

Technics



SX-PX5/SX-PX7/SX-PX9

PCM

DIGITAL PIANO

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 9.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

"This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate the electronic musical instrument with respect to the receiver
- move the electronic musical instrument away from the receiver
- plug the electronic musical instrument into a different outlet so that electronic musical instrument and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Stock No. 004-000-00345-4."

The model number of this product is found on the rear of the unit. The model number and serial number are found underneath the keyboard.

Please note the model and serial number in the space provided below and retain this booklet as a permanent record of your purchase to aid identification in the event of theft.

MODEL NUMBER _____

SERIAL NUMBER _____

Technics

OWNER'S MANUAL

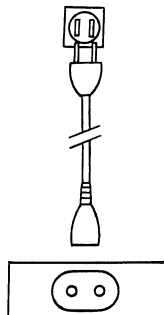
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Part I Introduction

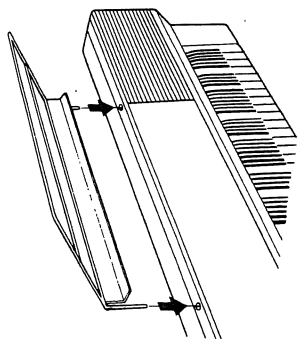
① Getting Ready to Play

- Plug in the power cord.



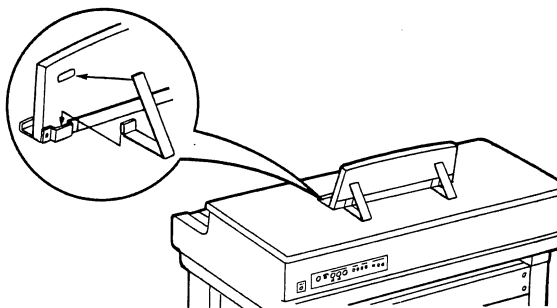
(PX5/PX7)

- Secure the music rack in place.



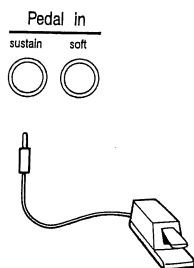
(PX9)

- Place the music stand on top of the piano.



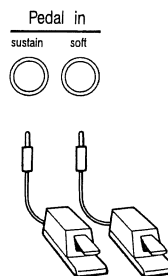
(PX5)

- Connect the accessory pedal to the pedal in sustain terminal on the rear of the piano.



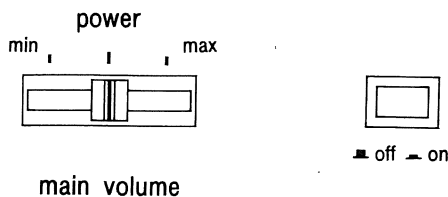
(PX7/PX9)

- Connect the accessory pedals to the pedal in sustain and soft terminals on the rear of the piano.



■ Power/volume

- Pressing the **power** switch turns the digital piano on.
- The **main volume** control adjusts the loudness of the digital piano. No sound will be heard when the slide is on **min**.



Note (PX7/PX9 only):

The **master** button of the **MIDI conductor** must be turned on. If turned off, no sound can be heard from the piano.

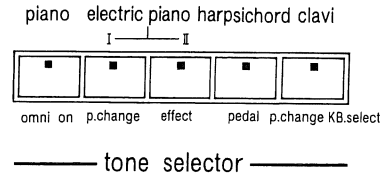
Part II Creation of tones and effects

2 Tone Selector

Five different tones (**piano**, **electric piano I** and **II**, **harpischord** and **clavi**) produced by a PCM digital sound source can be selected.

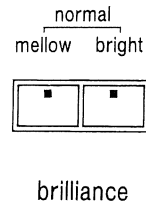
When using voices other than the **harpischord**, the sound increases in volume in proportion to the speed with which the keys are pressed.

Sixteen notes on the PX9 and PX7 and 8 notes on the PX5 can be produced at one time.



3 Brilliance (PX7/PX9 only)

The brilliance of the tone is increased by pressing the **bright** button. The tone is softened by pressing the **mellow** button. If both buttons are simultaneously pressed, the brilliance returns to normal.



4 Sustain/Soft Pedal

■ Sustain

(Connect the accessory pedal to the **pedal in sustain** terminal.)

When a key is released while this pedal is depressed, the sound is sustained so that it lingers and slowly fades out.

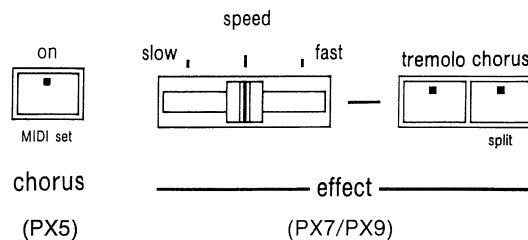
- The tones of the far right keys are automatically sustained just like in an acoustic piano.

■ Soft

When the accessory pedal or the optional SZ-P2 pedal is connected to the **pedal in soft** terminal and the pedal is depressed, the sound is softer and the volume is lower.

5 Effect

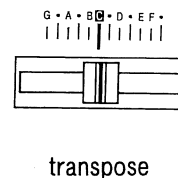
A **tremolo** effect (PX7/PX9 only) and a **chorus** effect can be applied to give the sound greater depth. The **speed** of the tremolo effect can be adjusted with the slide controls.



6 Transpose

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 Transpose feature.

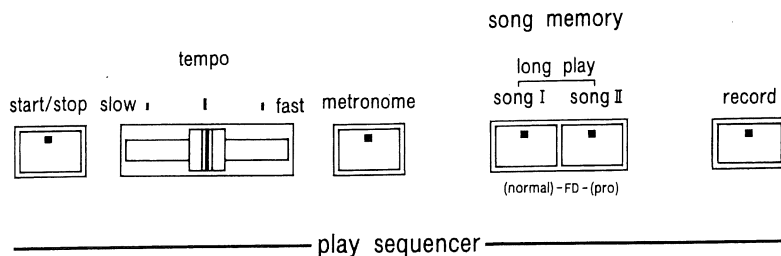
Adjust the key by moving the slide control from the normal key of C.



- When transposed to a lower key, the lowest keys equal to the number of notes transposed do not emit any sounds (PX7/PX9 only).

Part III Recording Performances

7 Play Sequencer



This feature lets you store performances, effect settings, etc., and play them back automatically.

Record: Press this button to record.

Song I, II: Store tunes in these buttons. Two tunes can be stored, but by pressing both buttons at the same time, one tune lasting twice as long can be stored.

Metronome: Use to play in time with the sound of a metronome.

Tempo: Use this slide control to adjust the tempo of the stored tune or metronome.

Start/stop: Use to start and stop the stored tune or metronome.

To store a performance in song memory:

1. Set the voice and effect.
2. Press the **record** button so that its indicator flashes.
3. Press the desired **song memory** button so that its indicator flashes slowly.

