

Multi-track recording

When recording the tracks, you can record **MELODY/CTL** track while listening to the track **APC/CHORD** already recorded.

1. Follow the procedure to record the **APC/CHORD** track.
 - When you turn off the **RECORD** button in the **SEQUENCER**, confirm that the indicator for the track you recorded is lit.
2. Follow the procedure to record the **MELODY/CTL** track in time with the track you recorded in step 1.
 - When the **START/STOP** button is turned on, the track recorded in step 1 is played back. You can record the **MELODY/CTL** track in time with this.

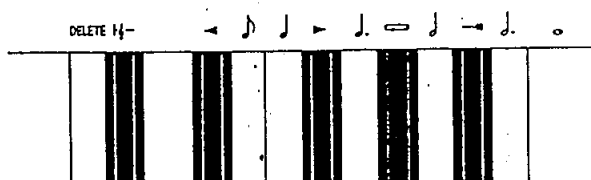
Store a chord progression

You can use the step recording method to store a chord progression for the **AUTO PLAY CHORD** or changes in the panel settings. During playback, the chords and settings then change automatically.

Store a chord progression

Store a chord progression for the **AUTO PLAY CHORD**.

- The chord length is specified with the **STEP RECORD** keys on the keyboard.



Note value keys

- Whole note
- ◡ Dotted half-note
- ♪ Half-note
- ♩ Dotted quarter-note
- ♩ Quarter-note
- ♫ Eighth-note

Reset key

Press to begin storing from the beginning.

Correction keys

- ◀ Move back one chord.
- ▶ Move forward one chord.

Repeat key

Press to end the chord-storing procedure and to specify automatic repeat playback of the stored progression.

End key

Press after the whole chord progression has been stored.

DELETE key

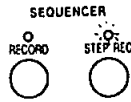
Press to erase data.

- To erase all the data from the current track, while pressing the **DELETE** key, press the End key (—H).

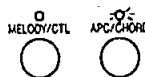
■ Example of storing a chord progression

Measure 1	Measure 2	Measure 3	Measure 4
C	C	F G7	C Am
o	o	♪ ♪	♪ ♪

1. In the **SEQUENCER** section, press the **STEP REC** button to turn it on.



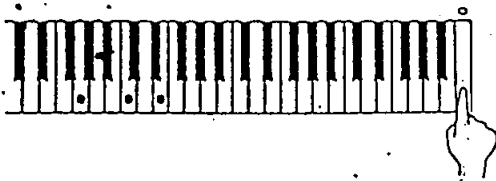
• The **APC/CHORD** indicator flashes.



2. Store the chords.

<Measure 1, measure 2>

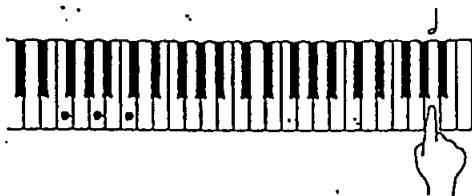
While playing a C chord with your left hand, press the **o** key one time with your right hand.



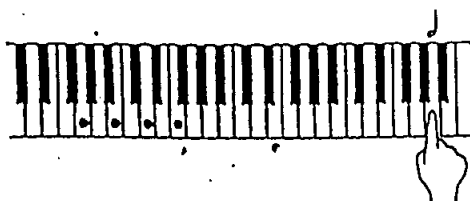
- A "beep" tone indicates that one C major chord of whole-note length is stored.
- The current measure number is shown on the display. This changes automatically, in accordance with the specified note value, to the next unrecorded position.

<Measure 3>

(1) While playing an F chord, press the **♪** key one time.



(2) While playing an G7 chord, press the **♪** key one time.



<Measure 4>

(1) While playing a C chord, press the **♪** key one time.

(2) While playing an Am chord, press the **♪** key one time.

- You can press the **INTRO & ENDING** button or a **FILL IN** button on the panel to store the desired pattern at the current position. (An intro can be stored only at the beginning.) To specify a chord for the **INTRO** or **ENDING** pattern, while pressing the chord keys, press the **INTRO & ENDING** button. To specify a chord for the **FILL IN**, store the chord after pressing the **FILL IN 1** or **FILL IN 2** button. For details about the kind of data that can be stored in the **CHORD** part, refer to page 28.
- Store a rest by pressing a note value key without specifying a chord.
- Chords can also be specified in the **ONE FINGER** mode.
- You can also turn on the **ON BASS** button and specify on bass chords (KN701).

3. At the end of the chord progression, press the End key (→|).

- The Keyboard exits the recording mode.
- You can press the **INTRO & ENDING** button instead of the End key (→|) for an automatic ending pattern at the end of the performance during playback.
- During playback, playback of the recorded chord progression stops at this point. For automatic repeat playback of the chord progression, press the Repeat key (↶) instead of the End key (→|).
- When you play back the track for the **CHORD** part, the chords of the automatic accompaniment change in accordance with the stored chord progression.

■ Correct the recorded chord progression

1. In the **SEQUENCER** section, press the **STEP REC** button to turn it on.

2. Use the **◀** and **▶** Correction keys to find the chord you wish to edit.

- The current measure number is shown on the display, and the stored chord sounds.
- If a panel button command is stored in the current measure (for example, a **FILL IN**), the corresponding button indicator flashes.
- To go to the end of the chord progression, while pressing the Reset key (j), press the **◀** key.
- Rests are indicated on the display as [**_**].
- The End command is indicated on the display as [**E**], and the Repeat command as [**r**].

<continued on next page>

3. Press the **DELETE** key.

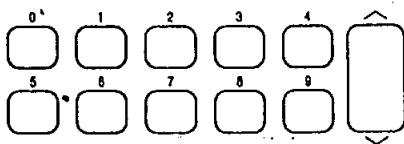
- The data stored at the current position is erased.
- If you erase chord data and do not store a new chord, the following data shifts forward to replace the deleted data (the performance becomes shorter). Conversely, if you do not erase the chord data before entering a new chord, the new data is inserted, and the previously stored data is shifted back by the note value of the new chord (the performance becomes longer).
- To erase all the stored data, while pressing the **DELETE** key, press the End key (\rightarrow).

4. Store the new chord and other panel commands.
5. When you have finished correcting the chord progression, press the **STEP REC** button to turn it off.

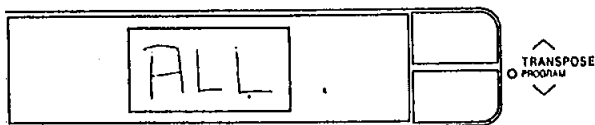
Erasing the recorded performance

You can erase the contents of selected tracks, for example, when you have made an error in your performance and wish to record the track again.

Sequencer clear

1. Press the **MODE SET** button.2. On the number pad, select **7**.

- The display looks similar to the following.

3. Use the **TRANSPOSE** buttons to specify the track you wish to erase.

- Select from the following: all tracks [ALL], MELODY/CTL [MEL], APC/CHORD [APC].

4. Press the **EXECUTE (SYNCHRO)** button.

- [SrE] is shown on the display.
 - If you wish to cancel the erase procedure, press the **EXIT** button at this time.
5. Press the **EXECUTE** button again.
 - The recorded data is erased from the specified track(s), and after [End] is shown on the display, the instrument returns to the normal performance mode.

Part IV Composer (KN701)

Outline of the Composer

The **COMPOSER** enables you to create your own accompaniment patterns or to edit preset accompaniment patterns. Your original pattern is then stored in a memory and can be used just like the preset rhythms.

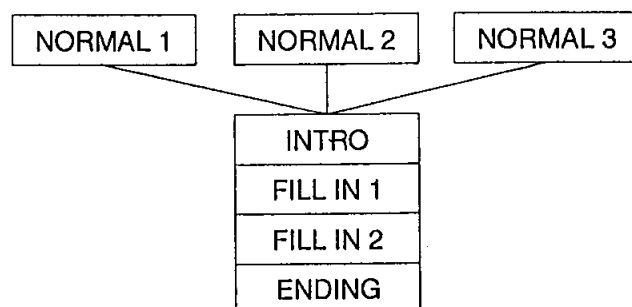
■ Example of a rhythm pattern

The image shows a musical score for a rhythm pattern. It consists of five staves, each labeled on the left: ACCOMP 1, ACCOMP 2, ACCOMP 3, BASS, and DRUMS. The first four staves (ACCOMP 1-3 and BASS) are in treble clef, and the fifth staff (DRUMS) is in bass clef. The music is written in 4/4 time. ACCOMP 1 features a melody of eighth and quarter notes. ACCOMP 2 and ACCOMP 3 provide harmonic support with chords and moving lines. The BASS staff shows a steady eighth-note accompaniment. The DRUMS staff uses 'x' marks to represent drum hits, showing a consistent pattern of snare and bass drum.

