YAMAHA

disklavier ENSPIRE™

Disklavier Control Unit **DKC-900**

Owner's manual
Mode d'emploi
Benutzerhandbuch
Manual de instrucciones
Manuale di istruzioni

EN
FR
DE
ES
IT

PianoSoft™ PianoSoft•Plus smartkey™

FCC INFORMATION (U.S.A.)

1. **IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!**
   This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.
2. **IMPORTANT:** When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
3. **NOTE:** This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

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

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

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

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

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

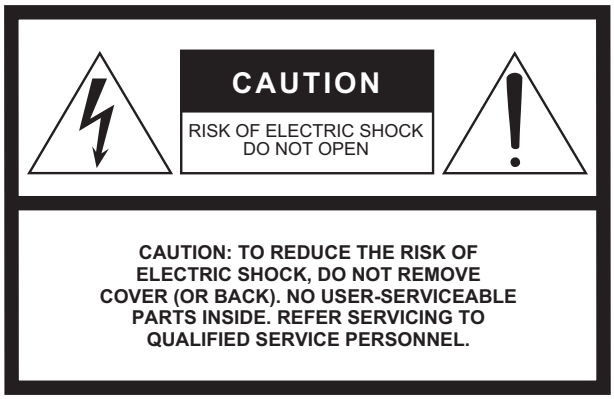
* This applies only to products distributed by Yamaha Corporation of America. (class B)

COMPLIANCE INFORMATION STATEMENT
(Supplier's declaration of conformity procedure)

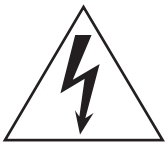
Responsible Party : Yamaha Corporation of America
Address : 6600 Orangethorpe Ave., Buena Park, Calif. 90620
Telephone : 714-522-9011
Type of Equipment : Disklavier Control Unit
Model Name : DKC-900

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
1) this device may not cause harmful interference, and
2) this device must accept any interference received including interference that may cause undesired operation.

* This applies only to products distributed by Yamaha Corporation of America. (FCC SDoC)



Explanation of Graphical Symbols



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

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

IMPORTANT SAFETY INSTRUCTIONS

1 **Read these instructions.**
2 **Keep these instructions.**
3 **Heed all warnings.**
4 **Follow all instructions.**
5 **Do not use this apparatus near water.**
6 **Clean only with dry cloth.**
7 **Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.**
8 **Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.**
9 **Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.**
10 **Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.**
11 **Only use attachments/accessories specified by the manufacturer.**
12 **Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.**

13 **Unplug this apparatus during lightning storms or when unused for long periods of time.**
14 **Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.**

WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

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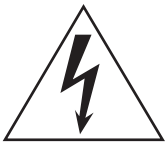
Explication des symboles graphiques



L'éclair avec une flèche à l'intérieur d'un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur la présence d'une « tension dangereuse » non isolée à l'intérieur de l'appareil, pouvant être suffisamment élevée pour constituer un risque d'électrocution.

Le point d'exclamation à l'intérieur d'un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur la présence d'instructions importantes sur l'emploi ou la maintenance (réparation) de l'appareil dans la documentation fournie.

CONSIGNES DE SÉCURITÉ À LIRE ATTENTIVEMENT

1 **Lisez les instructions ci-après.**
2 **Conservez ces instructions.**
3 **Tenez compte des avertissements.**
4 **Suivez toutes les instructions.**
5 **N'utilisez pas cet instrument dans un milieu humide.**
6 **Employez uniquement un chiffon sec pour nettoyer l'instrument.**
7 **N'obstruez pas les ouvertures prévues pour la ventilation. Installez l'instrument conformément aux instructions du fabricant.**
8 **N'installez pas l'instrument près d'une source de chaleur, notamment un radiateur, une bouche de chaleur, un poêle ou autres (y compris les amplificateurs).**
9 **Ne modifiez pas les caractéristiques de la fiche avec mise à la terre polarisée. Une fiche polarisée est dotée de deux broches (l'une est plus large que l'autre). Une fiche avec mise à la terre comprend deux broches, ainsi qu'une troisième qui relie l'instrument à la terre. La broche la plus large (ou troisième broche) permet de sécuriser l'installation électrique. Si vous ne pouvez pas brancher le cordon d'alimentation dans la prise d'alimentation, demandez à un électricien de la remplacer.**
10 **Protégez le cordon d'alimentation. Cela permet d'éviter de marcher dessus ou de le tordre au niveau de la fiche, de la prise d'alimentation et des points de contact sur l'instrument.**
11 **N'employez que les dispositifs/accessoires indiqués par le fabricant.**
12 **Utilisez uniquement le chariot, le socle, le trépied, le support ou le plan indiqués par le fabricant ou livrés avec l'instrument. Si vous utilisez un chariot, soyez prudent si vous le déplacez avec l'instrument posé dessus pour éviter de le renverser.**

13 **Débranchez l'instrument en cas d'orage ou lorsque vous ne l'utilisez pas pendant des périodes prolongées.**
14 **Confiez toutes les réparations à des techniciens qualifiés. Des réparations sont nécessaires lorsque l'instrument est endommagé, notamment dans les cas suivants : cordon d'alimentation ou fiche défectueuse, liquides ou objets projetés sur l'appareil, exposition aux intempéries ou à l'humidité, fonctionnement anormal ou chute.**

AVERTISSEMENT
N'UTILISEZ PAS L'INSTRUMENT SOUS LA PLUIE OU DANS UN ENVIRONNEMENT HUMIDE, FAUTE DE QUOI VOUS RISQUEZ DE PROVOQUER UN INCENDIE OU DE VOUS ÉLECTROCUTER.

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SIMPLIFIED UK DECLARATION OF CONFORMITY

Hereby, Yamaha Corporation declares that this model is in compliance with the Product Security and Telecommunications Infrastructure Regulations. The full text of the UK Declaration of Conformity is available at the following internet address:
https://europe.yamaha.com/en/support/compliance/doc.html

(657-M01 UK cybersecurity 01)

Information for users on collection and disposal of old equipment:

This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.
For proper treatment, recovery and recycling of old products, please take them to applicable collection points, in accordance with your national legislation.

By disposing of these products 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, 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:
This symbol is 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.

(weee_eu_en_02)

Informations concernant la collecte et le traitement des déchets d’équipements électriques et électroniques

Le symbole sur les produits, l'emballage et/ou les documents joints signifie que les produits électriques ou électroniques usagés 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, veuillez les déposer aux points de collecte prévus à cet effet, conformément à la réglementation nationale.