- By pressing both the **song I** and **song II** buttons at this time, a tune twice as long can be stored (double-length mode).

4. Begin playing.

- Begin recording by pressing a key or the **start/stop** button.
- If you need the metronome, press the **metronome** button. The metronome sound will not be recorded.
- Changes in the voice, effect and pedals during play and key touch can also be stored.
- Polyphonic sounds can also be stored.
- The tempo can be freely adjusted when a tune is played back, so you can play slowly when recording a tune.

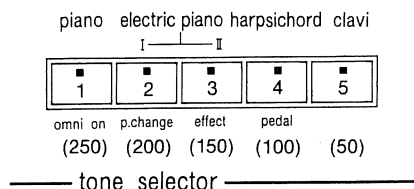
5. When finished playing, press the **record** button to turn it off.

- About 1,350 notes can be stored in either the **song I** or **song II** button.

- Recording voice, effect and pedal changes will also reduce the number of notes that can be stored.

- As the capacity decreases, the **tone selector** buttons flash in the following order. The values in parentheses () indicate the approximate number of notes that can be recorded.

When the capacity is exceeded, all of the **tone selector** buttons will flash.



- When recording in the double-length mode, if the music played does not exceed 1,350 notes, the mode changes to normal and it is recorded in **song I**, leaving **song II** free for additional recording.

- When a new tune is stored in a button, any tune previously stored in the button is erased.

To Play Back a Stored Performance:

1. Press the **song memory** button in which the desired performance is stored.
 - When recorded in the double-length mode, the indicators of both buttons will light when only one of the buttons is pressed.
2. Press the **start/stop** button to begin automatic playback of the stored tune.
 - When two parts are played back simultaneously, the voice, effect and pedal changes recorded in both buttons are recalled.
 - When playing back again, first turn the **song** button off, then turn it on and start.
 - If a fast tune, which was recorded with the tempo slide control on slow, is played back with the tempo slide control on fast, correct playback may not be possible.

Multiplex Recording

For example, you can play back a stored tune in **song I** while storing other parts in **song II**.

1. Store the performance in **song I**. (Leave the **record** button on.)
 - If the **record** button was turned off, make sure that the **song I** button is on, then press the **record** button so its indicator flashes. Then, proceed with step 2.
2. Press **song II**. Its indicator will flash slowly. Confirm that the **song I** indicator is on.
 3. Press the **start/stop** button or a key to begin automatic playback of the tune stored in **song I** and play the part to be stored in **song II** in time with this.
 4. When finished playing, press the **record** button to turn it off.
 - To automatically play back the stored tune, turn on both the **song I** and **song II** buttons. Then press the **start/stop** button and both parts will be played back.

Changing Voice and Effect Settings

Use the following procedure to change the initial settings when playing back a previously stored tune.

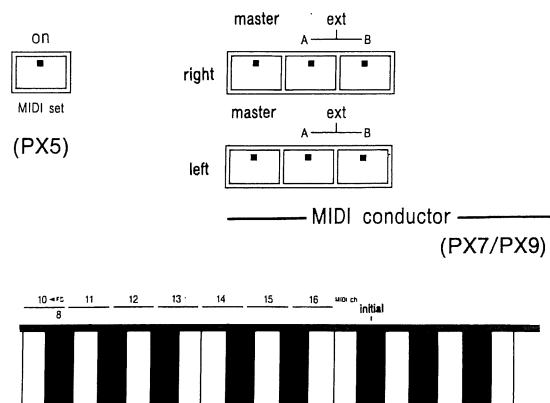
1. Set the voice(s) and effect(s).
2. Press the **record** button. (Its indicator will flash.)
 3. Press the **song** button you want to change.
 - Press the **song I** button when playing the double-length mode.
 - Do not play the keyboard or press the **start/stop** button at this time.
 4. Press the **record** button to stop the procedure.

To Play Back the Manufacturer's Preset Song

Chopin's "Prelude No. 7" has been stored in the memory of this piano, and can be played back automatically.

(Song I...Part for right hand)
(Song II...Part for left hand)

1. While holding down the **record** button, first press the **MIDI set** button (PX5) or one of the **MIDI conductor** buttons (PX7/PX9) and then press the **initial** key.
 - When this is done, tunes stored in the **song I** and **song II** buttons are erased. Also, the voice, effect and MIDI settings are reset to the standard setting.
2. Press the **start/stop** button.



If the buttons, keyboards, etc. malfunction...

1. While holding down the **record** button, first press the **MIDI set** button (PX5) or one of the **MIDI conductor** buttons (PX7/PX9) and then press the **initial** key.
2. If the buttons, keyboards, etc. do not return to normal, turn the **power** switch off once, then on again.

⑧ Digital Disk Recorder (Optional)

By using the optional SY-FD5 Digital Disk Recorder, you can store a number of short tunes or one long tune on a digital memory disk.

- Please consult the Digital Disk Recorder Operating Instructions for further information. (SY-FD1 users should follow the same instructions.)

Note:

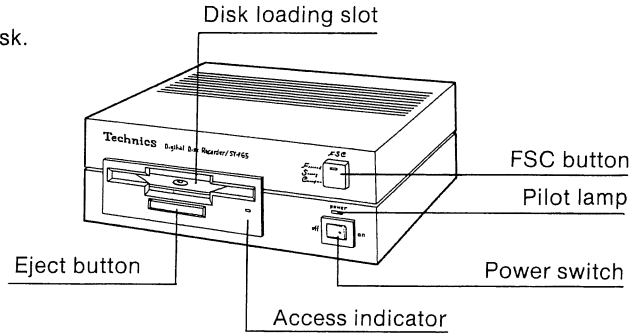
Do not place the Digital Disk Recorder near speakers or anywhere there is a strong magnetic field. Doing so may result in improper storage or playback or erasure of the stored contents.

- The following contents can be stored in the digital memory disk.

- Contents stored in the **play sequencer**

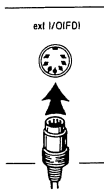
- Sounds played (key touch included)
- Changes in voice
- Changes in effect

- Contents stored in the **MIDI full set** (see page 18).



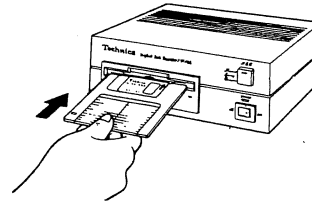
Connection to the Digital Piano

1. Attach the connector of the digital disk recorder to the **ext I/O (FD)** terminal of the piano.



2. Turn on the digital disk recorder.

3. Turn on the piano.
4. Insert the digital memory disk into the drive with the label side facing up and the write protect window in the lower left.



- To remove the disk, press the eject button firmly.

Modes

■ Normal mode

The 10 combinations of **song I**, **song II** and **MIDI full set** can be stored.