Components of a rhythm pattern

You can store up to 3 basic rhythm patterns (NORMAL 1, 2 and 3). You can also create a **INTRO** pattern, an **FILL IN 1** pattern, a **FILL IN 2** pattern and an **ENDING** pattern.

- Each rhythm component is comprised of five parts: **DRUMS**, **BASS** and **ACCOMP 1, 2 and 3**.



Two ways to record in the COMPOSER

There are two ways to create and record a rhythm.

■ Edit a preset rhythm

Select a preset rhythm, change parts of it, and then store it as a new rhythm.

■ Create a completely new rhythm

Clear the memories and compose a completely new rhythm from scratch.

Memory capacity

Expressed in terms of notes, the total number of notes which can be stored in all the **COMPOSER** memories is about 2700. During recording, when the remaining memory capacity becomes 20% or less, it is shown as a percentage on the display.

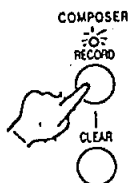
- When the memory is full, [FuL] appears on the display, no more data can be stored in the **COMPOSER**.
- The **COMPOSER** contents are preserved even if the **PLAY** button is turned off, as long as power is being supplied through the AC adaptor or the batteries.
- By using the **SONG** memories, you can save up to four sets of **COMPOSER** rhythms. (Refer to page 39.)

Setting up to create a rhythm pattern

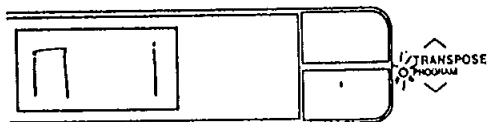
First decide whether you are going to "Edit a preset rhythm pattern" or "Create a completely new rhythm". Below are the instructions for preparing to edit a preset rhythm pattern. And following that are instructions for creating a completely new rhythm pattern.

Edit a preset rhythm pattern

1. Use the **SOUND/RHYTHM** select section to select a rhythm to use as the base of your new rhythm.
 - Select the rhythm which is most like the rhythm you are going to create.
2. Press the **RECORD** button of the **COMPOSER** to turn it on.



3. Use the **TRANPOSE** buttons to select the rhythm component you are going to modify.

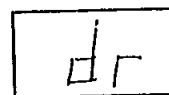


- Select from **NORMAL** (the basic rhythm pattern) 1 [M 1], 2 [M 2], 3 [M 3], **INTRO** [int], **FILL IN** 1 [F 1], 2 [F 2], **ENDING** [End].
- Create **INTRO**, **FILL IN** and **ENDING** patterns after setting the **COMPOSER** mode to **EXPAND**. (Refer to page 37.)

4. Press the **EXECUTE (SYNCHRO)** button.
 - [CPY] is shown on the display, and after a few seconds, the display changes to the following.



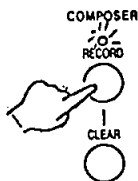
5. Press the **TRANPOSE** buttons. The rhythm you selected in step 1 and the metronome sound start, and recording begins.
6. Use the **TRANPOSE** buttons to select the rhythm part you want to record (**BASS**, **ACCOMP 1**, **ACCOMP 2**, **ACCOMP 3** or **DRUMS**).



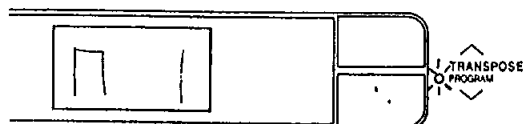
(Continue from "Record your rhythm pattern" on page 36.)

Create a completely new rhythm

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



2. Use the **TRANPOSE** buttons to select the rhythm component you are going to create.



- Select from **NORMAL** (the basic rhythm pattern) 1 [M 1], 2 [M 2], 3 [M 3], **INTRO** [int], **FILL IN** 1 [F 1], 2 [F 2], **ENDING** [End].
- Create **INTRO**, **FILL IN** and **ENDING** patterns after setting the **COMPOSER** mode to **EXPAND**. (Refer to page 37.)

3. Press the **EXECUTE (SYNCHRO)** button.

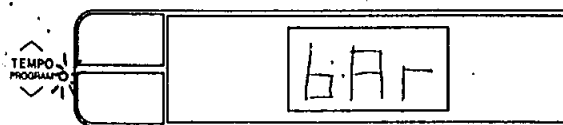


- [CPY] is shown on the display, and after a few seconds, the display changes to the following.

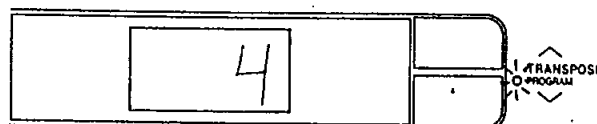


4. Press the **EXECUTE** button.
 - [cLr] is shown on the display.
5. Press the **EXECUTE** button.
 - [End] is shown on the display and each **COMPOSER PART** of the rhythm component you specified in step 2 is erased.
 - If you wish to cancel the clear procedure, press the **EXIT** button at this time.

6. Use the **TEMPO** buttons to select [bAr] on the display.

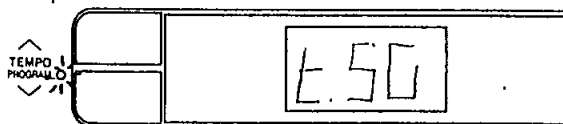


- After about 2 seconds, the display changes.

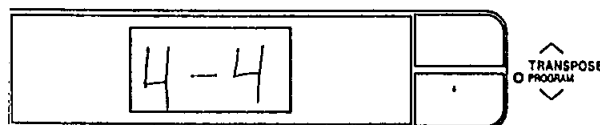


7. Use the **TRANPOSE** buttons to specify the number of measures in your repeating rhythm pattern (1 to 8).

8. Use the **TEMPO** buttons to select [t.SG] on the display.



- After about 2 seconds, the display changes.



9. Use the **TRANPOSE** buttons to specify the time signature.
 - Select from 1/4 [1-4] to 8/4 [8-4].

10. Press the **EXIT** button or **TEMPO** buttons to return to the [ALL] display.

11. Press the **TRANPOSE** buttons.

The rhythm you selected in step 1 and the metronome sound start, and recording begins.

12. Use the **TRANPOSE** buttons to select the rhythm part you want to record (**BASS**, **ACCOMP 1**, **ACCOMP 2**, **ACCOMP 3** or **DRUMS**).

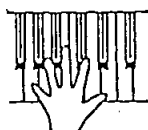
(Continue from "Record your rhythm pattern" on the next page.)

Record your rhythm pattern

Store each part of the rhythm pattern as you perform it on the keyboard.

Recording procedure

1. Adjust the tempo.
 - The tempo can be freely adjusted when you play back the rhythm pattern, so record at the tempo which is easiest for you to play.
2. Select the sound.
 - For the **DRUMS** part, select sounds from the **KEYBOARD PERC** sounds. For the **BASS** and **ACCOMP** parts, select from **SOUND** numbers 001 to 128.
3. Record the part.
4. When you have completed recording one part, select the next part to record with the **TRANPOSE** buttons.
5. Repeat steps 1 through 4 to record all the parts of the rhythm.
6. When you have finished recording the rhythm, press the **RECORD** button of **COMPOSER** to turn it off.



- The specified number of measures are repeatedly played back, during which time any newly played notes are added to those already recorded. The current measure number is shown on the display.
- Use the keyboard percussion keys to play the **DRUMS** part.
- Record the performance in C major for correct chord progressions during playback of the **BASS** and **ACCOMP** parts.
- **SUSTAIN** and **PITCH BEND** effects are also recorded for the **BASS** and **ACCOMP** parts.

■ Maximum simultaneous tones

The maximum number of notes which can sound simultaneously for each part is 8. Even if you record more notes at one timing, only 8 are produced when the pattern is played back.

Recording functions

The following functions are available while recording.

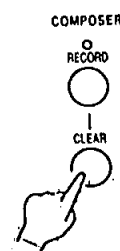
■ PERCUSSION ERASE

When the **DRUMS** part is selected, the **DRUMS** part can be cleared instrument by instrument. Hold down the **PERC ERASE** button and specify the instrument sound to be deleted by pressing the corresponding instrument key on the keyboard, after which only the specified instrument will be erased for as long as this button is kept pressed.



■ PART CLEAR

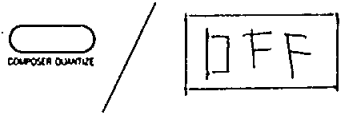
While recording, you can press the **COMPOSER CLEAR** button to erase all recorded contents of the currently selected part.



■ QUANTIZE

Set the desired quantize level (minimum note length) to smooth out any unevenness in the timing of your performance.

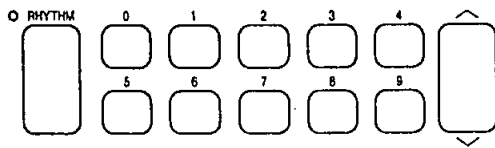
1. Press **COMPOSER QUANTIZE** button.
- The display looks similar to the following.



