when a pattern is stored in the COMPOSER . Erase the stored pattern.
The stored rhythm pattern plays back at intervals.	This occurs when the number of stored measures is less than the specified number. Store a pattern of the same number of measures which is specified on the PAGE 2 display. (Refer to Vol. 2, page 11.)
The timing of a rhythm pattern which was stored in the real-time mode is not correct.	The smallest note unit that can be stored is defined by setting the QUANTIZE level. When the timing of a played note is off for the QUANTIZE level, it will be corrected to the nearest note unit and stored.

■ SEQUENCER

Storage is not possible.	<ul style="list-style-type: none"> •The indicator for the track to be used is not flashing. •The remaining storage capacity of the SEQUENCER memory is 0. Erase other memory contents with the TRACK CLEAR or SONG CLEAR function. (If desired, first save them in a memory disk [SY-D20].)
Multi-track recording does not work.	When the indicator for the playback track is lit, press the START/STOP button to start recording. (Refer to Vol. 2, page 21.)
The displayed measure number during recording or playback does not coincide with the performance.	The number of measures corresponds to the time signature of the rhythm which was selected at the beginning of recording or playback. If the time signature is modified by changing the rhythm, store the rhythm change data in the RHYTHM track.
The automatic rhythm does not start when playback has been started during the performance.	When automatic playback is begun at a point after the stored rhythm start, the rhythm will not start.

■ Digital Disk Recorder (optional for GN3, GN3K and GN5K)

The Digital Disk Recorder produces a noise during storage or automatic performance.	This occurs when the Digital Disk Recorder searches for a storage location. It does not indicate a problem.
When the operation to load from the memory disk is performed, the contents of the organ's internal memory are erased.	When performing the load operation from a memory disk, the organ's internal memory changes to that stored in the memory disk. To preserve a song in the organ's memory, save it in a memory disk before performing the load procedure.

■ Other

Noise from a radio or TV can be heard.	This sometimes occurs when electrical equipment such as a radio or TV is used near the organ. Try moving such electrical equipment further away from the organ.
Sound from a radio or TV can be heard.	The sound may be coming from a nearby broadcast station or amateur radio station. If the sound is bothersome, consult your dealer or service center.
The cabinet becomes warm during use.	This organ has a built-in power source that heats the cabinet to some degree. This is not an indication of trouble.
The sound is distorted.	This organ's sustained sound sometimes causes nearby objects, such as furniture or window panes, to vibrate. Turn down the volume or try moving such objects.

Error Display

Display	Cause
■ COMPOSER/SEQUENCER	
MEMORY full!!	<ul style="list-style-type: none"> The COMPOSER or SEQUENCER memory is full.
MEASURE error!!	<ul style="list-style-type: none"> A measure number which does not exist was specified. The measure number was specified improperly.
REPEAT exist	<ul style="list-style-type: none"> You attempted to use the copy, insert or delete procedure for a SEQUENCER chord track or rhythm track in which a repeat mark is stored.
PART error!!	<ul style="list-style-type: none"> Illegal edit attempt, such as in a melody track or rhythm track.
DATA exist	<ul style="list-style-type: none"> You attempted to use the COMPOSER function to modify a beat or measure of memory where a pattern was stored.
TRACK error!!	<ul style="list-style-type: none"> You attempted to edit a SEQUENCER track in which no song or data is stored.
OPERATION error!!	<ul style="list-style-type: none"> Recording is ending with no punch out point specified (the punch in point was specified).

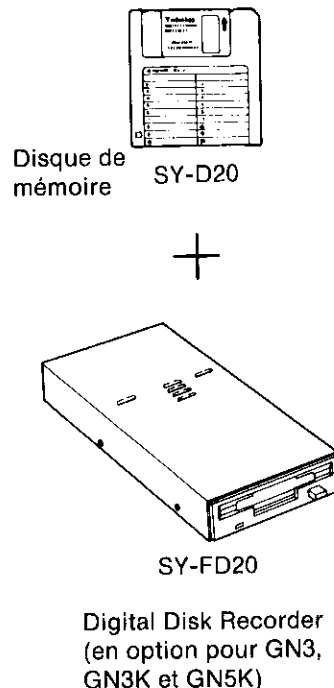
■ Memory disk

LOAD error!!	<ul style="list-style-type: none"> • Loading failed.
SAVE error!!	<ul style="list-style-type: none"> • Saving failed.
DELETE error!!	<ul style="list-style-type: none"> • Deleting a song failed.
VERIFY error!!	<ul style="list-style-type: none"> • Data verification failed. • Loaded, saved, or copied data has errors.
FORMAT error!!	<ul style="list-style-type: none"> • Formatting failed.
NO DISK	<ul style="list-style-type: none"> • A memory disk is not inserted.
PROTECT error!!	<ul style="list-style-type: none"> • You attempted to save to a memory disk which is write-protected.
SONG NOT FOUND	<ul style="list-style-type: none"> • You attempted to load a song which does not exist in the memory disk.
DISK FULL!!	<ul style="list-style-type: none"> • Available memory area on the memory disk is full.

Partie VIII Comment emmagasiner les données d'exécution

34 Digital Disk Recorder SY-FD20

Les données de jusqu'à 20 exécutions—en plus de tous les réglages de panneau, les mémoires des boutons et le contenu de **SEQUENCER**—peuvent être stockées en un disque de mémoire numérique SY-D20 (Disquette) grâce à Digital Disk Recorder (incorporé dans GN5, GN7(K) et GN9(K); quant à GN3, GN3K et GN5K, utiliser SY-FD20 optionnel). La mémoire interne pour le stockage est fixée sur une capacité limitée, mais ce dispositif de mémoire externe augmente sans limite la mémoire pour le stockage. Une simple procédure par l'enregistrement des données d'exécution permet de charger à tout moment sur le panneau d'orgue les réglages mémorisés.



Installation dans l'orgue (GN3/GN3K/GN5K)

Si Digital Disk Recorder n'est pas encore installé dans l'orgue, suivre cette procédure.

1. S'assurer que l'alimentation est coupée.
2. Enlever le couvercle de l'unité du connecteur en enlevant d'abord une vis.
3. Insérer Digital Disk Recorder et le pousser vers l'intérieur fermement et complètement. Puis, fixer Digital Disk Recorder au clavier avec la vis qui a été enlevée à l'étape 2.