■ Professional mode

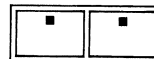
Two songs, each 10 times longer than a song in the normal mode, and the **MIDI full set** can be stored.

■ Changing the mode

1. Insert a digital memory disk.
2. Press the **record** button of the piano. (Its indicator will flash.)
3. Press the **FSC** button. (Its indicator will flash slowly.)
 - Either the normal or professional mode indicator will start to flash, indicating which mode is set.

song memory

long play
song I song II



(normal) - FD - (pro)

4. Press the **initial** key of the piano to change the mode.
5. After setting the desired mode, press the **record** button again to turn it off.

Storing Song Memory to Disk

- Before using a disk, check the following:
 - Be sure the write protect window in the lower left corner of the disk is closed.
 - Check the storage mode (normal or professional) of the disk you are using. (See the section on "Changing the mode.")
- Set the tones and effects you want to use in the recording.
- Recording the performance:

To record, follow the directions in the Play Sequencer section. The professional mode, available only when the disk drive is connected, allows you to store a performance about 10 times longer than in the normal mode; otherwise song memory operation is exactly the same in both modes.

- To store a performance on the disk:
 - Press the **record** button (its indicator will flash).
 - Press the **FSC** button (its indicator will flash slowly).
 - Select a storage position by pressing one of the white number keys.
 - In the normal mode, storage is possible in positions 1 through 10.
 - In the professional mode, storage is possible only in position 1.

When storage is complete, the **record** button indicator will flash rapidly and the access indicator on the disk drive will go out. In the normal mode, you can store tunes in any order you like by repeating the above procedure. The previously stored contents of a disk location will be erased by this procedure.

NOTE: To prevent erasure of stored contents, open the write protect window on the disk.

Lengths of tunes that can be stored in the play sequencer

	Normal mode	Professional mode
Song I	About 1,350 tones	About 13,500 tones
Song II	About 1,350 tones	About 13,500 tones
	*About 2,700 tones	*About 27,000 tones

(*double-length mode)

- You can confirm the remaining capacity by referring to which **tone selector** indicator is flashing.

Error Indication

Tunes will not be properly stored or played back if 4 buttons (excluding the **record button**) of the **play sequencer** flash while storing or playing back.

Confirm that all operations, such as inserting the disk correctly, have been completed before repeating the procedure.

Automatic Playback

- Insert the disk which contains your tune.
- Press the **FSC** button to turn it on.
- Press the number key (from 1 to 10) for the tune you wish to listen to.
 - In the normal mode, select a number from 1 to 10.
 - Note: The tune or tunes stored in the **song I** and **song II** modes will thereby be erased.
 - In the professional mode, press key 1.
- Wait a few seconds until the **record** button flashes rapidly and the access indicator goes out.
- Press only the **song** button which contains your tune.
- Press the **start/stop** button to listen to the stored tune.

Continuous Play

<Procedure>

- While holding down the **FSC** button, press the **initial** key. (This activates the continuous mode.)
- Press a number key. Continuous playback starts with the tune of the selected number.

Example number 8: 8 → 9 → 10 → 1 → 2 → ...

 - If you stopped playback but want to start again, press the **FSC** button to turn it on, and then press a number key.
 - If the **FSC** button is pressed or the **song** buttons are turned off during continuous play, playback skips to the next tune (skip function).
 - If the disk is removed or the power is turned off, the continuous mode is cancelled.

Initializing a Disk

Commercially available floppy disks (3.5-inch micro floppy disks; single sided, double density, double track), other than the Technics SY-D1, MUST first be initialized using the following procedure before any recording or playback can take place.

- Load a disk in place (label side up, write protect window closed).
- Press and hold the **record** button.
- Press the **FSC** button.
- Press the **initial** key on the keyboard.

The actual initializing process will take about 40 seconds, after which the access light will go out. (DO NOT REMOVE THE DISK BEFORE THE DISK DRIVE LIGHT GOES OUT. The result will be incomplete formatting and unreliable record/playback performance.)

The memory disk is now set for operation in the normal mode. (See the section on "Changing the mode" to switch to the professional mode.)

Technics SY-D1 disks are initialized at the factory and do not require this procedure for use. However, if they are erased by accidental exposure to a magnetic field, this process will restore their operation.

The initialization process erases any previously recorded information.

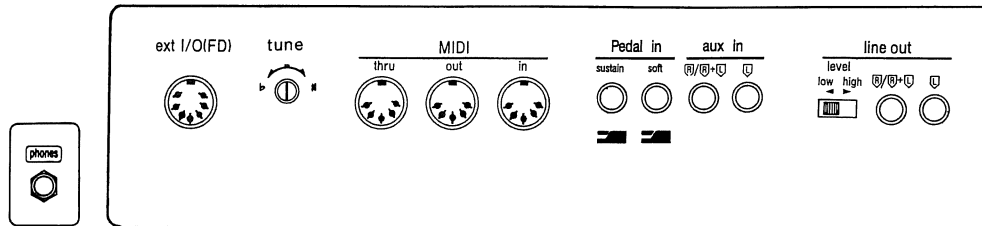
Note:

When the professional mode memory disk is inserted, storage and playback cannot be done using the internal memory of the piano. When using the internal memory of the piano, be sure to remove the professional mode memory disk.

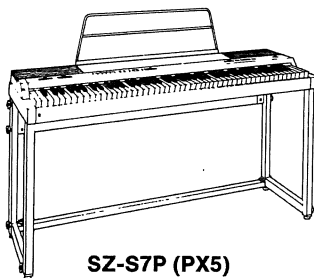
9 Options and Connections

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

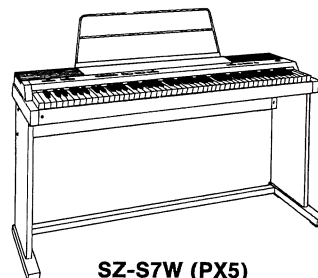
Also indicated are the many possible connections to the rear accessory panel.



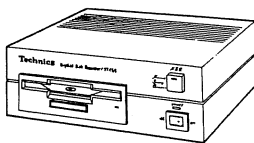
(PX7/PX9)



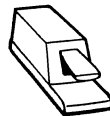
SZ-S7P (PX5)
SZ-S8P (PX7)
Stand (optional)



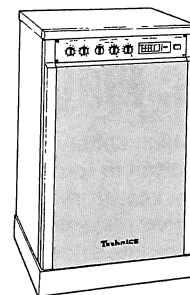
SZ-S7W (PX5)
SZ-S8W (PX7)
Stand (optional)



SY-FD5
Digital Disk Recorder
(optional)



SZ-P2 (PX5)
Pedal
(optional)



SY-T80
Tone Cabinet
(optional)

Ext. I/O (FD)

An optional digital disk recorder (SY-FD5) may be connected to this terminal for the storage of longer music performances or groupings of songs.

