

Technics

ACOUSTIC PIANO
DIGITAL SYSTEM

SM-ZS30



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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

Maintenance

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

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

Turn the unit off when not in use. When you use AC power, appreciable current remains present even with the Play Switch turned off. If unit will not be used for a long time, unplug the power cord

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

Controls and functions

[Front panel]

DEMO

You can listen to automatic performances that demonstrate various sounds
(Refer to page 5)

MODE SET

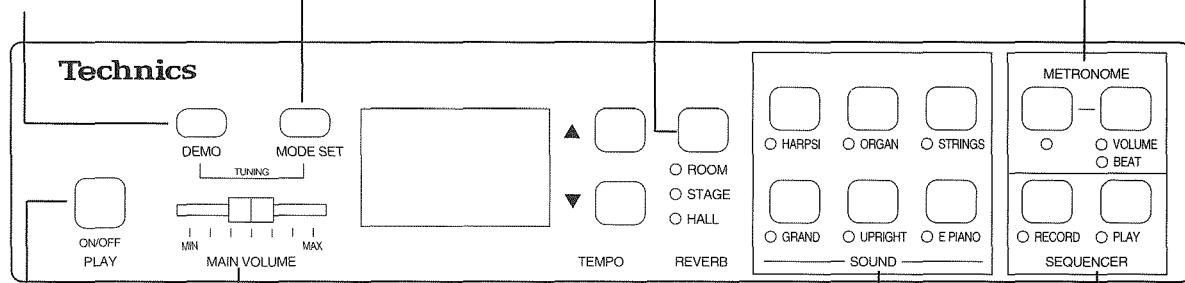
Use for setting various functions

REVERB

Add a reverberation effect to the sound
(Refer to page 6)

METRONOME

The metronome sounds out the correct rhythm to help you practice
(Refer to page 9)



PLAY

The on/off switch for this instrument

MAIN VOLUME

Adjust the headphones volume

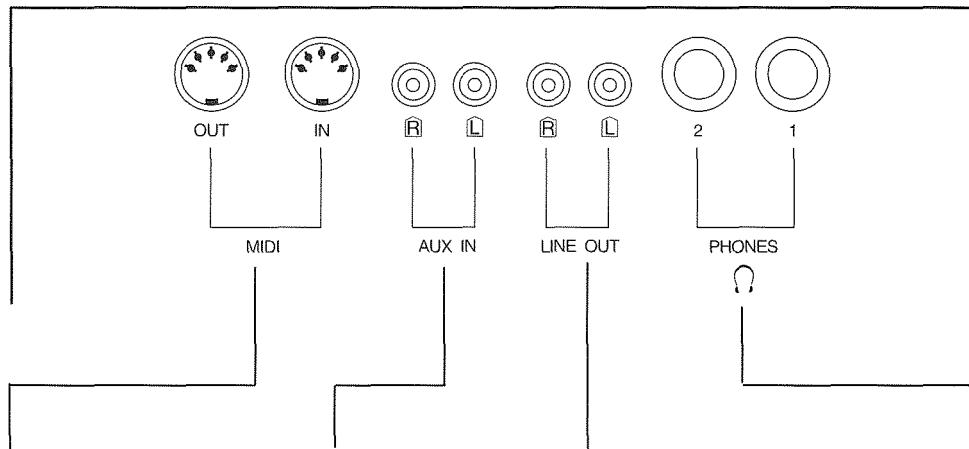
SOUND

Select from a variety of sounds

SEQUENCER

Record and play back your performance
(Refer to page 10)

[Bottom panel]



MIDI terminals

(Refer to page 11)

Input terminals

Input sounds from external equipment, or listen with headphones along with the sound from this unit

Output terminals

You can produce the sound from this unit on an external speaker amplifier or stereo equipment

