

Digital Piano

N-100

ENGLISH

DEUTSCH

FRANÇAIS

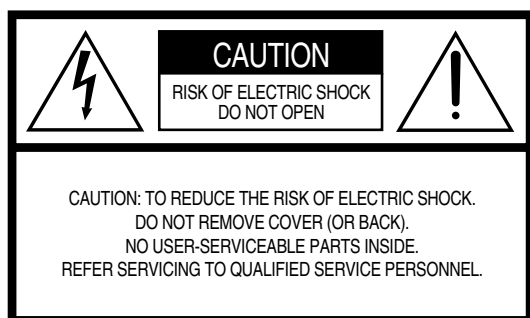
ESPAÑOL

Owner's Manual
Bedienungsanleitung
Mode d'emploi
Manual de instrucciones

EN
DE
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ES

SPECIAL MESSAGE SECTION

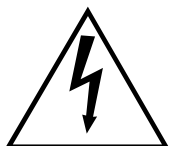
PRODUCT SAFETY MARKINGS: Yamaha electronic products may have either labels similar to the graphics shown below or molded/stamped facsimiles of these graphics on the enclosure. The explanation of these graphics appears on this page. Please observe all cautions indicated on this page and those indicated in the safety instruction section.



See bottom of Keyboard enclosure for graphic symbol markings.



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



The lightning flash with arrowhead symbol, within the 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 electrical shock.

IMPORTANT NOTICE: All Yamaha electronic products are tested and approved by an independent safety testing laboratory in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. **DO NOT** modify this unit or commission others to do so unless specifically authorized by Yamaha. Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty may be denied if the unit is/has been modified. Implied warranties may also be affected.

SPECIFICATIONS SUBJECT TO CHANGE: The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

ENVIRONMENTAL ISSUES: Yamaha strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

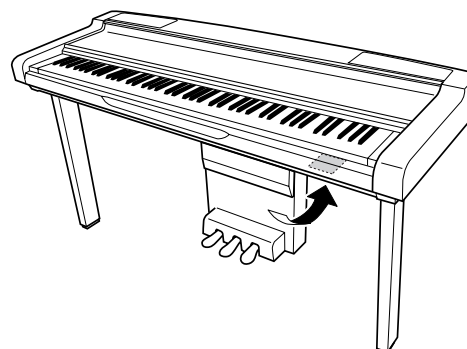
Battery Notice: This product **MAY** contain a small non-rechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

Warning: Do not attempt to recharge, disassemble, or incinerate this type of battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by applicable laws. Note: In some areas, the servicer is required by law to return the defective parts. However, you do have the option of having the servicer dispose of these parts for you.

Disposal Notice: Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc.

NOTICE: Service charges incurred due to lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer’s warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

NAME PLATE LOCATION: The graphic below indicates the location of the name plate. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.



Model _____

Serial No. _____

Purchase Date _____

IMPORTANT SAFETY INSTRUCTIONS

INFORMATION RELATING TO PERSONAL INJURY, ELECTRICAL SHOCK, AND FIRE HAZARD POSSIBILITIES HAS BEEN INCLUDED IN THIS LIST.

WARNING- When using any electrical or electronic product, basic precautions should always be followed. These precautions include, but are not limited to, the following:

1. Read all Safety Instructions, Installation Instructions, Special Message Section items, and any Assembly Instructions found in this manual **BEFORE** making any connections, including connection to the main supply.
2. **Main Power Supply Verification:** Yamaha products are manufactured specifically for the supply voltage in the area where they are to be sold. If you should move, or if any doubt exists about the supply voltage in your area, please contact your dealer for supply voltage verification and (if applicable) instructions. The required supply voltage is printed on the name plate. For name plate location, please refer to the graphic found in the Special Message Section of this manual.
3. This product may be equipped with a polarized plug (one blade wider than the other). If you are unable to insert the plug into the outlet, turn the plug over and try again. If the problem persists, contact an electrician to have the obsolete outlet replaced. Do **NOT** defeat the safety purpose of the plug.
4. Some electronic products utilize external power supplies or adapters. Do **NOT** connect this type of product to any power supply or adapter other than one described in the owners manual, on the name plate, or specifically recommended by Yamaha.
5. **WARNING:** Do not place this product or any other objects on the power cord or place it in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! If you must use an extension cord, the minimum wire size for a 25' cord (or less) is 18 AWG. **NOTE:** The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.
6. **Ventilation:** Electronic products, unless specifically designed for enclosed installations, should be placed in locations that do not interfere with proper ventilation. If instructions for enclosed installations are not provided, it must be assumed that unobstructed ventilation is required.
7. **Temperature considerations:** Electronic products should be installed in locations that do not significantly contribute to their operating temperature. Placement of this product close to heat sources such as; radiators, heat registers and other devices that produce heat should be avoided.
8. This product was **NOT** designed for use in wet/damp locations and should not be used near water or exposed to rain. Examples of wet/damp locations are; near a swimming pool, spa, tub, sink, or wet basement.
9. This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by the manufacturer. If a cart, rack, or stand is used, please observe all safety markings and instructions that accompany the accessory product.
10. The power supply cord (plug) should be disconnected from the outlet when electronic products are to be left unused for extended periods of time. Cords should also be disconnected when there is a high probability of lightning and/or electrical storm activity.
11. Care should be taken that objects do not fall and liquids are not spilled into the enclosure through any openings that may exist.
12. Electrical/electronic products should be serviced by a qualified service person when:
 - a. The power supply cord has been damaged; or
 - b. Objects have fallen, been inserted, or liquids have been spilled into the enclosure through openings; or
 - c. The product has been exposed to rain; or
 - d. The product does not operate, exhibits a marked change in performance; or
 - e. The product has been dropped, or the enclosure of the product has been damaged.
13. Do not attempt to service this product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.
14. This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. **DO NOT** operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist. **IMPORTANT:** The louder the sound, the shorter the time period before damage occurs.
15. Some Yamaha products may have benches and/or accessory mounting fixtures that are either supplied as a part of the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured **BEFORE** using. Benches supplied by Yamaha are designed for seating only. No other uses are recommended.

PLEASE KEEP THIS MANUAL

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep this manual in a safe place for future reference.



WARNING

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

Power supply/Power cord

- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.
- Use only the supplied power cord/plug.
- Do not place the power cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.

Do not open

- Do not open the instrument or attempt to disassemble the internal parts or modify them in any way. The instrument contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.

Water warning

- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- Never insert or remove an electric plug with wet hands.

Fire warning

- Do not put burning items, such as candles, on the unit.
A burning item may fall over and cause a fire.

If you notice any abnormality

- If the power cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the instrument, or if any unusual smells or smoke should appear to be caused by it, immediately turn off the power switch, disconnect the electric plug from the outlet, and have the instrument inspected by qualified Yamaha service personnel.



CAUTION

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the instrument or other property. These precautions include, but are not limited to, the following:

Power supply/Power cord

- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, or during electrical storms.
- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.

Assembly

- Read carefully the attached documentation explaining the assembly process. Failure to assemble the instrument in the proper sequence might result in damage to the instrument or even injury.

Location

- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not use the instrument in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the instrument, TV, or radio may generate noise.
- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected cables.
- When setting up the instrument, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch and disconnect the plug from the outlet.

Connections

- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum. Also, be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.

Maintenance

- When cleaning the instrument, use a soft, lint-free cloth. The cloth should be dry or slightly damp. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

Handling caution

- Take care that the key cover does not pinch your fingers, and do not insert a finger or hand in any gaps on the key cover or instrument.
- Never insert or drop paper, metallic, or other objects into the gaps on the key cover, panel or keyboard. If this happens, turn off the power immediately and unplug the power cord from the AC outlet. Then have the instrument inspected by qualified Yamaha service personnel.
- Do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Do not operate the instrument for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the instrument, or data that is lost or destroyed.

Always turn the power off when the instrument is not in use.

Introduction

Thank you for purchasing the Yamaha Digital Piano N-100!

*We recommend that you read this manual carefully
so that you can fully take advantage of the advanced and
convenient functions of the N-100.*

*We also recommend that you keep this manual in a safe and
handy place for future reference.*

Main Features

■ Graded Hammer Effect Keyboard

Thanks to our experience as the world's leading manufacturer of acoustic pianos, we've developed a keyboard with action that's virtually indistinguishable from the real thing. Just as on a traditional acoustic piano, the keys of the lower notes have a heavier touch, while the higher ones are more responsive to lighter playing. The keyboard's sensitivity can even be adjusted to match your playing style.

■ Dynamic Stereo Sampling

The Yamaha N-100 Digital piano offers unmatched sonic realism and natural grand-piano type playability as well as Yamaha's original AWM Dynamic Stereo Sampling tone generation technology for rich, musical voices.

The Grand Piano 1 voice features totally new samples painstakingly recorded from a full concert grand piano. The Grand Piano 1 voice features three velocity-switched samples (Dynamic Sampling), special Sustain Sampling (page 15) that use samples of the unique resonance of an acoustic grand piano's soundboard and strings when the sustain pedal is pressed, and Keyoff Samples that add the subtle sound produced when the keys are released. The N-100 comes much closer to the sound of a true acoustic piano.

About this Owner's Manual

This manual consists of three main sections: Introduction, Reference and Appendix.

■ Introduction (page 6):

Please read this section first.

■ Reference (page 13):

This section explains how to make detailed settings for the N-100's various functions.

■ Appendix (page 32):

This section features a variety of essential, detailed information on the instrument.

- * The illustrations as shown in this owner's manual are for instructional purposes only, and may appear somewhat different from those on your instrument.
- * Copying of the commercially available musical data including but not limited to MIDI data and/or audio data is strictly prohibited except for your personal use.

This product incorporates and bundles computer programs and contents in which Yamaha owns copyrights or with respect to which it has license to use others' copyrights. Such copyrighted materials include, without limitation, all computer software, style files, MIDI files, WAVE data, musical scores and sound recordings. Any unauthorized use of such programs and contents outside of personal use is not permitted under relevant laws. Any violation of copyright has legal consequences. **DON'T MAKE, DISTRIBUTE OR USE ILLEGAL COPIES.**

- The company names and product names in this Owner's Manual are the trademarks or registered trademarks of their respective companies.

Accessories

• Owner's Manual

This manual contains complete instructions for operating your N-100.

- Quick Operation Guide
- Assembly Parts

■ Maintenance

Clean the instrument using a dry or slightly damp soft cloth (wring well).

■ Tuning

Unlike an acoustic piano, this instrument does not need to be tuned. It always stays perfectly in tune.

■ Transporting

If you move to another location, you can transport this instrument along with your other belongings. You can move the unit as it is (assembled) or you can disassemble the unit before moving.

Transport the keyboard horizontally. Do not lean it up against a wall or stand it up on its side. Do not subject the instrument to excessive vibration or shock.

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Application Index

Use this index to find reference pages that may be helpful for your particular application and situation.