Tune

During an ensemble performance with other instruments, fine adjustments of pitch can be made using this knob.

Pedal in

Sustain

The accessory pedal allows you to turn sustain on and off.

Soft

The accessory pedal (PX7/PX9) or optional SZ-P2 pedal (PX5) can be used as a soft pedal.

Aux in

Other instruments such as a drum percussion unit can be connected to the piano so that the sound is output from the piano. To receive monaural sound, connect instruments to the R/R+L terminal.

Line out

By plugging into the Technics Keyboard Amp or a high-power amplifier, the sound can be reproduced at high volume. (Use the R/R+L terminal when outputting monaural sound.)

Level (high/low) allows you to choose a suitable output level for your amp.

Phones

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

⑩ 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.

- Because the power source is located inside the unit, it is normal for the cabinet to become warm.

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.

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

MAINTENANCE

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

- Be sure to switch the instrument off after use, and do not switch the instrument on and off in quick succession, as this places an undue load on the electronic components.

- To keep the luster of the keys 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.

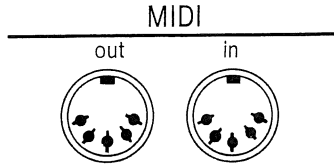
- A wax-based polish may be used on the cabinet, although you will find that rubbing with a soft cloth will suffice.

Part IV MIDI (PX5)

MIDI Terminals

MIDI (Musical Instrument Digital Interface) is a standard specifying the hardware and basic data format for communication between equipment such as synthesizers, drum machines, sequencers and computers.

Technics Digital Pianos are capable of data transmission and reception with equipment provided with a MIDI standard interface.



For these connections, use a standard MIDI cable (5-pin DIN male plug, each end on a cable less than 15 meters [50 feet] long).

- Do not use DIN to RCA adaptor cables. These cables could cause interference and damage.

In: The terminal that receives messages from the external instrument.

Out: The terminal that transmits messages from the digital piano to the external instrument.

MIDI Mode Selection

When the piano is initialized the MIDI functions are set as follows:

Basic Channel	
Part	#
PIANO**	1
SONG I	1
SONG II	1

MODE SETTING	
FUNCTION	STATUS
OMNI**	ON
P. CHANGE*	ON
EFFECT*	ON
PEDAL*	ON

* Whether or not the data for each of these items is transmitted or received can be set. When the keyboard is initialized these data are set to be transmitted or received.

When the piano is initialized the piano channel is set to 1 and the **omni mode is ON. The piano will then receive note messages from all the MIDI basic channels. When the **omni mode** is set to OFF, the basic channels on the transmitting side and the receiving side must match before any MIDI data can be communicated.

Standard setting (initialization)

By using this procedure, tones and effects and MIDI settings can be reset to their initial condition.

1. Press the **record** button.
2. Press the **MIDI set** button.
3. Press the **initial** key (black) on the keyboard.

In this operation, the contents of the **play sequencer** do not change.

MIDI Mode Setting

1. Press the **record** button. (Its indicator will flash.)
2. Press the **MIDI set** button. (Its indicator will flash slowly.)
3. Select the necessary functions.

■ Omni mode

To turn the omni mode on, press the **omni on** button. Press it again to turn the omni mode off.

piano

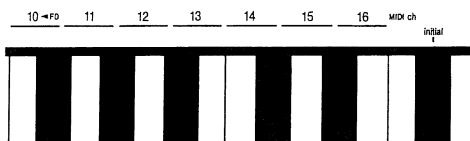
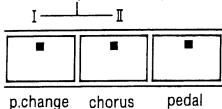


omni on

■ Tone (program change), effect and pedal message

If the LED on these buttons are lighted then the data is set to be transmitted or received. To cancel these messages, press the button to turn off the LED.

electric piano harpsichord



■ Basic channel assignment

Press one of the white keys (numbered 1 to 16) corresponding to the desired basic channel number. With the **song I** button depressed, press the corresponding white key to make a **song I** selection. Make **song II** selection in the same manner using the **song II** button.

- The **record** button indicator will start to flash quickly, indicating that the basic channel has been assigned.

■ The following types of message can be received.

Connect the **out** terminal of the external instrument with the **in** terminal of the piano.

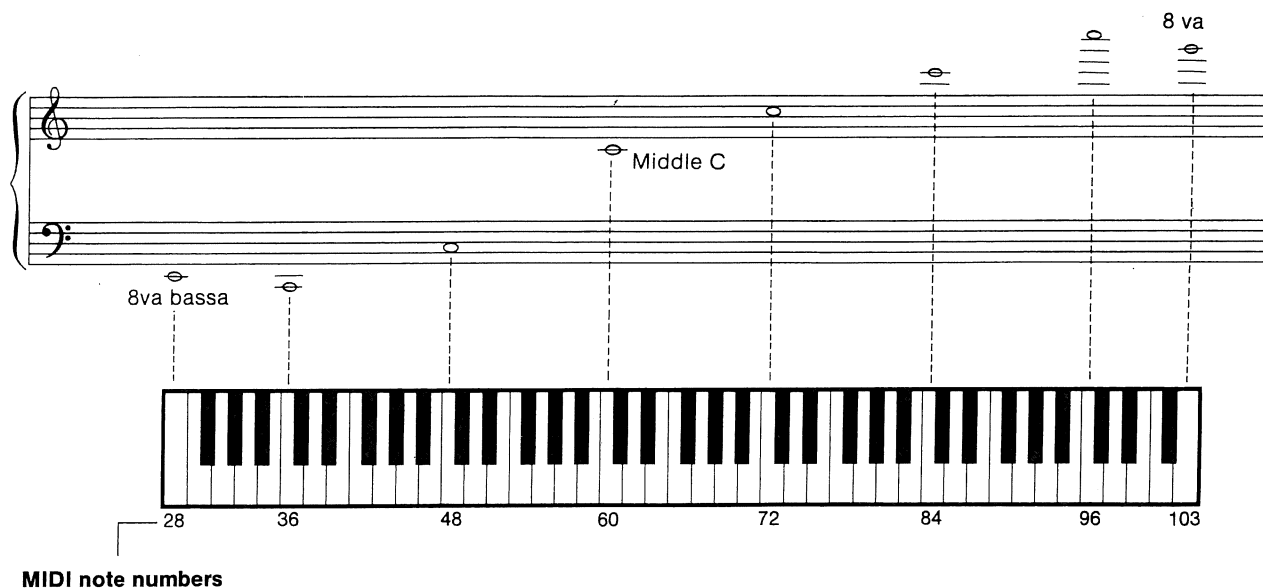
- **Keyboard (note) on/off message from the external instrument**
When playing the external instrument the sound is produced by the piano.
- **Tone (program change) message**
The tones of the piano can be selected by operating the external instrument.
- **Effect and pedal message**
The chorus effect and pedals of the piano can be controlled by operating the external instrument.
- **Sequencer message**
The **play sequencer** can record note on/off messages received on the piano's basic channel.