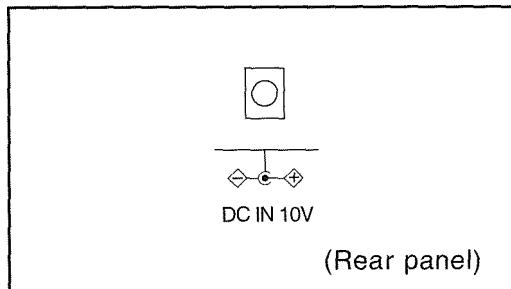
Headphones terminal

Connect the included headphones to this terminal

- Up to two headphone sets can be connected

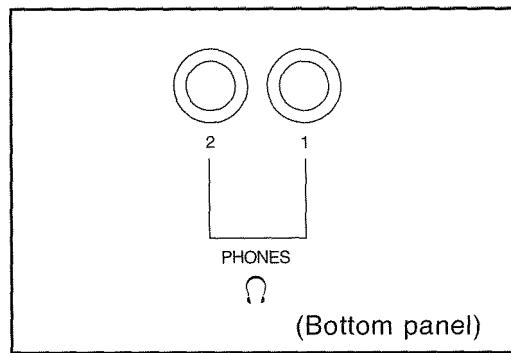
Getting started

1 | Plug the AC adaptor (included) into an outlet



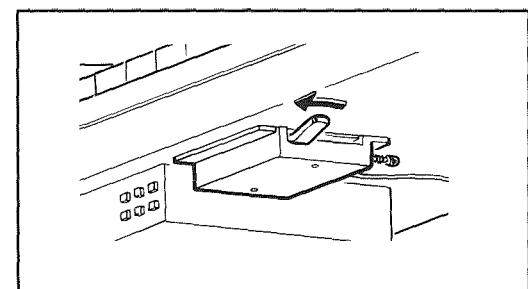
- Use only the included AC adaptor
- Do not connect or disconnect the AC adaptor when the power is turned on

2 | Connect the headphones (included)



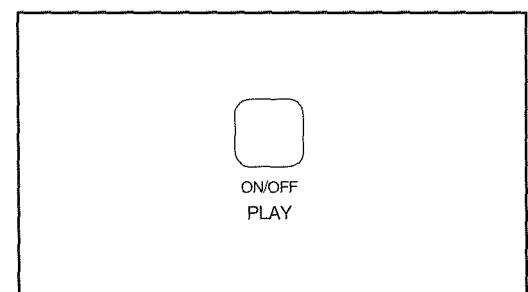
- Up to two headphone sets can be connected

3 | Move the mute lever forward (towards you)



- The sound of the acoustic piano is extinguished
- To reactivate the sound of the acoustic piano, move the lever back to its original position
- Do not move the mute lever during a performance

4 | Press the **PLAY** button to turn on this unit



- To turn off this unit, press the **PLAY** button again

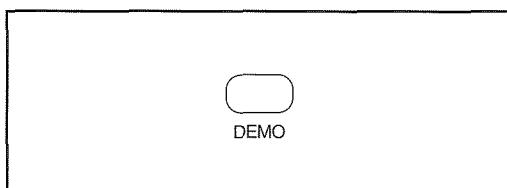
Tuning

Your system will never need tuning no matter how long you use it. However, please remember to have your acoustic piano tuned regularly.

Listen to the demonstration

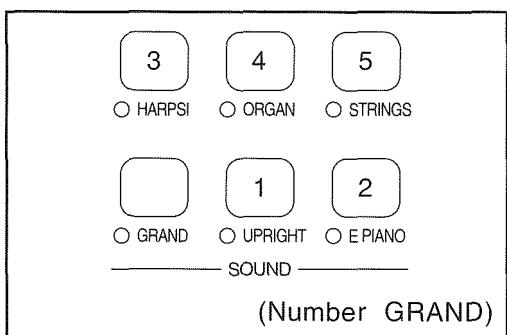
Automatic performances which introduce you to the sounds are stored in this system's memory. You can listen to them through the headphones.

1 | Press the **DEMO** button



- The indicators for the **SOUND** buttons flash
- Each **SOUND** button contains an automatic performance demonstrating that particular sound

2 | Select a sound you wish to hear



- The demonstration tune for the selected sound begins
- There are five demonstration tunes in the **GRAND** button. When this button is pressed, the other indicators flash. Select one of these buttons
- If the button for the current demo is pressed, the demonstration performance stops

3 | Repeat step 2 to listen to the demonstration tunes for the other sounds

4 | When you have finished listening to the demonstration performances, press the **DEMO** button again

Medley

If you press and hold the **DEMO** button for a few seconds, all the demonstration tunes are automatically played in order.