En vous débarrassant correctement des déchets d’équipements électriques et électroniques, 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, 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.

Informations sur la mise au rebut dans d'autres pays en dehors de l'Union européenne :
Ce symbole est seulement valable dans l'Union européenne. Si vous souhaitez vous débarrasser de déchets d’équipements électriques et électroniques, veuillez contacter les autorités locales ou votre fournisseur et demander la méthode de traitement appropriée

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Verbraucherinformation zur Sammlung und Entsorgung alter Elektrogeräte

Befindet sich dieses Symbol auf den Produkten, der Verpackung und/oder beiliegenden Unterlagen, so sollten benutzte elektrische Geräte nicht mit dem normalen Haushaltsabfall entsorgt werden.
In Übereinstimmung mit Ihren nationalen Bestimmungen bringen Sie alte Geräte bitte zur fachgerechten Entsorgung, Wiederaufbereitung und Wiederverwendung zu den entsprechenden Sammelstellen.

Durch die fachgerechte Entsorgung der Elektrogeräte 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 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:
Dieses Symbol gilt 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.

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Información para usuarios sobre la recogida y eliminación de los equipos antiguos

Este símbolo en los productos, embalajes y documentos anexos significa que los productos eléctricos y electrónicos no deben mezclarse con los desperdicios domésticos normales.
Para el tratamiento, recuperación y reciclaje apropiados de los productos antiguos, llévelos a puntos de reciclaje correspondientes, de acuerdo con la legislación nacional.

Al deshacerse de estos productos de forma correcta, ayudará a ahorrar recursos valiosos y a impedir los posibles efectos desfavorables en la salud humana y en el entorno que de otro modo se producirían si se trataran los desperdicios de modo inapropiado.

Para obtener más información acerca de la recogida y el reciclaje de los productos antiguos, póngase en contacto con las autoridades locales, con el servicio de eliminación de basuras o con el punto de venta donde adquirió los artículos.

Para los usuarios empresariales de la Unión Europea:
Si desea desechar equipos eléctricos y electrónicos, póngase en contacto con su vendedor o proveedor para obtener más información.

Información sobre la eliminación en otros países fuera de la Unión Europea:
Este símbolo solo es válido en la Unión Europea. Si desea desechar estos artículos, póngase en contacto con las autoridades locales o con el vendedor y pregúnteles el método correcto.

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Informazioni per gli utenti sulla raccolta e lo smaltimento di vecchia attrezzatura

Questi simboli sui prodotti, sull'imballaggio e/o sui documenti che li accompagnano, indicano che i prodotti elettrici ed elettronici non devono essere mischiati con i rifiuti generici.
Per il trattamento, il recupero e il riciclaggio appropriato di vecchi prodotti, si prega di portarli ai punti di raccolta designati, in accordo con la legislazione locale.

Smaltendo correttamente questi prodotti si potranno recuperare risorse preziose, oltre a prevenire potenziali effetti negativi sulla salute e l'ambiente che potrebbero sorgere a causa del trattamento improprio dei rifiuti.

Per ulteriori informazioni sulla raccolta e il riciclaggio di vecchi prodotti, si prega di contattare l'amministrazione comunale locale, il servizio di smaltimento dei rifiuti o il punto vendita dove sono stati acquistati gli articoli.

Per utenti imprenditori dell'Unione europea:
Se si desidera scartare attrezzatura elettrica ed elettronica, si prega di contattare il proprio rivenditore o il proprio fornitore per ulteriori informazioni.

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Questi simboli sono validi solamente nell'Unione Europea; se si desidera scartare questi articoli, si prega di contattare le autorità locali o il rivenditore e richiedere informazioni sulla corretta modalità di smaltimento.

(weee_eu_it_02)

(For European Countries) Importer: Yamaha Music Europe GmbH Siemensstrasse 22-34, 25462 Rellingen, Germany

English

disklavier ENSPIRE™

Disklavier Control Unit DKC-900

Owner's Manual

Welcome to the Yamaha Disklavier™!

Thank you for purchasing the Disklavier Control Unit!
Before using your this product, please read this manual thoroughly and retain it for future reference.

■ About this product

Installing this product to your Disklavier piano additionally allows you to play back accompanying audio sounds. These include professional vocal performances by worldwide famous artists, acoustic performances on instruments such as violin and cello, and other audio sounds—giving you the experience and atmosphere of an actual live performance. This product also lets you perform simple operations from the screen of your smartphone or tablet. Moreover, you can still enjoy the Silent Piano™ function, Auto Play function, as well as the recording and playback functions of the Disklavier E3 and Disklavier Mark IV.

About the Manuals

The following instruction manuals are available for this product.

■ Booklet manual

Disklavier Control Unit DKC-900 Owner's Manual (this book)

Please keep this manual for future reference along with the Disklavier E3 owner's manual or Disklavier Mark IV owner's manual.

Disklavier ENSPIRE Built-in song list

This is a list of built-in songs that can be automatically played by this product.
You can also download this list from the Yamaha website.

■ Online Manuals (PDF)

Disklavier ENSPIRE Controller Application Instruction Manual

This is the operation manual for the ENSPIRE Controller app, which is a special app that lets you actually operate the various functions of this product.
You can call up this operation manual from the Information screen of the ENSPIRE Controller app.
You can also download the manual from the Yamaha website.

To obtain these materials, access the Yamaha Downloads website, then enter the model name for searching the desired files.

Yamaha Downloads
https://download.yamaha.com/

Included Accessories

Please make sure that you have the following accessories:

- Owner's Manual (this book) × 1
- Built-in song list × 1
- USB wireless LAN adaptor (UD-WL01) × 1
- AC adaptor* (PA-300C or an equivalent recommended by Yamaha) × 1
- Power cord* × 1
- Audio cable × 1 (pin plugs - pin plugs)
- Bracket* × 1

* When installing this product, it may already be connected.

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

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

For the AC Adaptor

⚠ WARNING

- This AC adaptor is designed for use with only Yamaha electronic instruments. Do not use for any other purpose.
- Indoor use only. Do not use in any wet environments.

⚠ CAUTION

- When setting up, make sure that the AC outlet is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch of the instrument and disconnect the AC adaptor from the outlet. When the AC adaptor is connected to the AC outlet, keep in mind that electricity is flowing at the minimum level, even if the power switch is turned off. When you are not using the instrument for a long time, make sure to unplug the power cord from the wall AC outlet.