2. Use the **COMPOSER QUANTIZE** buttons to select the desired quantize level.
- Select from $\uparrow_3[32.3]$, $\uparrow[32]$, $\uparrow_3[16.3]$, [OFF], $\uparrow[16]$, $\uparrow_3[8.3]$, $\uparrow[8]$, $\uparrow[4]$. (A 3 [3] denotes a triplet-type note.)
- A few seconds after the setting is changed, the display returns to the measure-indication display.

Playback

1. In the **SOUND/RHYTHM** select section, select **RHYTHM**.



3. Press the **START/STOP** button.
- The **DRUMS** part of the recorded rhythm begins to play.
- The **BASS** and **ACCOMP** parts are played back with the **AUTO PLAY CHORD**.
- The **VARIATION** button does not work for **COMPOSER** rhythm patterns.

2. Select the **COMPOSER** number you wish to play back (101 to 103).
- Select 101 for the pattern stored in M1 and 102, 103 for the pattern stored in M2, M3.

Notes

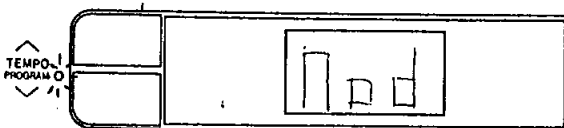
- When you store a rhythm pattern in a **COMPOSER** memory (101 to 103), it replaces the preset rhythm in that memory with the new rhythm. However, you can recall the original preset rhythm at any time by initializing your Keyboard. (Refer to page 56.)
- The **COMPOSER** contents are preserved even if the **PLAY** button is turned off, as long as power is being supplied through the AC adaptor or the batteries.

Creating your own intro, fill-in and ending patterns

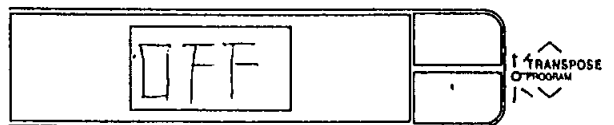
You can create and play back your original intro, fill-in and ending patterns.

Composer mode

1. Press the **RECORD** button of the **COMPOSER** to turn it on.
2. Use the **TEMPO** buttons to select mode [Mod].



- After a few seconds, the display changes to the following.



3. Use the **TRANSPOSE** buttons to select the mode.

<continued on next page>

■ NORMAL mode [OFF]

During playback of your basic rhythm pattern (NORMAL), when a **FILL IN** button or the **INTRO & ENDING** button is pressed, the corresponding pattern for the preset rhythm that you first selected is played back.

■ EXPAND mode [On]

During playback of your basic rhythm pattern (NORMAL), when a **FILL IN** button or the **INTRO & ENDING** button is pressed, the corresponding pattern that you created is played back.

Recording

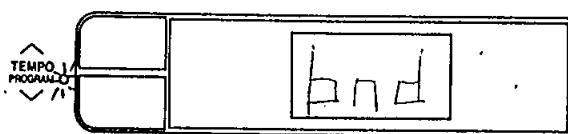
After setting the **COMPOSER** mode to **EXPAND** [On], use the following procedure.

1. Press the **EXIT** button or **TEMPO** buttons to return to the display to select the rhythm component.
2. Use the **TRANSCOPE** buttons to select the rhythm component you are going to create.
 - Select from **INTRO** [int], **FILL IN 1** [F 1], **FILL IN 2** [F 2], **ENDING** [End].
3. Change the recording settings as desired. (Refer to page 35.)
4. Follow the procedure to record the rhythm. (Refer to page 36.)
 - Repeat the above procedure for each pattern as desired.
 - Only one **FILL IN 1**, **FILL IN 2**, **INTRO** and **ENDING** pattern can be created. The fill-in patterns, etc. are used for all three basic rhythms ([M 1], [M 2] and [M 3]).

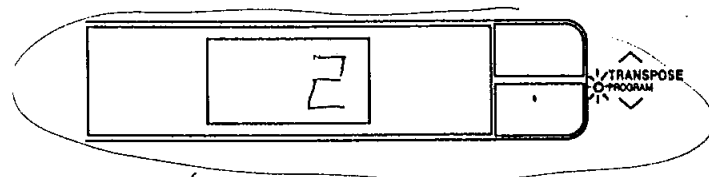
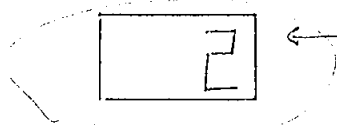
Bend Range

Adjust the amount of pitch change applied to the **ACCOMP** parts and the **BASS** part when the **PITCH BEND** wheel is operated during **COMPOSER** recording.

1. Press the **RECORD** button of the **COMPOSER** to turn it on.
2. Use the **TEMPO** buttons to select [bnd].
3. Use the **TRANSCOPE** buttons to specify the range (0 to 12).
 - Increments are in semitones.

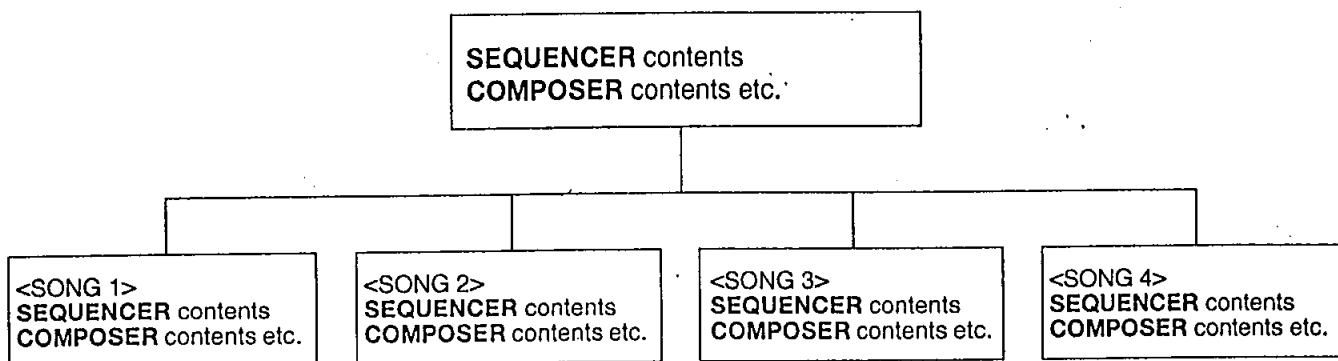


- After a few seconds, the display changes to the following.



Part V Song memory (KN701)

Only one performance can be stored in the **SEQUENCER** and **COMPOSER**. However, by using the **SONG SAVE/LOAD** feature, four performances can be saved in the **SONG** memories.



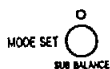
- Use the **SAVE** function to store the recorded performance or stored contents, etc. in a **SONG** memory. You can then use the **LOAD** function to recall the stored performance.
- The current panel settings are also saved in the **SONG** memories.
- The contents of the **SONG** memories are preserved even if the **PLAY** button is turned off, as long as power is being supplied through the AC adaptor or the batteries.

Saving the recorded contents

Save up to 4 sets of performance data and panel settings.

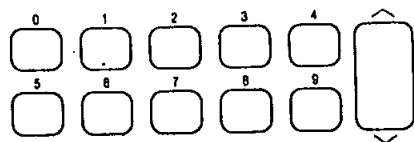
SAVE

1. Press the **MODE SET** button.



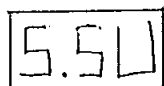
- [-] is shown on the display.

2. Use the **SOUND/RHYTHM** select number pad to select the number 4.



- On the display, the function number is shown briefly, after which the display changes to the function-setting display for the specified function.

3. Use the **TRANPOSE** button to select song save.
[S.SV]



4. Press the **EXECUTE (SYNCHRO)** button.



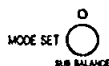
- Numbers from 1 to 4 are shown on the display. Use the **TRANPOSE** buttons to select the number to save under.
- If you wish to cancel the procedure, press the **EXIT (DEMO)** button.
- 5. When [YES] appears on the display, press the **EXECUTE** button again.
- The **SAVE** operation begins.
- The data has been saved when [End] is shown on the display. This instrument returns to the normal performance mode.
- Note that when the **SAVE** procedure is performed, any previously saved contents of the selected **SONG** memory are erased.

Loading the recorded contents

The contents of the saved SONG memories can be recalled any time.

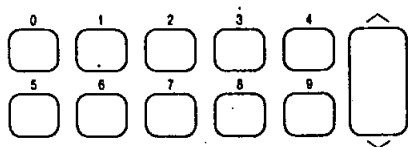
LOAD

1. Press the **MODE SET** button.



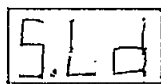
- [-] is shown on the display.

2. Use the **SOUND/RHYTHM** select number pad to select the number 4.



- On the display, the function number is shown briefly, after which the display changes to the function-setting display for the specified function.