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Listening to demo songs with different voices..... Listening to the Demo Songs and the 50 Piano Preset Songs → (page 13)

Playing

Using the pedal..... Using the Pedals → (page 16)

Changing the key of the N-100 to facilitate playing in difficult/unfamiliar key signatures..... Transposition → (page 19)

Fine tuning the pitch of the entire instrument when you play the N-100 along with other instruments or CD music
..... Fine tuning of the Pitch → (page 19)

Selecting a touch sensitivity type..... Touch Sensitivity → (page 20)

Changing voices

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Simulating a concert hall Adding Variations to the Sound – Reverb → (page 18)

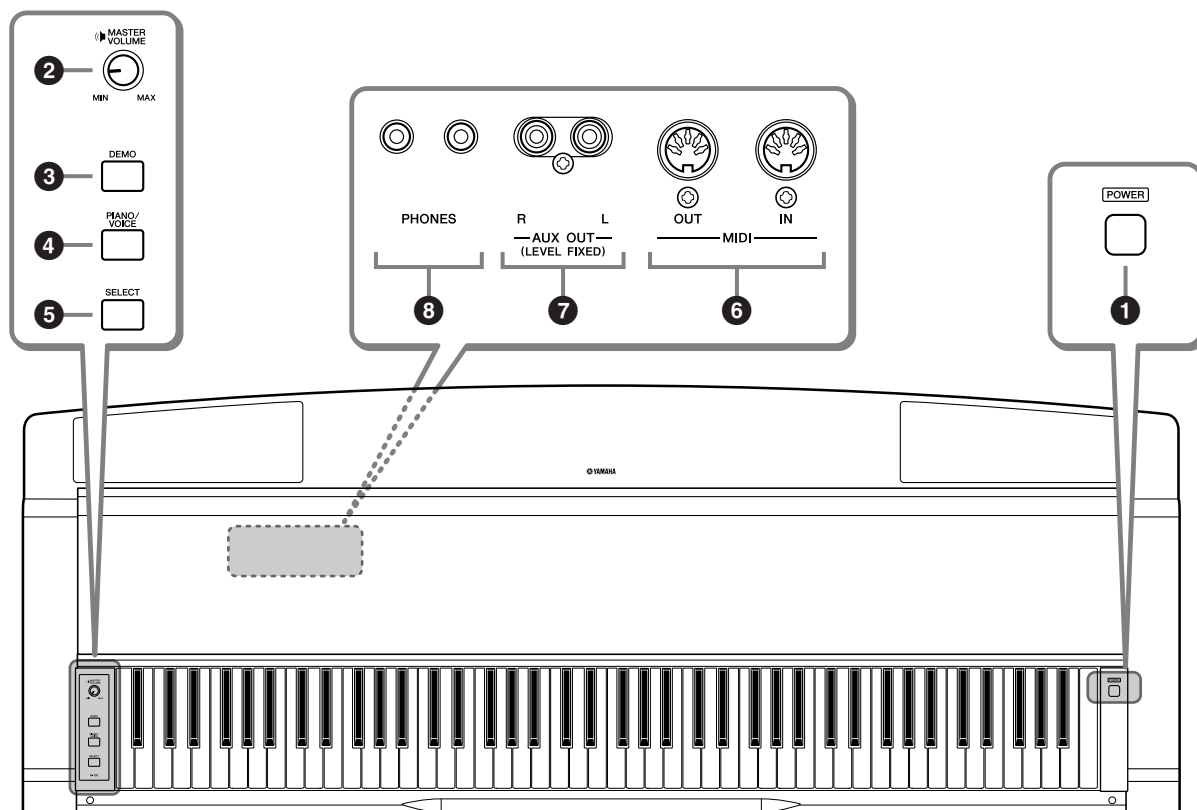
Combining two voices Combining Voices (Dual) → (page 17)

Connecting the N-100 to other devices

What is MIDI? About MIDI → (page 21)

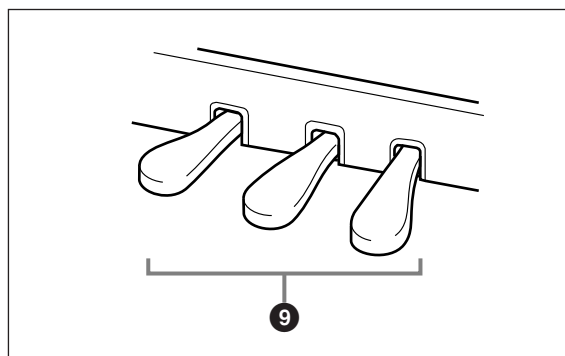
Connecting a computer Connecting a Personal Computer → (page 22)

Panel Controls and Terminals



ENGLISH

- 1 [POWER] switch** page 12
For turning the power on or off.
- 2 [MASTER VOLUME] dial**..... page 12
For adjusting the volume level of the entire sound.
- 3 [DEMO] button** pages 13, 14
For playing the demo songs and the 50 piano preset songs. When you press the [DEMO] button, the button name will blink for a second.
- 4 [PIANO/VOICE] button**
..... pages 15, 17, 18, 20
For selecting voices from 10 internal sounds including Grand Piano 1 and 2 (page 15). You can also combine two voices (page 17) or add reverb effects to the selected voice for your keyboard performance (page 18). When you press the [PIANO/VOICE] button, the button name will blink for a second.
- 5 [SELECT] button**..... pages 13, 15
For selecting a demo song for each voice, or one of the 50 piano preset songs. You can also change the ten Voices by pressing the [SELECT] button. When you press the [SELECT] button, the button name will blink for a second.
- 6 MIDI [IN] [OUT] terminals**..... page 21
For connecting external MIDI devices, allowing the use of various MIDI functions.
- 7 AUX OUT [L] [R](LEVEL FIXED) jacks**
.....page 21
For outputting the sound of the N-100 to an external audio system, or connecting it to another device (MD recorder, etc.) to record your performance.
- 8 [PHONES] jack**.....page 12
For connecting a set of standard stereo headphones, allowing private practice.
- 9 Soft pedal (left), Sostenuto pedal (center), Damper pedal (right)**
.....page 16
For producing a range of expressive effects similar to those produced by the pedals on an acoustic piano.



Before Using the Digital Piano

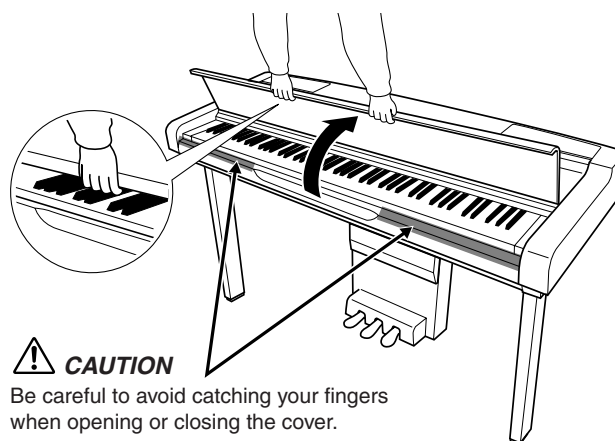
Key Cover

To open the key cover:

Using the hand grip in the center on the front, lift open the key cover.

To close the key cover:

Grip the hand grip at the center of the panel, and close the key cover.



CAUTION

Be careful to avoid catching your fingers when opening or closing the cover.

CAUTION

Hold the cover with both hands when opening or closing it. Do not release it until it is fully opened or closed. Be careful to avoid catching fingers (yours or others, especially children's) between the cover and main unit.

CAUTION

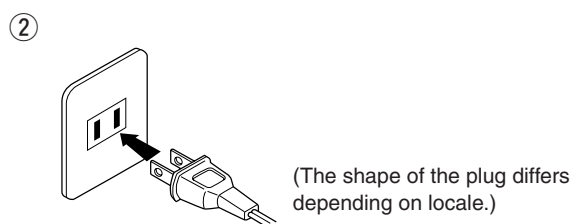
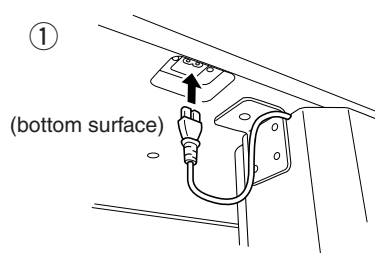
Do not place objects, such as a piece of metal or paper, on top of the key cover. Small objects placed on the key cover may fall inside the unit when the cover is opened and may be nearly impossible to remove. This could cause electric shock, short circuit, fire or other serious damage to the instrument.

Turning the Power On

1. Connect the power cord.

First insert the plug of the power cable into the AC connector on the N-100, then plug the other end of the cable into the proper AC outlet on the wall.

In some areas, a plug adaptor may be provided to match the pin configuration of AC wall outlets in your area.



WARNING

Make sure your N-100 is rated for the AC voltage supplied in the area in which it is to be used (voltage rating appears on the name plate on the bottom panel). In some areas, a voltage selector may be provided on the bottom panel of the main keyboard unit near the power cord. Make sure that the voltage selector is set for the voltage in your area. Connecting the unit to the wrong AC supply can cause serious damage to the internal circuitry and may even pose a shock hazard!

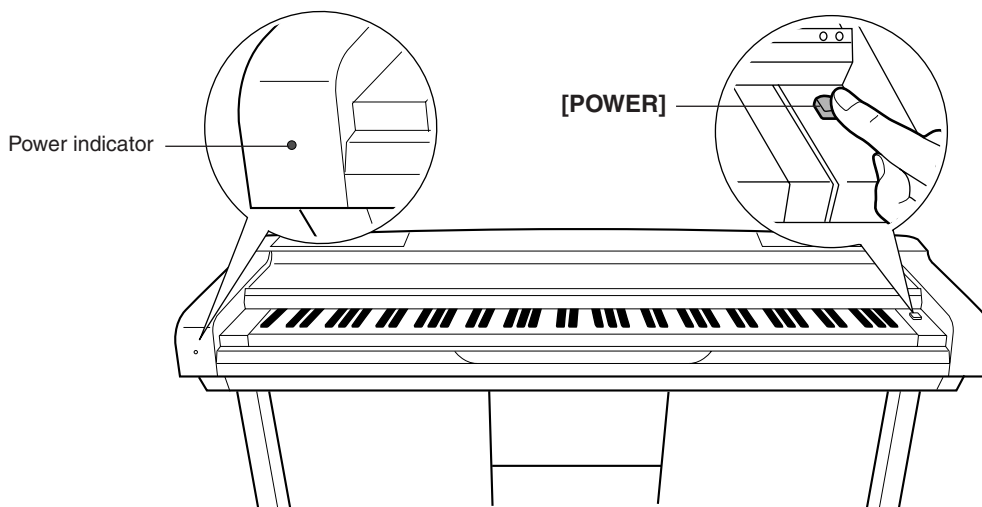
Use only the AC power cord supplied with the N-100. If the supplied cord is lost or damaged and needs to be replaced, contact your Yamaha dealer. The use of an inappropriate replacement can pose a fire and shock hazard!

The type of AC power cord provided with the N-100 may be different depending on the country in which it is purchased. (In some areas a plug adaptor may be provided to match the pin configuration of the AC wall outlets in your area.) Do NOT modify the plug provided with the N-100. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

2. Turn the power on.

Press the **[POWER]** switch located on the right of the keyboard to turn the power on.

The power indicator located below the left end of the keyboard and the button names on the panel light up.



To turn the power off, press the **[POWER]** switch again.

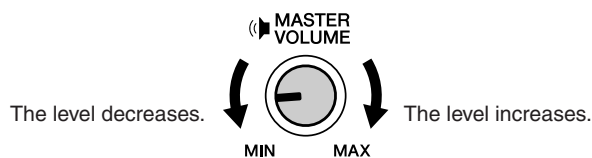
The power indicator and the button names turn off.

Power indicator

If you forget to turn off the power to the piano and close the key cover, the power indicator will remain lit, indicating that the power is still on.

Setting the Volume

To adjust the volume, use the **[MASTER VOLUME]** dial located at the left of the panel. Play the keyboard and listen to the sound while you adjust the volume.



TERMINOLOGY

MASTER VOLUME:

The volume level of the entire keyboard sound

CAUTION

Do not use the N-100 at a high volume level for a long period of time, or your hearing may be damaged.

Using Headphones

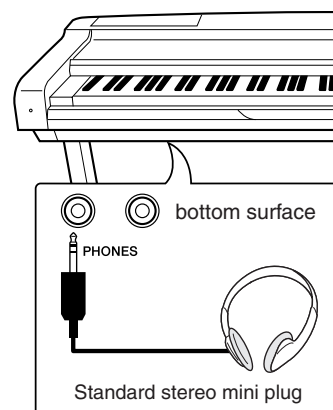
Connect a set of headphones to one of the **[PHONES]** jacks.

Two **[PHONES]** jacks are provided.

You can connect two sets of standard stereo headphones. (If you are using only one set of headphones, you can plug them into either jack.)

CAUTION

To protect your hearing, avoid listening to the N-100 at a high volume level for long periods of time.

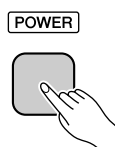


Listening to the Demo Songs and the 50 Piano Preset Songs

The N-100 contains Demo songs that effectively showcase the voices of the instrument, and includes performance data of 50 different popular piano songs for your listening enjoyment.

1. Press the [POWER] switch to turn the power on.

The power indicator located below the left end of the keyboard and the button names on the panel light up.



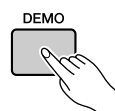
2. Adjust the volume.

Initially set the [MASTER VOLUME] dial about half way between the “MIN” and “MAX” settings. Then, when you start playing, re-adjust the [MASTER VOLUME] dial to the most comfortable listening level.



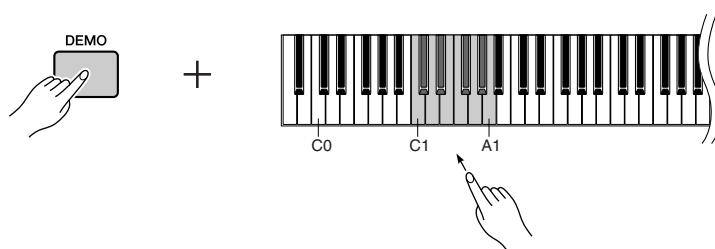
3. Press the [DEMO] button to listen to the demo songs.