- If you press the button with the flashing indicator, the current tune stops and the next tune begins
- The tunes are repeated in order until the **DEMO** button is pressed again
- You can also first press the **DEMO** button and then the **SEQUENCER PLAY** button to play the tunes in order

Demo performance list

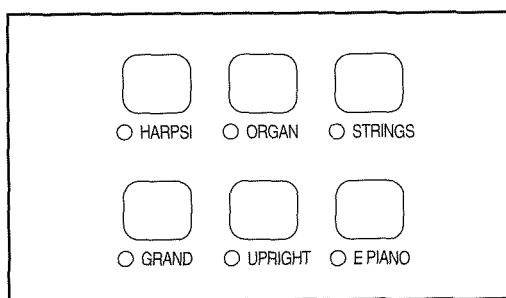
SOUND	COMPOSER	SONG TITLE	SOUND	COMPOSER	SONG TITLE	
GRAND 1	Chopin	Etude C-minor Op 10 No 12	UPRIGHT	Mozart	Alla Turca	
			E PIANO	Technics original		
GRAND 2	Liszt	Love's Dream No 3	HARPSI	J S Bach	Italian Concerto BWV971	
GRAND 3	Badarzewska	La Prière d'Une Vierge				
		ORGAN	Technics original			
GRAND 4	Beethoven	Fur Elise	STRINGS	Technics original		
GRAND 5	Technics original	Standard		Technics original		

Playing the piano

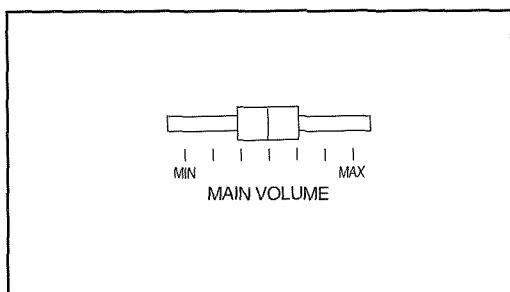
Use the headphones and play various sounds



1 Select a sound

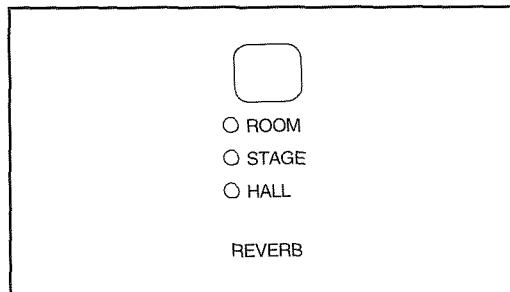


3 Set the **MAIN VOLUME** to an appropriate level



2 Play the keyboard

4 Add reverb to the sound



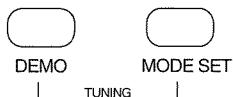
- Three settings (**ROOM**, **STAGE** and **HALL**) let you choose the length of the **REVERB**
- When all the indicators are off, the **REVERB** effect is deactivated
- The selected **REVERB** setting for each sound is memorized

- Pedal operation with this system
Sustain pedal (right pedal)
When this pedal is depressed, the sound is sustained so that it slowly fades out
Soft pedal (left pedal)
When the pedal is depressed, the sound is softer
- For pianos with three pedals, the middle pedal produces no effect

Tuning

You can adjust the pitch to match the tuning of the acoustic piano or another instrument

1. Press the **DEMO** and **MODE SET** buttons simultaneously



3. When you have finished adjusting the pitch, press the **MODE SET** button

- 2 Use the **TEMPO** buttons to adjust the pitch



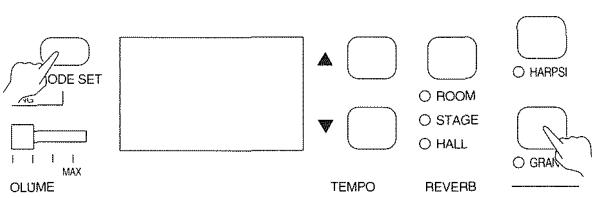
TEMPO

- Press the \blacktriangle button to raise the pitch and the \blacktriangledown button to lower the pitch (427.3 Hz–440.0 Hz–453.0 Hz)
- Press and hold either **TEMPO** button to change the pitch quickly
- The 100's digit (4) is not shown on the display. The decimal can be set to 0, 3 or 6
- If both **TEMPO** buttons are pressed at the same time, the pitch returns to the standard (A=440.0 Hz) pitch

Piano tuning on/off

You can select this system's tuning mode

While pressing the **MODE SET** button, press the **GRAND** button to turn the piano tuning to on or off