3. Use the **TRANPOSE** button to select song load.
[S.Ld]



4. Press the **EXECUTE (SYNCHRO)** button, and then use the **TRANPOSE** buttons to select the number to be loaded.

5. Press the **EXECUTE (SYNCHRO)** button.



- The LOAD operation begins.
- The data has been recalled when [End] is shown on the display. This instrument returns to the normal performance mode.
- If you have selected a SONG memory for which no contents have been saved, [n.SG] is shown on the display.

6. Press the **START/STOP** button to turn it on.
- The recalled performance begins to play.

Part VI Setting the functions

Outline of the Mode Set

Various functions related to the operation of this instrument can be adjusted and regulated to match your particular needs.

Functions that can be set

2: SUB BALANCE (page 42)

This is used to adjust the levels for each of the five separate parts (**ACCOMP 1 – 3**, **BASS** and **DRUMS**) which make up the rhythm part.

3: PART SETTING (page 42)

Adjust the volume and effect settings for each part.

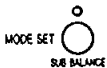
4: (KN501)

5: (KN701) KEYBOARD SET UP (page 44)

Set the instrument pitch, keyboard touch response, left part setting during an **AUTO PLAY CHORD** performance and the function to be assigned to an optional foot switch.

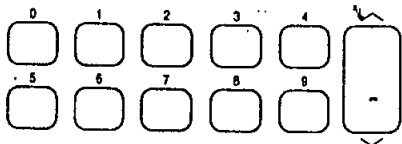
Procedure

1. Press the **MODE SET** button.



- [-] is shown on the display.

2. Use the **SOUND/RHYTHM** select number pad to select the number of the function you wish to set.



- The list of **MODE SET** functions and their numbers is found on the upper left of the operation panel. On the display, the function number is shown briefly, after which the display changes to the function-setting display for the specified function.

3. Adjust the setting (see the following section).

- When adjusting the settings, you can press the **EXIT (DEMO)** button to return to the function-number display [-], select a different function number and continue setting the functions.

4. Repeat steps 2 and 3 for the other functions if desired.

5. Once you have finished setting the functions, press the **MODE SET** button to exit the setting mode.

- The instrument returns to the normal performance mode.

Adjusting the settings

Adjust the setting after selecting the function.

SUB BALANCE

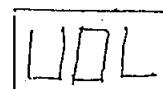
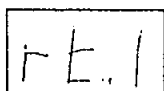
This is used to adjust the levels for each of the five separate parts which make up the rhythm part.

1. Select 2: **SUB BALANCE**. (Refer to page 41.)
2. Select the desired part using the **TEMPO** buttons.
 - Select **ACCOMP 1** [AC1], **ACCOMP 2** [AC2], **ACCOMP 3** [3], **BASS** [bAs] or **DRUMS** [dr].
3. Adjust the sound volume using the **TRANPOSE** buttons. (0 ~ 127)
4. Once adjustment is finished, press the **MODE SET** button to exit the setting mode.

PART SETTING

Adjust various settings for each part.

1. Select 3: **PART SETTING**. (Refer to page 41.)
 - The display looks similar to the following.
3. Press the **EXECUTE** button.
The display will change to the following.



2. Use the **TEMPO** buttons to select the part.
 - Select from **RIGHT 1** [rt. 1], **RIGHT 2** [rt. 2], **LEFT** [LF1], **PART 4** [P4] to **PART 16** [P16], **CHORD** [Chd], **ROOT BASS** [r. bS].
 - For parts for which **KEYBOARD PERC** sounds are selected, only the **VOLUME** setting can be adjusted.
 - **PART 16** is reserved for the **DRUMS** part. Only the **VOLUME** setting can be adjusted for this part. Also, the **PAN**, **KEYSHIFT**, **TUNE**, **BEND** and **GLIDE** settings cannot be changed for the **CHORD** and **ROOT BASS** parts.
 - For information concerning **CHORD** and **ROOT BASS**, refer to page XX.
 - **PART 4** to **16** are used for **MIDI** functions.
4. Use the **TEMPO** buttons to select the desired item.
5. Use the **TRANPOSE** buttons to adjust each attribute.
6. Press the **EXIT** button to return to the display for selecting the part.
7. Repeat steps 2 to 6 for the other parts, as desired.
 - The following items can be set.

■ VOLUME

When a VOLUME has been selected, [VOL] is shown on the display, and then the display changes to the setting display. Use the **TRANPOSE** buttons to adjust the volume of the selected part (0 to 127).

■ SUSTAIN LENGTH

When a SUSTAIN LENGTH has been selected, [SuS] is shown on the display, and then the display changes to the setting display. Use the **TRANPOSE** buttons to adjust the sustain length when the **SUSTAIN** button is on (1 to 8).

■ PAN POT

When a PAN POT has been selected, [PAN] is shown on the display, and then the display changes to the setting display. Use the **TRANPOSE** buttons to adjust the stereo balance (0 to 127).

- At 64, the sound is at the center.
- At 0 to 63, the sound is to the left of center. At 65 to 127, the sound is to the right of center.

■ REVERB

When a REVERB has been selected, [rEV] is shown on the display, and then the display changes to the setting display. Use the **TRANPOSE** buttons to adjust the reverberation of the selected part (0 to 127).

■ CHORUS

When a CHORUS has been selected, [CHo] is shown on the display, and then the display changes to the setting display. Use the **CHORUS** buttons to adjust the pitch difference for the extra CHORUS part (0 to 127).

■ KEYSHIFT

When a KEYSHIFT has been selected, [SFT] is shown on the display, and then the display changes to the setting display. Use the **TRANPOSE** buttons to specify the relation of the pitch of the played key to the pitch of the sound (-12 to 12).

- A value of 1 means a difference of one semitone. A value of 12 is one octave.
- Settings from -12 to -1 lower the pitch, and settings from 1 to 12 raise the pitch.

■ TUNE

When a TUNE has been selected, [tun] is shown on the display, and then the display changes to the setting display. Use the **TRANPOSE** buttons to fine-tune the pitch of the part (-128 to 127).

- Settings from -128 to -1 lower the pitch, and settings from 1 to 127 raise the pitch.

■ BEND RANGE

When a BEND RANGE has been selected, [bnd] is shown on the display, and then the display changes to the setting display. Use the **TRANPOSE** buttons to set the amount of pitch change when the **PITCH BEND** wheel is used (0 to 12).

- Increments are in semitones. A value of 12 is one octave.

■ GLIDE

When a GLIDE has been selected, [GLd] is shown on the display, and then the display changes to the setting display. Use the **TRANPOSE** buttons to turn the glide function of the Foot Switch (separately sold option to [On] or [OFF] for the part).

■ SUSTAIN PEDAL

When a SUSTAIN PEDAL has been selected, [PdL] is shown on the display, and then the display changes to the setting display. Use the **TRANPOSE** buttons to turn the sustain function control of the Foot Switch (sold separately) to [On] or [OFF] for each part.

- Different functions can be assigned to the Foot Switch. (Refer to page xx.)

KEYBOARD SET UP

This instrument is provided with a wide variety of functions that you can set according to your preferences.

1. Select **KEYBOARD SET UP**.
2. Use the **TEMPO** buttons to select the function.
 - Select from **TUNING** [tun], **TOUCH ON/OFF** [tCH], **LEFT HOLD SETTING** [hLd] or **FOOT SW SETTING** [Fot].
3. Use the **TRANPOSE** buttons to adjust each attribute.
4. Repeat step 2 and 3 for the other functions, as desired.
 - The following items can be set.

■ TUNING

Use this setting to fine-tune the pitch of this instrument when playing along with other instruments or with a recorded performance.

- When **TUNING** is selected, [tun] will appear in the display.
- Use the **TRANPOSE** buttons to adjust the pitch (427.3 to 453.0 Hz).
[27.3] to [53.0] will appear in the display.
- The decimal can be set to 0, 3 or 6.

■ TOUCH ON/OFF

Adjust the amount of keyboard touch response.

- When **TOUCH ON/OFF** is selected, [tCH] will appear in the display.
- Use the **TRANPOSE** buttons to adjust the degree of touch sensitivity (0 to 9).
- The larger the number, the greater the degree of touch sensitivity.
- When set to 0, the volume is the same no matter how hard or softly the keyboard is played.

■ LEFT HOLD SETTING

Specify how the left section of the keyboard sounds during an **AUTO PLAY CHORD** performance.

- When **LEFT HOLD SETTING** is selected, [hLd] will appear in the display.
- Use the **TRANPOSE** buttons to set the mode to [On] or [OFF].

<continued on next page>

■ OFF

	ONE FINGER	FINGERED	PIANIST
When rhythm is off	The chord note specified by the pressed key is heard (CHORD part).	The LEFT part sound and chord note specified by the pressed keys are heard.	The LEFT part notes and the chord note are not heard (the RIGHT part sound is heard for the entire keyboard).
When rhythm is on	The LEFT part notes and the chord note are not heard.	The LEFT part sound of the pressed keys is heard.	