The GRAND PIANO 1 demo song will start. Demo songs provided for each voice and the 50 piano preset songs will play back in sequence until you press the [DEMO] button. You can change to the next demo song or piano song during playback by pressing the [SELECT] button.



Changing a Demo Song

The number of each voice is assigned to the C1–A1 keys. For selecting a demo song using the keyboard, press one of the C1–A1 keys while holding down the [DEMO] button.



Demo Song List

Key	Voice Name	Title	Composer
C1	Grand Piano 1	Nocturne op.9-2	F.F. Chopin
G#1	Harpsichord	Gavotte	J.S. Bach

- The demonstration pieces listed above are short rearranged excerpts of the original compositions.
- All other songs are original (© 2005 Yamaha Corporation).



Refer to the voice list on page 15 for more information on the characteristics of each preset voice.



The demo songs and 50 piano preset songs will not be transmitted via MIDI.



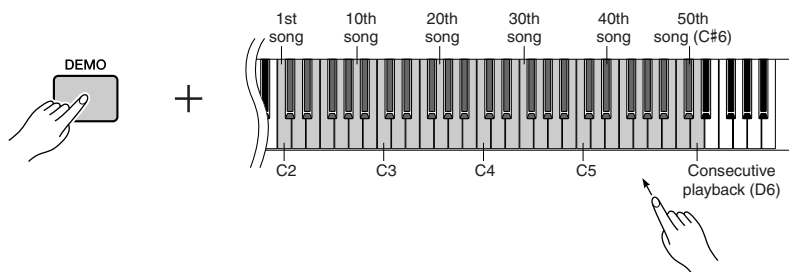
When you press the [DEMO], [PIANO/VOICE] and [SELECT] button, the button name will blink for a second.



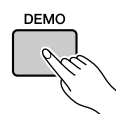
Selecting a Demo song automatically changes the voice to that pre-programmed for the Demo song.

Change the 50 Piano Preset Songs

The number of each piano preset song is assigned to the C2–C#6 keys. To select one of the 50 preset piano songs, simultaneously hold down the [DEMO] button and press the key corresponding to the song (as shown in the illustration below). To play all preset songs automatically in succession, simultaneously hold down the [DEMO] button and press the D6 key.



4. Press the [DEMO] button to stop playback.



TERMINOLOGY

Song:

On the N-100, performance data is called a "Song." This includes the demonstration song and piano preset song.

Preset:

Preset Data supplied with the internal memory of the N-100 shipped from the factory.



When you select a different song (or a different song is selected during chained playback), an appropriate reverb type will be selected accordingly.

Selecting & Playing Voices

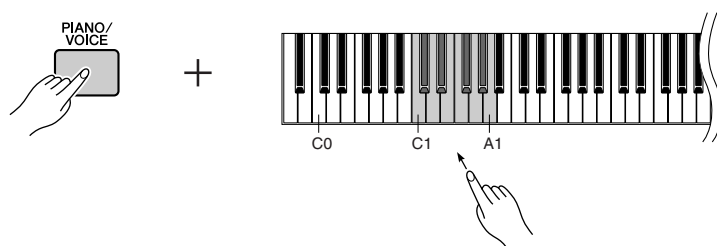
Selecting Voices

1. Select the Grand Piano 1 voice by pressing the [PIANO/VOICE] button.

Pressing the [SELECT] button switches among the following ten voices.

Key	Voice Name	Description
C1	Grand Piano 1	Recorded samples from a full concert grand piano. Also includes three levels of dynamic sampling, sustain samples, and key-off samples for exceptionally realistic acoustic grand piano sound. Perfect for classical compositions as well as any other style that requires acoustic piano.
C#1	Grand Piano 2	Spacious and clear piano with bright reverb. Good for popular music.
D1	Piano & Strings	A Dual voice combining grand piano and strings – perfect for slow, orchestral piano music.
D#1	Electronic Piano 1	An electronic piano sound created by FM synthesis. Exceptional musical response with varying timbre according to keyboard dynamics. Good for standard popular music.
E1	Electronic Piano 2	The sound of an electric piano using hammer-struck metallic tines. Soft tone when played lightly, and an aggressive tone when played hard.
F1	Church Organ	This is a typical pipe organ sound (8 feet + 4 feet + 2 feet). Good for sacred music from the Baroque period.
F#1	Jazz Organ	The sound of a tonewheel type electric organ. Often heard in jazz and rock idioms.
G1	Strings	Stereo-sampled, large-scale strings ensemble with realistic reverb. Try combining this voice with piano in the DUAL.
G#1	Harpsichord	The definitive instrument for baroque music. Since harpsichord uses plucked strings, there is no touch response. There is, however, a characteristic additional sound when the keys are released.
A1	Vibraphone	Vibraphone played with relatively soft mallets. The tone becomes more metallic the harder you play.

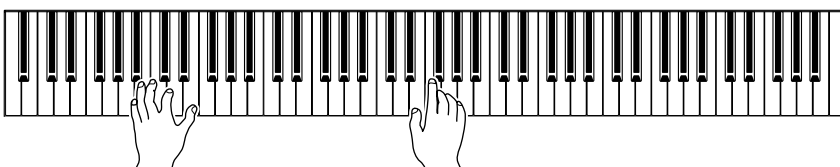
While holding down the [PIANO/VOICE] button, press one of the C1–A1 keys to select a voice.



To instantly call up the Grand Piano 1 voice again, simply press the [PIANO/VOICE] button.

2. Adjust the volume.

Re-adjust the [MASTER VOLUME] dial for the most comfortable listening level during your performance.



To familiarize yourself with the characteristics of the voices, listen to the demo songs for each voice (page 13).

TERMINOLOGY

Voice:

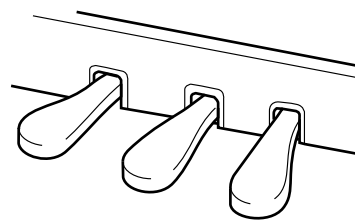
On the N-100, the term “voice” means “instrument sound.”



When you select a voice, an appropriate reverb type will be selected automatically (page 18).

Using the Pedals

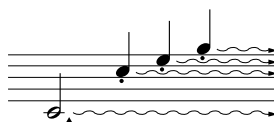
The N-100 has three foot pedals: damper pedal (right), sostenuto pedal (center), and soft pedal (left) that produce a range of expressive effects similar to those produced by the pedals on an acoustic piano.



Damper pedal (right)

When you press the damper pedal, the notes you play have a longer sustain.

When you select Grand Piano 1, pressing the damper pedal activates the instrument's special "Sustain Samples" to accurately recreate the unique resonance of an acoustic grand piano's soundboard and strings. A "half-pedal" effect lets you use the damper pedal to create partial sustain effects, depending on how far down you press the pedal.



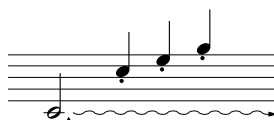
When you press the damper pedal here, the notes you play before you release the pedal have a longer sustain.



If the damper pedal doesn't work, or notes are sustained even when the pedal is not pressed, make sure that the pedal cord is properly plugged into the main unit (page 30).

Sostenuto pedal (center)

If you play a note or chord on the keyboard and press the sostenuto pedal while holding the note(s), the notes will sustain as long as the pedal is held. All subsequent notes will not sustain.



When you press the sostenuto pedal here while holding the note(s), the notes will sustain as long as you hold the pedal.



Organ and string voices will continue to sound for as long as the sostenuto pedal is depressed.

Soft pedal (left)

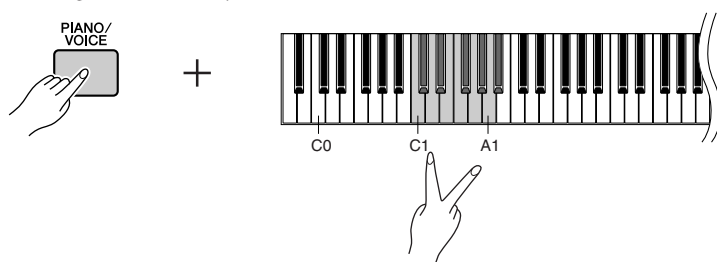
The soft pedal reduces the volume and slightly changes the timbre of notes played while the pedal is pressed. (The soft pedal will not affect notes that are already playing when it is pressed. Press the pedal immediately before you play the target notes.)

Combining Voices (Dual)

You can play voices simultaneously across the entire range of the keyboard. In this way, you can combine similar voices to create a thicker sound.

1. While holding down the [PIANO/VOICE] button, press two keys in the range of C1 through A1 simultaneously (or press one key while holding another) to engage Dual.

Refer to “Selecting Voices” on page 15 for more information on the voices that are assigned to the keys.



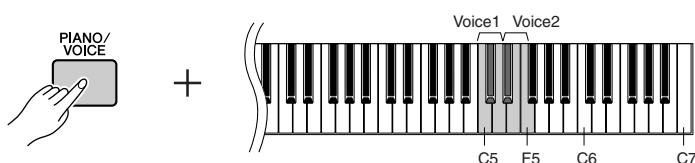
The voice assigned to the lower key will be designated as Voice 1, and the voice assigned to the higher key will be designated as Voice 2.

You can make the following settings for Voices 1 and 2 in Dual:

Setting the Octave

You can shift the pitch up and down in octave steps for Voice 1 and Voice 2 independently. Depending on which voices you combine in Dual, the combination may sound better if one of the voices is shifted up or down an octave.

While holding down the [PIANO/VOICE] button, press one of the C5–F5 keys.



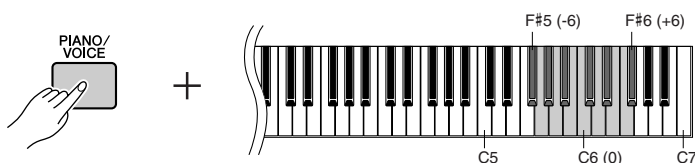
Voice 1	C5	-1	Voice 2	D#5	-1
	C#5	0		E5	0
	D5	+1		F5	+1

Setting the Balance

You can adjust the volume balance between two voices. For example, you can set one voice as the main voice with a louder setting, and make the other voice softer.

While holding down the [PIANO/VOICE] button, press one of the F#5–F#6 keys.

A setting of “0” produces an equal balance between the two Dual voices. Settings below “0” increase the volume of Voice 2 in relation to Voice 1, and settings above “0” increase the volume of Voice 1 in relation to Voice 2.



2. While holding down the [PIANO/VOICE] button, press one of the C1–A1 keys (or press the [PIANO/VOICE] button) to exit Dual and return to the normal single-voice play.



Reverb in Dual

The reverb type assigned to Voice 1 will take priority. If the reverb assigned to Voice 1 is set to OFF, the reverb assigned to Voice 2 will be in effect.

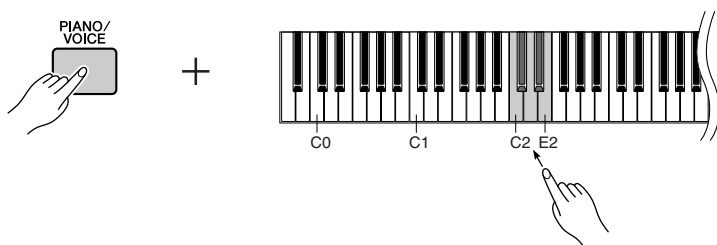
Adding Variations to the Sound—Reverb

This control enables you to select four different types of reverb effect that add extra depth and expression to the sound to create a realistic acoustic ambience.

Key	Reverb Type	Description
C2	Room	This setting adds a continuous reverb effect to the sound, similar to the acoustic reverberation you would hear in a room.
C#2	Hall 1	For a “bigger” reverb sound, use the HALL 1 setting. This effect simulates the natural reverberation of a small-size concert hall.
D2	Hall 2	For a truly spacious reverb sound, use the HALL 2 setting. This effect simulates the natural reverberation of a large concert hall.
D#2	Stage	Simulates the reverb of a stage environment.
E2	Off	No effect is applied.

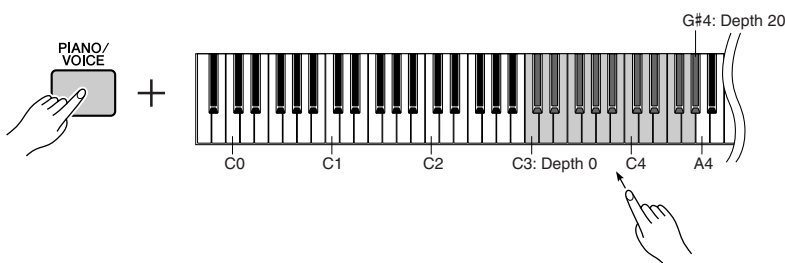
Selecting a Reverb Type

While holding down the [PIANO/VOICE] button, press one of the C2–E2 keys to select a reverb type.