For the DKC-900

⚠ WARNING

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

Power supply/AC adaptor

- When one of the following problems occur, immediately turn off the power switch and disconnect the electric plug from the outlet. Then have the device inspected by Yamaha service personnel.
  - When foreign matter or liquid gets inside this product.
  - It emits unusual smells or smoke.
  - There is a sudden loss of sound during use of this product.
- Use the specified adaptor (page 3) only. Using the wrong adaptor can result in damage to this product or overheating.
- Use only the supplied power cord. Using other power cords may cause heat or electric shock.
- This AC adaptor is designed for use with only Yamaha electronic instruments. Do not use for any other purpose. It may cause damage, heat or fire.
- The power adaptor is for indoor use only and should not be used outdoors or in a dripping environment.

Location

- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place on it any containers (such as vases, bottles or glasses) containing liquids which might spill into any openings. If any liquid such as water seeps into the instrument, turn off the power immediately and unplug the power cord from the AC outlet. Then have the instrument inspected by qualified Yamaha service personnel.
- Never insert or remove an electric plug with wet hands.

Do not open

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

Maintenance

- Always remove the power plug from the AC outlet before cleaning this product. Leaving the power plug connected presents a risk of electric shock.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.There is a risk of electric shock or short circuit.
- Use a dry cloth to wipe the units.It may cause an electric shock, fire or breakdown.

⚠ CAUTION

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

Power supply/AC adaptor

- Do not place the power cord near heat sources such as heaters or radiators. Also, do not excessively bend or otherwise damage the cord, or place heavy objects on it.
- Do not connect the instrument to an electrical outlet using a multiple connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
- Do not use if the power cord or plug is damaged. It may cause an electric shock, short circuit or fire.
- Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, or during electrical storms.It may cause an electric shock, short circuit or fire.
- When removing the electric plug from this product or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.

Location

- Do not place the instrument in an unstable position where it might accidentally fall over.
- Do not locate this product 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.
- Do not place objects in front of the instrument's air vent, since this may prevent adequate ventilation of the internal components, and possibly result in this product overheating.
- Do not use near other appliances such as TVs, radios, speakers, etc. Due to the extensive use of digital circuits, noise may occur in TVs and radios.
- When setting up the product, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch and disconnect the plug from the outlet. Even when the power switch is turned off, electricity is still flowing to the product at the minimum level. When you are not using the product for a long time, make sure to unplug the power cord from the wall AC outlet.

Connections

- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum.

Transportation

- Do not drag when moving this product. There is a risk of damaging the floor.
- Before moving the instrument, remove all connected cables, to prevent damage to the cables or injury to anyone who might trip over them.
- Do not pinch your hands or feet when moving this product. There is a risk of injury.
- When moving this product, do it slowly and carefully. There is a risk of this product falling and colliding with the surroundings. We recommend that you use a specialized vendor to transport or move this product.

Handling caution

- Do not rest your weight on, or place heavy objects on this product, and do not use excessive force on the buttons, switches or connectors.
- Never insert or drop paper, metallic, or other objects into the gaps on the panel or keyboard. This could cause physical injury to you or others, damage to this product or other property, or operational failure. It may cause electric shock, short circuit, fire or breakdown.
- Do not use this product/device or headphones for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.
- Close the fallboard when not using this product. Open and close the keyboard lid with both hands. Make sure that people around you don't touch the keyboard lid carelessly. There is a risk of injury by holding your hand or finger in the Keyboard lid.
- Do not go near the instrument during an earthquake. Strong shaking during an earthquake could cause the instrument to move or tip over, resulting in damage to this product or its parts, and possibly causing injury.

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

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

■ Trademarks & Copyrights

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disklavier ENSPIRE™

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- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (https://www.openssl.org/)
- App Store is a trademark of Apple Inc., registered in the U.S. and other countries.
- Android and Google Play are trademarks of Google LLC.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.
- All illustrations and screens shown in this Owner's Manual are for purposes of explaining operation, and may differ somewhat from actual specifications.

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:

10-1 Nakazawa-cho, Chuo-ku, Hamamatsu, Shizuoka, 430-8650, JAPAN
Piano Development Department, 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 at the following website:
https://download.yamaha.com/sourcecodes/disklavier/

- 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.

The model number, serial number, power requirements, etc., may be found on or near the name plate, which is at the bottom of the unit. You should note this serial number in the space provided below and retain this manual as a permanent record of your purchase to aid identification in the event of theft.

Model No.

Serial No.

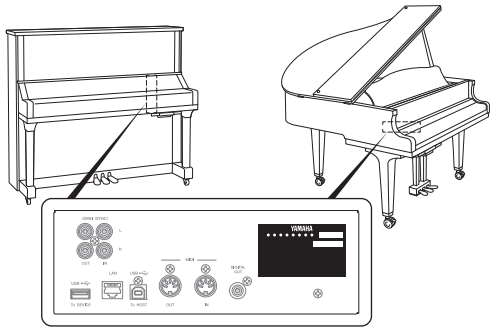

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Table of Contents

English

Chapter 1

Introduction

Main Features

This product provides a variety of sophisticated features and advanced functions that greatly expand the capabilities of your piano—and enhance your musical enjoyment.

Simple operation with your smart device

- By connecting your smartphone, tablet or other smart device to the same network as this product and installing the special ENSPIRE Controller app, you can use a variety of functions, such as the auto play function that records and reproduces piano performances and the ensemble function that plays various instrumental parts using the wide range of voices produced by the built-in tone generator.
- Choose your favorites from 500 built-in songs or purchased songs, and enjoy your favorite songs in your own original playlist.

See page 18 for more information on the ENSPIRE Controller app.

Huge Variety of Professional-quality Songs

- A total of 500 piano pieces are stored internally, ranging in genre from famous classical pieces to popular music and jazz, there for you to enjoy as the mood takes you. Songs including professional vocal performances by artists in collaboration with Yamaha let you experience the atmosphere of a live performance, and Yamaha also provides a special 24-hour Disklavier Premium Pass streaming service.

  * An optional powered speaker is required to play back parts other than the piano sound. (Sold separately for upright piano.)

- Music of various genres is available for purchase via download at the Yamaha website (https://shop.usa.yamaha.com/en/downloadables), letting you buy the latest songs at any time from the comfort of your home. Insert a USB flash drive to your Internet-connected Disklavier in order to download and immediately start playing purchased data via the ENSPIRE Controller app.

Convenient function (SmartKey function)

- SmartKey feature that shows you the next key to play with by moving the keys slightly—an ideal function for beginners. Playing the keys in the order shown leads you through the song, allowing even beginning players to enjoy practicing. For SmartKey Songs, please refer to the included built-in song list.