- The **LEFT** part can be heard only when the **LEFT** button in the **CONDUCTOR** section is on.
- When you select the **ONE FINGER** mode, the **LEFT** button in the **CONDUCTOR** section turns off automatically.

■ ON

	ONE FINGER	FINGERED	PIANIST
When rhythm is on/off	The specified chord note is produced in the LEFT part sound.	The LEFT part sound of the pressed keys is heard.	The LEFT part notes and the chord note are not heard (the RIGHT part sound is heard for the entire keyboard).

- The **LEFT** part can be heard only when the **LEFT** button in the **CONDUCTOR** section is on.
- When the **MEMORY** button is on, even when the keys are released, the **LEFT** part sound continues to play.

■ FOOT SWITCH SETTING

If a Foot Switch (separately sold option) is connected, you can assign a function to it and then control the function with your foot.

- When **FOOT SW SETTING** is selected, [Fot] will appear in the display.
- Use the **TRANSPOSE** buttons to specify the desired function to assign to the foot switch.
- Select one of the following: **PANEL MEMORY** increment* [P.lc]; **START/STOP** on/off [Str]; **VARIATION** on/off [VAR]; **FILL IN 1, 2** on/off [Fi.1], [Fi.2]; **INTRO & ENDING** on/off [End]; **SUSTAIN** on/off [SuS] (factory-preset); glide** on/off [GLd], **TECHNI-CHORD** on/off [tcd].
 - * When the Foot Switch is pressed, the **PANEL MEMORY** number changes to the next higher number.
 - ** When the Foot Switch is depressed, the sound of the entire instrument slides down by approximately one semitone, and when the Foot Switch is released, the pitch slides back to the normal pitch. (This effect does not work for some of the sounds).

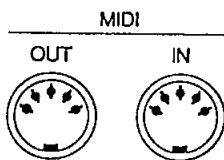
Part VII MIDI

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.

MIDI terminals

(On the rear panel)



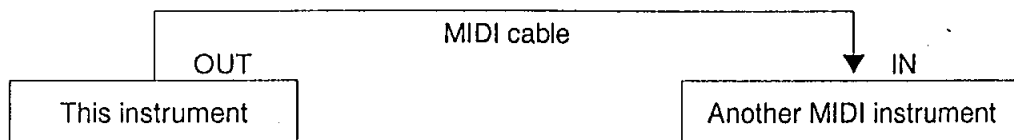
IN: The terminal by which this instrument receives data from other equipment.

OUT: The terminal that transmits data from this instrument to other equipment.

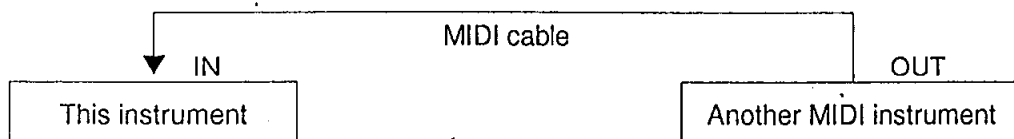
- For these connections, use a commercially available MIDI cable.

Connection examples

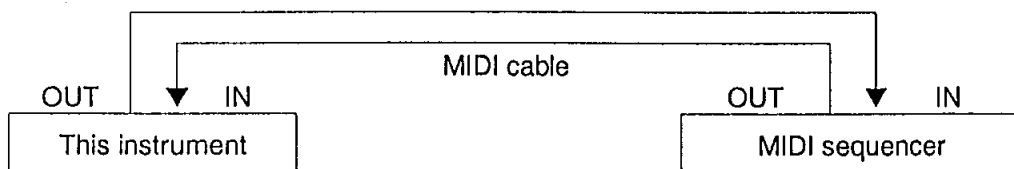
- To generate sound from a connected instrument by playing this instrument



- To generate sound from this instrument by operating a connected instrument



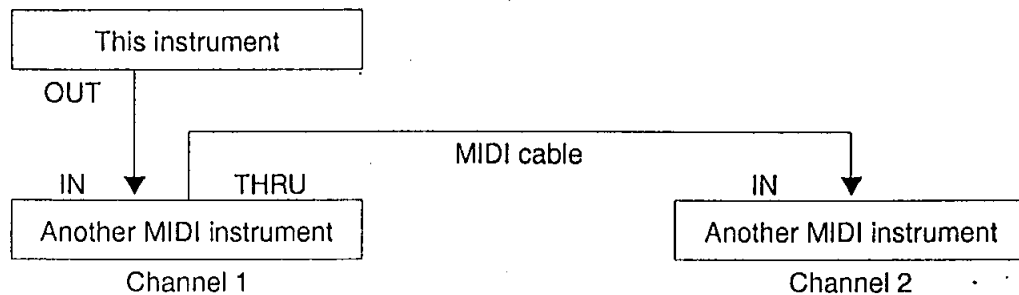
- To connect with a MIDI sequencer or a personal computer



MIDI channels

Many different kinds of performance data are sent using just one MIDI cable. This is possible because MIDI signals are sent and received through 16 different "basic channels" (numbered 1 to 16).

In order for the exchange of data to take place, the channels on the transmission side must match the channels on the receiving side. This characteristic also makes it possible to link multiple sound generators and to control each by matching specific channels.



The following kinds of data can be transmitted/received.

■ NOTE data

This is the most basic kind of MIDI data which is exchanged, and is used to specify which keys are played and how hard they are played.

NOTE NUMBER: Number specifying which key is played.

NOTE ON: Specifies that a key is played.

NOTE OFF: Specifies that a key is released.

VELOCITY: Specifies how hard a key is struck.

- MIDI notes are assigned numbers from 0 to 127, with middle C as 60. Note pitches are in semitone increments, with the higher numbers assigned to the higher pitches.

■ PROGRAM CHANGE

This is sound change data. When a different sound is selected on the transmitting instrument, the sound on the receiving instrument also changes.

■ CONTROL CHANGE

These are volume, sustain, effect, etc. data used to enhance performance expression. Each function is distinguished by its control number, and the function which can be changed by the control differs depending on the instrument.

■ EXCLUSIVE data

This is sound data, etc. particular to a specific instrument model. This data can also be transmitted and received by the DUMP function.

- For details, refer to the separate "REFERENCE GUIDE" provided.

GENERAL MIDI

GENERAL MIDI (GM) is the standard which enables MIDI data exchange between different models or equipment of different manufacture. PROGRAM CHANGE numbers and their corresponding sounds, percussion instrument sounds, note numbers, etc. are data-compatible between equipment using this standard. Song data created on the equipment of one manufacturer can be played back on the equipment of a different manufacturer, as long as both conform to the GENERAL MIDI standard. This instrument

conforms to this standard and can be used as a GENERAL MIDI sound generator.

Equipment which conforms to GENERAL MIDI standards is indicated by the following logo.

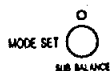
Outline of MIDI functions

Select the various settings which are used for MIDI operation of the instrument.

- The abbreviated function name as shown on the display is indicated in brackets [].
- : **BASIC CHANNEL** [b.ch] (page XX)
Assign a MIDI channel to each part.
- : **OCTAVE SHIFT** [oct] (page XX)
Set the octave shift value for key notes transmitted from this instrument.
- : **LOCAL CONTROL** [L.ct] (page XX)
Specify whether this instrument's sound generator is enabled when MIDI data is transmitted.
- : **REALTIME COMMAND** [Srt] (page XX)
Enable or disable the exchange of REALTIME data.
- : **CLOCK** [CL] (page XX)
Set the CLOCK mode.
- : **NOTE ONLY** [nt.o] (page XX)
Of the performance data, specify whether or not only note data is exchanged.
- : **TRANSPOSE OUTPUT** [trA] (page XX)
Specify whether the note number of the transposed note or the note number of the played key is transmitted/received when TRANSPOSE is on.
- : **PROGRAM CHANGE MODE** [P.ch.] (page XX)
Settings related to the PROGRAM CHANGE number of each sound.
- : **SONG SELECT** [S.SL] (page XX)
Specify whether song number data can be exchanged.
- : **MIDI SETUP LOAD** [M.Ld] (page XX)
Specify whether MIDI settings stored on a disk are automatically recalled when disk data is loaded.
- : **PROGRAM CHANGE TO PANEL MEMORY** [P.P.M] (page XX)
Specify whether or not changes in the PANEL MEMORY number selection are exchanged as PROGRAM CHANGE data for the RIGHT 1 part.
- : **RIGHT 1 INPUT** [r.in] (page XX)
Specify how note data is handled when it is received.
- : **APC INPUT** [A.in] (page XX)
Specify whether input data for the automatic accompaniment parts is received.
- : **TECHNI-CHORD OUTPUT** [tEC] (page XX)
Specify whether keyboard notes generated by the TECHNI-CHORD function are transmitted.
- : **DRUM PATTERN OUTPUT** [dr.o] (page XX)
Specify whether data from the DRUMS part is transmitted.
- : **APC OUTPUT** [Ac.o] (page XX)
Specify whether data for the automatic accompaniment is transmitted.
- : **BULK DUMP** [dMP] (page XX)
Settings related to SYSTEM EXCLUSIVE data exchange.
- : **PRESETS** [PSt] (page XX)
Establish the optimum settings depending on how this instrument is connected to other equipment.

