

disklavier™

Disklavier Control Unit DKC-850

Operation manual

Manuel de l'utilisateur

Bedienungsanleitung



SPECIAL MESSAGE SECTION

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:

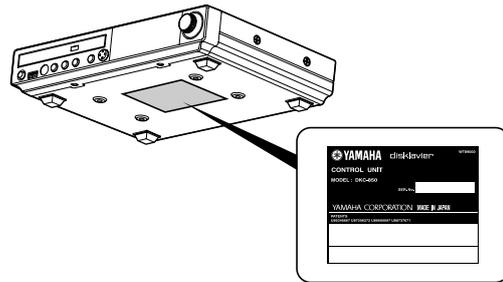
Battery Notice: This product MAY contain a small non-rechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

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 _____

PLEASE KEEP THIS MANUAL

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Applies to Power Adaptor Connecting the Plug and Cord

IMPORTANT

THE WIRES IN THE 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.

CAUTION—Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION—L'utilisation de commandes ou de réglages, ou l'exécution de procédures, autres que celles qui sont spécifiées ici peuvent conduire à une exposition à des rayonnements dangereux.

VORSICHT—Die Verwendung von Bedienungselementen oder Einstellungen, oder die Anwendung von Verfahren, die nicht in dieser Anleitung angegeben sind, kann zu gefährlicher Freisetzung von Strahlung führen.

The control unit is classified as a Class 1 laser product. One of the labels below is located on the inside of the CD drive unit.

L'unité de commande est classée produit laser de Classe 1. Une des étiquettes ci-dessous ou une étiquette similaire se trouve à l'intérieur du lecteur de CD.

Die Steuereinheit ist als ein Lasergerät der Klasse 1 eingestuft. Eins der nachstehend abgebildeten Etiketts bzw. ein Etikett ähnlichen Inhalts befindet sich im Inneren des CD-Laufwerks.

CLASS 1 LASER PRODUCT
LASER KLASSE 1
LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT
APAREIL A LASER DE CLASSE 1
EN60825

CLASS 1 LASER PRODUCT
LASER KLASSE 1

Laser Diode Properties

- * Material: GaAlAs
- * Wavelength: 790 nm
- * Laser Output Power at the lens of the Laser Pick Up Unit: max. 0.2 mW

Propriétés de la diode à semi-conducteur

- * Matériau : GaAlAs
- * Longueur d'ondes : 790 nm
- * Puissance de sortie laser à la lentille du capteur laser : 0.2 mW max.

Eigenschaften der Laserdiode

- * Werkstoff: GaAlAs
- * Wellenlänge: 790 nm
- * Laserausgangsleistung an Abtasterlinse: 0.2 mW max.

Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.



[For business users in the European Union]

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

[Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.



Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Cd

Information concernant la Collecte et le Traitement des piles usagées et des déchets d'équipements électriques et électroniques



Les symboles sur les produits, l'emballage et/ou les documents joints signifient que les produits électriques ou électroniques usagés ainsi que les piles ne doivent pas être mélangés avec les déchets domestiques habituels.

Pour un traitement, une récupération et un recyclage appropriés des déchets d'équipements électriques et électroniques et des piles usagées, veuillez les déposer aux points de collecte prévus à cet effet, conformément à la réglementation nationale et aux Directives 2002/96/EC et 2006/66/EC.

En vous débarrassant correctement des déchets d'équipements électriques et électroniques et des piles usagées, vous contribuerez à la sauvegarde de précieuses ressources et à la prévention de potentiels effets négatifs sur la santé humaine qui pourraient advenir lors d'un traitement inapproprié des déchets.

Pour plus d'informations à propos de la collecte et du recyclage des déchets d'équipements électriques et électroniques et des piles usagées, veuillez contacter votre municipalité, votre service de traitement des déchets ou le point de vente où vous avez acheté les produits.



[Pour les professionnels dans l'Union Européenne]

Si vous souhaitez vous débarrasser des déchets d'équipements électriques et électroniques veuillez contacter votre vendeur ou fournisseur pour plus d'informations.

[Information sur le traitement dans d'autres pays en dehors de l'Union Européenne]

Ces symboles sont seulement valables dans l'Union Européenne. Si vous souhaitez vous débarrasser de déchets d'équipements électriques et électroniques ou de piles usagées, veuillez contacter les autorités locales ou votre fournisseur et demander la méthode de traitement appropriée.



Note pour le symbole « pile » (deux exemples de symbole ci-dessous) :

Ce symbole peut être utilisé en combinaison avec un symbole chimique. Dans ce cas il respecte les exigences établies par la Directive pour le produit chimique en question.

Cd

Verbraucherinformation zur Sammlung und Entsorgung alter Elektrogeräte und benutzter Batterien



Befinden sich diese Symbole auf den Produkten, der Verpackung und/oder beiliegenden Unterlagen, so sollten benutzte elektrische Geräte und Batterien nicht mit dem normalen Haushaltsabfall entsorgt werden. In Übereinstimmung mit Ihren nationalen Bestimmungen und den Richtlinien 2002/96/EC und 2006/66/EC, bringen Sie alte Geräte und benutzte Batterien bitte zur fachgerechten Entsorgung, Wiederaufbereitung und Wiederverwendung zu den entsprechenden Sammelstellen.

Durch die fachgerechte Entsorgung der Elektrogeräte und Batterien helfen Sie, wertvolle Ressourcen zu schützen und verhindern mögliche negative Auswirkungen auf die menschliche Gesundheit und die Umwelt, die andernfalls durch unsachgerechte Müllentsorgung auftreten könnten.

Für weitere Informationen zum Sammeln und Wiederaufbereiten alter Elektrogeräte und Batterien, kontaktieren Sie bitte Ihre örtliche Stadt- oder Gemeindeverwaltung, Ihren Abfallentsorgungsdienst oder die Verkaufsstelle der Artikel.



[Information für geschäftliche Anwender in der Europäischen Union]

Wenn Sie Elektrogeräte ausrangieren möchten, kontaktieren Sie bitte Ihren Händler oder Zulieferer für weitere Informationen.

[Entsorgungsinformation für Länder außerhalb der Europäischen Union]

Diese Symbole gelten nur innerhalb der Europäischen Union. Wenn Sie solche Artikel ausrangieren möchten, kontaktieren Sie bitte Ihre örtlichen Behörden oder Ihren Händler und fragen Sie nach der sachgerechten Entsorgungsmethode.



Anmerkung zum Batteriesymbol (untere zwei Symbolbeispiele):

Dieses Symbol kann auch in Kombination mit einem chemischen Symbol verwendet werden. In diesem Fall entspricht dies den Anforderungen der Richtlinie zur Verwendung chemischer Stoffe.

Cd

COMPLIANCE INFORMATION STATEMENT (DECLARATION OF CONFORMITY PROCEDURE)

Responsible Party : Yamaha Corporation of America
Address : 6600 Orangethorpe Avenue, Buena Park, CA 90620 USA
Telephone : 1-714-522-9011
Fax : 1-714-522-9301
Type of Equipment : Player Piano Control Unit
Model Name : DKC-850

This device complies with Part 15 of the FCC Rules.

Operation is subjected to the following conditions;

- 1) this device may not cause harmful interference, and
 - 2) this device must accept any interference received including interference that may cause undesigned operation.
- See user manual instructions if interference to radio reception is suspected.

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

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 coaxial 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, CA 90620

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

disklavier™

Disklavier Control Unit DKC-850

Operation manual

Welcome to the Yamaha Disklavier™!

Thank you for purchasing the Yamaha Disklavier control unit!

This control unit is a fascinating instrument that integrates a classic Yamaha acoustic piano with innovative electronics to suit your entertainment, educational, and creative needs, while retaining the tone, touch and long-term value that have long made Yamaha pianos the world's finest.

Before using your Disklavier control unit, please read this manual thoroughly and retain it for future reference.

■ Notes on Source Code Distribution

For three years after the factory shipment, you may request from Yamaha the source code for any portions of the product which are licensed under the GNU General Public License by writing to the following address:

1480 Ryoke, Kakegawa, Shizuoka, 436-0038, JAPAN
Piano International Sales Division, Yamaha Corporation

The source code will be provided at no charge; however, we may require you to reimburse Yamaha for the cost of delivering the source code to you.

The source code download is also available on the following website:

http://www.global.yamaha.com/download/disklavier_e3/

- Note that we shall bear no responsibility whatsoever for any damage arising from changes (additions/deletions) made to the software for this product by a third party other than Yamaha (or party authorized by Yamaha).
- Note that re-use of source code released to the public domain by Yamaha is unguaranteed, and Yamaha shall not bear any responsibility whatsoever for the source code.

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- Disklavier software, Copyright © 2008 Yamaha Corporation.
- This contains programs licensed under the GNU General Public License, GNU Lesser General Public License, the BSD Copyright, the Artistic License, and the others.
- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)
- Windows is a registered trademark of Microsoft Corporation in the United States and other countries.
- Macintosh and Mac OS are trademarks of Apple Inc., registered in the U.S. and other countries.
- The company names and product names in this operation manual are the trademarks or registered trademarks of their respective companies.

Important Precautions

Read the following before operating the Disklavier control unit.

■ Warnings

- Do not locate the Disklavier control unit in a place subject to excessive heat, low temperatures, or direct sunlight. This could be a fire hazard and may damage the finish and internal parts.
- Excessive humidity or dust can lead to fire or electric shock.
- Connect the plug of the AC adaptor to a compatible AC outlet. Failure to do so will present a fire and electric shock hazard. If the AC adaptor is not compatible with your AC outlet, consult your dealer.
- Do not plug several devices into the same AC outlet. This can overload the AC outlet, and lead to fire and electric shock hazard. It may also affect the performance of some devices.
- Do not place heavy objects on the AC adaptor cable. A damaged cable is a potential fire and electric shock hazard. If the cable runs under a carpet, make sure heavy objects are not placed on top of the cable.
- If the AC adaptor cable is damaged (i.e. cut or a bare wire is exposed), ask your dealer for a replacement. Using the Disklavier control unit in this condition is a fire and shock hazard.
- When disconnecting the AC adaptor cable from an AC outlet, always pull from the plug. Never pull the cable. Damaging the cable in this way is a potential fire and electric shock hazard.
- The cover of the unit should be removed only by qualified service technicians.
- Do not place liquid containers such as vases, potted plants, glasses, cosmetic bottles, medicines, etc., on the Disklavier control unit.
- Do not try to modify the Disklavier control unit, as this could lead to fire or electric shock hazard.
- When moving the Disklavier control unit to another location, turn off the power, remove the AC adaptor from the AC outlet, and remove all cables connected to external devices.

■ Cautions

- Turn off all audio devices when connecting to the Disklavier control unit. Refer to the user's guide for each device. Use the correct cables and connect as specified.
- Set the volume level on all the devices to minimum before applying power.
- Do not play the Disklavier control unit at a high volume for extended periods; you may damage your hearing. This is especially important when using headphones. If you think your hearing ability is impaired, consult your doctor.
- If the Disklavier control unit is worked extremely hard — that is, prolonged playback of very “busy” songs — the thermal relay of the Disklavier control unit may trip. The thermal relay will automatically reset when the Disklavier control unit has cooled down.
- If you notice any abnormality — such as smoke, odor, or noise — turn off the Disklavier control unit immediately, and remove the AC adaptor from the AC outlet. Consult your dealer for repair.
- If a foreign object or water gets inside the Disklavier control unit turn it off immediately, and remove the power plug from the AC outlet. Consult your dealer.
- If you plan not to use the Disklavier control unit for a long period of time (such as when you are on vacation), disconnect the AC adaptor from the AC outlet.
- Always remove the AC adaptor from the AC outlet before cleaning the Disklavier control unit. Leaving the AC adaptor connected presents a risk of electric shock.
- Do not use benzene, thinner, cleaning detergent, or a chemical cloth to clean the Disklavier control unit.
- Do not place metal objects with rubber feet on the Disklavier control unit. The color and finish of the Disklavier control unit can be damaged.
- Do not place heavy objects on the Disklavier control unit. Doing so can damage the Disklavier control unit.
- Use a soft, dry cloth to clean the Disklavier control unit. However, if you discover a stain, carefully use a soft damp cloth to remove it.

■ Interference

- The Disklavier control unit uses high-frequency digital circuits that may cause interference to radios and TVs placed close to it. If interference does occur, relocate the affected equipment.

■ Handling Batteries

The remote control of this unit is powered by dry batteries. Improper use or misuse of the dry batteries can cause the dry batteries to heat up, leak electrolyte or burst which in turn may result in a fire, damage to equipment and/or nearby objects or in burns, injury or other bodily harm. Read through and familiarize yourself with the following safety precautions prior to use to ensure correct usage.

- Do not directly touch the chemicals (electrolyte) which have leaked from dry batteries.
 1. If electrolyte from dry batteries has made contact with your eyes, rinse your eyes thoroughly with clean water and seek medical treatment from a physician immediately.
 2. If electrolyte from dry batteries has touched your skin or clothing, rinse it off immediately with clean water.
 3. If electrolyte from dry batteries has found its way inside your mouth, gargle immediately and consult a physician.
- Do not install the dry batteries with the “+” and “-” poles reversed. Misaligning the poles of dry batteries can lead the dry batteries to be charged or shorted or it can cause them to heat up, leak electrolyte or burst which in turn may result in a fire, damage to nearby objects or in burns, injury or other bodily harm.
- Use only the designated batteries. Do not use used batteries with unused batteries or different types of batteries together. This can cause them to heat up, leak electrolyte or burst which in turn may result in a fire or in burns, injury or other bodily harm. Replace all the dry batteries at the same time. Do not use new and old dry batteries together. Do not use different types of batteries (alkaline and manganese batteries, batteries made by different manufacturers or different battery products made by the same manufacturer) together: this can cause them to heat up, ignite or leak electrolyte.
- When the battery-powered unit is not going to be used for a prolonged period of time, remove the dry batteries from the unit. Otherwise the batteries will run down and their electrolyte may leak, resulting in damage to the unit.
- Remove spent batteries immediately from equipment. Otherwise, batteries will overdischarge, causing them to heat up, leak electrolyte or burst which in turn may result in damage to nearby objects or in burns, injury or other bodily harm.
- Dispose of batteries in accordance with the applicable regulations and ordinances.
- The batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

Please keep this manual for future reference.

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MIDI IMPLEMENTATION CHART

Features

The Disklavier control unit offers the valuable features that open up your musical possibility to explore. Here are brief explanations of such features:

Advanced Features for Your Listening Pleasure

- Special music CDs, contain over 17 hours of fantastic music, let you start listening on the day this unit arrives at your home.
- DisklavierRadio; you can listen to over 11 music channel by streaming broadcasts over the Internet. (Available only on models of which the control unit is replaced with the Disklavier control unit.)

Convenient Recording Features to Preserve Your Musical Memories

- Total 128 megabytes of internal memory comes with the Disklavier control unit to preserve your valuable data.
- Connecting external USB devices to the Disklavier control unit allows you to record your performance directly onto them, or even make backups of your valuable data in the internal memory.
- Video synchronization features offer great listening experience with sights. You can see as well as hear performances with perfectly synchronized audio and video.
- Your valuable music data on the floppy disk can be played back with the optional floppy disk drive (UD-FD01).

Simple and Easy-to-use Features Enhancing Your Performance

- The remote control, with clear and logical layout of buttons, lets you quickly enjoy the features of the Disklavier control unit.
- The display on the front panel employs an organic electro-luminescent display which makes it brighter and more easily readable than ever.