Note:

- Yamaha product firmware and supplied apps may occasionally be updated to improve functionality and operability. Certain functions may not be available with older versions, so we recommend that you update to the latest version. Refer to page 26 for how to update the version of this product.
- For the smart device, refer to the glossary (page 32).

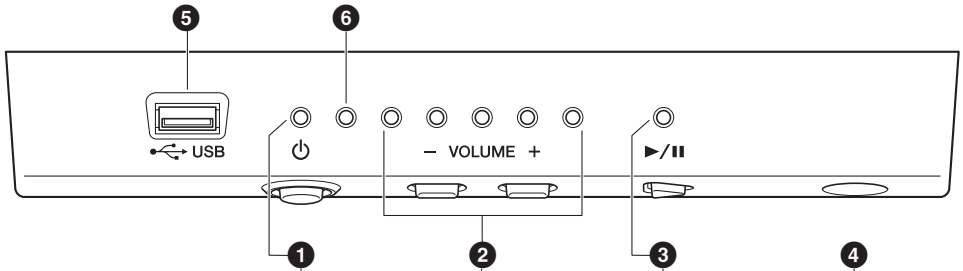
Names of Parts and Their Functions

This product consists of the following units.

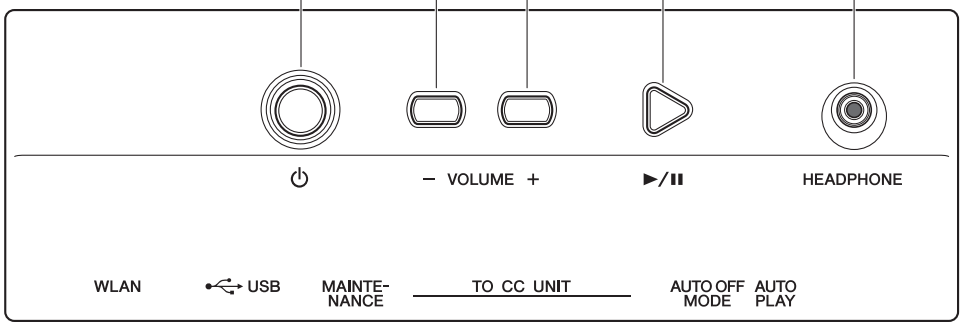
- Switch Box (following)..... Turn this product on/off to control functions.
- Control Center Unit (page 11)..... It is equipped with terminals for connecting external devices.

■ Switch Box (Front and Bottom panel)

Front panel



Bottom panel



❶ [⏻] (Standby/On) button/indicator

Turns this product on or off. When this button is operated, the [⏻] lamp on the front of the switch box indicates the power status as follows.

Condition	Status
Off	This product cannot be turned on because the power plug is unplugged.
Lit	This product is turned on.
Dim lit	This product is turned off (standby).
Flashing	This product is shutting down.
Slow flashing	This product is starting up.

❷ [- VOLUME +] buttons/indicators

These display the volume level (over 10 steps). Each indicator shows the volume in 2 steps with varying brightness.

❸ [►/❚❚] (Play/Pause) button/indicator

For starting and pauses playback.

- Playback starts from the last loaded song before turning the power off.
- If the last song cannot be loaded, playback starts from the first song of the internal demo songs.

The indicator lights up when playing back a song.If song playback is stopped/paused, the indicator will go dark.

❹ HEADPHONE jack

Used to connect a set of headphones. When headphones are connected, the sound of the acoustic piano is cancelled and the electronic piano sounds can be heard through the headphones.

⚠ Caution:

- To prevent damage to your hearing, refrain from raising the volume to excessive levels, and do not use the headphones for extended periods of time.
- Do not pull the headphone cord or apply excessive force on the plug. This can damage the headphone and lead to sound output malfunction.

❺ [USB] terminal

Used to connect the USB flash drive.

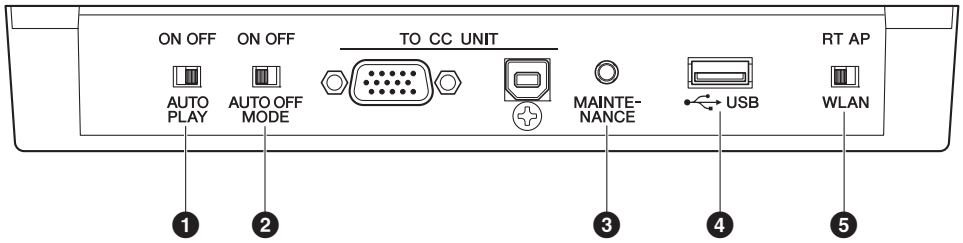
Note:

This product cannot detect the USB flash drive if two or more memory devices are connected at the same time.

❻ Error indicator

Flashes when some error has occurred. See “Error Indications” on page 30.

■ Switch Box (Rear Panel)



❶ [AUTO PLAY] switch

For activating or deactivating the auto play function. If you leave the switch set to “ON,” playback automatically starts when the power is turned on. (Default setting: OFF)

❷ [AUTO OFF MODE] switch

When this is turned on, this product will turn off automatically if the following conditions continue for a certain period of time. (Default setting: ON)

- No operation has been performed on the switch box.
- No operation has been performed on the ENSPIRE Controller app.
- The keyboard has not been played.
- This product has not received the MIDI data.

Note:

You can change the automatic turn off time with the ENSPIRE Controller app.

❸ [MAINTENANCE] button

For service personnel only. Do not touch this button.

❹ [USB] terminal

Used to connect the USB wireless LAN adaptor (UD-WL01).

Note:

This product cannot detect the USB flash drive if two or more memory devices are connected at the same time.