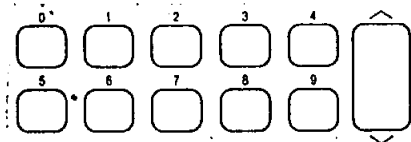
Procedure

1. Press the **MODE SET** button.



- [-] is shown on the display.

2. Use the **SOUND/RHYTHM** select number pads to select **MIDI SETTING**.



3. Use the **TEMPO** buttons to select the function that you would like to set.

4. Adjust the setting (see the following section).
 - A flashing indicator shows which buttons are used for adjusting the specified function.
 - When adjusting the settings, you can press the **EXIT** button to return to the function select display [-], select a different function and continue setting the functions. (**BASIC CHANNEL, OCTAVE SHIFT, LOCAL CONTROL, BULK DAMPING, PRESET**)
 - After a short period of time, the function selection display will appear again, so that you can then select a further function.
5. Repeat steps 3 and 4 for the other functions if desired.
6. Once you have finished setting the functions, press the **MODE SET** button to exit the setting mode.
 - The instrument returns to the normal performance mode.

Setting the functions

Adjust the setting after selecting the function.

BASIC CHANNEL

Assign a MIDI channel number to each part.

1. Use the **TEMPO** buttons to select **BASIC CHANNEL**. (Refer to page 49.)
2. Press the **EXECUTE** button.
3. Use the **TEMPO** buttons to select a part.
 - Select from **RIGHT 1** [rt.1], **RIGHT 2** [rt.2], **LEFT** [Lft], **PART 4** to **16** [P4 to P16], **CONTROL** [Ctl], **ACCOMP 1** to **3** [AC1 to AC3], **BASS** [bAS], **DRUMS** [dr], **CHORD** [Chd].
4. Use the **TRANSPOSE** buttons to select a basic channel for the part (OFF, ch1 to ch16).
 - A part which has been set to [OFF] cannot be used to transmit or receive MIDI data.
5. Repeat steps 3 and 4 for each part as desired.

■ Default channel settings

Part	Channel	Part	Channel
RIGHT 1	1	PART 14	14
RIGHT 2	2	PART 15	15
LEFT	3	PART 16	16
PART 4	4	(DRUMS)	16
PART 5	5	CONTROL	OFF
PART 6	6	AUTO PLAY CHORD	
PART 7	7	ACCOMP 1	OFF
PART 8	8	ACCOMP 2	OFF
PART 9	9	ACCOMP 3	OFF
PART 10	10	BASS	OFF
PART 11	11	DRUMS	OFF
PART 12	12	CHORD	OFF
PART 13	13		

OCTAVE SHIFT

Set the octave shift value for key notes transmitted from this instrument.

1. Use the **TEMPO** buttons to select **OCTAVE SHIFT**. (Refer to page 49.)
2. Press the **EXECUTE** button.
3. Use the **TEMPO** buttons to select a part.
 - Select from **RIGHT 1** [rt.1], **RIGHT 2** [rt.2], **LEFT** [LFt], **PART 4 to 16** [P4 to P16], **ACCOMP 1 to 3** [AC1 to AC3], **BASS** [bAS], **DRUMS** [dr], **CHORD** [Chd].aA
4. Use the **TRANPOSE** buttons to set the **OCTAVE SHIFT** value (-3 to 3).
 - Increments are in octaves.
 - The transmitted and received octave shifts are linked. For example, if the transmitted octave shift is set to 1, the received octave shift is automatically set to 1.
5. Repeat steps 3 and 4 for each part as desired.

LOCAL CONTROL

Specify whether this instrument's sound generator is enabled when MIDI data is transmitted.

1. Use the **TEMPO** buttons to select **LOCAL CONTROL**. (Refer to page 49.)
2. Press the **EXECUTE** button.
3. Use the **TEMPO** buttons to select a part.
 - Select from **RIGHT 1** [rt.1], **RIGHT 2** [rt.2], **LEFT** [LFt], **PART 4 to 16** [P4 to P16], **ACCOMP 1 to 3** [AC1 to AC3], **BASS** [bAS], **DRUMS** [dr], **CHORD** [Chd].
4. Use the **TRANPOSE** buttons to enable or disable this instrument's sound generator.
 - [On]: The performance from this instrument is transmitted as MIDI data and also sounds from this instrument.
 - [OFF]: The performance from this instrument is transmitted as MIDI data but does not sound from this instrument.

REALTIME COMMAND

Enable or disable the exchange of **START/STOP** data.

1. Use the **TEMPO** buttons to select **REALTIME COMMAND**. (Refer to page 49.)
2. Use the **TRANPOSE** buttons to change the **REALTIME COMMAND** setting.
 - [On]: Rhythm and **SEQUENCER** start/stop, continue, and song position pointer data can be transmitted/received.
 - [OFF]: This data cannot be transmitted/received.

CLOCK

Select the **CLOCK** mode.

1. Use the **TEMPO** buttons to select **CLOCK**. (Refer to page 49.)
 2. Use the **TRANPOSE** buttons to change the **CLOCK** setting.
 - MIDI [MId]: The **CLOCK** of the connected equipment is used to control the performance. This instrument's **CLOCK** is disabled.
 - When MIDI is selected, the tempo is displayed as [--] and the rhythm and **SEQUENCER** are disabled until the **CLOCK** signal is received from the connected instrument.
- INTERNAL** [int]: This instrument's internal **CLOCK** is used to control the performance. The **CLOCK** of the connected equipment is disabled.

NOTE ONLY

Of the performance data, specify whether or not only note data is exchanged.

1. Use the **TEMPO** buttons to select **NOTE ONLY**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Only note on/off data is exchanged.
[OFF]: Other data is also exchanged.

TRANSPOSE OUTPUT

Specify whether the note number of the transposed note is transmitted when **TRANSPOSE** is on, or if the note number of the played key is transmitted.

1. Use the **TEMPO** buttons to select **TRANSPOSE OUTPUT**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to change the setting.

[On]: The note number of the transposed note is transmitted.
[OFF]: The note number of the played key is transmitted.

PROGRAM CHANGE MODE

Set the PROGRAM CHANGE mode.

1. Use the **TEMPO** buttons to select **PROGRAM CHANGE MODE**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to select the mode.

NORMAL [nor]: The PROGRAM CHANGE numbers correspond to the sound numbers as shown on the panel list.

TECHNICS [TEC]: 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 which are set to the same mode.

GM [GM]: PROGRAM CHANGE numbers follow the GM standard.

- The PROGRAM CHANGE numbers for each mode can be found in the separate "REFERENCE GUIDE" provided.

SONG SELECT

Specify whether song number data can be exchanged.

1. Use the **TEMPO** buttons to select **SONG SELECT**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons change the setting.

[On]: Song number data is exchanged.
[OFF]: Song number data is not exchanged.

MIDI SETUP LOAD

Specify whether MIDI settings stored on a disk are automatically recalled when disk data is loaded.

1. Use the **TEMPO** buttons to select **MIDI SETUP LOAD**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to change the setting.

[On]: MIDI settings are recalled.
[OFF]: MIDI settings are not recalled.

PROGRAM CHANGE TO PANEL MEMORY

Specify whether or not changes in the **PANEL MEMORY** number selection are exchanged as **PROGRAM CHANGE** data for the **RIGHT 1** part.

- The **PROGRAM CHANGE** numbers for **PANEL MEMORY** numbers 0 to 9.

1. Use the **TEMPO** buttons to select **PROGRAM CHANGE TO PANEL MEMORY**.
(Refer to page 49.)

2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Changes in the **PANEL MEMORY** number selection are exchanged as **PROGRAM CHANGE** data for the **RIGHT 1** part.

[OFF]: Changes in the **PANEL MEMORY** number selection are not exchanged as **PROGRAM CHANGE** data for the **RIGHT 1** part.

RIGHT 1 INPUT

Specify how note data is handled when it is received.

1. Use the **TEMPO** buttons to select **RIGHT 1 INPUT**.
(Refer to page 49.)

2. Use the **TRANSPOSE** buttons to select the mode.

[cnd]: The **NOTE** data received on the MIDI channel for the **RIGHT 1** part is assigned to the parts by the **CONDUCTOR**, as when the keyboard is played.

[dir]: The **NOTE** data received on the MIDI channel for the **RIGHT 1** part is assigned to the **RIGHT 1** part.

APC INPUT

Specify whether input data for the automatic accompaniment parts is received.