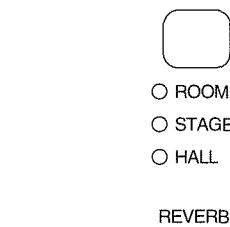
On The lower pitches are tuned slightly lower and the higher pitches are tuned slightly higher (default setting)

Off Equally spaced tuning in all pitch ranges

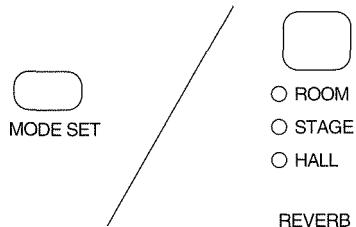
Reverb depth

The depth of the **REVERB** can be adjusted for each reverb type

1. Select a type of **REVERB**

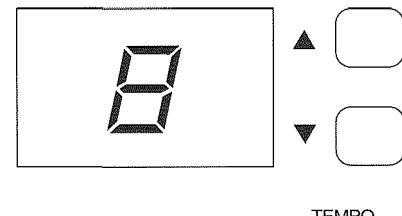


2. While pressing the **MODE SET** button, press the **REVERB** button



- The indicator for the selected type flashes

3. Use the **TEMPO** buttons to adjust the depth of the reverb



- Each press of the ▲ button increases the reverb depth, and each press of the ▼ button decreases the reverb depth (1 to 10)
- To return instantaneously to the standard reverb depth, press the two **TEMPO** buttons at the same time

4. When you have finished adjusting the reverb depth, press the **MODE SET** button

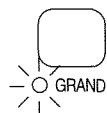
- The depth of the other **REVERB** types can be adjusted in the same way

String resonance

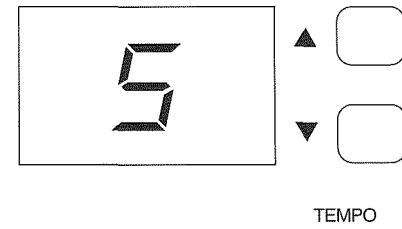
For the **GRAND** and **UPRIGHT** sounds, string resonance is produced as long as the sustain pedal is depressed. The amount of string resonance can be adjusted, and is common for both sounds

- String resonance is the sound heard in an acoustic piano when the struck strings produce a sympathetic resonance of the other unstruck strings
- When any **REVERB** type is on, there is no string resonance

1. Press and hold the **GRAND** button for about 3 seconds



2 Use the **TEMPO** buttons to adjust the amount of resonance



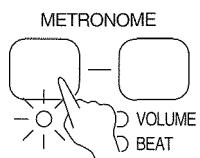
- Each time the ▲ button is pressed, the resonance increases. Each time the ▼ button is pressed, the resonance decreases (0 to 10)
- When set to 0, there is no string resonance
- Pressing both **TEMPO** buttons at the same time will return the instrument to the standard resonance

3. When you have finished adjusting the string resonance, press the **GRAND** button again

Metronome

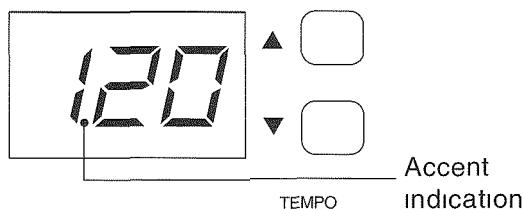
You can play in time with the metronome sound, and you can add an accent to the metronome sound

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



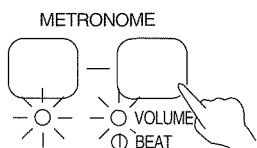
- The metronome sound begins

2 Adjust the tempo with the **TEMPO** buttons

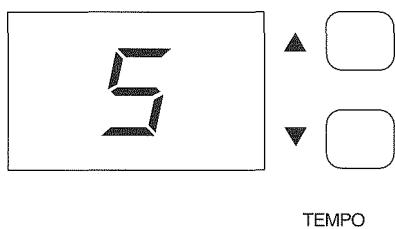


METRONOME volume

1 Press the **VOLUME BEAT** button so that the **VOLUME** indicator lights



2. Use the **TEMPO** buttons to adjust the volume



- Each press of the **▲** button increases the volume, and each press of the **▼** button decreases the volume (1 to 9)
- If both **TEMPO** buttons are pressed at the same time, the volume returns to the standard setting