❺ [WLAN] switch

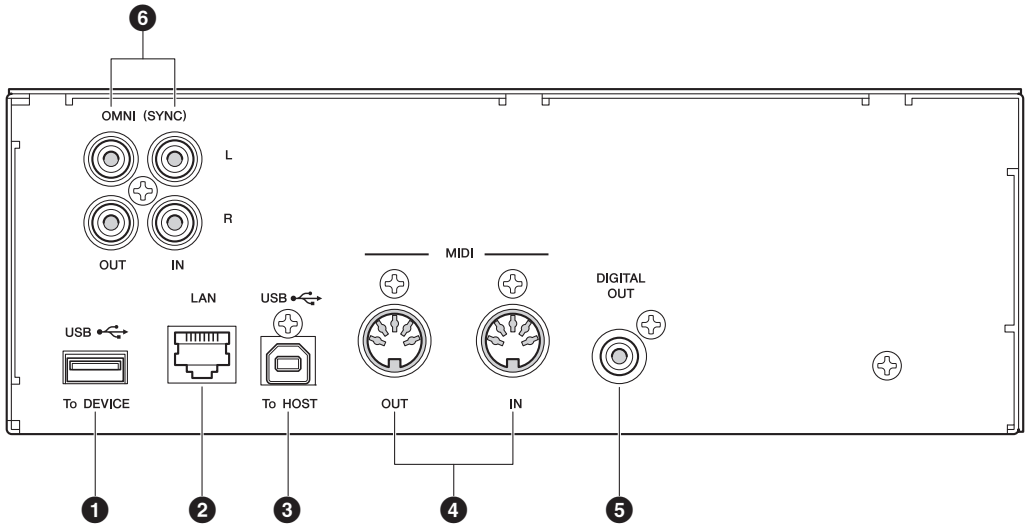
For setting the method for wireless LAN connection when connecting the USB wireless LAN adaptor to the [USB] terminal. See “Connecting the Product and Smart Device to a Network” on page 18. (Default setting: RT)

Functions that can be operated by Switch Box

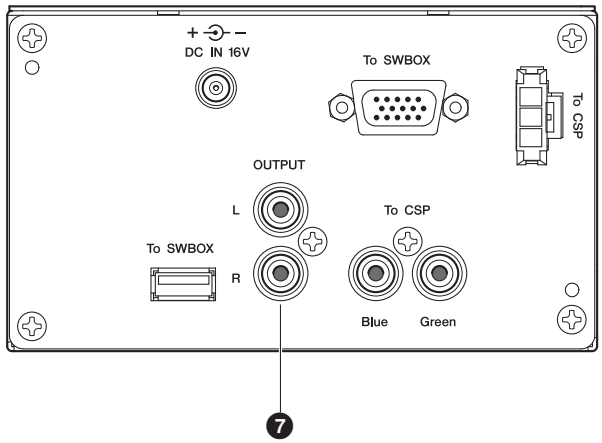
The functions that can be operated with the Switch Box are only power on/off, song playback/pause, and volume control of acoustic piano/internal electronic sound source (page 9). The other functions are controlled only from the application of your smartphone or tablet.

■ Control Center Unit

Rear panel



Side panel



❶ [USB] (To DEVICE) terminal

Used to connect the USB flash drive.

Note:

This product cannot detect the USB flash drive if two or more memory devices are connected at the same time.

❷ [LAN] port

Used to connect the router or hub using an Ethernet cable.

❸ [USB] (To HOST) terminal

Used to connect the computer using a USB cable.

❹ [MIDI IN]/[MIDI OUT] jacks

Used to connect to the MIDI input or output jacks of external MIDI devices using MIDI cables.

❺ [DIGITAL OUT] jack

Used to connect to the digital input jack of an external audio device using a digital coaxial cable.

❻ [OMNI] (SYNC) [IN]/[OUT] jacks

Used to connect to the input or output jacks of external audio devices using RCA cables.

❼ [OUTPUT] jacks

Used to connect the monitor speakers.

Compatible Media and File Format

■ Compatible Device

USB Flash Drive

- The USB flash drive should be formatted in FAT16 or FAT32 file system.
- Check that the USB flash drive is free of memory and software protection before attempting to use it, as these kinds of protection will prohibit access to the memory.
- This product is USB 2.0 compliant. You can also connect USB 3.0 devices, however data will be transferred at USB 2.0 speeds.

Notice:

- Do not remove the USB flash drive or turn on or off the power during data transfer as breakage may result.
- Do not insert and remove the USB flash drive too frequently as breakage may result.
- Be careful not to bump the USB flash drive with your legs when it is connected to the unit.
- Do not insert any objects other than the USB flash drive into the USB terminal as it may become unusable.

Note:

Yamaha does not assure the operation of the commercially available USB flash drives.

■ Compatible File Formats

This product can handle these four types of file format:

Song Format	File Format	Extension
MIDI	**SMF0** Standard MIDI File format 0 for playback and recording.	.MID
	SMF1 Standard MIDI File format 1 for playback only.	.MID
Audio	**WAV** Uncompressed audio file format commonly used to create standard audio CDs. This product can play back 44.1kHz/16bit stereo WAV files.	.WAV
	MP3 Compressed audio file format commonly used in computers and smart devices.	.MP3

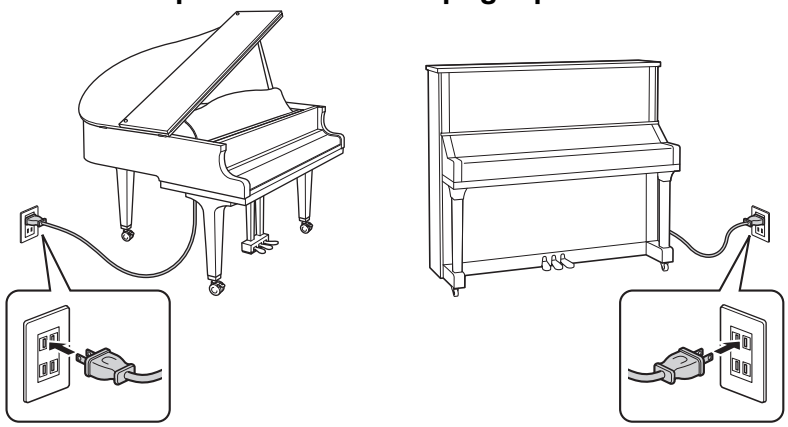
Chapter 2

Getting Started

Connecting the AC Power Cable

1 **Connect the AC power cable extending from the piano to the AC wall outlet. This connection provides power to the autoplay piano.**

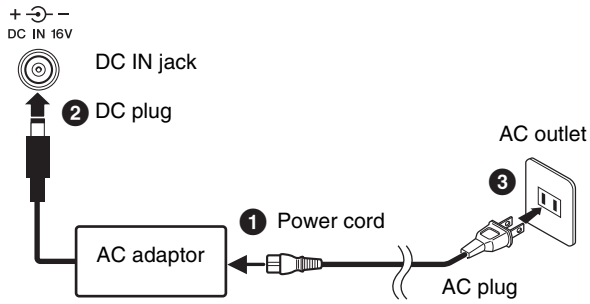
Grand piano **Upright piano**



2 **Connect the power cord connected to the DKC-900's power adaptor. This connection supplies power to the control center unit and the switch box.**

Connect the plugs of the AC adaptor in the order shown in the illustration.

In the upright piano, the DC plug of the power adaptor is connected to the DC IN terminal beforehand.