1. Use the **TEMPO** buttons to select **APC INPUT**.
(Refer to page 49.)

2. Use the **TRANSPOSE** buttons to select the mode.

[On]: Input data for the **ACCOMP 1, 2, 3, BASS** and **DRUMS** parts is received.

[OFF]: This data is not received.

- MIDI channels should be assigned to the automatic accompaniment parts before exchanging data. (Refer to page 49.)

TECHNI-CHORD OUTPUT

Specify whether keyboard notes generated by the **TECHNI-CHORD** function are transmitted.

1. Use the **TEMPO** buttons to select **TECHNI-CHORD OUTPUT**. (Refer to page 49.)

2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Keyboard notes generated by the **TECHNI-CHORD** function are also transmitted.

[OFF]: Only key note data of the pressed keys is transmitted.

DRUM PATTERN OUTPUT

Specify whether data from the **DRUMS** part is transmitted.

1. Use the **TEMPO** buttons to select **DRUM PATTERN OUTPUT**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Data from the **DRUMS** part is transmitted.
[OFF]: Data from the **DRUMS** part is not transmitted.

APC OUTPUT

Specify whether data for the **ACCOMP 1, 2, 3, BASS** and **CHORD** parts is transmitted.

1. Use the **TEMPO** buttons to select **APC OUTPUT**. (Refer to page 49.)
2. Use the **TRANSPOSE** buttons to change the setting.

[On]: Data from the **ACCOMP 1, 2, 3, BASS** and **CHORD** parts is transmitted.
[OFF]: Data from these parts is not transmitted.
• MIDI channels should be assigned to the automatic accompaniment parts before exchanging data. (Refer to page 49.)

BULK DUMP

This instrument's internal data such as panel settings, performance data, etc. can be transmitted to and received from another same model unit or other MIDI equipment as **SYSTEM EXCLUSIVE** data.

- Sound is not generated from this instrument during this procedure.

■ Transmitting

1. Follow the procedure necessary to prepare the receiving instrument for data reception.
2. Use the **TEMPO** buttons to select **BULK DUMP**. (Refer to page 49.)
3. Press the **EXECUTE** button.
4. Use the **TRANSPOSE** buttons to specify the type of data to transmit.

[ALL]: All data
[CMP]: **COMPOSER** data
[SEQ]: **SEQUENCER** data
[SND]: **SOUND MEMORY** data
[PnL]: Panel settings and **PANEL MEMORY** data

5. Press the **EXECUTE (SYNCHRO)** button.



- [YES] is shown on the display.
- If you wish to cancel the procedure, press the **EXIT** button instead.

6. Press the **EXECUTE** button again.
 - Transmission begins.
 - If transmission is unsuccessful, [E.tr] is shown on the display. In this case, repeat the procedure from the beginning.
 - When transmission is completed, [End] is shown on the display.

■ Receiving

After accessing this display on this instrument, follow the transmission procedure on the transmission side.

- If reception is unsuccessful, [E.rc] is shown on the display. In this case, repeat the procedure from the beginning.
- When reception is completed, [End] is shown on the display.

PRESETS

Establish the optimum settings depending on how this instrument is connected to other equipment, and on whether this instrument is used as the master or the slave.

1. Use the **TEMPO** buttons to select **PRESETS**.
(Refer to page 49.)

2. Press the **EXECUTE** button.

3. Use the **TRANSPOSE** buttons to select the number for the connection setup (1 to 33).
 • Detailed information about the MIDI PRESETS can be found in the separate "REFERENCE GUIDE" provided.

4. Press the **EXECUTE (SYNCHRO)** button.

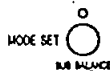


- [End] is shown on the display and the PRESETS settings are completed.

GM MODE SET

Specify whether this instrument is compatible with GENERAL MIDI standard instruments.

1. Press the **MODE SET** button.



2. Use the number buttons to select "9".

- "9" will appear on the display for a short time, and then the display will return to the setting display.

3. Use the **TRANSPOSE** buttons to switch the setting on or off.

[On]: This instrument is compatible with GENERAL MIDI standard instruments.

[OFF]: This instrument is not compatible with GENERAL MIDI standard instruments.

- This setting is automatically set to [OFF] When the power is turned on.
- If [On] is selected, the status of this instrument changes to the GENERAL MIDI status, and the sounds and operations which can be selected are limited. In addition, the arrangement of percussion sounds on the keyboard changes. (Refer to the separate "REFERENCE GUIDE" provided.)
- If GENERAL MIDI on/off data is received from connected MIDI equipment, the received data has priority.

4. Press the **EXECUTE (SYNCHRO)** button.



- [YES] is shown on the display.
- If you wish to cancel the procedure, press the **EXIT** button.

5. Press the **EXECUTE** button again.

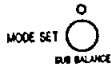
- The data has been saved when [End] is shown on the display. This instrument returns to the normal performance mode.
- Changing this setting will cause all **SEQUENCER** data to be erased.
- This setting is automatically set to OFF when the power is turned on. If the setting is set to ON and the instrument is then turned off, all **SEQUENCER** data will be erased.

Initialize

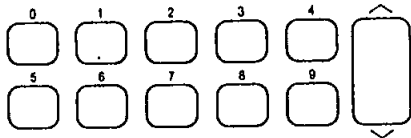
This instrument has many settable functions and storable memories. However, you can return the settings and memories to the factory-preset status.

INITIAL

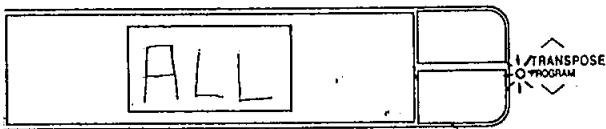
1. Press the **MODE SET** button.



2. On the **SOUND/RHYTHM** select number pad, select 1.



• The display changes to the following.



3. Use the **TRANSPOSE** buttons to specify which settings are reset.

- Select from All [ALL], **SEQUENCER** [SEq], **COMPOSER** [CMP], **SOUND MEMORY** [Snd], **PANEL MEMORY** [PnL], **MIDI** [Mid].

4. Press the **EXECUTE (SYNCHRO)** button.



- [YES] is shown on the display.
- Press the **EXIT** button if you wish to cancel the procedure.

5. Press the **EXECUTE** button again.

- When [End] appears on the display, initialization is completed.

- You can also reset all the instrument settings with the following procedure: Turn off the **PLAY** button once. Then, while pressing the **0**, **1** and **2** buttons on the **SOUND/RHYTHM** select number pad at the same time, turn the **PLAY** button on.

■ Backup memory

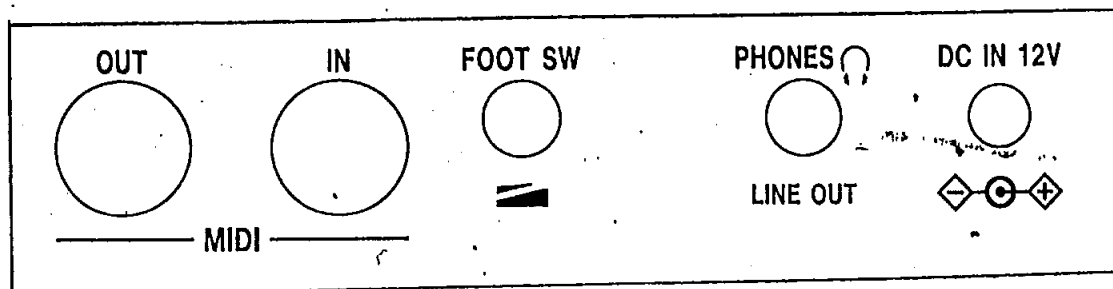
The various stored memories and function settings are preserved even if the **PLAY** button is turned off, as long as power is being supplied through the AC adaptor or the batteries. If the power supply to this instrument is discontinued (either through the AC adaptor or the batteries), the various memories and settings will be cleared after about 10 minutes.

Options and connections

This page shows the optional accessories that are available for your Keyboard. 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 accessory panel.

Connections

(on the rear panel)



FOOT SW

An optional SZ-P1 Foot Switch (sold separately) can be connected to this terminal to control various functions. (Refer to page XX.)

PHONES ()/LINE OUT (output level 1.5 Vrms, 16 Ω)

Headphones, a keyboard amplifier, or stereo equipment can be connected to this terminal. When another apparatus is connected to this terminal, the speaker system is automatically switched off, and sound is heard only through the connected device.

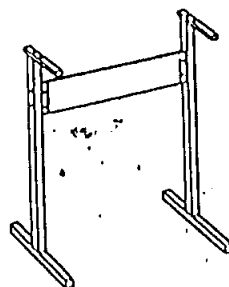
MIDI

These terminals are for connection to another MIDI instrument. (Refer to page 46.)