■ The following types of message can be sent.

Connect the **in** terminal of the external instrument with the **out** terminal of the piano.

- **Keyboard (note) on/off message**
When playing the piano, the sound can be produced from the external instrument.
- **Tone (program change) message**
The voices of the external instrument can be selected by operating the piano.
- **Effect and pedal message**
The effects and pedals of the external instrument can be controlled by operating the piano.
- **Sequencer message**
The external instrument can be played by using the **play sequencer** of the piano.

Relationship between the keyboard, ranges and MIDI note numbers



Setting the play sequencer playback mode

The **play sequencer** of a Technics Digital Piano is capable of two modes of playback operation, allowing you to select whether a song memory will play the piano or not.

To set this function:

1. Press and hold the **record** button (its indicator will flash).
 2. Press the **MIDI set** button (the indicator will flash slowly).
 3. To select the mode for each of the song memories, press one of the two keys at the right end of the keyboard. Each time one of these keys is pressed, the corresponding **song memory** indicator will be turned on or off.
 - The highest F key (the second key from the right) selects the mode for **song I**.
 - The highest G key (the rightmost key) selects the mode for **song II**.
 - The **song memory** button LED indicates the selected function: when this LED is on, the **song memory** will play the piano; when it is off, it will not play the piano.
 4. When the desired modes have been set for both song memories, release the **record** button.
 5. Press the **record** button to turn it off.
- The **play sequencer** will always play instruments connected on the MIDI bus that have been assigned to its basic channel.
 - When the power to the instrument is first turned on, the **play sequencer** will operate in the "indicator on" mode.

MIDI Implementation Chart

SX-PX5

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default	1 ~ 16	1 ~ 16	memorized
	Changed	1 ~ 16	1 ~ 16	
Mode	Default	3	1, 3	memorized
	Messages Altered	×	×	
Note Number	True voice	1 ~ 126	15 ~ 124 21 ~ 119	Changes depending on the position of the transpose slide control.
Velocity	Note ON Note OFF	○ × (9nH: V=0)		
After Touch	Key's Ch's	×		
Pitch Bender		×		
Control Change	64	*OX	*OX	sustain pedal soft pedal chorus
	67	*OX	*OX	
	93	*OX	*OX	
Prog Change	True #	*○ (0 ~ 4) ×	*○ (0 ~ 4) × 0 ~ 4	
System Exclusive		×	×	
System Common	Song Pos	×	×	
	Song Sel	○	○	
	Tune	×	×	
System Real Time	Clock Commands	○ ○	×	start/stop
Aux Messages	Local ON/OFF	×	×	
	All Notes OFF	○	○	
	Active Sense	○	○	
	Reset	×	×	
Notes		*OX..... Whether or not the data for each of these items is transmitted can be set.		

Mode 1: OMNI ON, POLY **Mode 2:** OMNI ON, MONO ○ : Yes
Mode 3: OMNI OFF, POLY **Mode 4:** OMNI OFF, MONO × : NO

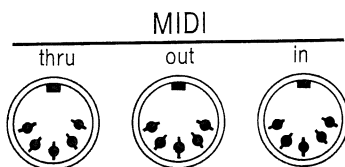
• This product adheres to MIDI specifications as published by the Japan MIDI Association.

Part V MIDI (PX7/PX9)

MIDI Terminals

MIDI (Musical Instrument Digital Interface) is a standard specifying the hardware and basic data format for communication between equipment such as synthesizers, drum machines, sequencers and computers.

Technics Digital Pianos are capable of data transmission and reception with equipment provided with a MIDI standard interface.



For these connections, use a standard MIDI cable (5-pin DIN male plug, each end on a cable less than 15 meters [50 feet] long).

- Do not use DIN to RCA adaptor cables. These cables could cause interference and damage.

In: The terminal that receives messages from the external instrument.

Out: The terminal that transmits messages from the digital piano to the external instrument.

Thru: The terminal that transfers messages from the In terminal directly to other instruments.

MIDI Mode Selection

When the piano is initialized the MIDI functions are set as follows:

Basic Channel	
Part	#
MASTER**	1
EXT A	1
EXT B	2
SONG I	1
SONG II	1

MODE SETTING	
FUNCTION	STATUS
OMNI**	ON
P. CHANGE*	ON
EFFECT*	ON
PEDAL*	ON
P. CHANGE KB SELECT*	OFF
BANK	1
SPLIT	MIDDLE C.

* Whether or not the data for each of these items is transmitted or received can be set. When the keyboard is initialized these data are set to be transmitted or received.

When the piano is initialized the **master channel is set to 1 and the **omni mode** is ON. The piano will then receive note messages from all the MIDI basic channels. When the **omni mode** is set to OFF, the basic channels on the transmitting side and the receiving side must match before any MIDI data can be communicated.

Standard setting (initialization)

By using this procedure, tones and effects and MIDI settings can be reset to their initial condition.

1. Press the **record** button.
2. Press one of the **MIDI conductor** buttons.
3. Press the **initial** key (black) on the keyboard.

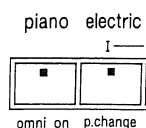
In this operation, the contents of the **play sequencer** do not change.

MIDI Mode Setting

1. Press the **record** button. (Its indicator will flash.)
2. Press one of the **MIDI conductor** buttons. (Its indicator will flash slowly.)
3. Select the necessary functions.

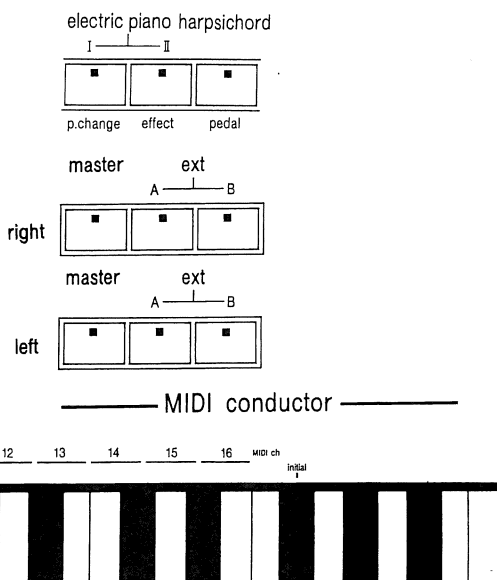
■ Omni mode

To turn the omni mode on, press the **omni on** button. Press it again to turn the omni mode off.



■ Tone (program change) effect and pedal messages

If the LED on these buttons are lighted then the data is set to be transmitted or received. To cancel these messages, press the button to turn off the LED.



■ Basic channel assignment

The basic channels for the **master**, the external instrument **A** and **B** of the **MIDI conductor**, and **song I** and **song II** of the **play sequencer** are set by holding down the appropriate button and pressing the white key (numbered 1 to 16) corresponding to the basic channel number you want to assign.