Adjusting Reverb Depth

While holding down the [PIANO/VOICE] button, press one of the C3–G#4 keys to adjust the reverb depth for the selected voice.



The depth value increases as you press higher keys.

While holding down the [PIANO/VOICE] button, press the A4 key to set the reverb to the depth most suitable for the selected voice.



Reverb depth range:
0 (no effect)–
20 (maximum depth)



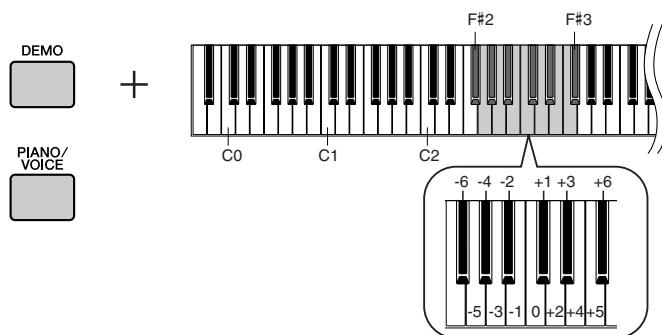
The default reverb type (including OFF) and depth settings are different for each voice.

Transposition

The N-100's Transpose function makes it possible to shift the pitch of the entire keyboard up or down in semitone intervals to facilitate playing in difficult key signatures, and to let you easily match the pitch of the keyboard to the range of a singer or other instruments. For example, if you set the transposition amount to "+5," playing key C produces pitch F. In this way, you can play a song as though it were in C major, and the N-100 will transpose it to the key of F.

Setting the amount of transposition

While holding down the [DEMO] and [PIANO/VOICE] buttons, press one of the F#2–F#3 keys to set the desired amount of transposition.



To transpose the pitch down (in semitone steps)

While holding down the [DEMO] and [PIANO/VOICE] buttons, press any key between F#2 and B2.

To transpose the pitch up (in semitone steps)

While holding down the [DEMO] and [PIANO/VOICE] buttons, press any key between C#3 and F#3.

To restore the normal pitch

While holding down the [DEMO] and [PIANO/VOICE] buttons, press the C3 key.

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Transpose:

Changing the key signature. On the N-100, transposing shifts the pitch of the entire keyboard.



Transposition range:

- F#2 (-6 semitones)–
- C3 (normal pitch)–
- F#3 (+6 semitones)

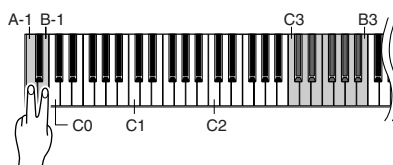
Fine tuning of the Pitch

You can fine tune the pitch of the entire instrument. This function is useful when you play the N-100 along with other instruments or CD music.

Setting the Pitch

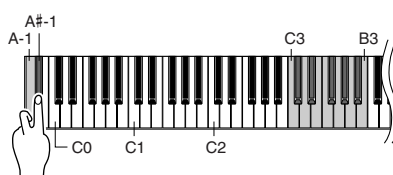
To raise the pitch (in steps of roughly 0.2 Hz):

Hold down the A-1 and B-1 keys simultaneously and press any key between C3 and B3.



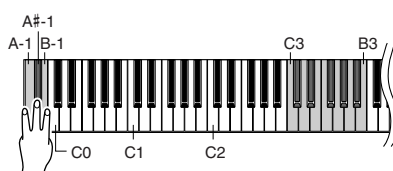
To lower the pitch (in steps of roughly 0.2 Hz):

Hold down the A-1 and A#-1 keys simultaneously and press any key between C3 and B3.



To restore standard pitch:

Hold down the A-1, A#-1 and B-1 keys simultaneously and press any key between C3 and B3.



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Hz (Hertz):

This unit of measurement refers to the frequency of a sound and represents the number of times a sound wave vibrates in a second.

Default setting:

The "Default setting" refers to the factory setting obtained when you first turn on the power to the N-100.



Setting range: 427.0–453.0 Hz

Standard pitch: 440.0 Hz

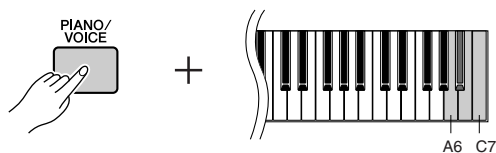
Touch Sensitivity

You can adjust the volume level that changes depending on how fast or strong you hit the keys. The following four settings are available.

Key	Touch Sensitivity	Description
A6	FIXED	The volume level does not change at all regardless of whether you play the keyboard soft or hard.
A#6	SOFT	The volume level does not change much when you play the keyboard soft or hard.
B6	MEDIUM	This is the standard piano touch response (default setting).
C7	HARD	The volume level changes very widely from pianissimo to fortissimo to facilitate dynamic and dramatic expression. You have to hit the keys hard to produce a loud sound.

Setting the Touch Sensitivity Type

While holding down the [PIANO/VOICE] button, press one of the A6–C7 keys to select the desired touch sensitivity.



The touch sensitivity settings may have little or no effect with Church Organ and Harpsichord voices that are not normally responsive to keyboard dynamics.

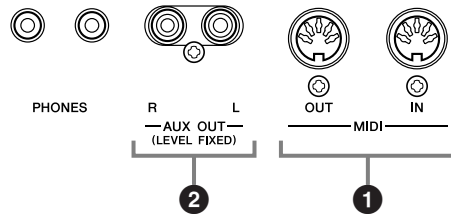
Default setting: B6

Connections

Connectors

⚠ CAUTION

Before connecting the N-100 to other electronic components, turn off the power to all the components. Before doing this, set all volume levels to minimum (0). Otherwise, electrical shock or damage to the components may result.



1 MIDI [IN] [OUT] terminals

Use MIDI cables to connect external MIDI devices to these connectors.

MIDI [IN]: Receives MIDI data.

MIDI [OUT]: Transmits MIDI data.

Refer to the “Connecting a Personal Computer” on page 22.

About MIDI

MIDI (Musical Instrument Digital Interface) is a standard format for data transmission/reception. It enables the transfer of performance data and commands between MIDI devices and personal computers. Using MIDI, you can control a connected MIDI device from the N-100, or control the N-100 from a connected MIDI device or computer.



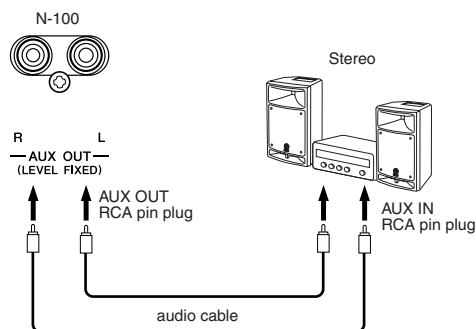
Since MIDI data that can be transmitted or received varies depending on the type of MIDI device, check the “MIDI Implementation Chart” to find out what MIDI data and commands your devices can transmit or receive. The N-100’s MIDI Implementation Chart appears on page 37.

2 AUX OUT [L] [R](LEVEL FIXED) jacks

You can connect these jacks to a stereo system to amplify the N-100 or to a cassette tape recorder to record your performance. Refer to the diagram below and use audio cables to make the connections.

⚠ CAUTION

When the N-100’s AUX OUT jacks are connected to an external audio system, first turn on the power to the N-100, then to the external audio system. Reverse this order when you turn the power off.



When these are connected (with RCA pin plug; LEVEL FIXED), the sound is output to the external device at a fixed level, regardless of the [MASTER VOLUME] dial setting.



Use audio cables and adaptor plugs with zero resistance.

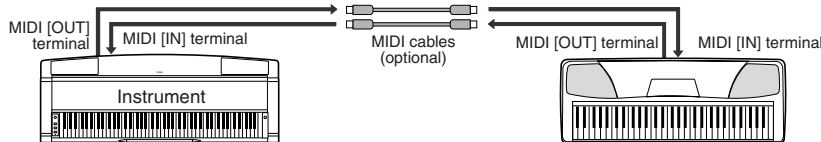
Connecting MIDI Instruments

The N-100 features MIDI IN/OUT terminals, allowing you to connect the N-100 to other instruments and devices—including computers—and take advantage of the various performance and recording capabilities in MIDI applications.

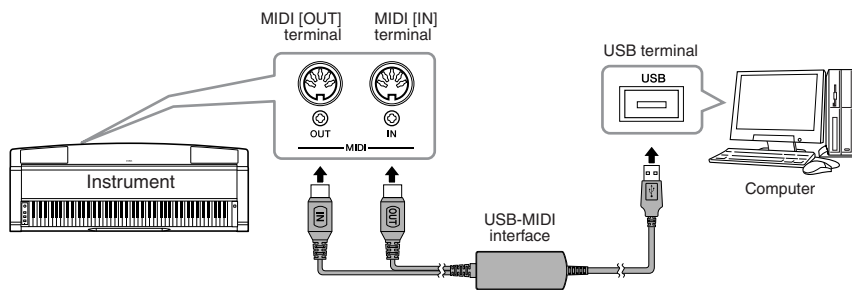
⚠ CAUTION

Before connecting the instrument to other electronic components, turn off the power of all the components.

● Transferring performance data to and from another MIDI device



● Transferring MIDI data to and from a computer



You cannot transmit the voice demo songs and the 50 piano preset songs from the N-100 to another MIDI device.

For MIDI connections, use a standard (optional) MIDI cable, available at most musical instrument stores.

Connecting a Personal Computer

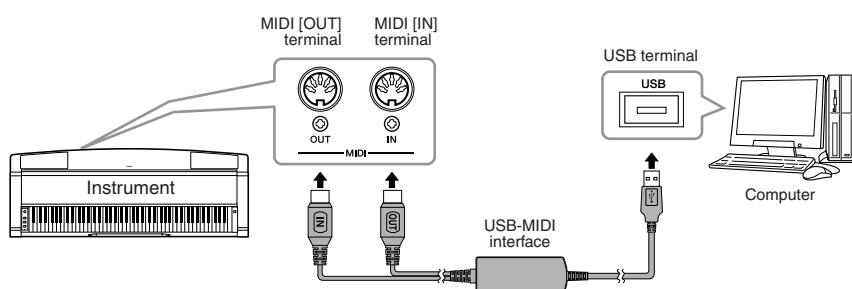
By connecting a computer to the MIDI terminals, you can transfer data between the N-100 and the computer via MIDI.

⚠ CAUTION

When connecting the N-100 to a computer, first turn off the power to both the N-100 and the computer before connecting any cables. After making connections, turn on the power of the computer first, then that of the N-100.

Connecting the USB port on the computer to the N-100 via a USB-MIDI interface (such as the UX16, UX96, or UX256)

Use a USB-MIDI interface device to connect the USB port on your computer to the N-100's MIDI terminals. You must install the USB-MIDI interface (such as the UX16, UX96, or UX256) driver. For more information, refer to the user's manual that came with the USB-MIDI interface device.



When the N-100 is used as a tone module, performance data with voices that are not found on the N-100 will not be played correctly.



In order to properly transfer MIDI data between the N-100 and a computer, special MIDI driver software must be installed to the computer.

MIDI Functions

These operations let you make detailed adjustments to MIDI settings.

MIDI Transmit/Receive Channel Selection

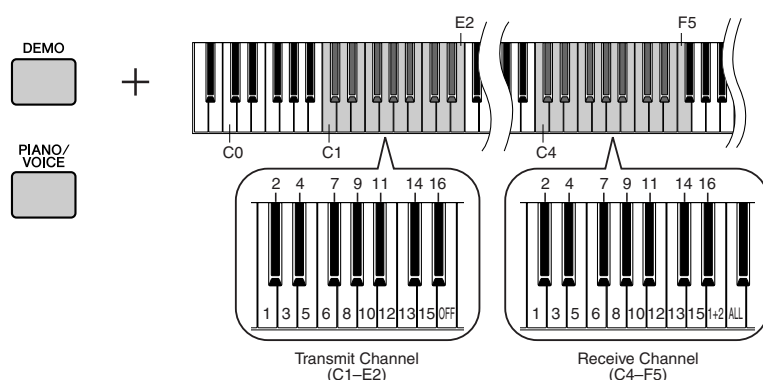
In any MIDI control setup, the MIDI channels of the transmitting and receiving devices must be matched for proper data transfer. This parameter enables you to specify the channel on which the N-100 transmits or receives MIDI data.