⚠ Warning:
Use the AC power cable attached to the piano. Use of other AC power cables may result in damage, overheating, or fire.

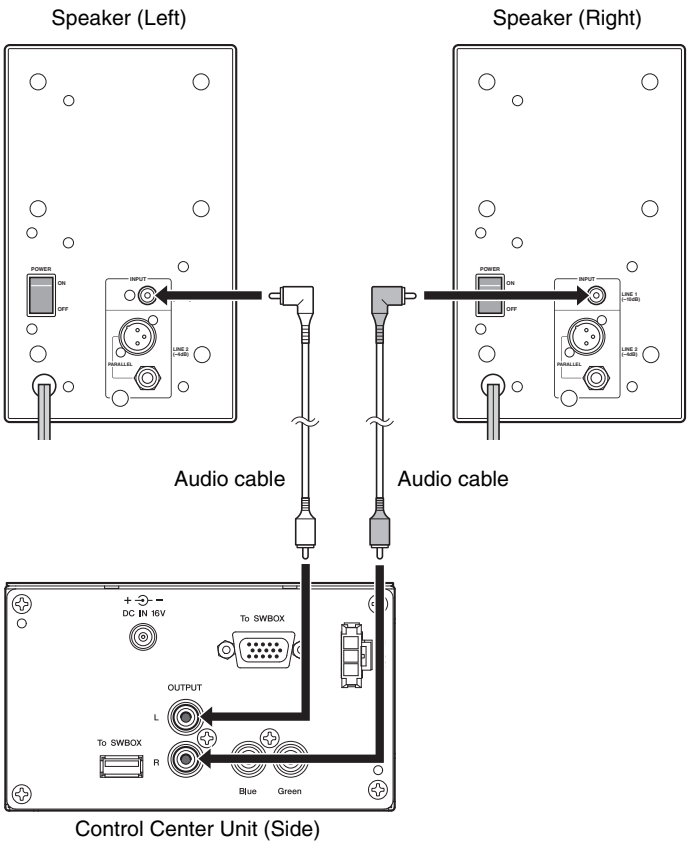
⚠ Caution:
- Do not stretch the cable or bend its ends.
- Do not attempt to use the cable if it is stretched or if the ends of the cable have been bent. Attempting to do so may cause interruptions to the power supply.
- Always turn off the main unit power before disconnecting the AC power cable.
- When you wish to move the piano, unplug the AC power cable from the AC outlet before proceeding.
- Unplug the AC power cable from the AC outlet if you do not intend to use the instrument for an extended period of time.

English

Connect powered speakers (Sold separately for Upright piano)

You can connect powered speakers to the [OUTPUT] jacks as illustrated.

* The audio cable should be 3m or less in length, and use an audio cable (conversion cable) that matches the shape of the INPUT LINE jack on the speaker side.



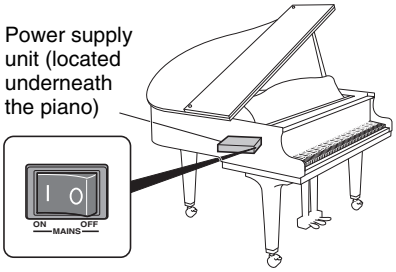
Notice:
To avoid possible damage to the devices, first turn on the power to this pruduct, then to the external device.
When turning off the power, first turn off the power to the external device, then to this pruduct.

Turning the Power On/Off

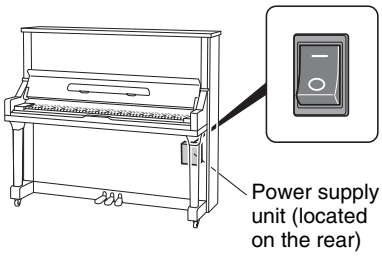
■ Turning the Power On

1 Make sure that the main switch on the power supply unit/ inlet box is turned on.

In the case of Grand piano



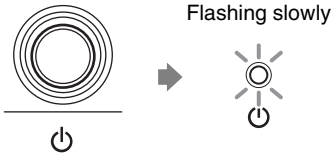
In the case of Upright piano



Under normal use, the power switch of the power supply unit remains on, but there is no problem, but if you do not use it for a long period of time or if you feel something wrong, turn off the power supply unit and turn the power cord from the outlet.

2 Press the [⏻] (Standby/On) button.

The [⏻] indicator flashes slowly (every one second).

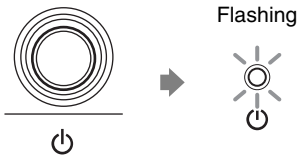


After several seconds, the [⏻] indicator lights up. This product is now ready for use.

■ Turning the Power Off (Standby)

1 Press the [⏻] (Standby/On) button.

The [⏻] indicator flashes (every 0.5 seconds).



After several seconds, the [⏻] indicator lights up dimly.

■ Setting the Auto Off Function

You can turn the power off automatically if you do not use the product for the time specified with the ENSPIRE Controller app.

1 Set the [AUTO OFF MODE] switch on the rear of the switch box.

Setting	Description
ON	The auto off function is activated. The product is automatically turned off if you do not use it for the time specified with the ENSPIRE Controller app.
OFF	The auto off function is deactivated. Use the [⏻] (Standby/On) button to turn the power off.

Note:
When set to ON, this product automatically turns off under the following conditions:
- No operation is performed on the switch box.
- No operation is performed on the ENSPIRE Controller app.
- The keyboard is not being played.
- This product does not receive the MIDI data.

How to use the Silent Piano™ Function

(For Pianos Equipped with the Silent Piano™ Function)

This product has the original mechanism of a piano that strikes strings with hammers, and also has a “Silent Piano™ function” that effectively mutes the sound. When the sound is muted, the hammers inside the piano do not strike the strings, and the piano sound is heard entirely as electronic sound from powered speaker (in Quiet mode) or the headphones (in Headphone mode). The method of switching to each mode is as follows.

[Quiet Mode]

In this mode, the hammers do not strike the strings, and the piano sound can be heard from a powered speaker (Sold separately for upright piano). This is convenient when you wish to play with a quieter sound, etc.

Note:
To use Quiet mode, a powered speaker (sold separately for upright piano) is required.

[Headphone mode]

In this mode, the piano sound is entirely heard from the headphones, which is convenient when you do not wish to produce piano sound, such as when practicing at night.

■ Silent Piano™ Function on Grand Piano

Quiet Mode

Perform this operation from the ENSPIRE Controller app (page 25). Switch the Silent Piano™ function mode to Quiet with “Acoustic/Quiet” on the Balance screen within the app. (If the headphones are connected to the [HEADPHONE] jack, disconnect the headphones.)