The indicator of the **record** button will flash quickly to indicate that the basic channel has been assigned.

This procedure can be repeated to assign the basic channels for the other instrument parts.

4. Press the **record** button to stop the procedure.

■ The following types of message can be received.

Connect the **out** terminal of the external instrument with the **in** terminal of the piano.

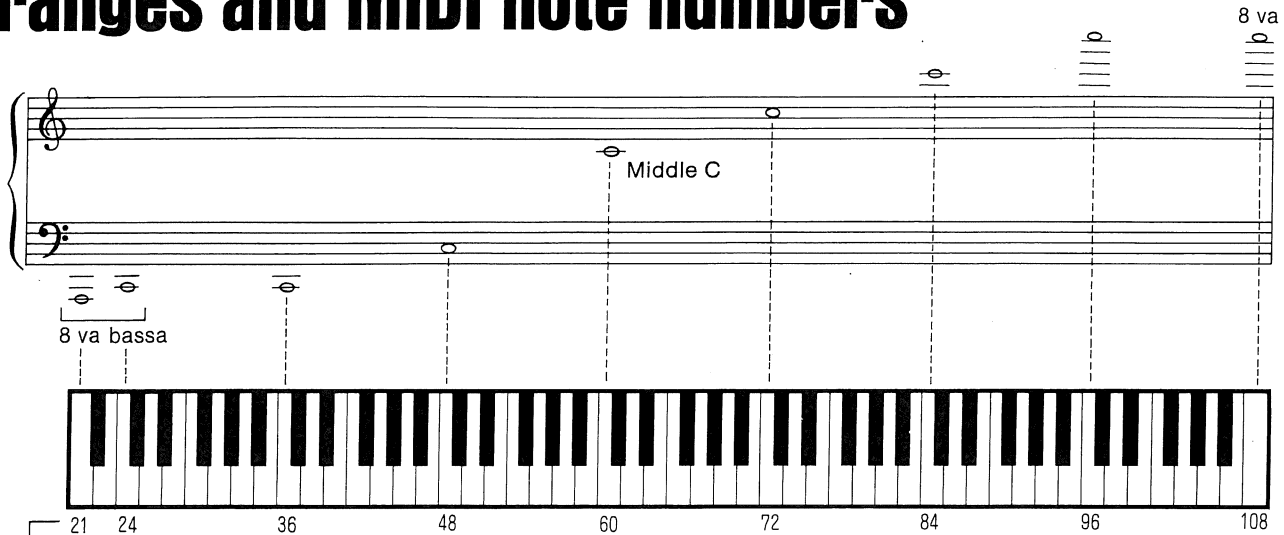
- **Keyboard (note) on/off message from the external instrument**
When playing the external instrument the sound is produced by the piano.
- **Tone (program change) message**
The tones of the piano can be selected by operating the external instrument.
- **Effect and pedal message**
The effects and pedals of the piano can be controlled by operating the external instrument.
- **Sequencer message**
The **play sequencer** can record note on/off messages received on the piano's master basic channel.

■ The following types of message can be sent.

Connect the **in** terminal of the external instrument with the **out** terminal of the piano.

- **Keyboard (note) on/off message**
When playing the piano, the sound can be produced from the external instrument.
- **Tone (program change) message**
The voices of the external instrument can be selected by operating the piano.
- **Effect and pedal message**
The effects and pedals of the external instrument can be controlled by operating the piano.
- **Sequencer message**
The external instrument can be played by using the **play sequencer** of the piano.

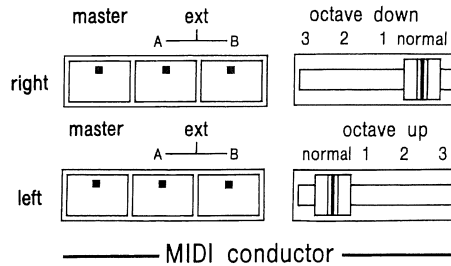
Relationship between the keyboard, ranges and MIDI note numbers



MIDI note numbers
(When the **octave down** and **octave up** switches are at their normal positions.)

MIDI Conductor

By using the **MIDI conductor**, two external instruments (A and B) can be played independently using the **right** and **left** parts of the piano keyboard split at any desired position.



master..... Press this button on to hear sound from the piano.

ext A and **ext B**..... Use these buttons to select the right or left instrument or both instruments.

- To select different instruments for the **right** and **left** parts of the piano, press the respective buttons simultaneously.
- When only the **right** or **left** button is pressed, the respective opposing button automatically comes on.

Octave down

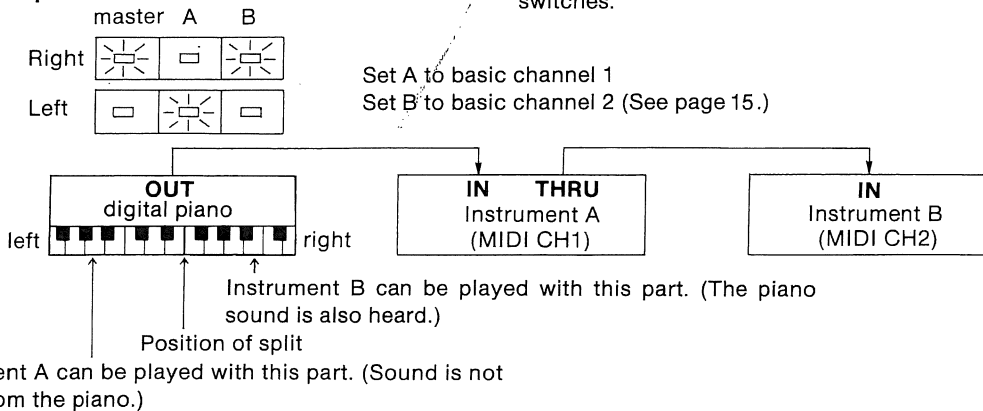
Using this slide switch, the instrument played with the **right** part of the keyboard can be lowered by one, two, or three octaves.

Octave up

Using this slide switch, the instrument played with the **left** part of the keyboard can be raised one, two, or three octaves.

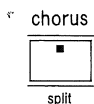
- The slide switches function only when the keyboard is split.
- The range of the piano itself is not affected by these slide switches.

<Example>



Setting the position of the split

1. Press the **record** button. (Its indicator will flash.)



2. Press the **split (chorus)** button. (Its indicator will flash slowly.)

3. Press the key where you desire the split. The high range including the pressed key will become the **right** part.

The indicator of the **record** button will flash quickly to indicate that the position of the split has been set.

Program change

The tones of the external instrument can be changed by sending program change message from the piano. To make a program change, the data formed by combining a bank and a number is sent.