Setting the Transmit Channel

While holding down the [DEMO] and [PIANO/VOICE] buttons, press one of the C1–E2 keys.

Setting the Receive Channel

While holding down the [DEMO] and [PIANO/VOICE] buttons, press one of the C4–F5 keys.



In Dual, Voice 1 data is transmitted on its specified channel and Voice 2 data is transmitted on the next greater channel number relative to the specified channel. In this case, no data is transmitted if the transmit channel is set to "OFF."

ALL:

"Multi-timbre" Receive. This allows simultaneous reception of different parts on all 16 MIDI channels, enabling the N-100 to play multi-channel song data received from a music computer or sequencer.

1+2:

"1+2" Receive. This allows simultaneous reception on channels 1 and 2 only, enabling the N-100 to play 1 and 2 channel song data received from a music computer or sequencer.

Program change and other like channel messages received will not affect the N-100's panel settings or the notes you play on the keyboard.

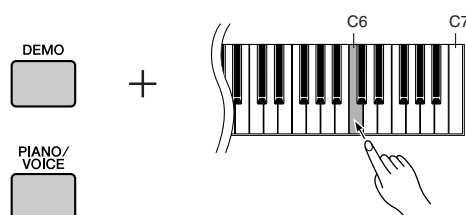
Data for the demo song and 50 piano preset songs cannot be transmitted via MIDI.

Local Control ON/OFF

"Local Control" refers to the fact that, normally, the N-100 keyboard controls its internal tone generator, allowing the internal voices to be played directly from the keyboard. This situation is "Local Control On," since the internal tone generator is controlled locally by its own keyboard.

Local control can be turned OFF, however, so that the N-100 keyboard does not play the internal voices, but the appropriate MIDI information is still transmitted via the MIDI OUT terminal when notes are played on the keyboard. At the same time, the internal tone generator responds to MIDI information received via the MIDI IN terminal.

While holding down the [DEMO] and [PIANO/VOICE] buttons, press the C6 key. Pressing the C6 key repeatedly toggles between Local Control On and Off.

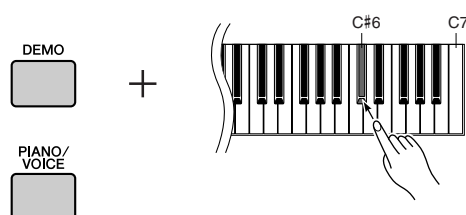


Default setting: ON

Program Change ON/OFF

Normally the N-100 will respond to MIDI program change numbers received from an external keyboard or other MIDI device, causing the same numbered voice to be selected on the corresponding channel (the keyboard voice does not change). The N-100 will normally also send a MIDI program change number whenever one of its voices is selected, causing the same numbered voice or program to be selected on the external MIDI device if the device is set up to receive and respond to MIDI program change numbers. This function makes it possible to cancel program change number reception and transmission so that voices can be selected on the N-100 without affecting the external MIDI device.

While holding down the [DEMO] and [PIANO/VOICE] buttons, press the C#6 key. Pressing the C#6 key repeatedly toggles between Program Change On and Off.



For information on program change numbers for each of the N-100's voices, refer to MIDI Data Format on page 33.

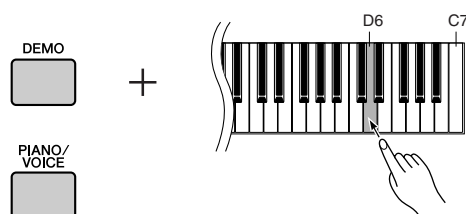
Default setting: ON

Control Change ON/OFF

Normally the N-100 will respond to MIDI control change data received from an external MIDI device or keyboard, causing the voice on the corresponding channel to be affected by pedal and other "control" settings received from the controlling device (the keyboard voice is not affected). The N-100 also transmits MIDI control change information when the pedal or other appropriate controls are operated.

This function makes it possible to cancel control change data reception and transmission so that, for example, the N-100's pedal and other controls can be operated without affecting an external MIDI device.

While holding down the [DEMO] and [PIANO/VOICE] buttons, press the D6 key. Pressing the D6 key repeatedly toggles between Control Change On and Off.



For information on control changes that can be used with the N-100, refer to MIDI Data Format on page 33.

Default setting: ON

Troubleshooting

Problem	Possible Cause and Solution
The N-100 does not turn on.	The N-100 has not been plugged in properly. Securely insert the female plug into the socket on the N-100, and the male plug into a proper AC outlet (page 11).
Noise is heard from the speakers or headphones.	The noise may be due to interference caused by the use of a mobile phone in close proximity to the N-100. Turn off the mobile phone, or use it further away from the N-100.
The overall volume is low, or no sound is heard.	<ul style="list-style-type: none"> • The Master Volume is set too low; set it to an appropriate level using the [MASTER VOLUME] dial. • Make sure a pair of headphones is not connected to the headphones jack (page 12). • Make sure that Local Control (page 23) is ON.
The damper pedal has no effect, or the sound continuously sustains even when the damper pedal is not pressed.	The pedal cord may not be properly connected. Make sure to securely insert the pedal cord into the [PEDAL] connector (page 30).

Optional Equipment

Headphones (HPE-30)

Keyboard Stand Assembly

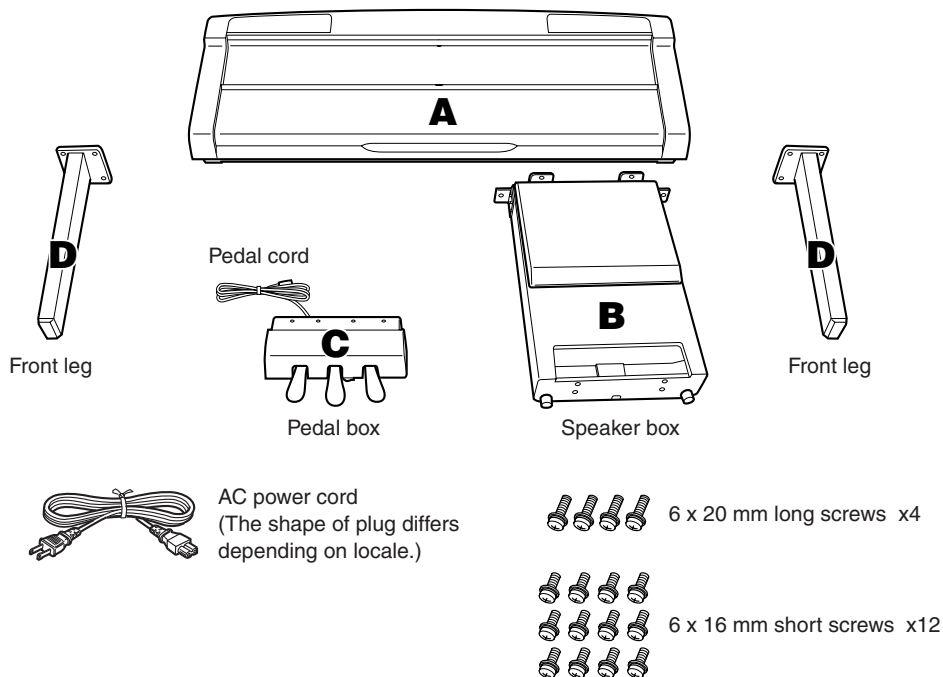
⚠ CAUTION

- Be careful not to confuse parts, and be sure to install all parts in the correct direction. Please assemble the unit in the appropriate sequence.
- Assembly should be carried out by at least two persons.
- Be sure to use the included screws only, and insert screws of the correct size in the correct hole locations. Do not use any other screws. Use of incorrect screws can cause damage or malfunction of the product.
- Be sure to tighten all screws upon completing assembly of each unit.
- To disassemble, reverse the assembly sequence.

Have a Phillips-head (+) screwdriver ready.



Remove all parts from the box. Confirm that all parts shown in the illustration are provided.

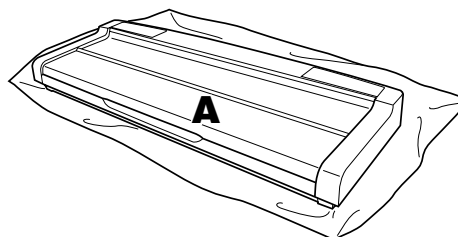


- Before starting installation, remove the vinyl ties that bundle the pedal cord and AC power cord.

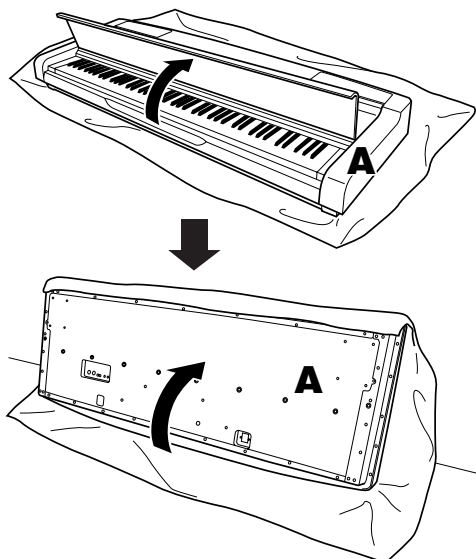
1. Lean A against the wall.

- 1-1 Spread a large soft cloth such as a blanket on the floor in front of the wall.

- 1-2 Lay A on the soft cloth with its keyboard side facing toward you.

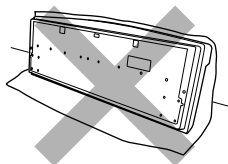


- 1-3** Open the key cover, then raise the keyboard side of A until it leans against the wall. Be careful not to allow the A to fall or slip. Also, insert the soft cloth between the A and the wall to protect the unit from being damaged by hitting the wall or any other object.

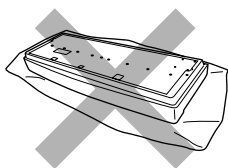


! CAUTION

- Do not place the A with the front side facing down.



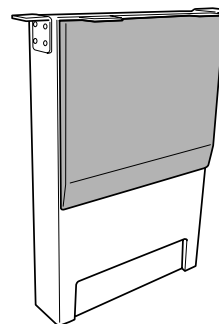
- Do not lay the A upside-down on the floor.



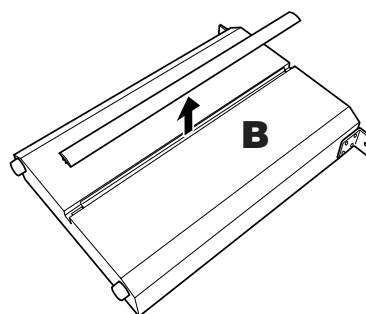
2. Attach C to B.

! CAUTION

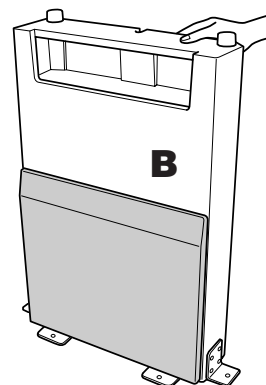
Please do not touch the speaker net (cloth cover) or the speaker underneath it.



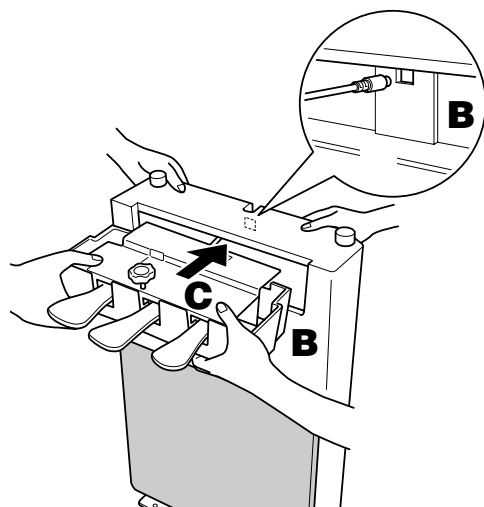
- 2-1** Remove the plastic groove cover from B.



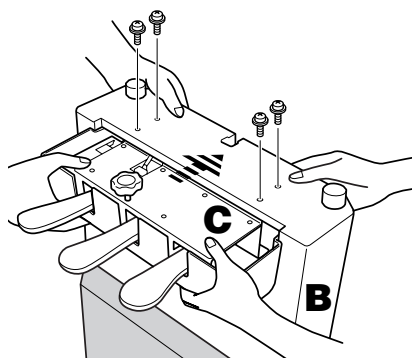
- 2-2** Stand B upside down on the floor and support it with your hands.



- 2-3** While supporting B with your hand, pass the pedal cord (attached to C) through from the inside to the outside of B. Position C upside down, then insert it into the slot on B. Be sure to push C until it stops.