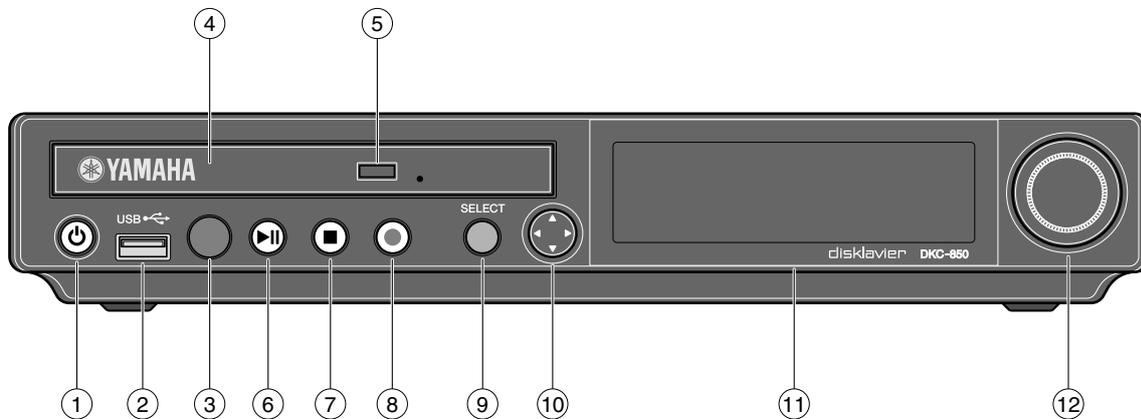
Items Supplied with the Disklavier Control Unit

Check that the following items are supplied with your Disklavier control unit.

- 1 Remote control
- 2 Batteries for remote control
- 1 Remote control sensor shielding sticker
- 1 Sample PianoSoft CD software
- 2 MIDI cables
- 1 Audio cable (pin plugs – stereo mini plug)
- 2 Audio cables (pin plug – phone plug)
- 1 Conversion cable for control
- 1 AC adaptor (PJP-PS02)
- 1 Power cable
- 1 Operation manual
- 1 PianoSoft CD song list

Names of Parts and Their Functions

■ Front Panel



① **[ON/OFF] button** 

Turns on or shuts down the Disklavier control unit. Press once to turn it on, and once again to shut it down.

② **USB port**

Used to connect a USB flash memory, etc.

③ **Remote control sensor**

When using the remote control, point it toward this sensor.

④ **CD drive**

Insert a PianoSoft·PlusAudio or other audio or audio/MIDI CD here.

⑤ **CD eject button**

Used to open the CD drive.

⑥ **[PLAY/PAUSE] button**
(☞ pages 24 and 25)

Used to start and pause playback.

⑦ **[STOP] button** (☞ page 25)

Used to stop playback and recording.

⑧ **[RECORD] button** (☞ page 32)

Used to engage the record standby mode before recording starts.

⑨ **[SELECT] button**

Used to select media.

⑩ **Cursor/[ENTER] buttons**

Cursor: Used to select options and parameters.
[ENTER]: Used to execute the selection.

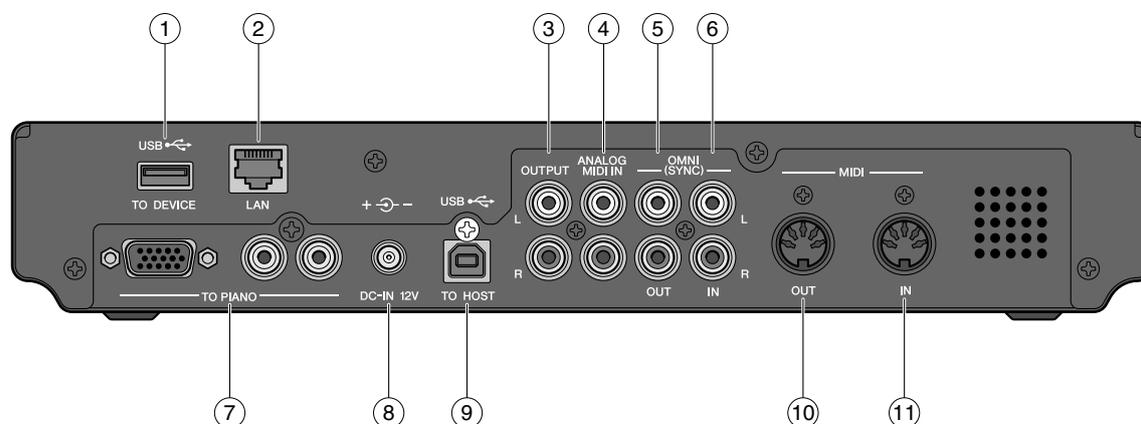
⑪ **Display**

Shows various information.

⑫ **Dial**

Used to adjust the volume, and to set parameter values.

■ Rear Panel



① USB TO DEVICE port

Used to connect a USB flash memory, an optional USB floppy disk drive, etc.

② LAN port

Used to connect to the Internet.

③ OUTPUT jacks

Used to connect the speaker cord from optional monitor speakers.

④ ANALOG MIDI IN jacks

Used to connect the audio equipment such as an external CD changer.

⑤ OMNI (SYNC) OUT jacks

Used to connect the microphone/line input of a camcorder.

⑥ OMNI (SYNC) IN jacks

Used to connect the audio output of a camcorder.

⑦ TO PIANO connectors

Used to connect the piano.

⑧ DC-IN 12V connector

Used to connect to the supplied AC adaptor.

⑨ USB TO HOST port

Used to connect the USB cable from a computer.

⑩ MIDI OUT terminal

For models to be replaced with Disklavier control unit:

Used to connect external MIDI equipment.

For models to be connected with the MIDI cables:
Used to connect the existing control unit.

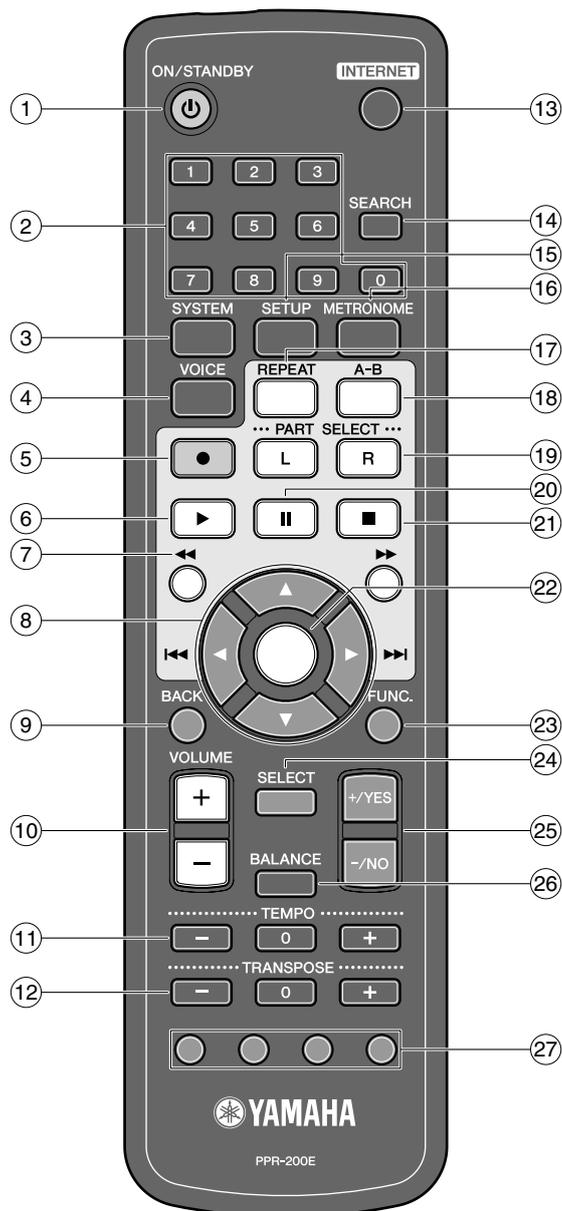
⑪ MIDI IN terminal

For models to be replaced with Disklavier control unit:

Used to connect external MIDI equipment.

For models to be connected with the MIDI cables:
Used to connect the existing control unit.

■ Remote Control



① **[ON/STANDBY] button**

Turns on the Disklavier control unit or puts it in the standby mode.

② **Number keypad**

Used for direct album/song selection and to enter a start time for song playback.

③ **[SYSTEM] button**

Used to access the system menu.

④ **[VOICE] button**

Used to access the voice function.

⑤ **[RECORD] button**

Used to engage the record standby mode before recording starts.

⑥ **[PLAY] button**

Used to start playback.

⑦ **[REVERSE]/[FORWARD] buttons**

In the play mode: used to fast preview and review.
In the pause mode: used to fast forward and reverse.

⑧ **Cursor buttons**

Used to select options and parameters.

- ⑨ **[BACK] button**
Used to cancel the selection, and return to the previous screen.
- ⑩ **[VOLUME] buttons (☞ page 31)**
Used to adjust the volume.
[-] lowers the volume, [+] raises the volume.
- ⑪ **[TEMPO] buttons**
Used to change the playback tempo.
[-] decreases the tempo, [+] increases the tempo, and [0] resets the tempo to 00.
- ⑫ **[TRANPOSE] buttons**
Used to transpose song playback.
[-] transposes down, [+] transposes up, and [0] resets the transposition value to 00.
- ⑬ **[INTERNET] button**
Used to access the Internet menu.
- ⑭ **[SEARCH] button**
Used to access the search function.
- ⑮ **[SETUP] button**
Used to access the setup menu.
- ⑯ **[METRONOME] button**
Used to access the metronome function.
- ⑰ **[REPEAT] button**
Used to select one of the repeat modes: ALL, RPT, RND, or OFF.
- ⑱ **[A-B] button**
Used to enter A and B points for the A-B repeat mode.
- ⑲ **[PART SELECT] buttons**
For L/R and ensemble songs, these buttons are used to choose which part will play: left-hand part, right-hand part, or both parts.
They are also used to select a part for recording.
- ⑳ **[PAUSE] button (☞ page 25)**
Used to pause playback.
- ㉑ **[STOP] button (☞ page 25)**
Used to stop playback and recording.
- ㉒ **[ENTER] button**
Used to execute the selection.
- ㉓ **[FUNC.] button**
Used to access the function menu.
- ㉔ **[SELECT] button**
Used to select media.
- ㉕ **[+/YES]/[-/NO] buttons**
Used to select parameters, adjust setting values, and execute or cancel the selected functions.
- ㉖ **[BALANCE] button**
Used to adjust the TG, audio and voice balance.
- ㉗ **Color buttons**
Green: For future use.
Yellow: Used to switch character types when titling albums and songs.
Red: For future use.
Blue: For future use.

Basic Disklavier Terminology

The following is a list of several basic Disklavier words that you may need to know before proceeding with operational procedures in this manual. For additional Disklavier terminology, see the glossary provided in Chapter 16.

Ensemble Song

An ensemble song contains the same left- and right-hand parts as an L/R song, and extra tracks that are played by the internal XG tone generator. Accompanying tracks can include acoustic bass, drums, strings, vibes, etc.

L/R Song

In a L/R song, the left-hand piano part is stored on track 1 (L) and the right-hand piano part is stored on track 2 (R). During playback you can cancel either part, and practice that part yourself. When recording an L/R song, you can record the two parts simultaneously or separately.

Internal Flash Memory

The Disklavier control unit has a total of 128 megabytes of internal flash memory that allow you to store song data without a floppy disk.

MIDI

An acronym for Musical Instrument Digital Interface. MIDI allows electronic musical instruments to communicate with each other.

PianoSoft



The PianoSoft Disk Collection is a library of prerecorded song disks made by Yamaha for use with the Disklavier series. Many titles are available, and among the many musical styles included are classical, jazz, and popular. The disk includes songs for listening enjoyment, piano study disks for the piano student, and accompaniment disks for vocal and instrumental practice. PianoSoft is sometimes used as a generic term for PianoSoft and PianoSoft-Plus.

PianoSoft-Plus



PianoSoft-Plus software contains prerecorded ensemble songs featuring instrumental accompaniment that can be played back on the Disklavier. See your Disklavier dealer for a PianoSoft catalog.

PianoSoft-PlusAudio



CD software made by Yamaha containing audio and MIDI signals for playing back on the Disklavier.

SmartPianoSoft



Software made by Yamaha containing MIDI signals for playing back along with standard audio CDs.

Song

A “song” usually means a short piece of music with lyrics. However, in this manual the term “song” is used to refer to any piece of music.

Tone Generator

An electronic device that generates instrument voices. The Disklavier control unit has an internal XG tone generator that can produce nearly 700 instrumental and percussion voices.

Voice

The sounds produced by a tone generator expressing various instruments.

XG



Yamaha XG is an extension of the GM (General MIDI) format. With greater polyphony, more voice, and effects, it improves song compatibility between MIDI devices. When a song in the Yamaha XG format is played on another XG compatible tone generator or synthesizer, it will play and sound as the original composer/creator intended.

Getting Started

This chapter describes instructions for connecting with your Disklavier piano and other preparation.

Checking the Type of Your Piano

The Disklavier control unit can be connected to several models of the Yamaha Disklavier pianos, however, connections and setup procedures vary depending on the piano model. Check the model number on the existing control unit and find your piano model following the descriptions below before connecting.

Note:

The model number of the control unit is on the upper part of the display.

■ Models to be Replaced with the Disklavier Control Unit

If you are using the piano listed below, **replace the existing control unit with the Disklavier control unit.**

Models		Model Number on the Control Unit
Upright pianos	Disklavier Mark II XG Series	DKC500R, DKC500RXG, DKC500RW, DKC500RWXG
	Disklavier Mark II XG Series (MX600)	DKC50R
	Disklavier Mark III Series (DU1A)	DKC55RCD
Grand pianos	Disklavier Mark II XG Series	DKC500R, DKC500RXG, DKC500RW, DKC500RWXG
	Disklavier Mark III Series Full-Function Models	DKC55RCD
	Disklavier Mark III Series Standard Models	DKC60RCD
	Disklavier Mark III Series PRO Models	DKC55RCD
	Disklavier Mark III Series Playback Models	DKC55, DKC55CD

For details on connections and setup, see Chapter 2 “Getting Started – Replacing the Existing Control Unit with the Disklavier Control Unit” on page 8.

Note:

You can also connect the piano listed above with the Disklavier control unit using the MIDI cables. However, you cannot use Internet Direct Connection when connected with the MIDI cables.

■ Models to be Connected with the MIDI Cables

If you are using the piano listed below, **connect your piano to the Disklavier control unit with the MIDI cables.**

Models		Model Number on the Control Unit
Upright pianos	Disklavier Mark II Series	DKC100R or built-in
Grand pianos	Disklavier Mark II Series	DKC100R

For details on connections and setup, see Chapter 2 “Getting Started – Connecting the Disklavier Control Unit with the MIDI Cables” on page 10.