Program change number table

NUMBER BANK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
3	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
4	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
5	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
6	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
7	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
8	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127

Sending Program Changes I. Using the tone selector buttons

The data marked with diagonal lines in the program change number table is sent using the **tone selector** buttons. The data sent is selected from among banks 1 to 8.

Selecting a bank

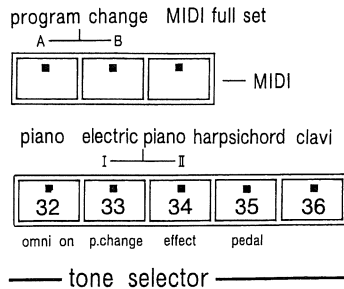
1. Press the **record** button. (Its indicator will flash.)
2. Press one of the buttons of the **MIDI conductor**. (Its indicator will flash slowly.)
3. While holding down the **program change** button (**A** or **B**), press the black key (numbered 1 to 8) which corresponds to the desired bank. The **record** button will flash quickly, indicating that the bank has been selected.

NOTE: Different bank numbers can be selected for each of the **program change** buttons using this procedure.

Sending the Message

While holding down a **program change** button (**A** or **B**), press the desired tone selector button.

Example:
When bank 3 is selected



NOTE: to send a program change message using the **tone selector** buttons, the **p. change** LED must have been turned on during the Midi mode setting procedure.

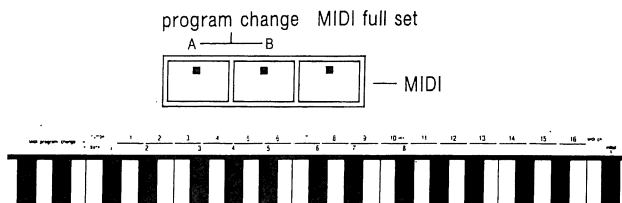
4. Press the **record** button to stop the procedure.

II. Using the keyboard

The keyboard can be used to send any program change data from 0 to 127. This message is formed by selecting a bank and number from the keyboard. See the program change number table to find the bank and number for the program change message you wish to send.

Sending the message

While holding down the **program change** button (**A** or **B**), press the black key corresponding to the bank, and then the white key corresponding to the number of the message you wish to send.



NOTE: To send a program change message using the keyboard, the **KB select** LED must have been turned on during the MIDI mode setting procedure.

MIDI full set

The MIDI functions of the piano can be set and program changes sent to an external instrument with a single touch of any of the **tone selector** buttons if this function is first used to preset the following messages.



Presetting the functions

1. Press the **record** button. (Its indicator will flash.)
2. Press the **MIDI full set** button. (Its indicator will flash slowly.)
3. Set the desired messages.

■ Program change

While holding down a **program change** button (**A** or **B**), input the desired bank and number using the keyboard.

- Do not use this procedure if you do not wish to send the program change for A or B or both when recalling the preset message.

NOTE: The **KB select** function must be turned on during the MIDI mode setting procedure to use this function.

■ Octave shift

Set the slide switches for **octave up** and **octave down** to the positions you wish to send.

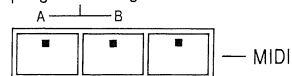
■ Basic channel

While holding down either the **right** or **left** button for the external instrument (**ext A** or **ext B**) of the **MIDI conductor**, press the white key (numbered 1 to 16) corresponding to the basic channel you wish to assign.

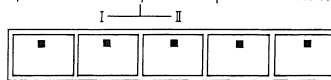
Perform the assignment in the same way for one or both of the external instruments.

- This procedure is not necessary if the basic channel already assigned is the desired channel.
- This method cannot be used to change the basic channels for **master** of **MIDI conductor**, **song I** and **song II** of the **play sequencer**.

program change MIDI full set

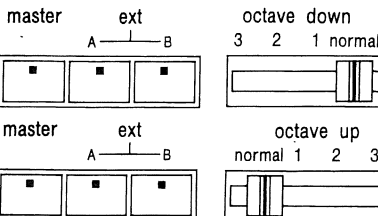


piano electric piano harpsichord clavi



omni on p.change effect pedal

tone selector



MIDI conductor

■ Position of split

While holding down the **split** button, press the key where you want to split the keyboard.

- This procedure is not necessary if the position of the split already set is the desired position.

■ MIDI conductor

Set the buttons you wish to send.

(See MIDI Conductor section, page 16.)

4. Press the desired **tone selector** button.

- Repeat the above procedure to set other combinations in the remaining **tone selector** buttons.

5. Press the **record** button to stop the procedure.

Recalling the preset message

While holding down the **MIDI full set** button, press the **tone selector** button (e.g., **harpsichord**) in which the data you want has been preset. The MIDI setting of the piano will be set according to this message and the program change will be sent to the external instrument.

- The program change is sent only when the **p. change** (**electric piano I**) button is on in the MIDI setting.

Setting the play sequencer playback mode

The **play sequencer** of a Technics Digital Piano is capable of two modes of playback operation, allowing you to select whether a song memory will play the piano or not.

To set this function:

1. Press and hold the **record** button (its indicator will flash).
 2. Press one of the **MIDI conductor** buttons (the indicators will flash slowly).
 3. To select the mode for each of the song memories, press one of the two keys at the right end of the keyboard. Each time one of these keys is pressed, the corresponding **song memory** indicator will be turned on or off.
 - The highest B key (the second key from the right) selects the mode for **song I**.
 - The highest C key (the rightmost key) selects the mode for **song II**.
 - The **song memory** button LED indicates the selected function: when this LED is on, the **song memory** will play the piano; when it is off, it will not play the piano.
 4. When the desired modes have been set for both song memories, release the **record** button.
 5. Press the **record** button to turn it off.
- The **play sequencer** will always play instruments connected on the MIDI bus that have been assigned to its basic channel.
 - When the power to the instrument is first turned on, the **play sequencer** will operate in the "indicator on" mode.

MIDI Implementation Chart

SX-PX7/SX-PX9

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default	1 ~ 16	1 ~ 16	memorized
	Changed	1 ~ 16	1 ~ 16	
Mode	Default	3	1, 3	memorized
	Messages Altered	×	×	
Note Number	True voice	1 ~ 126	15 ~ 124 21 ~ 119	
Velocity	Note ON Note OFF	○ × (9nH: V=0)		
After Touch	Key's	×		
	Ch's	×		
Pitch Bender		×		
Control Change	64	*○×	*○×	sustain pedal soft pedal tremolo chorus
	67	*○×	*○×	
	92	*○×	*○×	
	93	*○×	*○×	
Prog Change	True #	*○ (0 ~ 127) ×	*○ (0 ~ 4) × 0 ~ 4	
System Exclusive		×	×	
System Common	Song Pos	×	×	
	Song Sel	○	○	
	Tune	×	×	
System Real Time	Clock Commands	○ ○	× ×	start/stop
Aux Messages	Local ON/OFF	×	×	
	All Notes OFF	○	○	
	Active Sense	○	○	
	Reset	×	×	
Notes		<p>*○× Whether or not the data for each of these items is transmitted can be set.</p> <p>** Changes depending on the position of the octave up/down (transmitted) or transpose (recognized) slide control.</p>		

Mode 1: OMNI ON, POLY **Mode 2:** OMNI ON, MONO ○: Yes
Mode 3: OMNI OFF, POLY **Mode 4:** OMNI OFF, MONO ×: NO

- This product adheres to MIDI specifications as published by the Japan MIDI Association.