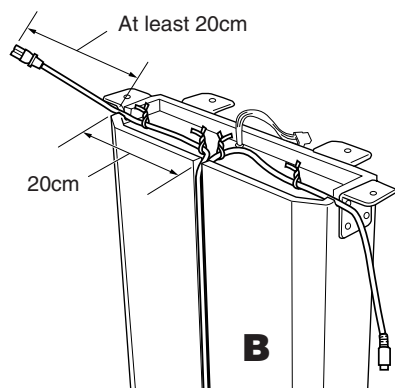


- 2-4** While holding and pressing C securely into the slot, fix it to B using four long screws (6x20mm).

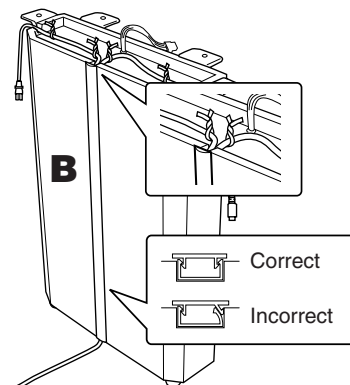


- 2-5** Turn B so that its bottom side of (the side on which C is attached) is on the floor.

- 2-6** Pass the pedal cord and power cord into the groove on B, then attach them to the top of B using the four vinyl ties. Be sure to have the end of the power cord extend past the top edge of B by 20cm or more (roughly half the length of B).



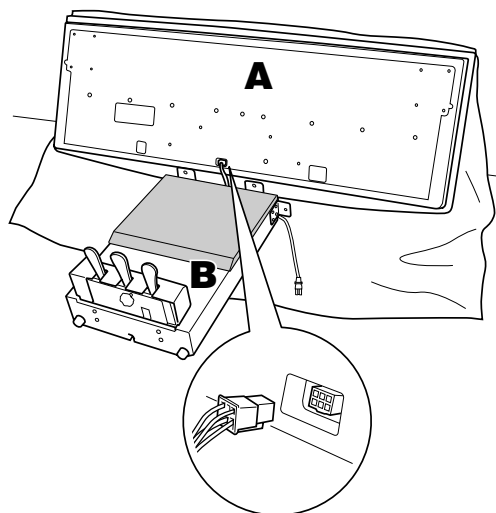
- 2-7** Replace the plastic cover onto the groove of B. Do not insert the feet of the groove cover between the groove socket and groove wall.



3. Fix B to A.

- 3-1** Place B in front of A, with the speaker net on B facing upward.

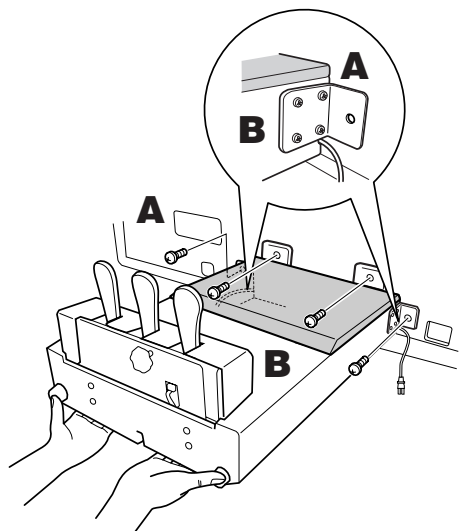
- 3-2** Insert the speaker cord plug into the connector on the bottom surface of A, with the plug's tab facing to the rear.



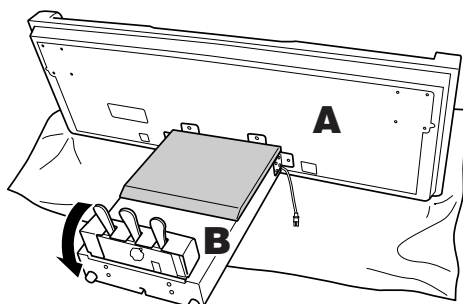
3-3 While holding B with your hands, fix B to A using four short screws (6x16mm).

At this time, be careful not to pinch the pedal cord and power cord between the bracket on B and the bottom of A.

Be sure not to scratch the speaker net (cloth cover) when you fix B to A.

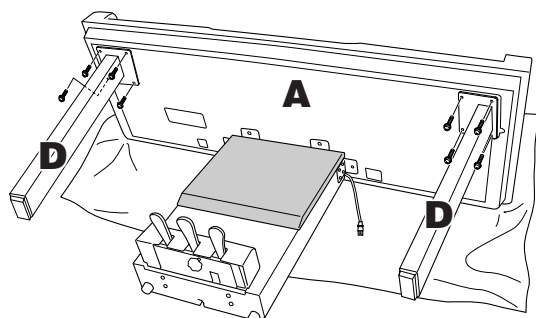


3-4 Lower B slowly.



4. Attach D.

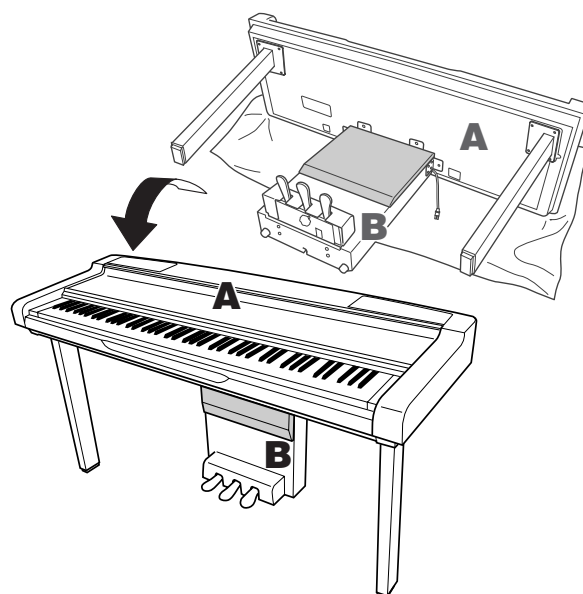
Fix D to the bottom of A, using four short screws (6x16mm) on each leg.



If the screw holes do not align, loose the other screws and adjust the position of D.

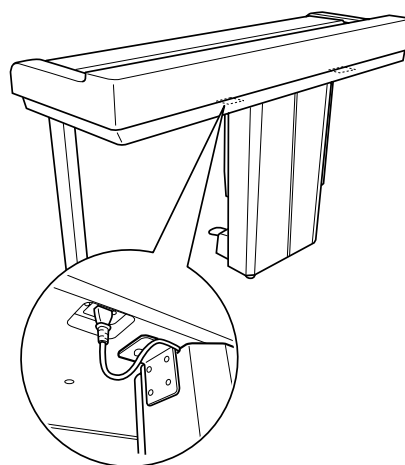
5. Raise A.

Use B as support to raise A.



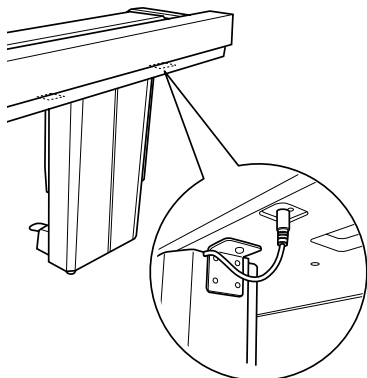
6. Connect the AC power cord.

Insert the AC power cord plug into the AC INLET.

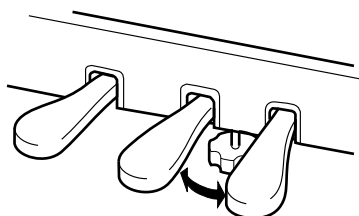


7. Connect the pedal cord.

Insert the pedal cord plug into the pedal connector.



8. Set the adjuster.



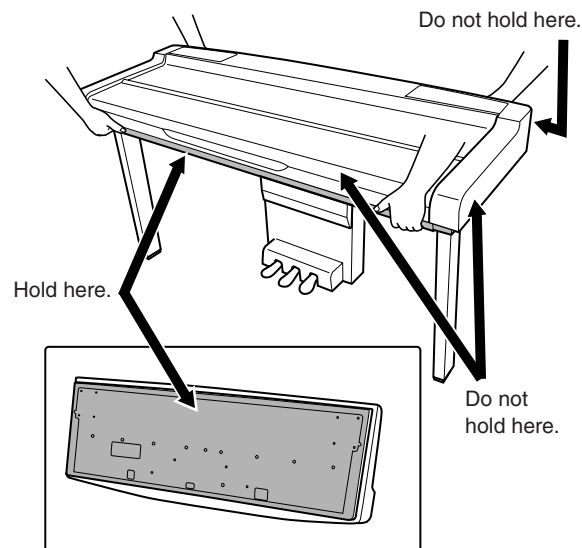
Rotate the adjuster until it comes in firm contact with the floor surface.

After completing the assembly, please check the following.

- Are there any parts left over?
→ Review the assembly procedure and correct any errors.
- Is the N-100 clear of doors and other movable fixtures?
→ Move the N-100 to an appropriate location.
- Does the N-100 make a rattling noise when you shake it?
→ Tighten all screws.
- Does the pedal box rattle or give way when you step on the pedals?
→ Turn the adjuster so that it is set firmly against the floor.
- Are the pedal and power cords inserted securely into the sockets?
→ Check the connection.
- If the main unit creaks or is otherwise unsteady when you play on the keyboard, refer to the assembly diagrams and retighten all screws.

CAUTION

When moving the instrument after assembly, always hold the bottom of the main unit. Do not hold the key cover, and the stepped part on the front, side or rear of the unit. Improper handling can result in damage to the instrument or personal injury.



Place the N-100 so that its rear panel is at least 10 cm away from the wall.

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Preset Song List / Liste der voreingestellten Songs / Liste des morceaux prédéfinis / Lista de canciones preseleccionadas

No.	Title	Composer
1	Invention No. 1	J.S.Bach
2	Invention No. 8	J.S.Bach
3	Gavotte	J.S.Bach
4	Prelude (Wohltemperierte Klavier I No.1)	J.S.Bach
5	Menuett G dur BWV.Anh.114	J.S.Bach
6	Le Coucou	L-C.Daquin
7	Piano Sonate No.15 K.545 1st mov.	W.A.Mozart
8	Turkish March	W.A.Mozart
9	Menuett G dur	W.A.Mozart
10	Little Serenade	J.Haydn
11	Perpetuum mobile	C.M.v.Weber
12	Ecossaise	L.v.Beethoven
13	Für Elise	L.v.Beethoven
14	Marcia alla Turca	L.v.Beethoven
15	Piano Sonate op.13 "Pathétique" 2nd mov.	L.v.Beethoven
16	Piano Sonate op.27-2 "Mondschein" 1st mov.	L.v.Beethoven
17	Piano Sonate op.49-2 1st mov.	L.v.Beethoven
18	Impromptu op.90-2	F.P.Schubert
19	Moments Musicaux op.94-3	F.P.Schubert
20	Frühlingslied op.62-2	J.L.F.Mendelssohn
21	Jägerlied op.19b-3	J.L.F.Mendelssohn
22	Fantaisie-Impromptu	F.F.Chopin
23	Prelude op.28-15 "Raindrop"	F.F.Chopin
24	Etude op.10-5 "Black keys"	F.F.Chopin
25	Etude op.10-3 "Chanson de l'adieu"	F.F.Chopin
26	Etude op.10-12 "Revolutionary"	F.F.Chopin
27	Valse op.64-1 "Petit chien"	F.F.Chopin
28	Valse op.64-2	F.F.Chopin
29	Valse op.69-1 "L'adieu"	F.F.Chopin
30	Nocturne op.9-2	F.F.Chopin
31	Träumerei	R.Schumann
32	Fröhlicher Landmann	R.Schumann
33	La prière d'une Vierge	T.Badarzewska
34	Dolly's Dreaming and Awakening	T.Oesten
35	Arabesque	J.F.Burgmüller
36	Pastorale	J.F.Burgmüller
37	La chevaleresque	J.F.Burgmüller
38	Liebesträume Nr.3	F.Liszt
39	Blumenlied	G.Lange
40	Barcarolle	P.I.Tchaikovsky
41	Melody in F	A.Rubinstein
42	Humoresque	A.Dvořák
43	Tango (España)	I.Albéniz
44	The Entertainer	S.Joplin
45	Maple Leaf Rag	S.Joplin
46	La Fille aux Cheveux de Lin	C.A.Debussy
47	Arabesque 1	C.A.Debussy
48	Clair de lune	C.A.Debussy
49	Rêverie	C.A.Debussy
50	Golliwog's Cakewalk	C.A.Debussy

MIDI Data Format / MIDI-Datenformat / Format des données MIDI / Formato de datos MIDI

If you're already very familiar with MIDI, or are using a computer to control your music hardware with computer-generated MIDI messages, the data provided in this section can help you to control the N-100.