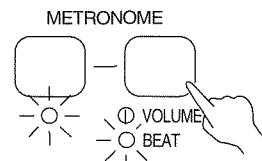
3 When you have finished making the setting, press the **VOLUME BEAT** button twice so that the indicators go out

- Each time the **▲** button is pressed, the tempo speeds up, and each time the **▼** button is pressed, the tempo slows down ($\text{J} = 40$ to 300)
- Pressing both **TEMPO** buttons at the same time returns the tempo to the standard $\text{J} = 120$

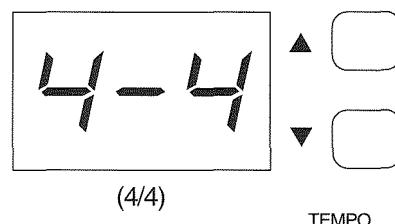
3. Press the **METRONOME** button again to turn off the metronome sound

Accented METRONOME sound

1 Press the **VOLUME BEAT** button so that the **BEAT** indicator lights



2 Use the **TEMPO** buttons to select the time signature



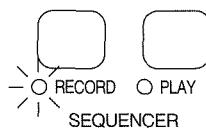
- Select a time signature from OFF, 2/4 [2-4], 3/4 [3-4], 4/4 [4-4], 5/4 [5-4] and 6/8 [6-8]
- An accent is added to the first beat of each measure of the selected time signature
- If OFF is selected, the beat is not accented
- Pressing both **TEMPO** buttons at the same time returns the time signature to the standard 4/4 time

3. When you have finished making the setting, press the **VOLUME BEAT** button once so that the indicators go out

Sequencer

You can store your performance in the **SEQUENCER** and have it played back

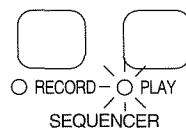
1. Select a sound
2. Press the **SEQUENCER**'s **RECORD** button to turn it on
3. Play the keyboard
 - Recording starts when you begin to play the keyboard
4. When you have completed the performance, press the **RECORD** button to turn it off



- The **RECORD** indicator flashes

Playback

Press the **SEQUENCER**'s **PLAY** button to turn it on



- The recorded performance is played back
- The tempo is shown on the display. You can adjust the playback speed with the **TEMPO** buttons
- Playback stops if the **PLAY** button is pressed during the performance
- If nothing is recorded in the **SEQUENCER**, the **PLAY** button will not turn on

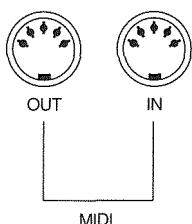
- Performance data, pedal operation, and changes in the sound selection, etc are recorded in the **SEQUENCER**
- The total number of notes which can be recorded in the **SEQUENCER** is about 4500 (somewhat less when the pedals are operated, for example)
- When the remaining **SEQUENCER** capacity becomes 20% or less, it is indicated on the display as %. When an error tone sounds, and "FuL" appears on the display, the memory is full and the recording mode stops automatically
- If the **METRONOME** is turned on, a one-measure count sounds before recording or playback begins (The volume and time signature settings are those of the metronome)

- If the recording procedure was not performed correctly, "Err" will appear on the display when you attempt to play back the tune. Re-record your performance
- You can erase the recorded performance. Press the **MODE SET** button and the **SEQUENCER**'s **PLAY** button at the same time for 2 or 3 seconds. A beep tone sounds and "cLr" appears on the display to indicate that the performance has been erased
- When you begin the procedure to record in the **SEQUENCER**, any previously recorded contents are erased
- The contents of the **SEQUENCER** remain in the memory for about one week after the **PLAY** is turned off

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.

About the MIDI terminals



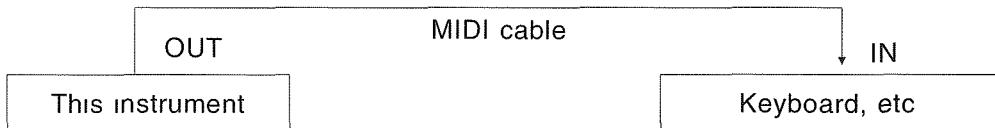
IN The terminal by which this instrument receives data from other equipment

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

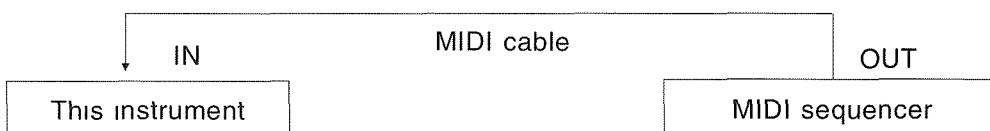
- For these connections, use a commercially available MIDI cable. Contact your Technics dealer for more information.