Note:

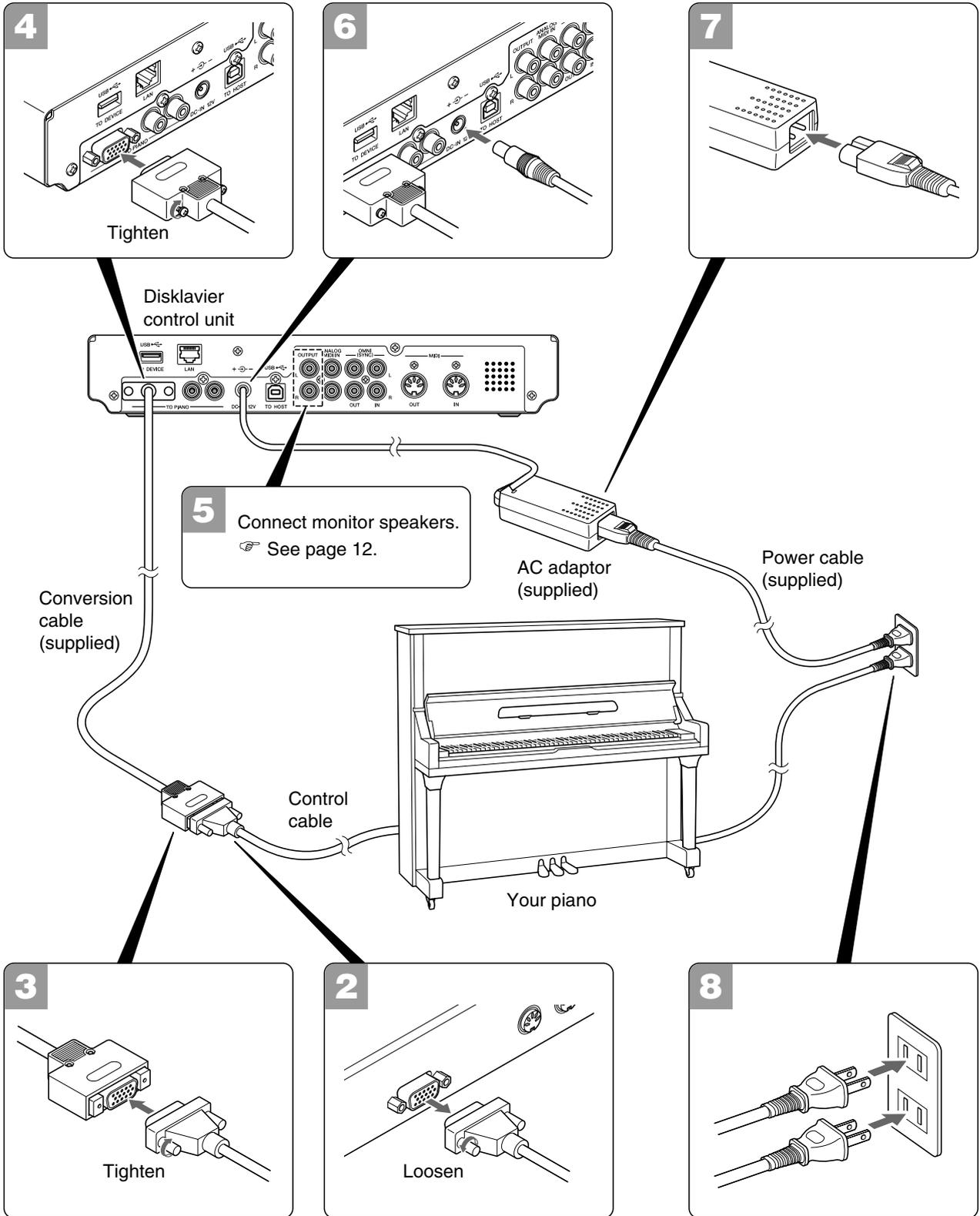
You cannot replace the control unit of the piano listed above with the Disklavier control unit.

Note:

You cannot use Internet Direct Connection on the piano listed above.

Replacing the Existing Control Unit with the Disklavier Control Unit

Connect the Disklavier control unit to your piano, replacing with the existing control unit.



1 Turn off your piano, and disconnect the power cable from the AC wall outlet.

2 Disconnect the control cable from the **TO CONTROL CABLE FOR PIANO** connector on the rear panel of your control unit.

Loosen the two screws attached to the connector by the screwdriver.

3 Connect the supplied conversion cable to the control cable disconnected in step 2.

Tighten the two screws attached to the connector by the screwdriver.

4 Connect the supplied conversion cable to the **TO PIANO** connector on the rear panel of the Disklavier control unit.

Tighten the two screws attached to the connector by the screwdriver.

5 Connect monitor speakers to the **OUTPUT** jacks on the rear panel of the Disklavier control unit.

6 Connect the supplied AC adaptor to the **DC-IN 12V** connector on the rear panel of the Disklavier control unit.

7 Connect the supplied power cable to the AC adaptor.

8 Connect the power cable extended from your piano and the AC adaptor to the AC wall outlet.

The connection completed.

Turn on the Disklavier control unit, and set the piano type.

Note:

The location of the **TO CONTROL CABLE FOR PIANO** connector varies depending on the piano model.

Important:

Please keep the disconnected control unit for future maintenance.



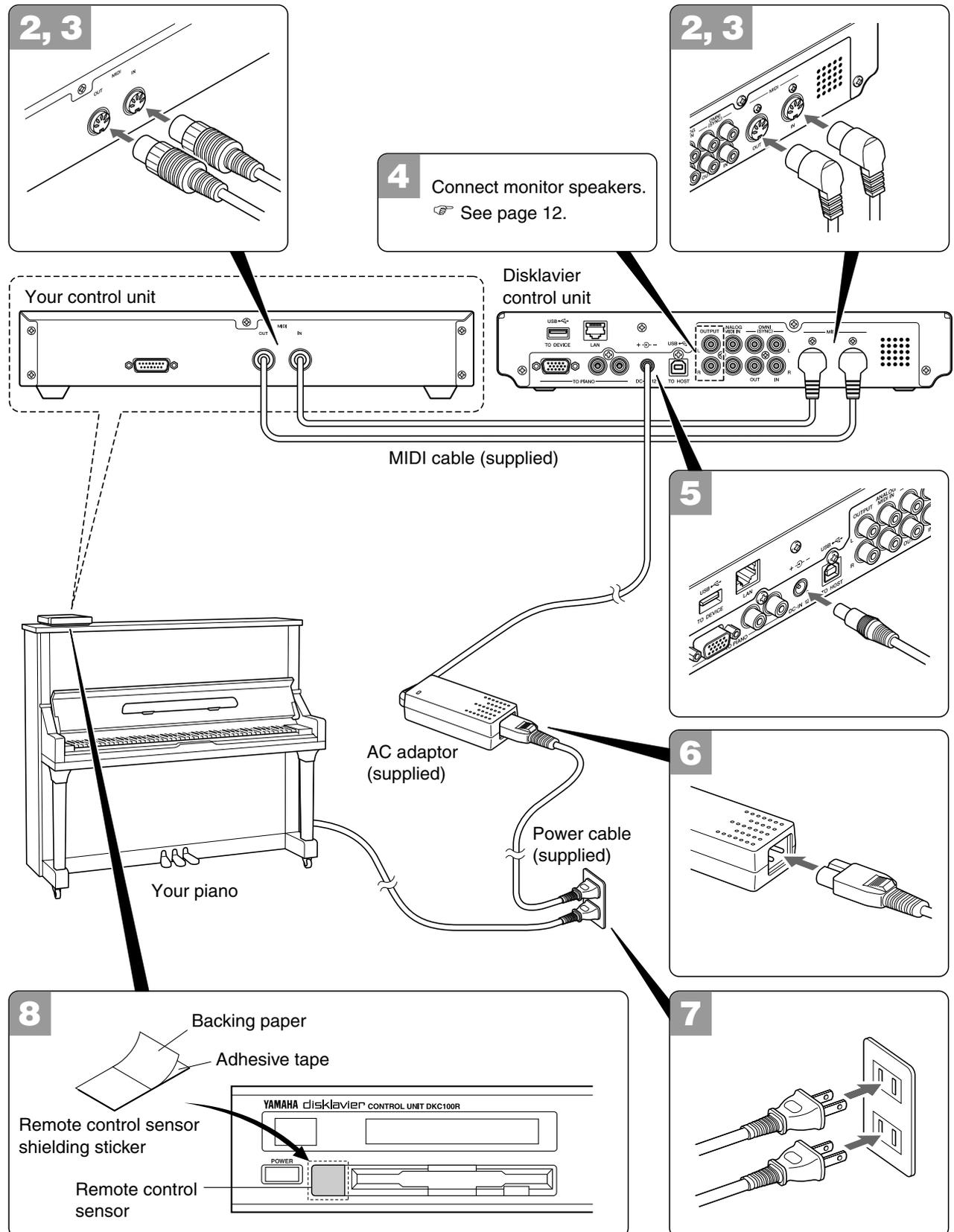
See Chapter 2 “Getting Started – Connecting Monitor Speakers” on page 12.



See Chapter 2 “Getting Started – Setting the Type of Your Piano” on page 15.

Connecting the Disklavier Control Unit with the MIDI Cables

Connect the Disklavier control unit to your piano using the MIDI cables.



- 1** Turn off your piano, and disconnect the power cable from the AC wall outlet.
- 2** Connect the MIDI IN terminal of your control unit to the MIDI OUT terminal of the rear panel of the Disklavier control unit with the supplied MIDI cable.
- 3** Connect the MIDI OUT terminal of your control unit to the MIDI IN terminal of the rear panel of the Disklavier control unit with the supplied MIDI cable.
- 4** Connect monitor speakers to the OUTPUT jack on the rear panel of the Disklavier control unit.
- 5** Connect the supplied AC adaptor to the DC-IN 12V connector on the rear panel of the Disklavier control unit.
- 6** Connect the supplied power cable to the AC adaptor.
- 7** Connect the power cable extended from your piano and the AC adaptor to the AC wall outlet.
- 8** Place the remote control sensor shielding sticker over the remote control sensor of the control unit of your piano.

The remote control supplied with the Disklavier control unit will also operate the control unit of your piano.

In order to prevent this, be sure to place the remote control sensor shielding sticker.

- 9** Turn on your piano, and make the MIDI data transmission/reception settings on the control unit of your piano.

Make the settings as follows. For details on setting, refer to your piano's owner's manual.

Settings

MIDI IN CH	HP
MIDI IN	DELAY IN (500ms)
MIDI OUT	KBD OUT
OUT CH	HP

The connection completed.

Turn on the Disklavier control unit, and set the piano type.

Note:

The location of the MIDI IN terminal varies depending on the piano model.

Note:

The location of the MIDI OUT terminal varies depending on the piano model.



See Chapter 2 “Getting Started – Connecting Monitor Speakers” on page 12.

Note:

For the location of the remote control sensor, refer to your piano's owner's manual.



See Chapter 2 “Getting Started – Setting the Type of Your Piano” on page 15.

Connecting Monitor Speakers

To listen to the internal XG tone generator voices, you have to connect monitor speakers. Connection methods vary depending on whether your piano is equipped with the Silent Piano™ function or not.

■ For Pianos Equipped with the Silent Piano™ Function

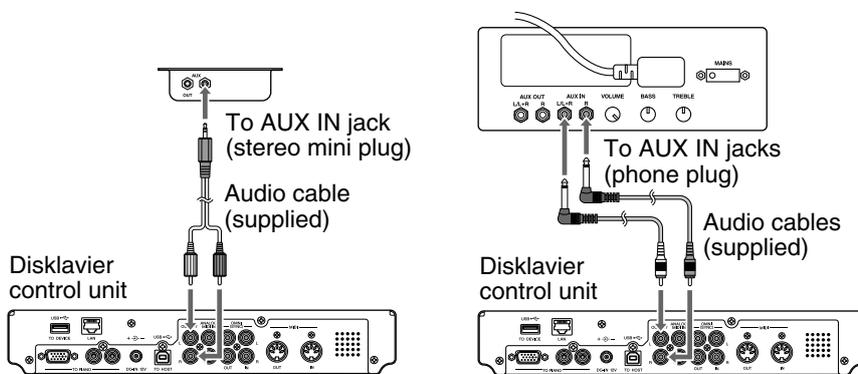
Connect the AUX IN jacks of your piano to the OUTPUT jacks on the rear of the Disklavier control unit with the supplied audio cable.

For models with the control box

Connect with the supplied audio cable (pin plugs – stereo mini plug).

For models with the amplifier

Connect with the supplied audio cables (pin plug – phone plug).

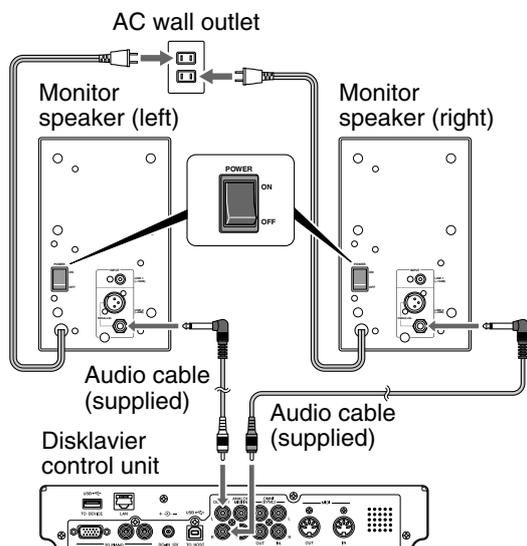


Note:

The shape of units or the location of the AUX IN jacks varies depending on the piano model.

■ For Pianos Not Equipped with the Silent Piano™ Function

Connect the input jacks of monitor speakers (phone jacks) to the OUTPUT jacks on the rear of the Disklavier control unit with the supplied audio cables (pin plug – phone plug).



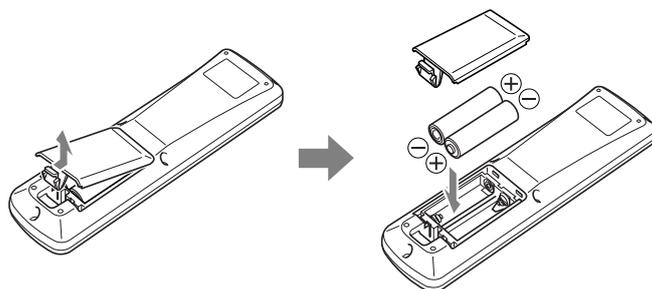
Using the Remote Control

The Disklavier control unit is equipped with a remote control which allows convenient control from almost anywhere in the room. This section provides notes on handling the remote control.

■ Installing Batteries in the Remote Control

Before the remote control can be used, the two batteries supplied with the Disklavier control unit must be installed.

Remove the battery cover from the rear of the remote control, install the batteries, and then replace the cover.



A diagram inside the battery compartment shows which way the batteries should be installed. Make sure you insert them correctly.

■ Battery Replacement

When the remote control fails to work from a distance, replace the batteries.

- Replacement batteries should be UM-3, AA, R6P, or LR6 type.
- Do not use new and old dry batteries together.
- Do not use different types of batteries (alkaline and manganese batteries, batteries made by different manufacturers or different battery products made by the same manufacturer) together.
- Remove spent batteries immediately from the remote control. Otherwise, batteries will overdischarge, causing them to leak electrolyte or burst which in turn may result in damage to nearby objects or in burns, injury or other bodily harm.
- Dispose of batteries in accordance with the applicable regulations and ordinances.
- If the remote control is not to be used for a prolonged period of time, remove the batteries to prevent possible damage by battery leakage.
- If the batteries have leaked, dispose of them immediately. Avoid touching the leaked electrolyte or letting it come into contact with skin or clothing. Clean the battery compartment thoroughly before installing new batteries.

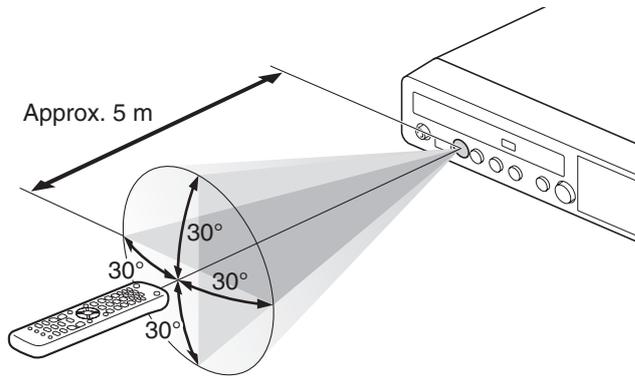
Important:

Be sure to read the section on “Handling Batteries” on page iii for details on the safe handling of dry batteries.

Getting Started

■ Using the Remote Control

To use the remote control, point it at the remote control sensor on the front panel.



Turning On the Disklavier Control Unit

- 1 Make sure that the AC adaptor is plugged into the AC wall outlet.**

When you connected the Disklavier control unit to your piano with the MIDI cables, first turn on the power of your piano.

- 2 Press [ON/OFF] on the front panel.**



While the control unit is in the standby mode, you can also turn on the Disklavier control unit by pressing [ON/STANDBY] on the remote control.

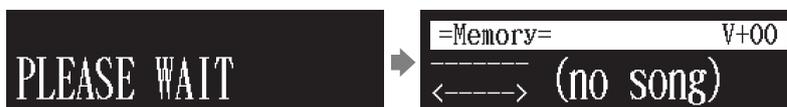
ON/STANDBY



The following message appears on the display, and [ON/OFF] on the front panel lights green.



After several seconds, the loading screen will appear, and last selected song will be loaded.



Your Disklavier control unit is now ready for use.



See Chapter 2 “Getting Started – Turning Off the Disklavier Control Unit (Standby Mode)” on page 19.

Setting the Type of Your Piano

[SYSTEM] "PianoType"

After you have connected the Disklavier control unit to your piano, you must set the type of your piano.