Headphone mode

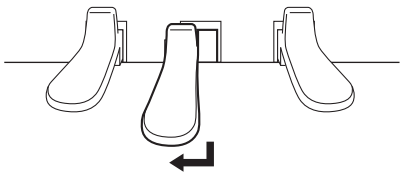
Connect the headphones to the [HEADPHONE] jack of the DKC-900 switch box to switch to Headphone mode.

Note:
When headphones are connected, “Acoustic/Quiet” is automatically set to “Headphone.”

■ Silent Piano™ Function on Upright Piano

Quiet Mode

Press down the center pedal and slide it to the left to set to Quiet mode. (If the headphones are connected to the [HEADPHONE] jack, disconnect the headphones.)



Headphone mode

Press down the center pedal and slide it to the left to set to Quiet mode, and then connect the headphones to the [HEADPHONE] jack of the switch box to switch to Headphone mode.

Connecting the Product and Smart Device to a Network

By connecting this product and smart device to a network, you can enjoy a variety of features as represented by Disklavier Premium Pass streaming service, or control this product using your smart device (ENSPIRE Controller app).

To fully control this product with the ENSPIRE Controller app, you must connect this product and smart device.
Here is the summary for connection:

1. **Install the ENSPIRE Controller app to your smart device (following).**
2. **Choose the connection method (page 19).**
3. **Connect this product and smart device to a network (page 21 to 24).**
4. **Search for this product using the ENSPIRE Controller app and connect to it (page 25).**

Note:
- This product 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 this product 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.
- For the smart device, refer to the glossary (page 32).

■ 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 this product itself.

■ Installing the App

To connect your smart device to this product, you must install the ENSPIRE Controller app to your smart device.

For details, search for "ENSPIRE Controller" on the App Store or Google Play.
For the ENSPIRE Controller app functions and operation instructions, refer to the Disklavier ENSPIRE Controller operation manual. The ENSPIRE Controller operation manual is located on the Information page within the ENSPIRE Controller app.

You can also download it from the website below.
https://download.yamaha.com/

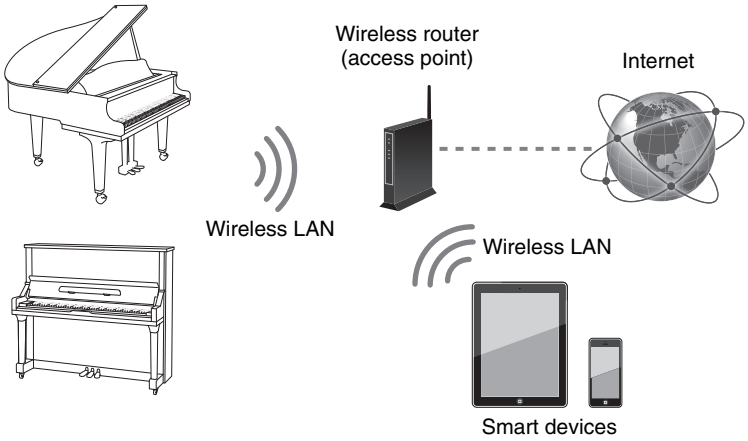
Note:
- The application supports iOS and Android devices.
- For details on the application, refer to the description on the download site.

Choosing the Network Connection Method

You can use one of the three methods of connections below. Select one which is most suitable for your network environment.

■ Wireless Network Connection by WPS (☞ page 21)

Choose this if you have a wireless router (access point) that supports WPS. Connection will be established via a wireless router (access point).



Requirements:

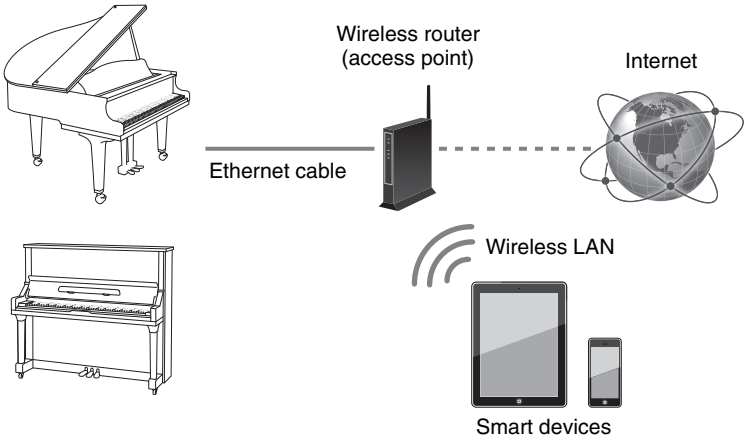
- USB wireless LAN adaptor (UD-WL01)
- Wireless router (access point) that supports WPS

WPS (Wi-Fi Protected Setup)
WPS is a wireless networking standard that makes connections between a router and wireless devices faster and easier. A router with WPS functionality is required to use WPS. Consult your wireless router (access point) specifications for compatibility information.

Note:
For the smart device, refer to the glossary (page 32).

■ Wired Network Connection (☞ page 23)

Choose this if you have a wireless router (access point) that does not support WPS. Connection will be established via wireless router (access point).



Requirements:

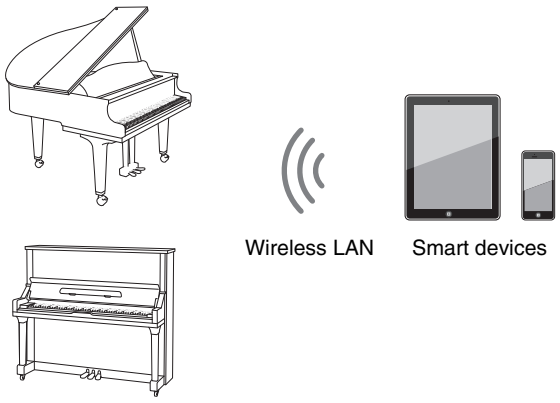
- Ethernet cable
- Wireless router (access point)

Note:
Use an STP (shielded twisted pair) cable for connection.

Notice:
To ensure proper security, when connecting this product to the Internet, be sure to connect via a router, etc.
Set an appropriate password for the router, etc. being used.
Do not connect directly to the communication circuits (including public line LAN) of the telecommunications carriers (mobile telecommunication companies, fixed-line telecommunication companies, Internet providers, etc.).

■ Direct Wireless Connection (☞ page 24)

Choose this if you do not have a wireless router (access point) or there is no wireless router (access point) available nearby. You can use this product as an access point to establish a direct wireless connection between this product and your smart device.