Connection examples

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



- To play this unit from a connected sequencer



The following kinds of data can be transmitted/received.

- Keyboard performance data (NOTE ON/OFF)
- Sustain pedal and soft pedal operation data
- Sound change data (PROGRAM CHANGE), etc

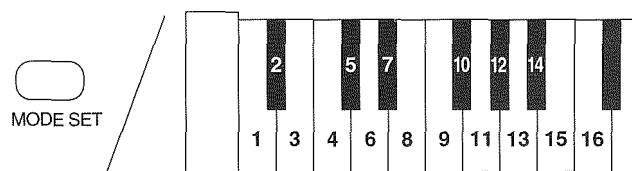
Note: The **SEQUENCER** and **DEMO** tune data from this unit cannot be transmitted as MIDI data

Assigning the MIDI CHANNEL

You can assign a MIDI CHANNEL number (1–16) to this instrument

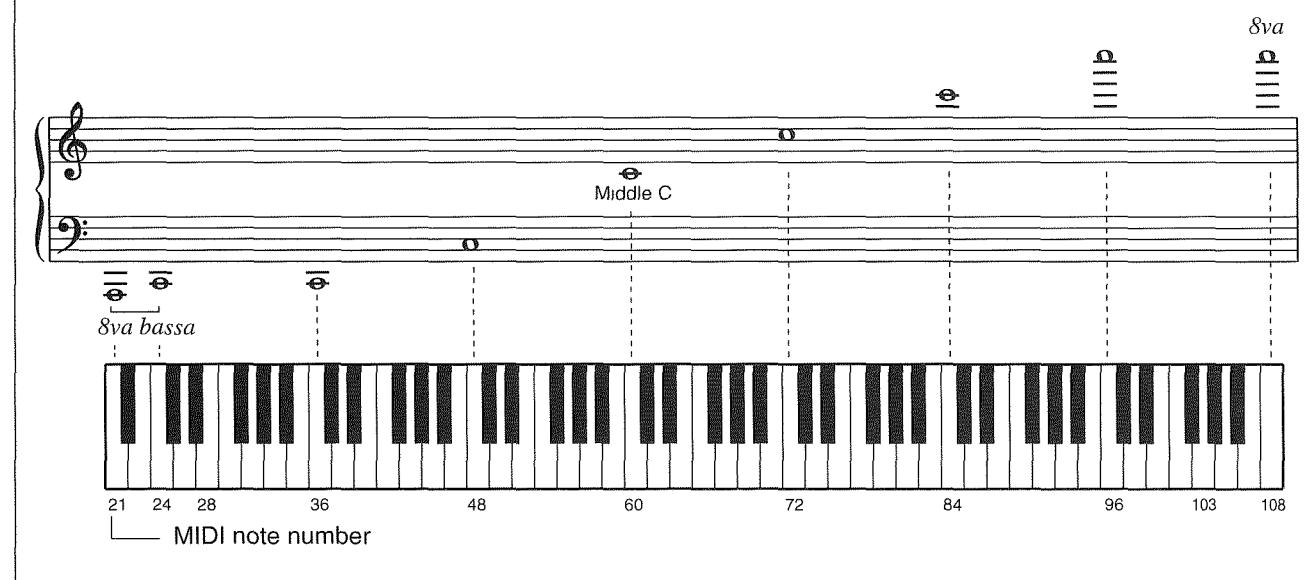
- Data can be exchanged only when the channel on the transmitting side matches the channel on the receiving side
- The default channel setting is 1

While pressing the **MODE SET** button, use the 16 lowermost keys (see illustration) to assign the desired MIDI CHANNEL number



- The selected MIDI CHANNEL number is shown on the display

Keyboard and MIDI note number



OMNI setting

When data is received, specify whether data is received for all MIDI channels (OMNI ON), or only on the MIDI channel which is matched (OMNI OFF)