Falls Sie bereits mit MIDI vertraut sind oder einen Computer zur Erzeugung von MIDI-Steuermeldungen für die Instrumente verwenden, können Sie sich zur Steuerung des N-100 nach den im folgenden Abschnitt aufgeführten Spezifikationen richten.

Si vous êtes très familier avec l'interface MIDI ou si vous utilisez un ordinateur pour commander votre matériel de musique au moyen de messages MIDI générés par ordinateur, les données suivantes vous seront utiles et vous aideront à commander le N-100.

Si usted está ya familiarizado con MIDI, o si emplea una computadora para controlar sus aparatos musicales con mensajes MIDI generados por computadora, los datos proporcionados en esta sección le ayudarán a controlar la N-100.

1. NOTE ON/OFF

Data format: [9nH] -> [kk] -> [vv]

9nH = Note ON/OFF event (n = channel number)
kk = Note number (Transmit: 09H–78H = A-2–C8 /
Receive: 00H–7FH = C-2–G8)
vv = Velocity (Key ON = 01H–7FH, Key OFF = 00H)

Data format: [8nH] -> [kk] -> [vv] (reception only)

8nH = Note OFF event (n = channel number)
kk = Note number: 00H–7FH = C-2–G8)
vv = Velocity

2. CONTROL CHANGE

Data format: [BnH] -> [cc] -> [vv]

BnH = Control change (n = channel number)
cc = Control number
vv = Data Range

(1) Bank Select

ccH	Parameter	Data Range (vvH)
00H	Bank Select MSB	00H:Normal
20H	Bank Select LSB	00H...7FH

Bank selection processing does not occur until receipt of next Program Change message.

(2) Main Volume

ccH	Parameter	Data Range (vvH)
07H	Volume MSB	00H...7FH

(3) Expression (reception only)

ccH	Parameter	Data Range (vvH)
0BH	Expression MSB	00H...7FH

(4) Sustain

ccH	Parameter	Data Range (vvH)
40H	Sustain MSB	00H...7FH

(5) Sostenuto (reception only)

ccH	Parameter	Data Range (vvH)
42H	Sostenuto	00H...3FH:off, 40H...7FH:on

(6) Soft Pedal (reception only)

ccH	Parameter	Data Range (vvH)
43H	Soft Pedal	00H...3FH:off, 40H...7FH:on

(7) Effect1 Depth (Reverb Send Level)

ccH	Parameter	Data Range (vvH)
5BH	Effect1 Depth	00H...7FH

Adjusts the reverb send level.

(8) Effect4 Depth (Variation Effect Send Level)

ccH	Parameter	Data Range (vvH)
5EH	Effect4 Depth	00H...7FH

(9) RPN

65H	RPN	MSB
64H	RPN	LSB
06H	Data Entry	MSB
26H	Data Entry	LSB
60H	Data	Increment
61H	Data	Decrement

* Parameters that are controllable with RPN:

- Coarse Tune
- Fine Tune
- Pitch Bend Range

3. MODE MESSAGES

Data format: [BnH] -> [cc] -> [vv]

BnH = Control event (n = channel number)
cc = Control number
vv = Data Range

(1) All Sound Off

ccH	Parameter	Data Range (vvH)
78H	All Sound Off	00H

(2) Reset All Controllers

ccH	Parameter	Data Range (vvH)
79H	Reset All Controllers	00H

Resets controllers as follows.

Controller	Value
Expression	127 (max)
Sustain Pedal	0 (off)
Sostenuto	0 (off)
Soft Pedal	0 (off)

(3) Local Control (reception only)

ccH	Parameter	Data Range (vvH)
7AH	Local Control	00H (off), 7FH (on)

(4) All Notes Off

ccH	Parameter	Data Range (vvH)
7BH	All Notes Off	00H

Switches OFF all the notes that are currently ON on the specified channel. Any notes being held by the sustain or sostenuto pedal will continue to sound until the pedal is released.

(5) Omni Off (reception only)

ccH	Parameter	Data Range (vvH)
7CH	Omni Off	00H

Same processing as for All Notes Off.

(6) Omni On (reception only)

ccH	Parameter	Data Range (vvH)
7DH	Omni On	00H

Same processing as for All Notes Off.

(7) Mono (reception only)

ccH	Parameter	Data Range (vvH)
7EH	Mono	00H

Same processing as for All Sound Off.

(8) Poly (reception only)

ccH	Parameter	Data Range (vvH)
7FH	Poly	00H

Same processing as for All Sound Off.

- When Control Change is turned OFF, Control Change messages will not be transmitted or received.
- Local on/off, OMNI on/off are not transmitted. (The appropriate note off number is supplied with "All Note Off" transmission).
- When a voice bank MSB/LSB is received, the number is stored in the internal buffer regardless of the received order, then the stored value is used to select the appropriate voice when a program change message is received.
- Poly mode is always active. This mode will not change when the instrument receives a MONO/POLY mode message.

4. PROGRAM CHANGE

Data format: [CnH] -> [ppH]

CnH = Program event (n = channel number)

ppH = Program change number

P.C.#= Program Change number

Voice Name	MSB	LSB	P.C.#
Grand Piano 1	0	122	1
Grand Piano 2	0	112	1
Piano & Strings	0	125	1
Electronic Piano 1	0	122	6
Electronic Piano 2	0	122	5
Church Organ	0	123	20
Jazz Organ	0	122	17
Strings	0	122	49
Harpsichord	0	122	7
Vibraphone	0	122	12

- When program change reception is turned OFF, no program change data is transmitted or received.
- When you specify a program change as a number in the range of 0–127, specify a number that is one less than the program change number listed above. For example, to specify program change number 1, you would specify a value of 0.

5. Pitch Bend Change (reception only)

[EnH] -> [ccH] -> [ddH]

ccH = LSB

ddH = MSB

6. SYSTEM REALTIME MESSAGES

[rrH]

F8H: Timing clock

FAH: Start

FCH: Stop

FEH: Active sensing

Data	Transmission	Reception
F8H	Transmitted every 96 clocks	Received as 96-clock tempo timing when MIDI clock is set to External.
FAH	Song start	Song start Not received when the MIDI clock is set to Internal.
FCH	Song stop	Song stop Not received when the MIDI clock is set to Internal.
FEH	Transmitted every 200 milliseconds	If a signal is not received via MIDI for more than 400 milliseconds, the same processing will take place for All Sound Off, All Notes Off and Reset All Controllers as when those signals are received.

- If an error occurs during MIDI reception, the Sustain, Sostenuto, and Soft effects for all channels are turned off and an All Note Off occurs.

7. SYSTEM EXCLUSIVE MESSAGES (Universal System Exclusive)

(1) Universal Realtime Message

Data format: [F0H] -> [7FH] -> [XnH] -> [04H] -> [01H] -> [IH] -> [mmH] -> [F7H]

MIDI Master Volume

- Simultaneously changes the volume of all channels.
- When a MIDI master volume message is received, the volume only has affect on the MIDI receive channel, not the panel master volume.

F0H = Exclusive status

7FH = Universal Realtime

7FH = ID of target device

04H = Sub-ID #1=Device Control Message

01H = Sub-ID #2=Master Volume

//H = Volume LSB

mmH = Volume MSB

F7H = End of Exclusive

or

F0H = Exclusive status

7FH = Universal Realtime

XnH = When received, n=0–F.

X = irrelevant

04H = Sub-ID #1=Device Control Message

01H = Sub-ID #2=Master Volume

//H = Volume LSB

mmH = Volume MSB

F7H = End of Exclusive

(2) Universal Non-Realtime Message (GM On)

General MIDI Mode On

Data format: [F0H] -> [7EH] -> [XnH] -> [09H] -> [01H] -> [F7H]

F0H = Exclusive status

7EH = Universal Non-Realtime

7FH = ID of target device

09H = Sub-ID #1=General MIDI Message

01H = Sub-ID #2=General MIDI On

F7H = End of Exclusive

or

F0H = Exclusive status

7EH = Universal Non-Realtime

XnH = When received, n=0–F.

X = irrelevant

09H = Sub-ID #1=General MIDI Message

01H = Sub-ID #2=General MIDI On

F7H = End of Exclusive

When the General MIDI mode ON message is received, the MIDI system will be reset to its default settings.

This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

8. SYSTEM EXCLUSIVE MESSAGES (XG Standard)

(1) XG Native Parameter Change

Data format: [F0H] -> [43H] -> [1nH] -> [4CH] -> [hhH] -> [mmH] -> [//H] -> [ddH] -> [F7H]

F0H = Exclusive status
 43H = YAMAHA ID
 1nH = When received, n=0–F.
 When transmitted, n=0.
 4CH = Model ID of XG
 hhH = Address High
 mmH = Address Mid
 //H = Address Low
 ddH = Data
 |
 F7H = End of Exclusive

Data size must match parameter size (2 or 4 bytes).

When the XG System On message is received, the MIDI system will be reset to its default settings.

The message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

(2) XG Native Bulk Data (reception only)

Data format: [F0H] -> [43H] -> [0nH] -> [4CH] -> [aaH] -> [bbH] -> [hhH] -> [mmH] -> [//H] -> [ddH] ->...-> [ccH] -> [F7H]

F0H = Exclusive status
 43H = YAMAHA ID
 0nH = When received, n=0–F.
 When transmitted, n=0.
 4CH = Model ID of XG
 aaH = ByteCount
 bbH = ByteCount
 hhH = Address High
 mmH = Address Mid
 //H = Address Low
 ddH = Data
 | |
 | |
 ccH = Check sum
 F7H = End of Exclusive

- Receipt of the XG SYSTEM ON message causes reinitialization of relevant parameters and Control Change values. Allow sufficient time for processing to execute (about 50 msec) before sending the N-100 another message.
- XG Native Parameter Change message may contain two or four bytes of parameter data (depending on the parameter size).
- For information about the Address and Byte Count values, refer to Table 1 below. Note that the table's Total Size value gives the size of a bulk block. Only the top address of the block (00H, 00H, 00H) is valid as a bulk data address.

9. SYSTEM EXCLUSIVE MESSAGES (Digital Piano MIDI Format)

Data format: [F0H] -> [43H] -> [73H] -> [01H] -> [nnH] -> [F7H]

F0H = Exclusive status
 43H = Yamaha ID
 73H = Digital Piano ID
 01H = Product ID (digital piano common)
 nnH = Substatus
 02H Internal MIDI clock
 03H External MIDI clock
 F7H = End of Exclusive

10. SYSTEM EXCLUSIVE MESSAGES (Special Control)

Data format: [F0H] -> [43H] -> [73H] -> [7FH] -> [4H]B -> [11H] -> [0nH] -> [ccH] -> [vvH] -> [F7H]

F0H = Exclusive status
 43H = Yamaha ID
 73H = Digital Piano ID
 7FH = Extended Product ID
 4BH = Product ID
 11H = Special control
 0nH = Control MIDI change (n=channel number)
 cc = Control number
 vv = Value
 F7H = End of Exclusive

Control	Channel	ccH	vvH
Channel Detune ch:	00H–0FH	43H	(Sets the Detune value for each channel) 00H–7FH
Voice Reserve ch:	00H–0FH	45H	00H : Reserve off 7FH : on*

* When Volume, Expression is received for Reserve On, they will be effective from the next Key On. Reserve Off is normal.

11. SYSTEM EXCLUSIVE MESSAGES (Others)

Data format: [F0H] -> [43H] -> [1nH] -> [27H] -> [30H] -> [00H] -> [00H] -> [mmH] -> [//H] -> [ccH] -> [F7H]

Master Tuning (XG and last message priority) simultaneously changes the pitch of all channels.

F0H = Exclusive Status
 43H = Yamaha ID
 1nH = When received, n=0–F.
 When transmitted, n=0.
 27H = Model ID of TG100
 30H = Sub ID
 00H =
 00H =
 mmH = Master Tune MSB
 //H = Master Tune LSB
 ccH = irrelevant (under 7FH)
 F7H = End of Exclusive

<Table 1>

MIDI Parameter Change table (SYSTEM)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
00 00 00	4	020C-05F4(*1)	MASTER TUNE	-50→+50[cent]	00 04 00 00
01				1st bit 3-0 → bit 15-12	400
02				2nd bit 3-0 → bit 11-8	
03				3rd bit 3-0 → bit 7-4	
04	1	00-7F	MASTER VOLUME	0-127	7F
7E		00	XG SYSTEM ON	00=XG sytem ON	
7F		00	RESET ALL PARAMETERS	00=ON (receiv e only)	
TOTAL SIZE 07					

*1: Values lower than 020CH select -50 cents. Values higher than 05F4H select +50 cents.