1 Press [SYSTEM] on the remote control.

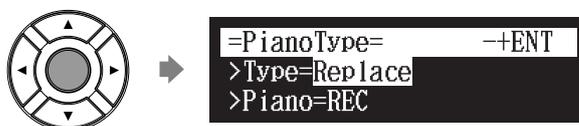
The system menu screen appears.



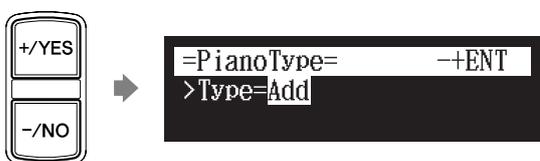
2 Select "PianoType" with the cursor buttons ([◀][▶][▲][▼]), then press [ENTER].



The piano type setup screen appears.



3 Press [+ / YES] and [- / NO] to change the connection type setting.



The following connection type settings are available:

Setting	Description
Replace	Select this when you replaced the existing unit with the Disklavier control unit (see page 8).
Add	Select this when you connected the Disklavier control unit to your piano with the MIDI cables (see page 10).

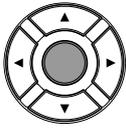
Note:

If you select "Replace" and this unit detects your piano as the playback model, "[PB]" appears on the right of the screen.

Getting Started

4 Press [ENTER].

The piano type is set, and this unit is automatically rebooted.



```
=PianoType=
Restarting...
```

Setting the Internal Calendar

[SYSTEM] "TimeZone" and "Clock Adj."

The Disklavier control unit has an internal calendar that can be set from 1/1/1985 00:00:00 to 12/31/2084 23:59:59. Set the calendar accurately so that the Disklavier control unit displays the correct current time during the stop mode.

Time is displayed in 24-hour format.



Setting the correct time is also important for engaging timer-controlled programs. See Chapter 6 "Advanced Song Playback – Using Timer Play" on page 51.

■ Time Zone

1 Press [SYSTEM] on the remote control.

The system menu screen appears.



```
=SYSTEM MENU= (1/2) →
*Clock Adj. *TimeZone
*Backup     *Restore
```

2 Select "TimeZone" with the cursor buttons ([◀][▶][▲][▼]), then press [ENTER].

```
=SYSTEM MENU= (1/2) →
*Clock Adj. *TimeZone
*Backup     *Restore
```

The time zone setup screen appears.



```
=Time Zone= --+ENT
TimeZone=GMT+0
```

3 Press [+ / YES] and [- / NO] to change the time zone.



Examples of Time Zone

The chart below shows the correspondence between the time zone setting on the Disklavier control unit and actual time zone used in each area.

For U.S. and Canada:

Setting	Actual Time Zone
GMT-10	Hawaii-Aleutian Standard Time
GMT-9	Alaska Standard Time (AKST)
GMT-8	Alaska Daylight Time (AKDT)
	Pacific Standard Time (PST)
GMT-7	Pacific Daylight Time (PDT)
	Mountain Standard Time (MST)
GMT-6	Mountain Daylight Time (MDT)
	Central Standard Time (CST)
GMT-5	Central Daylight Time (CDT)
	Eastern Standard Time (EST)
GMT-4	Eastern Daylight Time (EDT)

For Europe:

Setting	Actual Time Zone
GMT+0	U.K.
GMT+1	Central Europe (Paris, Berlin)
GMT+2	Eastern Europe (Athens)

4 Press [ENTER].



The time zone is set, and the display returns to the system menu. Proceed to the calendar setting.

Note:

The time zone listed here should be used only as a guide. For more details, contact your local observatories.

Getting Started

■ Calendar

- 1** Select “Clock Adj.” with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].



The current date and time appear.

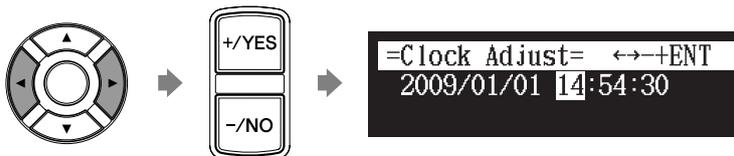


- 2** Press [ENTER].

The time setup screen appears with the cursor flashing on the hours display.



- 3** Select year, month, date, hours, minutes, and seconds with the cursor buttons ([◀] [▶]), then press [+ / YES] and [- / NO] to set a value.



- 4** Press [ENTER].



The date and time are stored in the internal calendar, and the display returns to the current time screen.

- 5** Press [BACK] on the remote control.



The display returns to the system menu screen.

Turning Off the Disklavier Control Unit (Standby Mode)

Press [ON/STANDBY] on the remote control.

The ending screen appears, and [ON/OFF] on the front panel lights red.



When you connected the Disklavier control unit to your piano with the MIDI cables, turn off your piano.

Note:

Press [ON/STANDBY] on the remote control to turn the Disklavier control unit back on.

Shutting Down the Disklavier Control Unit

Press [ON/OFF] on the front panel.

The ending screen appears, and [ON/OFF] on the front panel turns off.



When you connected the Disklavier control unit to your piano with the MIDI cables, turn off your piano.

Note:

Be sure to wait 5 seconds before turning the Disklavier control unit back on.

Compatible Media Format for the Removable Media

Compact Disc

The Disklavier control unit can play songs on commercial audio CDs and data CDs (such as PianoSoft·PlusAudio).

- The audio CDs should be formatted in CD-DA.
- The data CDs should be formatted in ISO 9660 Level 1.

USB Flash Memory

You can use commercially available USB flash memories to store song data. The USB flash memory should be formatted in FAT16 or FAT32 file system.

USB Hard Disk

You can use commercially available USB hard disk drives to store song data or make a backup of song data. The USB hard disk drive should be formatted in FAT32 file system.

Floppy Disk (Optional)

With the optional USB floppy disk drive, you can use 3.5" 2DD or 2HD floppy disks to store song data. The floppy disk should be formatted in MS-DOS.

Note:

If the external medium contains a number of albums or songs, it may take some time for the Disklavier control unit to recognize them.

Note:

Yamaha does not assure the operation of commercially available USB flash memories or USB hard disk drives. For a list of compatible products, please visit: www.yamaha.com/disklavier/

Note:

Do not insert or remove the USB media while reading or writing data. Make sure that reading or writing has finished before doing so.

Compatible File Format

The Disklavier control unit can handle these three types of file format:

SMF0

Standard MIDI File format 0 for playback and recording. The name of the file should have an extension as “.MID” or “.mid.”

SMF1

Standard MIDI File format 1 for playback only. The name of the file should have an extension as “.MID” or “.mid.”

E-SEQ

Format developed by Yamaha, for playback only. The name of the file should have an extension as “.FIL” or “.fil.”

Basic Precautions for Using CDs

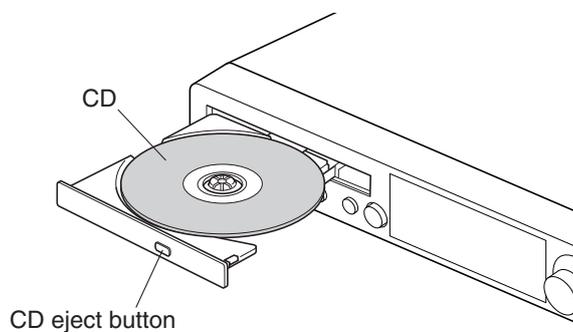
■ Handling CDs

In order to protect data stored on compact discs from damage or loss, handle them with care, and observe the following precautions.

- Do not touch the surface of a CD.
- Do not expose CDs to extreme temperatures or humidity. The working temperature range is between 4°C and 52°C (40°F and 125°F).
- Wipe CDs with a clean, dry cloth before playback.
- Remove the CD from the CD drive before turning off the Disklavier control unit.

■ Loading a CD

- 1** Press the CD eject button on the front panel to open the CD tray.



- 2** Place a CD on the tray, and then close the tray.

Types of Playable Software

PianoSoft and PianoSoft·Plus

When piano songs such as those contained in PianoSoft and PianoSoft·Plus software are played back on the Disklavier, the piano parts are actually played by the Disklavier keyboard, and the keys move up and down as though they were being played by an invisible performer. The ensemble parts (contained in PianoSoft·Plus software) are played by the internal tone generator and are heard from optional monitor speakers.



PianoSoft·PlusAudio

PianoSoft·PlusAudio songs are recorded using two channels, an analog MIDI channel for the piano parts and an audio channel for instrumentals and vocals. When they are played back on the Disklavier, the piano parts are played by the Disklavier keyboard as with PianoSoft and PianoSoft·Plus songs, and all other instrumental and vocal parts are heard from optional monitor speakers just like a normal stereo system.



SmartPianoSoft

SmartPianoSoft contains a recorded piano accompaniment to the commercial CDs, and the acoustic accompaniment will play back matching with the commercial CD. You can also record your own accompaniment for your favorite commercial CDs at home; play your Disklavier as you listen to a CD, and SmartPianoSoft will match the music together during playback, essentially adding you to famous performances.



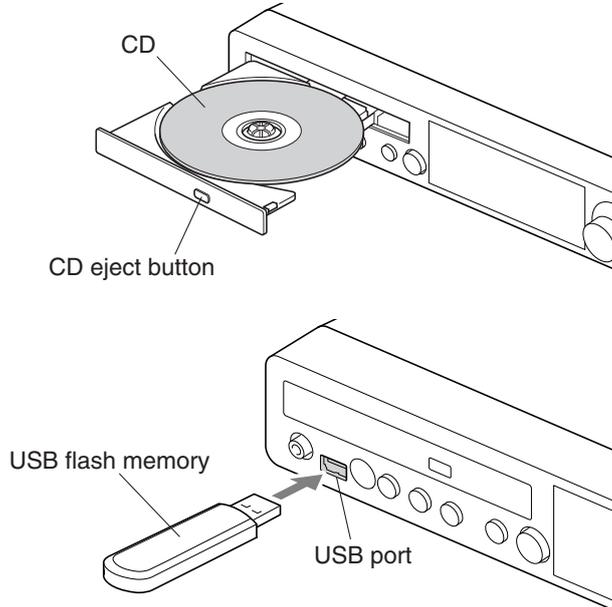
Standard Audio CDs

Standard audio CDs contain two audio channels (L and R), and are both heard from optional monitor speakers just like a normal stereo system. In other words, the Disklavier can be used to play CDs in place of a stereo system.

Selecting Medium and Their Contents

[SELECT]

1 Insert a desired medium.



2 Press [SELECT].

The media selection screen appears with the current selected medium highlighted.



3 Select a desired medium with the cursor buttons ([◀] [▶]).



The following media are available:

Medium	Description
Memory	Internal flash memory
CD	Audio CD or data CD
USB1, USB2	USB flash memory or USB HDD (USB1 indicates the first inserted one, and USB2 indicates the second.)
Playlist	Playlist in the internal flash memory
D-Radio	DisklavierRadio
FromToPC	Network folder in the internal flash memory

Note:

“D-Radio” is available only on models of which the control unit is replaced with the Disklavier control unit.



See Chapter 3 “Basic Song Playback – Listening to the DisklavierRadio” on page 30.



See Chapter 11 “Media Management – Copying Song File from a Personal Computer to the Disklavier Control Unit” on page 101.

4 Press [ENTER] or [▼].

The album selection screen appears.

**5** Select a desired album with the cursor buttons ([◀][▶]).

To return to the media selection screen, press [▲].

6 Press [ENTER] or [▼].

The song selection screen appears.

**7** Select a desired song with the cursor buttons ([◀][▶]).

To return to the album selection screen, press [▲].

8 Press [ENTER].

The selected song is loaded.

Note:

The maximum number of the selectable albums in a medium is 99.

Note:

You can also select albums directly using the number keypad on the remote control. See Chapter 3 “Basic Song Playback – Using the Number Keypad” on page 24.

Note:

The maximum number of the selectable songs in an album is 999.

Note:

You can also select songs directly using the number keypad on the remote control. See Chapter 3 “Basic Song Playback – Using the Number Keypad” on page 24.

Using the Number Keypad

Album or song selection screen 

You can also select albums or songs directly with the number keypad on the remote control.

Press the corresponding number button, then press [ENTER].

For example, to select album number 5, first press [0], then [5], then [ENTER].



To select song number 36, first press [0], then [3], then [6], then [ENTER].



Note:

If you enter a number higher than the existed, the last album or song appears.

Starting Playback



Press [PLAY/PAUSE] on the front panel or [PLAY] on the remote control.

[PLAY/PAUSE] on the front panel lights green, and the numerical value of the counter advances.



At the end of the song, the Disklavier control unit selects the next song automatically and continues playback.

After playback the last song in the album, playback stops.

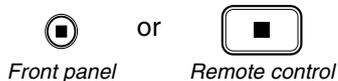
Note:

If your piano is in the Silent Piano™ function mode, the damper pedal does not move. However, the damper effect is effective for the piano tone.

Stopping Playback

During playback **[STOP]**

Press **[STOP]**.



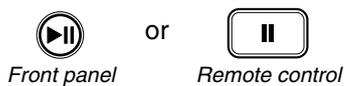
Playback stops, and the song returns to the beginning.

[PLAY/PAUSE] on the front panel turns off, and the counter is reset to "00:00" or "001-1."

Pausing Playback

During playback **[PAUSE]**

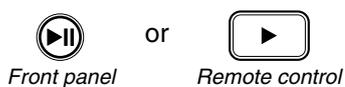
1 Press **[PLAY/PAUSE]** on the front panel, or **[PAUSE]** on the remote control.



Playback pauses.

[PLAY/PAUSE] on the front panel flashes, and the counter stops counting.

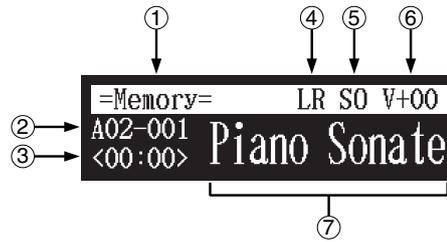
2 Press **[PLAY/PAUSE]** on the front panel or **[PLAY]** on the remote control to continue playback.



Basic Song Playback

■ Song Playback Screen

Here are a few things that you will often see during playback.



① Media

The selected medium is displayed here.

② Album/Song Number

The number of the selected album and song is displayed here.

Display	Description
Axx-yyy	xx: album number (01 to 99) yyy: song number (001 to 999)
Pxx-yyy	xx: playlist number (01 to 99) yyy: song number (001 to 999)

③ Counter

Playing time is indicated in one of two formats.

Display	Description
xx:yy	Minutes (xx) and seconds (yy)
xxx-y	Measures (xxx) and beats (y)

④ Song Type

The type of the selected songs is displayed here.

Display	Description
LR	PianoSoft
XP	PianoSoft recorded on the PRO model
PS	SmartPianoSoft
SK	SmartKey
YM	PianoSoft·PlusAudio
AU	Stereo audio

⑤ Song Format

The format of the selected song is displayed here.

Display	Description
S0	SMF (Standard MIDI File) format 0
S1	SMF (Standard MIDI File) format 1
ES	E-SEQ format

⑥ Volume

The current volume setting is displayed here.

⑦ Song Title

The title of the selected song is displayed here. If the title is long, it scrolls across the display.

Fast Preview & Review

During playback **[FORWARD] or [REVERSE]**

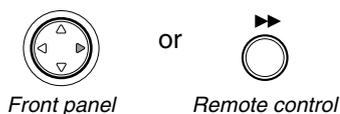
During playback, fast preview and review allow you to quickly search through a song **while listening to the sound**. This is useful for locating a desired position within a song.

Note:

No sound is produced by the piano when fast-previewing or reviewing PianoSoft-PlusAudio CDs.

Fast Preview

- 1 To preview, hold [▶] on the front panel or press [FORWARD] on the remote control.

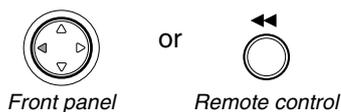


- 2 Release [▶] on the front panel, or press [FORWARD] on the remote control again to return to normal playback.

If a song is previewed all the way to the end, it will be paused at the end of the song.

Fast Review

- 1 To review, hold [◀] on the front panel or press [REVERSE] on the remote control.



- 2 Release [◀] on the front panel, or press [REVERSE] on the remote control again to return to normal playback.

If a song is reviewed all the way to the beginning, it will be paused at the beginning of the song.