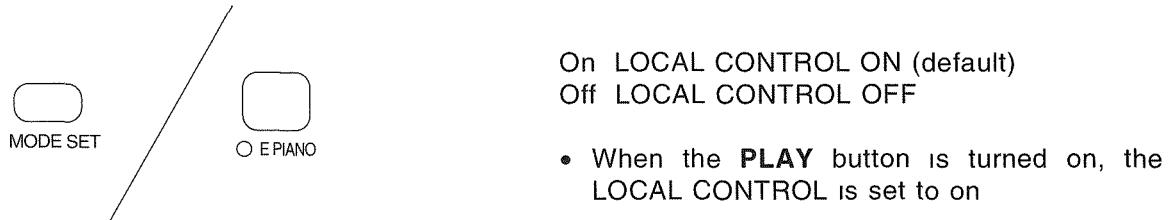
While pressing the **MODE SET** button, use the **UPRIGHT** button to set the mode



LOCAL CONTROL

When transmitting data, specify whether the performance also sounds from this instrument (LOCAL CONTROL ON) or not (LOCAL CONTROL OFF)

While pressing the **MODE SET** button, use the **E PIANO** button to set the mode



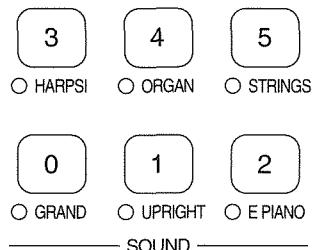
Transmitting PROGRAM CHANGE numbers

Your piano can be used to transmit desired PROGRAM CHANGE numbers to the connected instrument

<Using the buttons to transmit>

The **SOUND** buttons correspond to PROGRAM CHANGE numbers as shown in this illustration

- When sounds are mixed, the button pressed first has priority



<Using the keyboard to transmit>

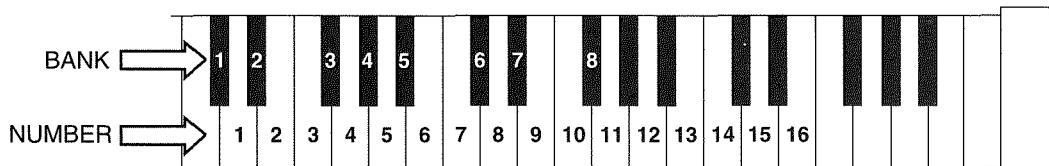
PROGRAM CHANGE numbers are transmitted by combining a **BANK** and **NUMBER** to specify the desired PROGRAM CHANGE number (0–127)

While pressing the **MODE SET** button, using the numbers on the keyboard illustration below for reference, press a black key to specify the **BANK** and a white key to specify the **NUMBER**



- The specified PROGRAM CHANGE number is shown on the display

PROGRAM CHANGE setting keyboard



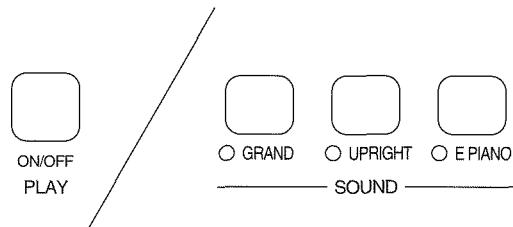
PROGRAM CHANGE number table

BANK \ NUMBER	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	
3	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	
4	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	
5	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	
6	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	
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

Initialization

You can return all the settings to their default status

1. Turn off the **PLAY** button



2. While pressing the **GRAND**, **UPRIGHT** and **E PIANO** button at the same time, turn the **PLAY** button on again

- “InI” is shown on the display and the settings return to their default status
- Note that when you perform the initialization procedure, the recorded contents of the **SEQUENCER** are erased and the function settings are also returned to their default status

■ About the backup memory

The selected sound and various functions, and the **SEQUENCER** contents remain in the memory for about one week after the **PLAY** button is turned off

- When the **PLAY** button is turned on, the **MIDI LOCAL CONTROL** is set to on
- The backup memory will not function until the **PLAY** button has been on for about 10 minutes
- If you wish to retain the memory for longer than one week, before one week has elapsed, turn on the power and leave it on for about 10 minutes before turning it off again. The settings will remain in the memory for about one week from this time
- When the **PLAY** button is turned on after the effective backup memory term of one week has elapsed, the settings and memories automatically return to their default status, and “InI” is shown on the display