SPECIFICATIONS

	SX-PX5	SX-PX7	SX-PX9
keyboard	76 keys (8 notes polyphonic)	88 keys (16 notes polyphonic)	
play sequencer	start/stop, tempo, metronome, record, song memory (song I, II/long play)		
tone selector	piano, electric piano I, II, harpsichord, clavi		
brilliance	—	mellow, bright, normal	
effect	chorus	tremolo, speed, chorus	
transpose	control (G ~ C ~ F#)		
MIDI	MIDI set, omni on, p. change, chorus, pedal, MIDI terminal (in, out)	conductor right: master, ext A, B, octave down left: master, ext A, B, octave up program change A, B, MIDI full set, omni on, p. change, effect, pedal, p. change KB select, split, MIDI terminals (in, out, thru)	
others	power switch, main volume, ext I/O (FD) terminal, tune, pedal in jacks (sustain, soft), aux in jacks (R/R+L, L), line out jacks (R/R+L, L), line out level (low/high), headphone jack, initial key		
power requirement	68W		
	AC 120V 60 Hz		
cabinet W×H×D	118.6 cm × 13.2 cm × 44.0 cm (46-11/16"×5-3/16"×17-5/16")	134.7 cm × 13.2 cm × 44.0 cm (53-1/32"×5-3/16"×17-5/16")	137.2 cm × 22.7 cm × 51.3 cm (54-1/32"×8-15/16"×20-3/16")
net weight	27 kg (59.5 lbs.)	30 kg (66.1 lbs.)	44 kg (97.0 lbs.)
accessories	music rack, sustain pedal, AC cord, dust cover	music rack, sustain pedal, soft pedal, AC cord, dust cover*	

***Caution (PX9)**

Shrinkage may occur if the dust cover is washed, and dry cleaning is thus preferred.

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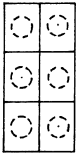
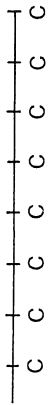
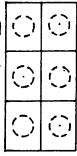
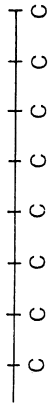
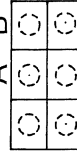
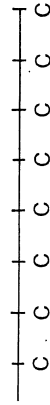
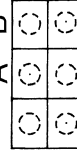
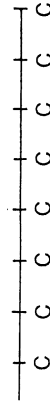
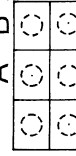
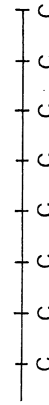
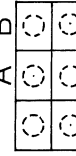
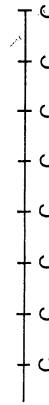
ENGLISH

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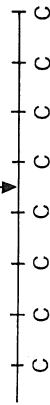
SQFGA20080
Se0386K0

MIDI full set record chart

FSC No. _____ model: _____ date _____

MIDI full set No.	A		B		MIDI conductor	octave shift	split point
	basic channel	prog. change	basic channel	prog. change			
		bank		No.			
	ch			ch	master A B  right left 3 2 1 n down 0 0 0 0 0 0 0 0 n 1 2 3 up		
	ch			ch	master A B  right left 3 2 1 n down 0 0 0 0 0 0 0 0 n 1 2 3 up		
	ch			ch	master A B  right left 3 2 1 n down 0 0 0 0 0 0 0 0 n 1 2 3 up		
	ch			ch	master A B  right left 3 2 1 n down 0 0 0 0 0 0 0 0 n 1 2 3 up		
	ch			ch	master A B  right left 3 2 1 n down 0 0 0 0 0 0 0 0 n 1 2 3 up		
	ch			ch	master A B  right left 3 2 1 n down 0 0 0 0 0 0 0 0 n 1 2 3 up		

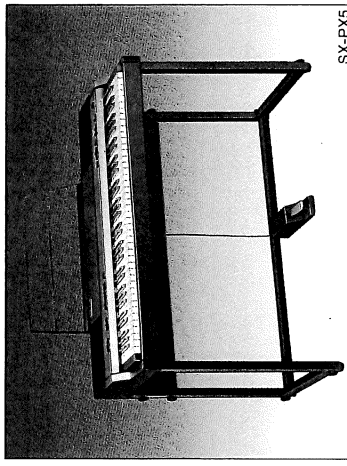
example

1	2	1	6	3	—	—	master A B  right left 3 2 1 n down 0 0 0 0 0 0 0 0 n 1 2 3 up	
---	---	---	---	---	---	---	---	---

Make a copy of this for ready reference.

SX-PX5

PCM
DIGITAL PIANO



SX-PX5

• The stand shown above is sold separately as an optional accessory.

PCM DIGITAL PIANO PX5

main volume **1**

transpose **6**

piano electric piano harpsichord clavichord

on/off

chorus **5**

long play

song I song II

song memory

start/stop slow

tempo

last metronome

record

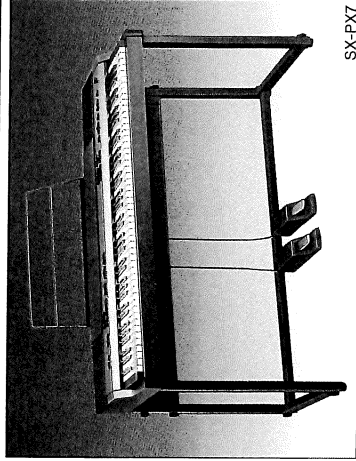
play sequencer

10-18

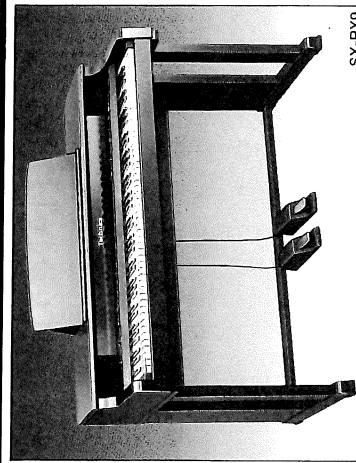
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SX-PX7/SX-PX9

PCM
DIGITAL PIANO



SX-PX7
• The stand shown above is sold separately as optional accessories.



SX-PX9

PCM DIGITAL PIANO

1 main volume

2 tone selector

3 brilliancy

4 master

5 effect

6 transpose

7 play sequencer

8 tempo

9 song memory

10 MIDI conductor

11 MIDI

12 right

13 left

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