Basic Song Playback

Fast Forward & Reverse

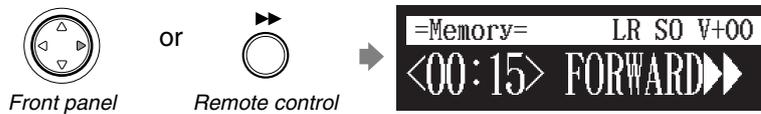
Stop or pause mode **[FORWARD]** or **[REVERSE]**

In the stop or pause mode, fast forward and reverse allow you to quickly locate a desired position in a song.

Reverse can also be used to return a song to the beginning, ready to play again.

■ Fast Forward

- 1** In the stop or pause mode, hold [▶] on the front panel or press [FORWARD] on the remote control.



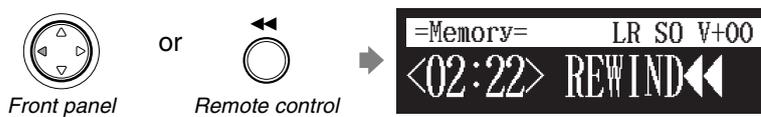
[PLAY/PAUSE] on the front panel flashes quickly and the counter shows the current position.

- 2** Release [▶] on the front panel, or press [FORWARD] on the remote control again to return to the pause mode.

If you fast forward a song all the way to the end, it will be paused at the end of the song.

■ Fast Reverse

- 1** In the pause mode, hold [◀] on the front panel or press [REVERSE] on the remote control.



[PLAY/PAUSE] on the front panel flashes quickly and the counter shows the current position.

- 2** Release [◀] on the front panel, or press [REVERSE] on the remote control again to return to the pause mode.

If you reverse a song all the way to the beginning, it will be paused at the beginning of the song.

Searching a Specific Section of a Song

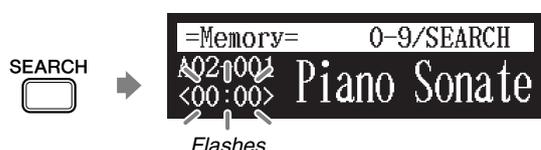
During playback or stop/pause mode **[SEARCH]**

Playback can be started from a specified point in a song. Instead of using fast forward or preview, you can use this function to go directly to a desired point within a song.

If the current song uses the minutes and seconds time format, you specify the point in minutes and seconds. If it uses the measures and beats time format, you specify the point in measures and beats.

1 Press **[SEARCH]** on the remote control.

The song search screen appears with the counter flashing.



The song will be paused at the exact point as you press **[SEARCH]**.

2 Enter the time that you want to search for with the number keypad.

For example, to search for 2:56 (minutes and seconds), first press [0], then [2], [5], and [6].



For example, to search for 52-3 (measures and beats), first press [0], then [5], [2], and [3].



3 Press **[SEARCH]** again.



The position of the song goes to the specified point.

Note:

If you enter a value higher than the entire song time, the search goes to the end of the song.

Listening to the DisklavierRadio

Media selection screen "D-Radio"

You can listen to streaming broadcasts of music, with many channels of music contents.

1 Select "D-Radio" in the media selection screen.

The channel selection screen appears.

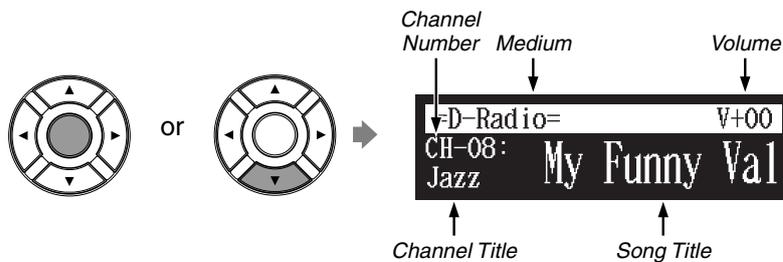


2 Press [◀] or [▶] or [+ / YES] or [- / NO] to select a channel.

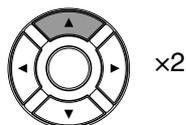


3 Press [ENTER] or [▼] to begin the broadcast of the selected channel.

The DisklavierRadio screen appears.



4 Press [▲] twice to stop the broadcast and return to the media selection screen.



Note:

DisklavierRadio is available only on models of which the control unit is replaced with the Disklavier control unit.



To enjoy the DisklavierRadio, first you need to connect to the Internet. See Chapter 5 "Internet Direct Connection (IDC) – Connecting the Disklavier to the Internet" on page 35.

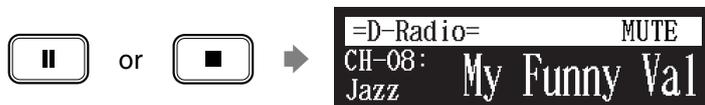


To select a medium, see Chapter 3 "Basic Song Playback – Selecting Medium and Their Contents" on page 22.

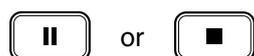
■ Muting the Sound

1 Press [PAUSE] or [STOP].

“MUTE” appears on the upper right of the screen.



2 Press [PAUSE] or [STOP] again to release muting.



Note:

Streaming broadcasts continue during muting. Therefore, the song broadcasted when releasing muting may differ from the one when muting.

Adjusting the Volume

[VOLUME +] or [VOLUME -]

You can adjust volume with the dial on the front panel or with the remote control as described below. Since all piano songs are recorded at the maximum volume level of 0, volume can be decreased down to -10, the softest volume at which the piano can play.

For ensemble songs, the volume of the piano and internal XG tone generator are adjusted simultaneously, so it is a good idea to first balance the volume of the piano and XG tone generator.

For songs on PianoSoft-PlusAudio, you should first balance the volume of the MIDI piano and audio parts.

Note:

This setting does not affect manual playing.



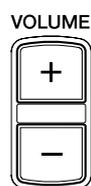
See Chapter 6 “Advanced Song Playback – Adjusting the Volume Balance among the Keyboard Playing, Ensemble Sound, and Software Playback” on page 48.

1 Press [VOLUME +] or [VOLUME -] on the remote control.

The main volume setting screen appears.



2 Press [VOLUME +] or [VOLUME -] to adjust the volume.



Volume can be adjusted in a range of -10 to 0.

Note:

You can also use the dial on the front panel to adjust the volume.

Note:

When the volume is set to -10, there may be a slight delay in sound production following key strokes, and the Disklavier control unit may skip some notes. Furthermore, at this volume setting, touch strength does not affect note dynamics.

Basic Recording

A song that you play on the Disklavier can be recorded and the recorded song can be easily saved for the selected medium. Furthermore, you can title your new recording for simple distinguish before recording.

Recording a New Song

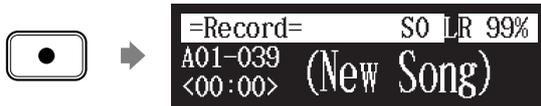
[RECORD]

You can save a new song that you play for an album.

1 Select a destination medium and album.

2 Press [RECORD].

The recording standby screen appears, and [RECORD] on the front panel lights red and [PLAY/PAUSE] flashes in green.



The level appears in the format section as soon as you play a keyboard or press a pedal.

3 Press [PLAY].



[PLAY/PAUSE] stops flashing.
The Disklavier is now ready for you to play.

4 Start playing your song.

Recording will start automatically as soon as you touch a key. The counter starts to advance.



5 Press [STOP] when you finish playing your song.



The recorded song is loaded.

Note:

You cannot record a song on the playback model.

Note:

Up to 999 songs can be recorded in a medium.



To select a medium and album, see Chapter 3 "Basic Song Playback – Selecting Medium and Their Contents" on page 22.

Titling a Song

[RECORD] [FUNC.]x2

Title a new song before you start recording.

1 Select a destination medium and album.

2 Press [RECORD].

3 Press [FUNC.] twice in the recording standby screen.

The song title editing screen appears.



4 Use [◀] and [▶] to move the cursor.



5 Select characters with [+ / YES] and [- / NO].



You can enter up to 64 characters.

6 Press [PLAY] after title determined.



Recording begins.



To select a medium and album, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.



To rename the existing song, see Chapter 11 “Media Management – Renaming a Song” on page 88.



For details on characters, see “Available Characters” on next page.

Note:

You can enter space by pressing [+ / YES] and [- / NO] simultaneously.

Basic Recording

Available Characters

The following table shows which characters are available. You can switch the character types by the yellow button on the remote control.

Character Type	Characters													
Letters (Upper Case) [A-Z]	Space	A	B	C	D	E	F	G	H	I	J	K	L	
	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Letters (Lower Case) [a-z]	Space	a	b	c	d	e	f	g	h	i	j	k	l	
	m	n	o	p	q	r	s	t	u	v	w	x	y	z
Symbols [etc]	Space	!	”	#	\$	%	&	'	()	*	+	,	
	-	.	/	:	;	<	=	>	?	_	@			
Numbers [0-9]	Space	0	1	2	3	4	5	6	7	8	9			

Note: To delete a character, first move the cursor on the character to delete, and then enter space.

Internet Direct Connection (IDC)

By connecting to the Internet, you can enjoy a streaming broadcast or download update programs directly. Internet Direct Connection is available only on models of which the control unit is replaced with the Disklavier control unit.

What is Internet Direct Connection (IDC)?

Internet Direct Connection (IDC) is a feature that allows you to connect your Disklavier directly to the Internet. Internet Direct Connection users are able to listen to a streaming broadcast (DisklavierRadio), and receive valuable information such as product updates. Your Disklavier can be upgraded remotely as new technologies and services are developed through the IDC service.

Note:

Internet Direct Connection (IDC) is available only on models of which the control unit is replaced with the Disklavier control unit.

Obtaining an ID and Password for the IDC Service (IDC Registration)

To use the IDC service, initial registration is required using an Internet-connected computer.

Please register at the following website:

<https://music.yamaha.com/serviceRegistration.html>

Once you have an IDC account, you will interact with that account using the remote control. To use the full IDC service, you are required to enter your registered ID (e-mail address) and password with the remote control or the keyboard.

Note:

If you have already registered for the IDC service with any other instrument (such as the Clavinova), you do not need to register again. You can use your ID and password obtained through that registration.

Note:

Some IDC service functions do not require an ID and password.

Connecting the Disklavier to the Internet

You can connect the Disklavier to a full-time online Internet connection (ADSL, optical fiber, cable Internet, etc.) via a router or a modem equipped with a router.

■ Preparations

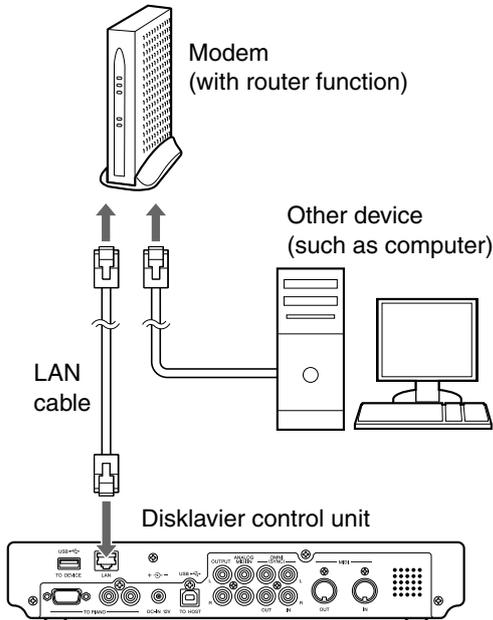
- To use the Internet connection, you will first need to subscribe to an Internet service or provider.
- Use a computer to obtain and configure Internet service. You cannot obtain Internet service or configure router settings on a local area network using the Disklavier control unit itself.
- Use an STP (shielded twisted pair) cable to connect the control unit and a router.
- Before connecting the LAN cable, make sure to turn off (or shut down) the Disklavier control unit.

Internet Direct Connection (IDC)

■ Connecting the Disklavier Control Unit to the Internet

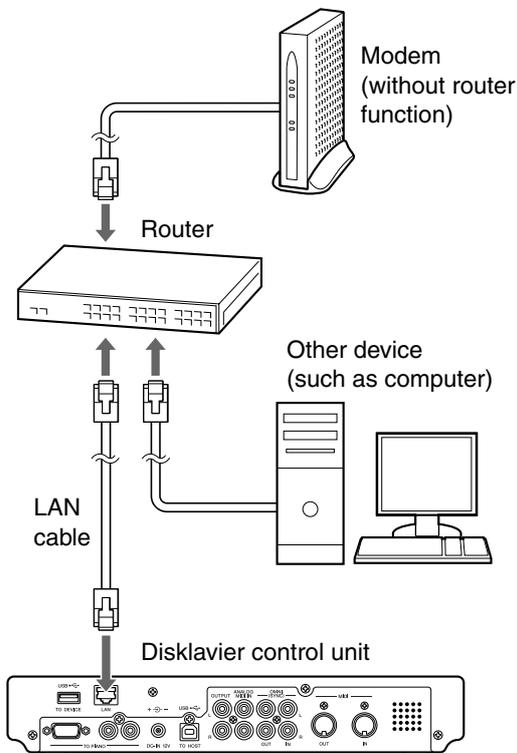
Connection example 1:

Using a modem with router function



Connection example 2:

Using a modem without router function



Note:

Depending on the contract with your Internet provider, you may not be able to connect two or more devices (for example, a computer and this unit) to the Internet. Please check your contract or contact your Internet provider for further information.

Note:

Some types of modems (such as ADSL modems or cable modems) have multiple ports for connecting two or more devices (such as computer, musical instrument, etc.). If your modems have only one port, an optional router or hub is required in order to connect several devices simultaneously.

Note:

Use an STP (shielded twisted pair) cable for connection. For details, see "Preparations" on previous page.

For further information on the Internet connection (only a wired LAN connection is supported), visit the Yamaha Disklavier website:

<http://www.yamaha.com/disklavier/>
(for US customers)

<http://www.yamaha.ca/content/piano/products/disklavierpianos/>
(for Canadian customers)

http://www.yamaha-europe.com/yamaha_europe/english_master/
(for European customers; Check the Disklavier website)

<http://www.yamaha.com.au/au/>
(for Australian customers; Check the Disklavier website)

■ Notes on Network Security

The Disklavier control unit attempts to achieve a balance between security and usability in its network implementation. However, a determined hacker may be able to defeat these security measures and utilize the network of the purchaser in an unauthorized manner. Since each network is different, only the purchaser can determine whether the security measures discussed here will adequately protect their network.

The purchaser acknowledges that connection to the Internet and use of the Disklavier control unit Internet features is done at the risk of the purchaser. In no event shall Yamaha, its subsidiaries or Yamaha's and/or its subsidiaries' directors, officers, or employees be responsible for unauthorized access, loss or alteration of the data of the purchaser or be liable for any damage from intrusions.

Accessing the Internet

[INTERNET]

Once you have established an IDC account and successfully connected your Disklavier to the Internet, you can access a special Disklavier website where you can access the DisklavierRadio, and download software updates.

D-Radio:

Select this to listen to streaming broadcasts of music, with many channels of music content. You can enjoy listening to piano performances that play continuously.

MyAccount:

Select this to log in to the IDC service. You can also refer to the help information from this option.

Update:

Select this to update the Disklavier control unit using Internet connection.

Note:

Free contents that do not require an ID and password are available.

Note:

The service contents are subject to change without prior notice.



See Chapter 3 “Basic Song Playback – Listening to the DisklavierRadio” on page 30.

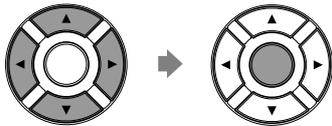
Internet Direct Connection (IDC)

1 Press [INTERNET] on the remote control.

The Internet menu screen appears.



2 Select a desired menu with the cursor buttons ([<] [>] [▲] [▼]), then press [ENTER].



Perform operations on the screen that appears.

Checking Your Account Information

[INTERNET] → "MyAccount"

You can confirm your current account information of IDC service. You can also log out from the IDC service.

Login:

Select this to log in to the IDC service. You need to enter your ID and password.

Logout:

If you wish to use another IDC account or prevent the current account from being used by others, select this to log out from the IDC service.

Account Information:

Select this to confirm your account information.