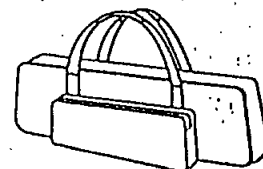
Separately sold options



SZ-P1
Foot Switch



SZ-S61
Stand



SZ-B7
Carrying Bag

Error messages

The following error messages inform you of a problem in operation or status.

Error display	Reason
E L d	SONG LOAD failure.
n 5 0	The number of the SONG MEMORY that you tried to load is empty.
b A t	Batteries exhausted.
E 5 9	There is an error in the SEQUENCER data. The performance cannot be played back.
F u L	The SEQUENCER COMPOSER or MANUAL SEQUENCE PADS memory is full. No more data can be stored.
E 3 0	You attempted to change the number of measures or the time signature of the rhythm without first clearing the COMPOSER memory.
E t r	An error has occurred during MIDI BULK DUMP transmission.
E r c	An error has occurred during MIDI BULK DUMP reception.
E i d	The identification (ID) code of the SYSTEM EXCLUSIVE data received by this instrument is for a different product.
E 4 4	You attempted to edit a KEYBOARD PERC sound (95 to 99).
E 4 7	A rhythm other than a preset rhythm was selected.
E 5 4	Preset numbers other than No.11 do not allow recording.

Symptoms which appear to be signs of trouble

The following changes in performance may occur in the Technics Keyboard but do not indicate trouble.

	Phenomenon	Remedy
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 this procedure is not successful, turn off the PLAY button once. Then, while pressing the three lower number buttons on the RHYTHM SELECT number pad (0, 1 and 2) at the same time, turn the PLAY button on again. (Note that, in this case, all programmable settings, functions and memories return to their factory-preset status.) • If you cannot turn off the PLAY button, disconnect the AC adaptor or remove the batteries once.
	No sound is produced when the keys are pressed.	<ul style="list-style-type: none"> • The MAIN VOLUME is at the minimum setting. Adjust the volume with the MAIN VOLUME control. • The volumes for the selected parts are set to the minimum levels. Use the balance buttons to set the volumes of the relevant parts to appropriate levels. (Refer to page XX.) • The local control for a part performed on the keyboard is set to OFF. Set the LOCAL CONTROL to ON. (Refer to page XX.)
	When using batteries, the volume level becomes low or the sound is distorted.	<ul style="list-style-type: none"> • The batteries are low. Replace the batteries as soon as possible.
	Only percussive instrument sounds are produced when the keyboard is played.	<ul style="list-style-type: none"> • A KEYBOARD PERC sound (numbers 95-99) has been selected. On the SOUND SELECT number pad, select a different sound number.
	Some sounds cannot be selected.	<ul style="list-style-type: none"> • When the GENERAL MIDI status is set to on, the sounds which can be selected and operations which can be executed are limited. Turn the GENERAL MIDI status off to return the instrument to its normal operation. (Refer to page XX.)
Rhythm	The rhythm does not start.	<ul style="list-style-type: none"> • The DRUMS volume is set to the minimum level. Use the BALANCE buttons to set the DRUMS volume to an appropriate level. • In the RHYTHM SELECT section, a rhythm in MEMORY with no stored pattern was selected. Select a different rhythm. • The MIDI CLOCK is set to MIDI. Set the MIDI CLOCK to INT. (Refer to page XX.) • The rhythm does not work when the GENERAL MIDI mode is set to ON. Turn the GENERAL MIDI status off to return the instrument to its normal operation. (Refer to page XX.)
AUTO PLAY CHORD	No sound is produced for the automatic accompaniment.	<ul style="list-style-type: none"> • In the RHYTHM SELECT section, a rhythm in MEMORY with no stored pattern was selected. Select a different rhythm.
	No sound is produced for the automatic accompaniment, or only the sounds of some parts are produced.	<ul style="list-style-type: none"> • An ACCOMP part does not sound if its corresponding volume is set to the minimum level. Use the respective BALANCE buttons to set the ACCOMP 1, 2 and 3 volumes to appropriate levels.

Phenomenon		Remedy
SEQUENCER	Storage is not possible.	<ul style="list-style-type: none"> The remaining memory capacity of the SEQUENCER is 0. Follow the SEQUENCER CLEAR procedure to erase the memory. (Refer to page XX.)
	Multi-track storage is not possible.	<ul style="list-style-type: none"> The playback track has been selected, but the START/STOP button has not been pressed. A flashing track indicator shows the track which is ready for recording, and a lit track indicator shows a track which is ready for playback. To record one track while listening to another (playback) track, press the START/STOP button to begin playback. (Refer to page XX.)
COMPOSER	Storage is not possible.	<ul style="list-style-type: none"> The remaining memory capacity of the COMPOSER is 0.
	Setting the number of measures is not possible.	<ul style="list-style-type: none"> If you wish to change the measure data, first follow the procedure to clear the memory. (Refer to page XX.)
	The playback timing of the rhythm pattern is different from the timing with which it was recorded.	<ul style="list-style-type: none"> The quantize function was on when the pattern was recorded and the timing was automatically corrected. Set the quantize level to a smaller note unit or to OFF when recording. (Refer to page XX.)
Other	Noise from a radio or TV can be heard.	<ul style="list-style-type: none"> This sometimes occurs when electrical equipment such as a radio or TV is used near the instrument. Try moving such electrical equipment further away from the instrument. The sound may be coming from a nearby broadcast station or amateur radio station. If the sound is bothersome, consult your dealer or servicenter.
	The cabinet becomes warm during use.	<ul style="list-style-type: none"> This instrument has a built-in amplifier section that heats the cabinet to some degree. This is not an indication of trouble.

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Specifications

		SX-KN701/501
KEYBOARD		61 KEYS (WITH INITIAL TOUCH)
SOUND GENERATOR		PCM
MAXIMUM NUMBER OF NOTES PRODUCED SIMULTANEOUSLY		32 NOTES
SOUNDS		200 SOUNDS
EFFECTS		DIGITAL EFFECT, SUSTAIN, DIGITAL REVERB, PITCH BEND
PART SELECT		RIGHT 1, RIGHT 2, LEFT
TRANPOSE		G-C-F ¹
RHYTHM		100 RHYTHMS
CONTROLS		MAIN VOLUME, OTHER BALANCE, CONDUCTOR, START/STOP, INTRO & ENDING, FILL IN 1, FILL IN 2, VARIATION, COUNT INTRO, SYNCHRO & BREAK, TEMPO, SPLIT POINT, MUTE
MANUAL PERCUSSION		1, 2, 3
AUTO PLAY CHORD		ONE FINGER, FINGERED, PIANIST, MEMORY, ON BASS, MUSIC STYLE ARRANGER, SOUND ARRANGER
ONE TOUCH PLAY		○
TECHNI-CHORD		○
PANEL MEMORY		2 BANKS × 4, SET
SEQUENCER		5 TRACKS STORAGE CAPACITY: APPROX. 2800 NOTES INPUT MODES: EASY RECORD, REALTIME RECORD, STEP RECORD (CHORD) FUNCTION: SEQUENCER CLEAR
COMPOSER		5 PARTS: BASS, ACCOMP 1, ACCOMP 2, ACCOMP 3, DRUMS PATTERNS: NORMAL 1, NORMAL 2, NORMAL 3, INTRO, FILL IN 1, FILL IN 2, ENDING STORAGE CAPACITY: APPROX. 2700 NOTES INPUT MODES: REALTIME RECORD FUNCTIONS: CLEAR, PERCUSSION ERASE, MODE SELECT, BEND RANGE
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	MIDI	BASIC CHANNEL, OTHER SETTINGS, PRESETS, GM MODE SET, BULK DUMP
DISPLAY		LED (4 DIGITS), EXIT
DEMO		○
TERMINALS		DC IN 12 V, PHONES/LINE OUT, FOOT SW, MIDI (IN, OUT)
OUTPUT		3 W × 2 (WITH BATTERIES), 8 W × 2 (WITH SY-AD6/AD6B/AD7 AC ADAPTOR)
SPEAKERS		12 cm × 2
POWER REQUIREMENT		BATTERIES: DC 9V (USING R20/LR20 ("D" SIZE, UM-1) BATTERIES × 6)
		AC: WITH SY-AD6/AD7 AC ADAPTOR AC 120/220/230/240 V 50/60Hz AC 120 V 60Hz (NORTH AMERICA AND MEXICO)
		AC: WITH SY-AD6/AD6B/AD7 AC ADAPTOR AC 230 V 50/60Hz (NEW ZEALAND AND EUROPE EXCEPT FOR UNITED KINGDOM)
DIMENSIONS (W × H × D)		cm × cm × cm (" × " × ")*
NET WEIGHT		7.1 kg (15.7 lbs.)*
ACCESSORIES		MUSIC STAND, 6R20 ("D" SIZE UM-1) BATTERIES or AC ADAPTOR (SY-AD6/AD6B/AD7)

* Without MUSIC STAND, BATTERIES

Design and specifications are subject to change without notice.