<Table 2>

MIDI Parameter Change table (EFFECT 1)

Refer to the "Effect MIDI Map" for a complete list of Reverb, Chorus and Variation type numbers.

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 01 00	2	00-7F	REVERB TYPE MSB	Refer to Effect MIDI Map	01 (=HALL1)
		00-7F	REVERB TYPE LSB	00 : basic type	00
02 01 40	2	00-7F	VARIATION TYPE MSB	Refer to Effect MIDI Map	00 (=Effect off)
		00-7F	VARIATION TYPE LSB	00 : basic type	00

• "VARIATION" refers to the EFFECT on the panel.

<Table 3>

MIDI Parameter Change table (MULTI PART)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
08 nn 11	1	00-7F	DRY LEVEL	0-127	7F

nn = Part Number

• **Effect MIDI Map**

REVERB

	MSB	LSB
ROOM	02H	10H
HALL 1	01H	10H
HALL 2	01H	11H
STAGE	03H	10H
OFF	00H	00H

EFFECT

	MSB	LSB
CHORUS	42H	10H
PHASER	48H	10H
TREMOLO	46H	10H
ROTARY SP	47H	10H
OFF	00H	00H

Function	Transmitted	Recognized	Remarks
Basic Channel Default Changed	1 1 - 16	1 - 16 1 - 16	
Mode Messages Altered	3 x *****	3 x x	
Note Number : True voice	0 - 127 *****	0 - 127 0 - 127	
Velocity Note ON Note OFF	o 9nH,v=1-127 x	o 9nH,v=1-127 x	
After Touch Key's Ch's	x x	x x	
Pitch Bend	x	o 0 - 24 semi	
Control Change 0,32 1 7 10 11 6,38 64,66,67 84 91,94 96-97 100-101	o x x x x x o x o x x x	o o o o o o o o o o o o	Bank Select Modulation Main Volume Panpot Expression Data Entry Portamento Control Effect Depth RPN Inc,Dec RPN LSB,MSB
Prog Change : True #	o 0 - 127 *****	o 0 - 127	
System Exclusive	o	o	
Common : Song Pos. : Song Sel. : Tune	x x x	x x x	
System : Clock Real Time : Commands	o o	o o	
Aux : All Sound Off : Reset All Cntrls : Local ON/OFF Mes- : All Notes OFF sages: Active Sense : Reset	o o x o o o x	o (120,126,127) o (121) o (122) o (123-125) o o x	
Notes:			

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON , MONO o : Yes
 Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO x : No

Specifications / Technische Daten / Caractéristiques techniques / Especificaciones

Keyboard	GH keyboard 88 keys (A-1–C7)
Sound Source	AWM Dynamic Stereo Sampling
Polyphony (Max.)	64
Voice Selection	10
Effect	Reverb
Volume	Master Volume
Controls	Dual, Transpose, Touch (Hard/Medium/Soft/Fixed)
Pedal	Damper (with half-pedal), Sostenuto, Soft
Demo Songs	10 voice Demo Songs, 50 preset Songs
Jacks/Connectors	MIDI (IN/OUT), PHONES × 2, AUX OUT (LEVEL FIXED) (L, R)
Main Amplifiers	20 W × 2
Speakers	(12 cm × 6 cm) × 2 + 16 cm × 2
Dimensions (W × D × H)	1,460 mm x 542 mm x 793 mm (57-1/2" x 21-1/3" x 31-1/4")
Weight	46 kg (101 lbs. 7 oz.)
Accessories	Owner's Manual, Quick Operation Guide, Assembly Parts

- * Specifications and descriptions in this owner's manual are for information purposes only. Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice. Since specifications, equipment or options may not be the same in every locale, please check with your Yamaha dealer.
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MEMO

FCC INFORMATION (U.S.A.)

1. **IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!**

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2. **IMPORTANT:** When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product **MUST** be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. **NOTE:** This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of

other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA90620

The above statements apply **ONLY** to those products distributed by Yamaha Corporation of America or its subsidiaries.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

(class B)

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

BLUE : NEUTRAL

BROWN : LIVE

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

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

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

Making sure that neither core is connected to the earth terminal of the three pin plug.

• This applies only to products distributed by Yamaha-Kemble Music (U.K.) Ltd. (2 wires)

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCs ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

• This applies only to products distributed by Yamaha Canada Music Ltd. (polarity)
• Ceci ne s'applique qu'aux produits distribués par Yamaha Canada Musique Ltée.

For details of products, please contact your nearest Yamaha representative or the authorized distributor listed below.

Pour plus de détails sur les produits, veuillez-vous adresser à Yamaha ou au distributeur le plus proche de vous figurant dans la liste suivante.

Die Einzelheiten zu Produkten sind bei Ihrer unten aufgeführten Niederlassung und bei Yamaha Vertragshändlern in den jeweiligen Bestimmungsländern erhältlich.

Para detalles sobre productos, contacte su tienda Yamaha más cercana o el distribuidor autorizado que se lista debajo.

NORTH AMERICA

CANADA

Yamaha Canada Music Ltd.
135 Milner Avenue, Scarborough, Ontario,
M1S 3R1, Canada
Tel: 416-298-1311

U.S.A.

Yamaha Corporation of America
6600 Orangethorpe Ave., Buena Park, Calif. 90620,
U.S.A.
Tel: 714-522-9011

CENTRAL & SOUTH AMERICA

MEXICO

Yamaha de México S.A. de C.V.
Calz. Javier Rojo Gómez #1149,
Col. Guadalupe del Moral
C.P. 09300, México, D.F., México
Tel: 55-5804-0600

BRAZIL

Yamaha Musical do Brasil Ltda.
Av. Reboucas 2636-Pinheiros CEP: 05402-400
Sao Paulo-SP. Brasil
Tel: 011-3085-1377

ARGENTINA

Yamaha Music Latin America, S.A.
Sucursal de Argentina
Viamonte 1145 Piso2-B 1053,
Buenos Aires, Argentina
Tel: 1-4371-7021

PANAMA AND OTHER LATIN AMERICAN COUNTRIES/ CARIBBEAN COUNTRIES

Yamaha Music Latin America, S.A.
Torre Banco General, Piso 7, Urbanización Marbella,
Calle 47 y Aquilino de la Guardia,
Ciudad de Panamá, Panamá
Tel: +507-269-5311

EUROPE

THE UNITED KINGDOM

Yamaha-Kemble Music (U.K.) Ltd.
Sherbourne Drive, Tilbrook, Milton Keynes,
MK7 8BL, England
Tel: 01908-366700

IRELAND

Danfay Ltd.
61D, Sallynoggin Road, Dun Laoghaire, Co. Dublin
Tel: 01-2859177

GERMANY

Yamaha Music Central Europe GmbH
Siemensstraße 22-34, 25462 Rellingen, Germany
Tel: 04101-3030

SWITZERLAND/LIECHTENSTEIN

Yamaha Music Central Europe GmbH,
Branch Switzerland
Seefeldstrasse 94, 8008 Zürich, Switzerland
Tel: 01-383 3990

AUSTRIA

Yamaha Music Central Europe GmbH,
Branch Austria
Schleiergasse 20, A-1100 Wien, Austria
Tel: 01-60203900

CZECH REPUBLIC/SLOVAKIA/ HUNGARY/SLOVENIA

Yamaha Music Central Europe GmbH,
Branch Austria, CEE Department
Schleiergasse 20, A-1100 Wien, Austria
Tel: 01-602039025

POLAND

Yamaha Music Central Europe GmbH
Sp.z o.o. Oddział w Polsce
ul. 17 Stycznia 56, PL-02-146 Warszawa, Poland
Tel: 022-868-07-57

THE NETHERLANDS/ BELGIUM/LUXEMBOURG

Yamaha Music Central Europe GmbH,
Branch Benelux
Clarissenhof 5-b, 4133 AB Vianen, The Netherlands
Tel: 0347-358 040

FRANCE

Yamaha Musique France
BP 70-77312 Marne-la-Vallée Cedex 2, France
Tel: 01-64-61-4000

ITALY

Yamaha Musica Italia S.P.A.
Viale Italia 88, 20020 Lainate (Milano), Italy
Tel: 02-935-771

SPAIN/PORTUGAL

Yamaha-Hazen Música, S.A.
Ctra. de la Coruna km. 17, 200, 28230
Las Rozas (Madrid), Spain
Tel: 91-639-8888

GREECE

Philippos Nakas S.A. The Music House
147 Skiathou Street, 112-55 Athens, Greece
Tel: 01-228 2160

SWEDEN

Yamaha Scandinavia AB
J. A. Wettergrens Gata 1
Box 30053
S-400 43 Göteborg, Sweden
Tel: 031 89 34 00

DENMARK

YS Copenhagen Liaison Office
Generatorvej 6A
DK-2730 Herlev, Denmark
Tel: 44 92 49 00

FINLAND

F-Musiikki Oy
Kluuvikatu 6, P.O. Box 260,
SF-00101 Helsinki, Finland
Tel: 09 618511

NORWAY

Norsk filial av Yamaha Scandinavia AB
Grini Næringspark 1
N-1345 Østerås, Norway
Tel: 67 16 77 70

ICELAND

Skifan HF
Skeifan 17 P.O. Box 8120
IS-128 Reykjavik, Iceland
Tel: 525 5000

OTHER EUROPEAN COUNTRIES

Yamaha Music Central Europe GmbH
Siemensstraße 22-34, 25462 Rellingen, Germany
Tel: +49-4101-3030

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Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650
Tel: +81-53-460-2312

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Yamaha Music Central Europe GmbH
Siemensstraße 22-34, 25462 Rellingen, Germany
Tel: 04101-3030

OTHER COUNTRIES

Yamaha Music Gulf FZE
LB21-128 Jebel Ali Freezone
P.O.Box 17328, Dubai, U.A.E.
Tel: +971-4-881-5868

ASIA

THE PEOPLE'S REPUBLIC OF CHINA

Yamaha Music & Electronics (China) Co.,Ltd.
25/F., United Plaza, 1468 Nanjing Road (West),
Jingan, Shanghai, China
Tel: 021-6247-2211

HONG KONG

Tom Lee Music Co., Ltd.
11/F., Silvercord Tower 1, 30 Canton Road,
Tsimshatsui, Kowloon, Hong Kong
Tel: 2737-7688

INDONESIA

PT. Yamaha Music Indonesia (Distributor)
PT. Nusantik
Gedung Yamaha Music Center, Jalan Jend. Gatot
Subroto Kav. 4, Jakarta 12930, Indonesia
Tel: 21-520-2577

KOREA

Yamaha Music Korea Ltd.
Tong-Yang Securities Bldg. 16F 23-8 Yoido-dong,
Youngdungpo-ku, Seoul, Korea
Tel: 02-3770-0660

MALAYSIA

Yamaha Music Malaysia, Sdn., Bhd.
Lot 8, Jalan Perbandaran, 47301 Kelana Jaya,
Petaling Jaya, Selangor, Malaysia
Tel: 3-78030900

PHILIPPINES

Yupangco Music Corporation
339 Gil J. Puyat Avenue, P.O. Box 885 MCPO,
Makati, Metro Manila, Philippines
Tel: 819-7551

SINGAPORE

Yamaha Music Asia Pte., Ltd.
#03-11 A-Z Building
140 Paya Lebor Road, Singapore 409015
Tel: 747-4374

TAIWAN

Yamaha KHS Music Co., Ltd.
3F, #6, Sec.2, Nan Jing E. Rd. Taipei.
Taiwan 104, R.O.C.
Tel: 02-2511-8688

THAILAND

Siam Music Yamaha Co., Ltd.
891/1 Siam Motors Building, 15-16 floor
Rama 1 road, Wangmai, Pathumwan
Bangkok 10330, Thailand
Tel: 02-215-2626

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Asia-Pacific Music Marketing Group
Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650
Tel: +81-53-460-2317

OCEANIA

AUSTRALIA

Yamaha Music Australia Pty. Ltd.
Level 1, 99 Queensbridge Street, Southbank,
Victoria 3006, Australia
Tel: 3-9693-5111

NEW ZEALAND

Music Houses of N.Z. Ltd.
146/148 Captain Springs Road, Te Papapa,
Auckland, New Zealand
Tel: 9-634-0099

COUNTRIES AND TRUST TERRITORIES IN PACIFIC OCEAN

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<http://music.yamaha.com/homekeyboard>
Yamaha Manual Library
<http://www.yamaha.co.jp/manual/>

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