Subscription Status:

Select this to confirm your DisklavierRadio subscription status.

1 Press [INTERNET] on the remote control.

The Internet menu screen appears.



Note:

ID and password are not required for free contents (such as free channel of DisklavierRadio).

- 2** Select “MyAccount” with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].



The MyAccount screen appears.



- 3** Select a desired option with the cursor buttons ([▲] [▼]), then press [ENTER].



Perform operations on the screen that appears.

Updating the Disklavier Control Unit Using the Internet

[INTERNET] → “Update”

You can download the update program directly from the Internet and update the firmware of the Disklavier control unit.

- 1** Press [INTERNET] on the remote control.

The Internet menu screen appears.



Internet Direct Connection (IDC)

- 2** Select “Update” with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].

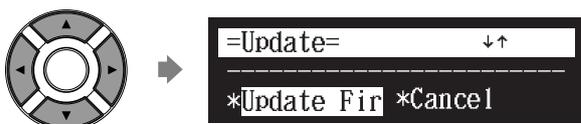


The update screen appears if there is any update program available.



You can scroll the screen up or down with the cursor buttons ([▲] [▼]).

- 3** Following the instructions on the screen, select the option with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].



The download process of the update program starts.



- 4** Shut down the Disklavier control unit with [ON/OFF] on the front panel after the download process is completed.



The update program is now prepared.

Update the firmware following the procedures in Chapter 13 “Other Settings – Updating the Disklavier Control Unit” on page 123.

Setting the Disklavier Control Unit for the Internet Connection

[SETUP] "Network"

You can change various settings related to the Internet connection. In most cases, you do not have to change the default factory settings.

Information:

You can confirm the information of network settings.

Use DHCP:

Select the method to determine several addresses. If your router has DHCP server function, we recommend that you to select "DHCP" or "DHCP+DNS."

DNS1/DNS2:

Enter the address of the primary and secondary DNS server. These settings must be made when Use DHCP is set to "DHCP+DNS" or "MANUAL."

IPAddr./SubMask/Gateway:

Enter the address of the control unit, subnet mask and gateway server. These settings must be made when Use DHCP is set to "MANUAL."

Proxy/Proxy Port:

Enter the name and the port number for the proxy server. These settings are necessary only when a proxy server is located in your local network.



To use the Internet connection, inquire of your Internet service provider.

Note:

For information about DNS server address, IP address, subnet mask and gateway server address, inquire of your internet service provider.

1 Press [SETUP] on the remote control.

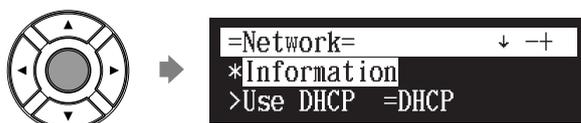
The setup menu screen appears.



2 Select "Network" with the cursor buttons ([◀][▶][▲][▼]), then press [ENTER].

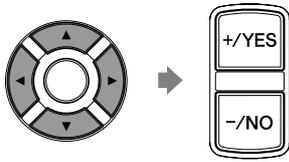


The network setting screen appears.



Internet Direct Connection (IDC)

- 3** Select a desired option with the cursor buttons ([◀] [▶] [▲] [▼]), then press [+ / YES] and [- / NO] to change setting.



If you select “Information” on the network setting screen, the current network setting appears. To return to the network setting screen, press [ENTER] after confirming.

- 4** Press [ENTER] to complete the operation.



Initializing Internet Settings

[SETUP] ▶ “Reset” ▶

If you want to initialize the Internet settings, first you must reset the Disklavier control unit to its initial factory setting. However, cookies are still remain after parameter resetting. To delete cookies, perform the appropriate operation on the reset screen.



For details on cookies, see Chapter 16 “Glossary” on page 131.



See Chapter 13 “Other Settings – Resetting the Disklavier Control Unit” on page 122.

Changing the Playback Tempo

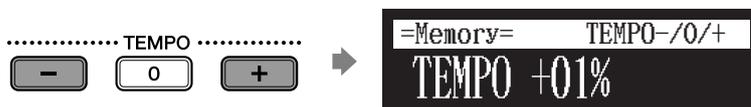
[TEMPO -] or [TEMPO +]

You can speed up or slow down the playback tempo. Slowing down the playback tempo can be useful when practicing a difficult piano part.

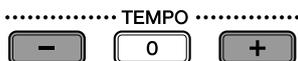
These tempo settings remain in effect until recording is started, another medium or album is selected, or the Disklavier control unit is turned off.

1 Press [TEMPO -] or [TEMPO +] on the remote control.

The tempo setting screen appears.

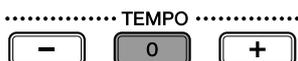


2 Press [TEMPO -] or [TEMPO +] to adjust the tempo.



Playback tempo can be adjusted from -50% to +50% in 1% increments.

Press [TEMPO 0] to set to the original tempo.



Note:

You cannot change the playback tempo of songs on audio CDs.



Tempo changes to songs that you have recorded yourself can be made permanent. See Chapter 7 “Advanced Recording – Changing the Default Tempo” on page 65.

Note:

You can also use the dial on the front panel to adjust the tempo.

Playing Back Songs in a Different Key (Transposition)

[TRANSPOSE -] or [TRANSPOSE +]

Playback can be transposed up or down by up to two octaves. This is useful, for example, when you want to sing along (karaoke) in a different key from the original recording.

Transposition changes remain in effect until recording is started, another medium or album is selected, or the Disklavier control unit is turned off.

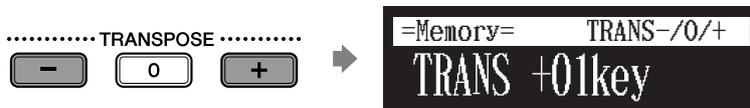
Note:

This function cannot be used to transpose songs from external devices connected to the OMNI IN jacks, or on audio CDs.

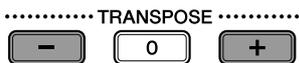
Advanced Song Playback

- 1 Press [TRANSPOSE -] or [TRANSPOSE +] on the remote control.

The transposition setting screen appears.



- 2 Press [TRANSPOSE -] or [TRANSPOSE +] to change the key.



Playbacks can be transposed in half-step increments up or down two octaves (-24 key to +24 key).

Press [TRANSPOSE 0] to set to the original key.



Note:

You can also use the dial on the front panel to adjust the key.

Repeating Song Playback

[REPEAT]

There are three repeat modes (ALL, RPT, RND) as described below. You can use these functions for entertainment or study purpose.

Repeat mode settings remain in effect until recording is started, another medium or album is selected, or the Disklavier control unit is tuned off.

- 1 Press [REPEAT] on the remote control.

The repeat setting screen appears.



2 Press [REPEAT] to select repeat modes.

The following options are available:

Option	Description
ALL	Repeats all songs on the selected album.
RPT	Repeats selected song.
RND	Shuffles the order of songs on the selected album and repeats the cycle.
OFF	Plays back songs normally.

3 Press [PLAY] to start repeat playback.**4** To cancel the repeat mode, press [REPEAT] until "OFF" appears on the screen.

Repeating a Specific Section of a Song (A-B Repeat)

During playback **[A-B]**

In the A-B repeat, playback is repeated between two specified points in a song: point A and point B. This function is useful when practicing or memorizing a difficult section of a song.

Once specified, points A and B are saved until another song is selected, recording is started, or the Disklavier control unit is turned off.

1 To set point A, play back a song and press [A-B] on the remote control when the desired point is reached.

Point A is set.

The A-B repeat setting screen appears with the "B" flashing.



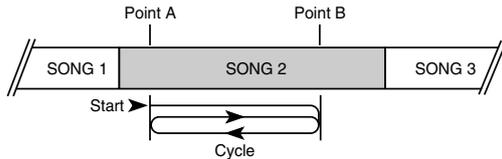
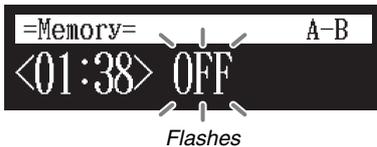
Advanced Song Playback

2 To set point B, press [A-B] again.

Point B is set.



Playback starts from point A, continues up to point B and, returns to point A and playback starts repeatedly.

**3** To cancel the A-B repeat, press [A-B] so that “OFF” flashes on the screen.

Pressing [BACK] also cancels the point setting, and returns to the song playback screen.

Note:

You cannot set point B that is beyond the selected song.

Note:

The A-B repeat is cancelled if you escape from the A-B repeat setting screen by other operations.

Playing Back Only the Desired Piano Part

[PART SELECT L] or [PART SELECT R]

This could be useful, for example, when listening carefully to one part, and also when you practice only the left- or right-hand part while the Disklavier plays the other.

■ Cancelling the Piano Part

1 Select the desired song.**2** Press [PART SELECT L] or [PART SELECT R] on the remote control to cancel a part.

The part cancellation screen appears with the corresponding part canceled.



To select a song, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.

Notes of displays:

Display	Description
L	Left hand part
R	Right hand part
P	Pedal part
ON	Plays part
OFF	Cancels part
G	Plays part with guide (only for SmartKey song)
---	No plays on part

- 3** To replay the cancelled part, press [PART SELECT L] or [PART SELECT R] again so that “ON” appears on the screen.



- 4** Press [BACK] to return to the song playback screen.



■ Cancelling the Pedal Part

- 1** On the part cancellation screen, press [▶] to select “P=.”



- 2** Press [-/NO] to cancel a pedal part.

**Note:**

Guide part can be set on the models capable of the SmartKey playback.

Note:

For the SmartKey song, “ON”, “OFF” and “G” appear sequentially each time you press [PART SELECT L] or [PART SELECT R].

Advanced Song Playback

- 3** To replay the pedal part, press [+ / YES] to select “ON” with the cursor is on “P=.”



- 4** Press [BACK] to return to the song playback screen.



Adjusting the Volume Balance among the Keyboard Playing, Ensemble Sound, and Software Playback

[BALANCE]

Besides adjusting the overall volume, the volume balance among the different sound sources as described below can be adjustable.

- TG:** Adjusts the volume of the ensemble sound reproduced by the tone generator (TG) of the Disklavier control unit.
- Audio:** Adjusts the volume of the accompaniment or standard audio sound pre-recorded in the software (CDs).
- Voice:** Adjusts the volume of the ensemble voice when you play using the voice function.

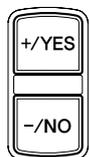
■ Adjusting the TG Balance

- 1** Press [BALANCE] on the remote control.

The TG balance setting screen appears.



- 2** Press [+ / YES] and [- / NO] to adjust the volume of the tone generator.



Tone generator volume can be adjusted in a range of 10 to 127.

Note:

You cannot adjust the volume balance during the DisklavierRadio playback.



See Chapter 8 “Advanced Piano Playing – Playing the Disklavier with an Ensemble Voice” on page 69.

Note:

You can also use the dial on the front panel to adjust the volume.

■ Adjusting the Audio Balance

1 Press [BALANCE] twice on the remote control.

The audio balance setting screen appears.



2 Press [+ / YES] and [- / NO] to adjust the volume of the audio.



Audio volume can be adjusted in a range of 10 to 127.

Note:

You can also use the dial on the front panel to adjust the volume.

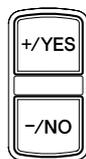
■ Adjusting the Voice Balance

1 Press [BALANCE] three times on the remote control.

The voice balance setting screen appears.



2 Press [+ / YES] and [- / NO] to adjust the volume of the voice.



Voice volume can be adjusted in a range of 0 to 127.

Note:

You can also use the dial on the front panel to adjust the volume.

Adjusting the Pitch of Audio

During playback **[FUNC.]**

You can temporarily adjust the pitch of the song contains audio (PianoSoft-PlusAudio, SmartPianoSoft) or an audio CD for your listening pleasure.

Pitch adjustments are effective until another medium or album is selected, recording is started, or the Disklavier control unit is turned off.

Note:

This function cannot be used to adjust the pitch of external audio CDs connected to the OMNI IN jacks.

1 During the song playback, press [FUNC.] on the remote control.

The audio pitch setting screen appears.



2 Press [+ / YES] and [- / NO] to change the audio pitch.



Audio pitch can be adjusted in a range of -50 cent to +50 cent (one semitone as 100 cent).

Adjusting the L/R Balance of Audio

During playback **[FUNC.]**

You can temporarily adjust the L/R balance of an audio CD.

Balance adjustments are effective until another song is selected, recording is started, or the Disklavier control unit is turned off.

1 During the song playback, press [FUNC.] several times.

The audio pan setting screen appears.



2 Press [+ / YES] and [- / NO] to change the audio pan.



The following pan settings are available:

Option	Description
Left	Audio of the L channel is output to both of the L and R channels.
Center	Audio of the L channel is output to the L channel, and the R channel is output to the R channel.
Right	Audio of the R channel is output to both of the L and R channels.

Using Timer Play

[SETUP] → "TimerPlay"

You can program your Disklavier to start or stop playback of a song at various specified times. All you need to do is register up to a maximum of 99 timer settings, and your Disklavier will perform them unattended. This function is called "timer play."

■ Setting the Timer Play

1 Press [SETUP] on the remote control.

The setup menu screen appears.



Note:

The internal calendar must be set in advance in order for the timer play to function. See Chapter 2 "Getting Started – Setting the Internal Calendar" on page 16.

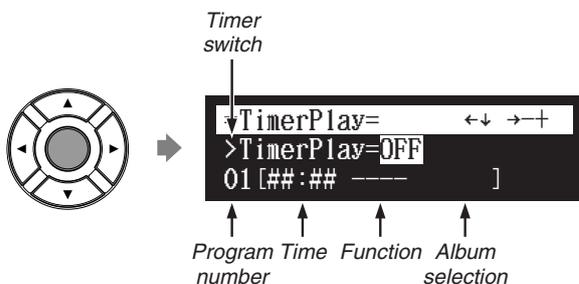
Note:

The control unit must be turned on in advance in order for the timer play to function. The timer play cannot turn on/off the control unit.

- 2** Select “TimerPlay” with the cursor buttons ([◀] [▶] [▲] [▼]), then press [ENTER].



The timer play setting screen appears.

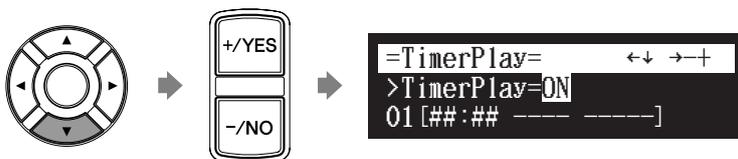


List of the parameters

Item	Option	Description
Timer switch	ON, OFF	Enables or disables the timer play function.
Program number	01 - 99	Indicates the number of a program.
Time	##:##	No set.
	00:00 - 23:59	Indicates the time at which a function is to be performed.
Function	----	No set.
	PLAY	Plays back songs at the specific time.
	STOP	Stops the timer play.
Album selection	-----	Plays back the current selected song.
	Mem01 - Mem99	Indicates the album number in the internal flash memory.
	Lst01 - Lst99	Indicates the list number in the playlist.

■ Switching the Timer Play On and Off

To switch the timer play on and off, press [▼] to move the cursor to the timer switch, then press [+ / YES] and [- / NO].



■ Moving Program Number

Press [▲] and [▼] to go to the program number.

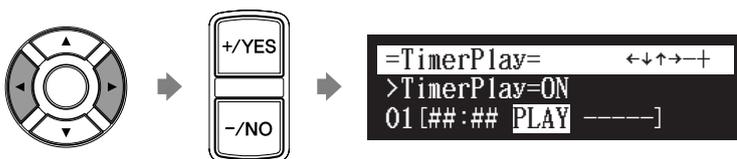


The cursor moves to the function parameter.

■ Setting Function

The following describes how to play back the first album in the internal flash memory at 8:15 AM.

To switch the function parameter, press [◀] and [▶] to move the cursor to the function parameter, then press [+/YES] and [-/NO].

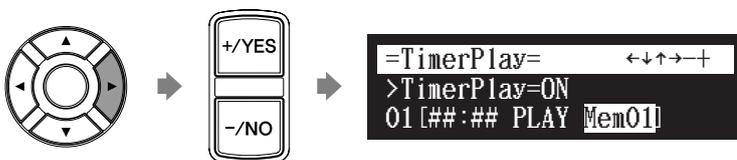


“PLAY” and “STOP” change sequentially.

When “PLAY” is selected, the album selection parameter appears.

■ Selecting Album

Press [▶] to move the cursor to the album selection parameter, then press [+/YES] and [-/NO] to select the album.



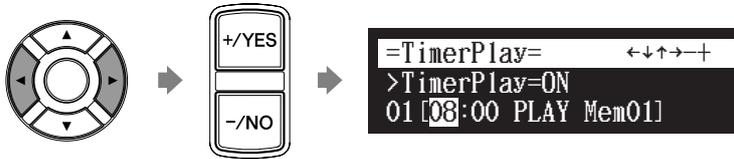
Note:

You can select the album in the internal flash memory.

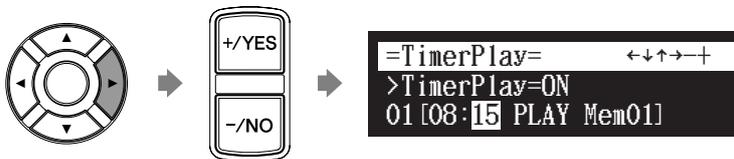
Advanced Song Playback

■ Setting Time

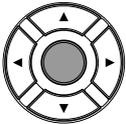
- 1** Press [◀] and [▶] to move the cursor to the hour parameter, then press [+ / YES] and [- / NO] to set hours.



- 2** Press [▶] to move the cursor to the minute parameter, then press [+ / YES] and [- / NO] to set minutes.



- 3** Press [ENTER] to return to the setup menu screen.



■ About Song Playback Screen

When the song playback is stopped — with the timer play function is set to ON and the current time is displayed — “T” flashes to the right side of the current time.



↑
Indicates that the timer play is on.

Skipping the Blank Part at the Beginning of a Song

[SETUP] "Playback"

When there is a blank part created at the beginning of the recorded song, turning on this function automatically skips the unwanted part and starts playback from the actual beginning of the song.

1 Press [SETUP] on the remote control.

The setup menu screen appears.



2 Select "Playback" with the cursor buttons ([◀][▶][▲][▼]), then press [ENTER].



The playback setting screen appears with the cursor flashing.



3 Press [+ / YES] and [- / NO] to change the setting.



4 Press [ENTER] to return to the setup menu screen.



SmartKey™ Playback

Select a SmartKey song **[PLAY]**

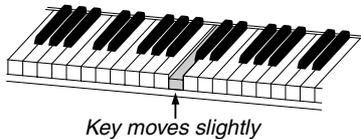
Special SmartKey software uses all the “SmartKey” features to create an exciting way in which non-players can learn to play simple melodies, one note at a time, without the need for written music. SmartKey software does this by partially depressing the piano key to signal which note should be played. The Disklavier then waits for you to press this key before it continues to the next note in the melody (If you miss the movement of the key, the Disklavier will repeat the movement until you press the key). When you press the key, the Disklavier will reward you with ear tickling phrases, incredible harmonies, and lush arpeggios to give you the aural and visual image of a complete high-quality performance. In short, it SHOWS you which key to play, WAITS for you to play that key before it continues, and REWARDS you with music. It is like having an eternally patient music teacher showing your fingers which notes to play.

1 Select a desired SmartKey song.

2 Press [PLAY].



Playback stops, and the key to play next moves slightly.



The key to play flashes in the counter.



Flashes

3 Play the key that the keyboard indicates.

This will continue until the song is finished. Notice that the Disklavier patiently waits for you to play the right key before proceeding to the next key. Also, notice that if you happen to miss the cue, it will gently remind you what the key is every few seconds until you play the right key.

Note:

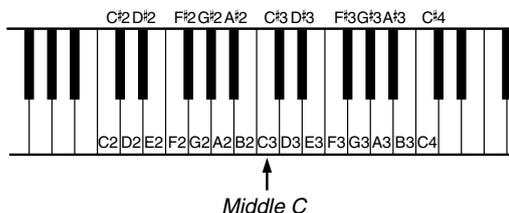
The SmartKey playback is available only on models of which the control unit is replaced with the Disklavier control unit.



To select a song, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.

■ Key notation

As a reference, “C3” is middle “C”, which means “C4” is an octave above middle “C” and so on.



Inactivating the Key Movement during Playback

During playback **[FUNC.]**

During playback of a song, keys normally move in accordance with the playback of the respective note's key. For models equipped with the Silent Piano™ function, you can select an option of stopping this key movement during the song playback with the Silent Piano™ function. This enables you, for example, to play along with the song being played back, to add your own improvisation, or to create a four-hand duet.

Note:

Key movement can only be inactivated on models of which the control unit is replaced with the Disklavier control unit.

Note:

You can change the setting for key movement from the “Playback” option in the setup menu.

- 1** During the song playback with the Silent Piano™ function, press **[FUNC.]** several times.

The key motion setting screen appears.



- 2** Press **[+/YES]** and **[-/NO]** to change the setting.



Advanced Recording

This chapter describes further functions for the advanced piano recording such as playing and measuring the current playing song tempo with the metronome, recording the left-hand part and the right-hand part separately.

Recording with the Internal Metronome

[METRONOME] → [RECORD]

You can use the metronome to record songs.

Songs recorded with the metronome will be in the measures and beats format.

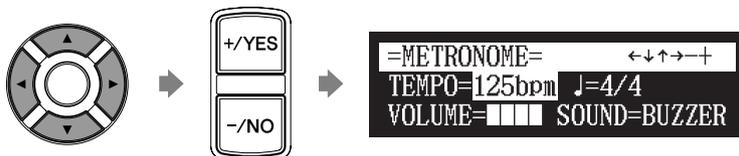
All metronome parameters are reset when the Disklavier control unit is switched off.

1 Press [METRONOME] on the remote control.

The metronome setting screen appears.

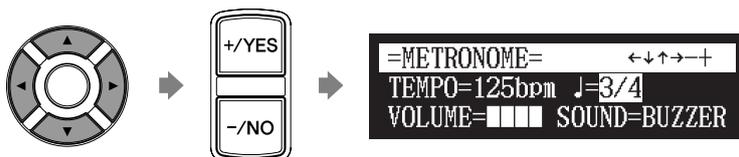


2 To change the tempo, move the cursor to the tempo parameter with the cursor buttons ([◀] [▶] [▲] [▼]), then press [+ / YES] and [- / NO].



The tempo can be adjusted in a range of 30 bpm to 400 bpm.

3 To change the beat, move the cursor to the beat parameter with the cursor buttons ([◀] [▶] [▲] [▼]), then press [+ / YES] and [- / NO].

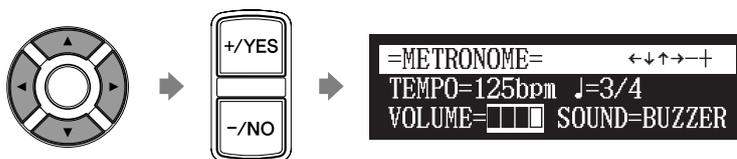


The following beat settings are available: 1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 8/4, 9/4.

Note:

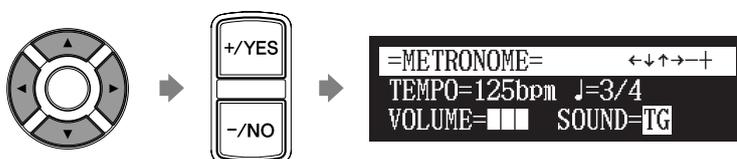
The tempo parameter displayed on the metronome setting screen indicates the number of beats in a minute, and one beat represents a quarter. When you play a song written in different measure unit from quarter note, change the setting (e.g. When playing a song in 3/2, set beat to 6/4).

- 4** To change the volume, move the cursor to the volume parameter with the cursor buttons ([◀] [▶] [▲] [▼]), then press [+ / YES] and [- / NO].



The volume can be adjusted in 4 steps.

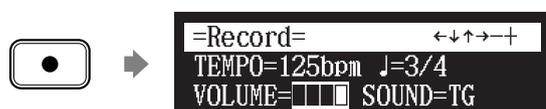
- 5** To change the sound, move the cursor to the sound parameter with the cursor buttons ([◀] [▶] [▲] [▼]), then press [+ / YES] and [- / NO].



The following sound settings are available: BUZZER, TG.

- 6** Press [RECORD] in the metronome setting screen.

The metronome recording setting screen appears.

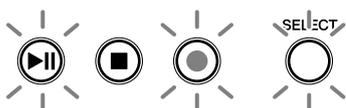


- 7** Press [PLAY].



Recording begins immediately.

[PLAY/PAUSE], [REC] and [SELECT] on the front panel flash simultaneously at the first beat of the metronome.



- 8** Start playing your song.

- 9** Press [STOP] when you finish playing your song.



The recorded song is loaded.

Recording the Left and Right Parts Separately

[RECORD] [FUNC.]

When recording an L/R song, the left- and right-hand parts can be recorded separately. Either part can be recorded first, and the pedals can be recorded with the first part.

While you record the second part, the first part will play back for monitoring.

If the left-hand or right-hand part is difficult to play at normal speed, the first part can be recorded at a slow tempo, and then the tempo changed afterwards to record the second part at the normal song speed.

This section describes how to record the left-hand part first then the right-hand part second.

■ Recording the Left-Hand Part

1 Select a destination medium and album.

2 Press [RECORD].



3 Press [FUNC.] in the recording standby screen.

The part selection screen appears.



4 Make sure that the left-hand part is set to be recorded (“L=REC”), then press [PLAY].



This Disklavier is now ready for you to play the left-hand part.

5 Start playing your song.

Recording will start as soon as you touch a key.

6 Press [STOP] when you finish playing your song.



The L/R song with the left-hand part recorded is saved onto the selected album.



To select a medium and album, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.



In the case you want to title your new song before recording, see Chapter 4 “Basic Recording – Titling a Song” on page 33, to rename the title after recording, see Chapter 11 “Media Management – Renaming a Song” on page 88.



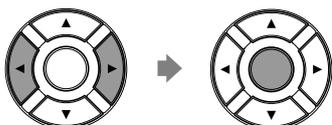
If you want to record your L/R song using the metronome, see Chapter 7 “Advanced Recording – Recording with the Internal Metronome” on page 58.

■ Recording the Right-Hand Part

- 1** Press [RECORD].



- 2** Press [◀] and [▶] to select the L/R song with the left-hand part that you have just recorded, then press [ENTER].



- 3** Press [FUNC.] in the recording standby screen.

The part selection screen appears.



The part that has already been recorded is displayed as "L=PLY."

- 4** Press [PART SELECT R] to record the right-hand part.



The part set to "REC" will be recorded.

- 5** Press [PLAY].



Playback of the left-hand recorded part starts immediately, so be sure that you are ready to play the right-hand part along with it.

Advanced Recording

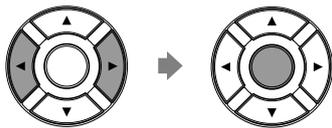
6 Press [STOP] when you finish playing your song.

The following screen appears.



The following table gives a description of each of the options.

Option	Description
SAVE	The second part is saved with the first part under the current song number.
NEW	The second part is saved under a new song number. The first part is kept under the previous song number.
CANCEL	The second part is discarded. The first part is kept under the previous song number.

7 Press [◀] and [▶] to select an option, then press [ENTER].

The right-hand part is saved as indicated or canceled.

Recording the Left and Right Parts Together (Setting a Split Point)

[RECORD] → [FUNC.]

You can also record an L/R song by playing the left- and right-hand parts simultaneously. In this case, a keyboard split point is set, and the notes played on the left-hand side of the split point are saved as the left-hand part, and notes played on the right-hand side of the split point are saved as the right-hand part.

1 Select a destination medium and album.**2** Press [RECORD].**3** Press [FUNC.] in the recording standby screen.

The part selection screen appears.



To select a medium or album, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.



In the case you want to title your new song before recording, see Chapter 4 “Basic Recording – Titling a Song” on page 33, to rename the title after recording, see Chapter 11 “Media Management – Renaming a Song” on page 88.



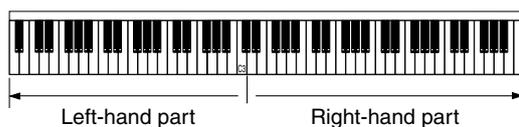
If you want to record your L/R song using the metronome, see Chapter 7 “Advanced Recording – Recording with the Internal Metronome” on page 58.

4 Press [PART SELECT R] to set both parts to record.

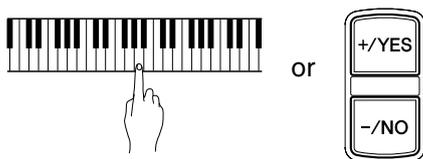
The split point setting screen appears.



The above display shows that the default keyboard split point is note C3, or middle C. In this case, note C3 and notes below are saved as the left-hand part and notes above C3 are saved as the right-hand part, as shown in the following figure.



5 To change the split point, press a key on the keyboard or [+ / YES] and [- / NO] to select a different key.



The split point can be set from note A-1 to note C7.

6 Press [PLAY].



The Disklavier is now ready for you to play.

7 Starts playing your song with the left- and right-hand parts and the pedal part simultaneously.

Recording will start as soon as you touch a key.

8 Press [STOP] when you finish playing your song.



The recorded song is loaded.

Re-Recording One Part

[RECORD] → Select the L/R song → [PART SELECT L] or [PART SELECT R]

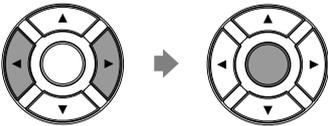
You can re-record the only one part left-hand or the right-hand of the existing L/R song.

1 Select a desired medium and album.

2 Press [RECORD].



3 Press [◀] and [▶] to select the L/R song that you want to re-record, then press [ENTER].



4 Press [PART SELECT L] or [PART SELECT R] to select the part to re-record.



The part set to “REC” will be re-recorded.

5 Press [PLAY].



Recording will start immediately, so be sure that you are ready to play the part.



To select a medium and album, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.

6 Press [STOP] when you finish playing your song.

The following screen appears.



The following table gives a description of each of the options.

Option	Description
SAVE	The re-recorded part is saved with the other existing part under the current song number.
NEW	The re-recorded part is saved under a new song number. The existing parts are kept under the current song number.
CANCEL	The re-recorded part is discarded. The existing parts are kept under the current song number.

7 Press [◀] and [▶] to select an option, then press [ENTER].



The re-recorded part is saved as indicated or canceled.

Changing the Default Tempo

[RECORD] → Select the song → [FUNC.]x3

This function allows you to change the default tempo of a song and save the change. It should not be confused with the playback tempo function described in Chapter 6 “Advanced Song Playback – Changing the Playback Tempo” in which tempo changes are lost when the Disklavier control unit is turned off.

The tempo of a song can be changed many times. This function can be used when recording a very complex song that is difficult to play at a fast tempo. First, record the song at a tempo you can manage, then change the tempo afterwards. For example, you could record a difficult left-hand part at a slow tempo, use this function to change the tempo, then record the right-hand part at the normal tempo.

If a song’s time format is minutes and seconds, tempo changes are specified as a percentage of the original tempo.

If a song’s time format is measures and beats, tempo changes are specified in beats per minute.

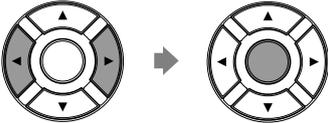
Advanced Recording

1 Select a desired medium and album.

2 Press [RECORD].



3 Press [◀] and [▶] to select the song in which you want to change the tempo, then press [ENTER].



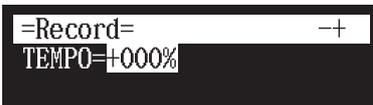
4 Press [FUNC.] three times.



For **measures and beats**, the current song tempo (bpm) is shown.



For **minutes and seconds**, the current song tempo is shown as "000%."



5 Press [+ / YES] and [- / NO] to change the tempo.



[+ / YES] increases the tempo, and [- / NO] decreases the tempo.

For **measure and beats**, the tempo range is from 30 bpm to 400 bpm.

For **minutes and seconds**, the tempo range is from -75% to +242%.



To select a medium or album, see Chapter 3 "Basic Song Playback – Selecting Medium and Their Contents" on page 22.

Note:

You cannot change the beat setting on the prerecorded songs.

6 Press [STOP] to save the tempo change.

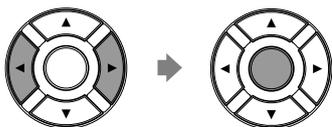
The following screen appears.



The following table gives a description of each of the options.

Option	Description
SAVE	The song is saved at its new tempo under the current song number.
NEW	The song is saved at its new tempo under a new song number. The original song is kept under the previous song number.
CANCEL	The song with a new tempo is discarded. The original song is kept under the previous song number.

7 Press [◀] and [▶] to select an option, then press [ENTER].



To change the tempo again or to reset the original tempo, repeat steps 1 to 6.

Playing the Disklavier along with the Internal Metronome

[METRONOME]

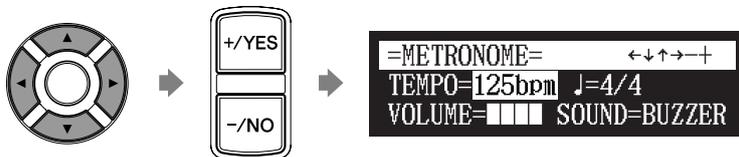
The internal metronome helps you playing along the meter (beat) and the tempo you set. Also the volume of the metronome can be adjusted.

1 Press [METRONOME] on the remote control.

The metronome setting screen appears and the metronome starts to click.

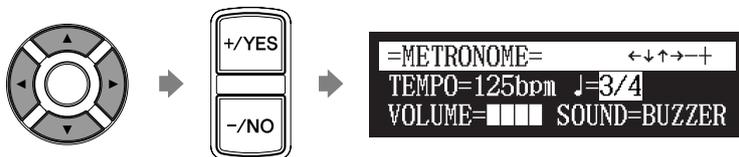


2 To change the tempo, move the cursor to the tempo parameter with the cursor buttons ([◀] [▶] [▲] [▼]), then press [+ / YES] and [- / NO].



The tempo can be adjusted in a range of 30 bpm to 400 bpm.

3 To change the beat, move the cursor to the beat parameter with the cursor buttons ([◀] [▶] [▲] [▼]), then press [+ / YES] and [- / NO].

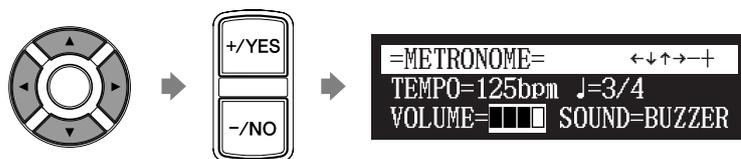


The following beat settings are available: 1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 8/4, 9/4.

Note:

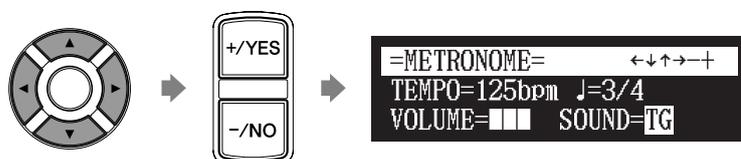
The tempo parameter displayed on the metronome setting screen indicates the number of beats in a minute, and one beat represents a quarter. When you play a song written in different measure unit from quarter note, change the setting (e.g. When playing a song in 3/2, set beat to 6/4).

- 4** To change the volume, move the cursor to the volume parameter with the cursor buttons ([◀] [▶] [▲] [▼]), then press [+ / YES] and [- / NO].



The volume can be adjusted in 4 steps.

- 5** To change the sound, move the cursor to the sound parameter with the cursor buttons ([◀] [▶] [▲] [▼]), then press [+ / YES] and [- / NO].



- 6** To cancel this function, press [METRONOME] again.



Playing the Disklavier with an Ensemble Voice

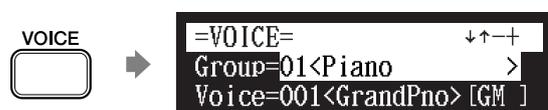
[VOICE]

The [VOICE] on the remote control lets you assign a voice from the internal XG tone generator to accompany the piano while you play. You will hear in unison the piano sound coming from the Disklavier and an ensemble voice produced by the internal XG tone generator. This is sometimes referred to as voice layering or unison.

The internal XG tone generator offers 480 instrumental voices and 11 drum kits for playing the keyboard.

- 1** Press [VOICE] on the remote control.

The voice selection screen appears.



Note:

You cannot use the voice function on the playback model.



For details on voice groups and voices, see Chapter 17 “Internal Tone Generator Voices” on page 134.

Advanced Piano Playing

2 Press [+ / YES] and [- / NO] to select a voice group.

Changing the voice group displays the top voice of that group in the voice parameters.

**3** To change the voice, press [▼] to move the cursor to the voice parameter, then press [+ / YES] and [- / NO].

If necessary, adjust the volume of the voice in the voice balance setting screen.

4 To cancel this function, press [VOICE] again.

See Chapter 6 “Advanced Song Playback – Adjusting the Volume Balance among the Keyboard Playing, Ensemble Sound, and Software Playback” on page 48.

Note:

The voice function is cancelled if you escape from the voice selection screen by other operations.

Video Synchronization

You can record a song synchronized with the video, and enjoy a synchronized playback of piano and video later on. This feature offers great listening experience with sight.

Video Synchronized Recording

[SETUP] → "Audio/O" → **Connect a camcorder and a DVD recorder**

By recording a song played on the Disklavier synchronized with the video recording, later on, you can enjoy piano playback with the video. First set up the camcorder, the DVD recorder, and the Disklavier control unit, and then start recording by following the procedures below.



For details on video synchronized playback, see Chapter 9 "Video Synchronization – Video Synchronized Playback" on page 75.

■ Setting for Video Synchronized Recording

1 Press [SETUP] on the remote control.

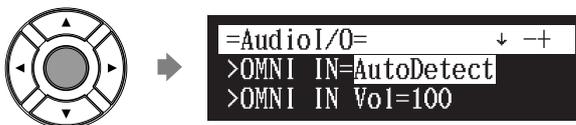
The setup menu screen appears.



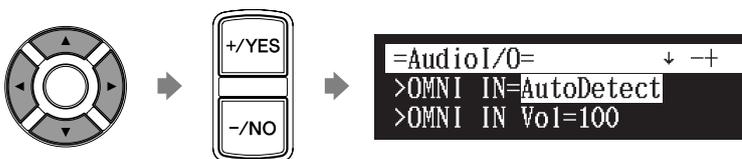
2 Select "AudioI/O" with the cursor buttons ([◀][▶][▲][▼]), then press [ENTER].



The audio I/O setting screen appears.

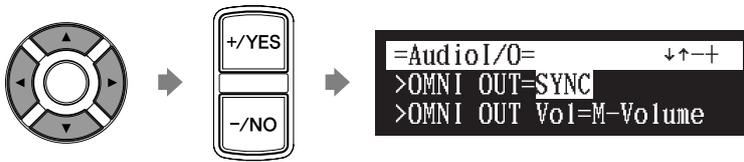


3 Select "OMNI IN" with the cursor buttons ([▲][▼]), then press [+ / YES] and [- / NO] to change setting to "Auto Detect".



Video Synchronization

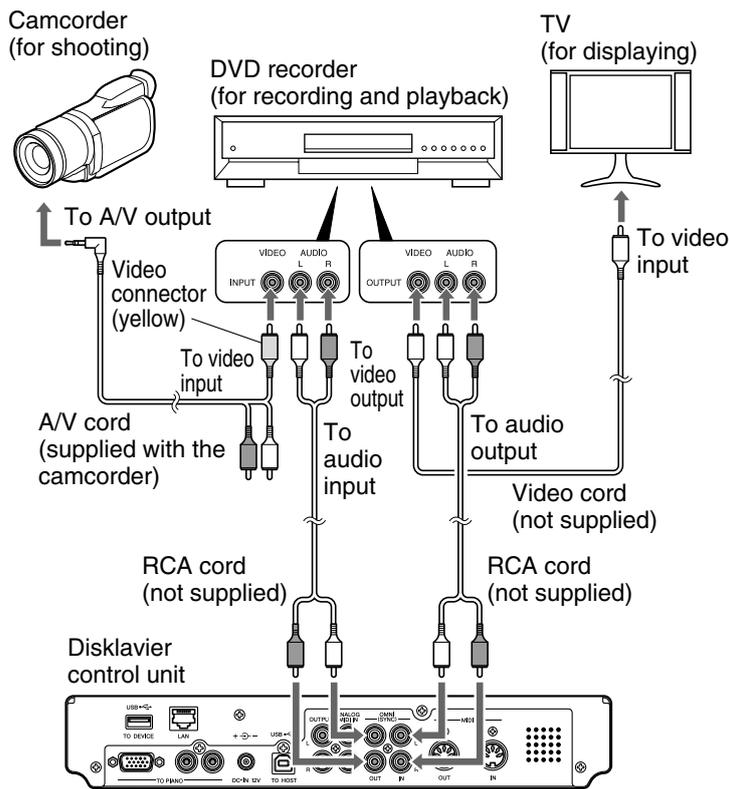
- 4** Select “OMNI OUT” with the cursor buttons ([\blacktriangle] [\blacktriangledown]), then press [+ / YES] and [- / NO] to change setting to “SYNC”.



- 5** Press [ENTER] to complete the operation.



- 6** Connect a camcorder and a DVD recorder to the Disklavier control unit.

**Note:**

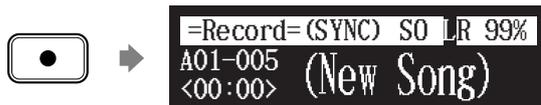
Confirm the shape of input/output connectors on the camcorder and the DVD recorder, and prepare the cables fit to them.

■ Starting Video Synchronized Recording

1 Select a destination medium and album.

2 Press [RECORD].

The video synchronized recording standby screen appears, and [RECORD] on the front panel lights red, and [PLAY/PAUSE] flashed in green.

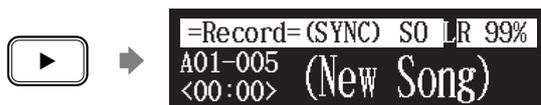


3 Set the camcorder to video shooting mode.

4 Select the video input on the DVD recorder which the camcorder is connected to, then start recording on the DVD recorder.

5 Press [PLAY].

[PLAY/PAUSE] stops flashing, and the counter starts to advance.



6 Wait for approximately ten seconds, and then start playing your song.

7 Press [STOP] when you finish playing your song.



8 Stop recording on the DVD recorder.



To select a medium and album, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.

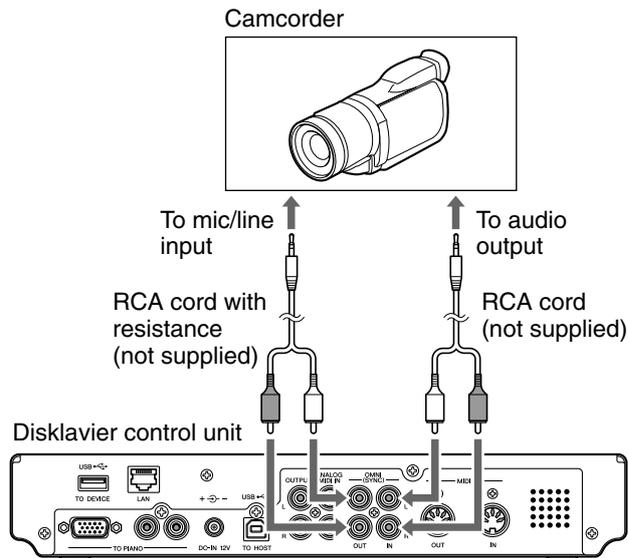
Note:

This step is necessary for synchronization of the song and the video playback, and should not be omitted.

■ Using the Camcorder only

If your camcorder has both mic input and audio output, you can perform video synchronized recording using the camcorder only.

1. Set the Disklavier control unit following the procedures 1 to 5 on page 71.
2. Connect a camcorder to the Disklavier control unit.



3. Select a destination medium and album.
4. Press [RECORD].
5. Start recording on the camcorder.
6. Press [PLAY].
7. Wait for approximately ten seconds, and then start playing your song.
8. Press [STOP] when you finish playing your song.
9. Stop recording on the camcorder.

Video Synchronized Playback

You can enjoy piano playback with the video recorded on the DVD recorder.

1 Perform the video synchronized recording in advance.

2 Make sure that the OMNI IN setting is set to “AutoDetect”.

3 Turn down the volume completely on the TV if you connect the audio output of the DVD recorder to the TV.

Turn down the volume completely on the camcorder if you use the camcorder only.

4 Start playback on the DVD recorder.

Start playback on the camcorder if you use the camcorder only.

The Disklavier control unit automatically searches and selects the song paired with the video, and then starts playback as well.

```
=Memory= (SYNC)SO V+00
A01-005 PIAN0005.MID
<00:03>
```



For details on video synchronized recording, see Chapter 9 “Video Synchronization – Video Synchronized Recording” on page 71.

Note:

Be sure to rewind the video cassette to locate the beginning of the recording. It may take some time before piano playback starts if you start playback halfway through the video.

Note:

When using the song copied to the USB flash memory, it may take some time until the Disklavier control unit recognizes the information for synchronization.



See “Setting for Video Synchronized Recording” on page 71.



If the piano playing is not synchronized with the video picture, adjust the offset time for synchronization. See Chapter 12 “Enhancing the Disklavier by Hooking Up Other Devices – Setting the Disklavier Control Unit for Audio Data Reception/Transmission” on page 113.



If noises (synchronized signal) are heard during video synchronized playback, turn down the signal level and re-record. See Chapter 12 “Enhancing the Disklavier by Hooking Up Other Devices – Setting the Disklavier Control Unit for Audio Data Reception/Transmission” on page 113.

Note:

You cannot operate the Disklavier using the front panel or remote control during video synchronized playback. If you want to stop playback of the song, stop playback on the DVD recorder (or the camcorder).

CD Synchronization

You can record a piano performance along with the playback of songs on commercially available CDs. Once you record a song with this feature, later on, you can enjoy piano playback along with the played back songs on the CD.

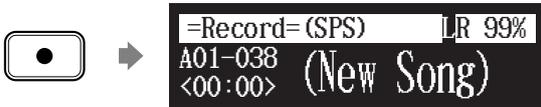
CD Synchronized Recording

Insert an audio CD 

You can record a Disklavier piano performance along with the playback of songs on commercial CDs.

- 1** Select a destination medium and album, then song in the selected album.
- 2** Insert an audio CD and select the song that you want to synchronize with.
- 3** Press [RECORD].

The SPS recording standby screen appears, and [RECORD] on the front panel lights red, and [PLAY/PAUSE] flashes in green.



- 4** Select the desired part of a song, then press [PLAY] to start synchronizing.



Recording begins with the CD playback.

- 5** Start playing the Disklavier along with the CD playback.

- 6** Press [STOP] to stop recording.



The recorded song is loaded.

Note:

The Disklavier control unit recognizes the destination album by selecting the song in it. Note that the selected song is not overwritten by this procedure.



To select a medium and album, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.



To play back the performance recorded with this feature, see Chapter 10 “CD Synchronization – Adding Disklavier Accompaniment to Commercial CD Songs (PianoSmart™ Playback)” on page 77.

Adding Disklavier Accompaniment to Commercial CD Songs (PianoSmart™ Playback)

Insert a CD → Select a SmartPianoSoft song → [PLAY]

You can add a Disklavier piano performance you recorded or on commercially available SmartPianoSoft software to the playback of songs on your favorite CDs.

1 Insert a desired CD that you want to synchronize with the SmartPianoSoft song.

2 Select a desired SmartPianoSoft song.

3 Press [PLAY].

Playback begins with the CD playback.



To record the piano performance to add, see Chapter 10 “CD Synchronization – CD Synchronized Recording” on page 76.



To select a song, see Chapter 3 “Basic Song Playback – Selecting Medium and Their Contents” on page 22.