Requirements:

- USB wireless LAN adaptor (UD-WL01)

Note:
If this product is connected directly to your smart device, no Internet access is available on your smart device.

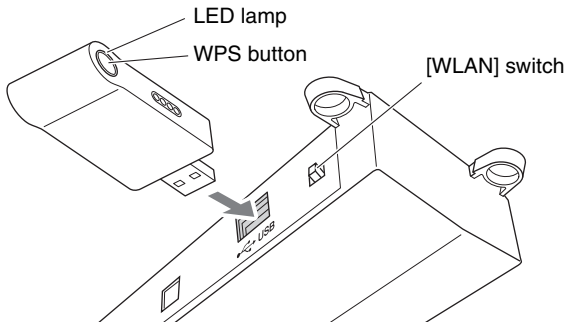
Wireless Network Connection by WPS

If your wireless router (access point) supports WPS, you can easily connect this product to a network just by following the procedures below, without making any additional settings, such as entering a password.

Note:
To check whether your wireless router (access point) supports WPS, refer to the owner's manual supplied with your wireless router (access point).

1 **Press the [⏻] (Standby/On) button to turn the power off.**

2 **Connect the USB wireless LAN adaptor (UD-WL01) to the [USB] terminal on the rear of the switch box.**



3 **Check that the [WLAN] switch on the rear of the switch box is set to "RT."**

4 **Press the [⏻] (Standby/On) button to turn the power on.**

Note:
On powering up, the display may indicate an error message that flashes in red, reading "The wireless router (access point) is not found." However, you can safely ignore the error, and proceed to step 5.

5 **Hold down the WPS button on the USB wireless LAN adaptor (UD-WL01) for at least five seconds.**

The LED lamp on the USB wireless LAN adaptor (UD-WL01) flashes every 0.5 seconds.

6 **Press the WPS button on your wireless router (access point) within two minutes after step 5.**

When this product is successfully connected to the wireless router (access point), the LED lamp on the USB wireless LAN adaptor (UD-WL01) lights up.

Connection between this product and the wireless router (access point) is now established. Once this product is connected to your wireless router (access point) by WPS, the setting will be remembered by this product, and you will not need to repeat this process the next time.

Note:
For details on the WPS setting, refer to the owner's manual supplied with your wireless router (access point).

Continue to the next page

7 **Open the Wi-Fi setting screen on your smart device.**

8 **Enable the Wi-Fi function.**

9 **From the network list shown on the screen, tap on the network to which you connected this product.**

If necessary, enter a password, and then connect.

10 **Open the app and connect to the this product (page 25).**

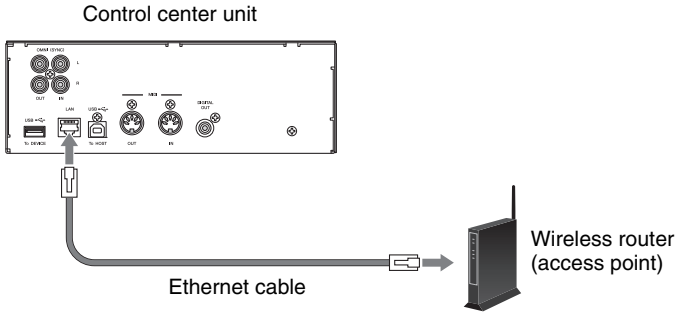
Note:
For details on the Wi-Fi setting, refer to the owner's manual supplied with your smart device.

Wired Network Connection

If your wireless router (access point) does not support WPS, you can connect this product to a wireless router (access point) using an Ethernet cable.

1 **Press the [⏻] (Standby/On) button to turn the power off.**

2 **Connect the wireless router (access point) to the [LAN] port on the control center unit using an Ethernet cable.**



3 **Enable the DHCP server function on the wireless router (access point).**

4 **Press the [⏻] (Standby/On) button to turn the power on.**
Connection between this product and the wireless router (access point) is automatically established in approximately 15 to 20 seconds.

5 **Open the Wi-Fi setting screen on your smart device.**

6 **Enable the Wi-Fi function.**

7 **From the displayed network list, tap the network to which this product is connected.**
If necessary, enter a password, and then connect.

8 **Open the app and connect to the this product (page 25).**

Notice:
To ensure proper security, when connecting this product to the Internet, be sure to connect via a router, etc.
Set an appropriate password for the router, etc. being used.
Do not connect directly to the communication circuits (including public line LAN) of the telecommunications carriers (mobile telecommunication companies, fixed-line telecommunication companies, Internet providers, etc.).

Note:
For details on the DHCP setting, refer to the owner's manual supplied with your wireless router (access point).

Note:
For details on the Wi-Fi setting, refer to the owner's manual supplied with your smart device.

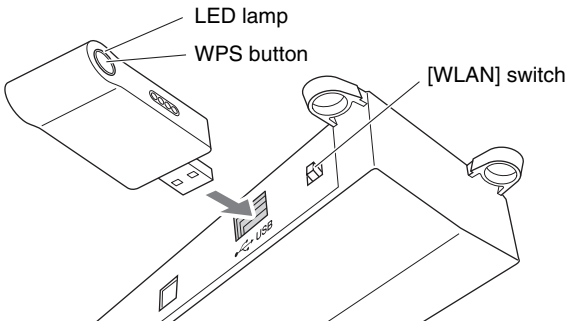
English

Direct Wireless Connection

You can use this product as an access point to establish a direct wireless connection between this product and your smart device.

1 **Press the [⏻] (Standby/On) button to turn the power off.**

2 **Connect the USB wireless LAN adaptor (UD-WL01) to the [USB] terminal on the rear of the switch box.**



3 **Set the [WLAN] switch on the rear of the switch box to "AP."**

RT AP

WLAN

4 **Press the [⏻] (Standby/On) button to turn the power on.**

When this product is set as an access point, the LED lamp of the USB wireless LAN adaptor (UD-WL01) lights up. You can now use this product as an access point.

5 **Open the Wi-Fi setting screen on your smart device.**

6 **Enable the Wi-Fi function.**

7 **From the network list shown on the screen, tap on [DKV**********].**

For Android

A dialog box window opens on the screen of the smart device and asks "This network has no internet access. Stay connected?". Tap "Yes".

8 **Open the app and connect to the this product (page 25).**

Note:
If you connect the product directly to a smart device, you will not be able to use functions that require an Internet connection.

Note:
As a default, the [WLAN] switch is set to the "RT" position.

Note:
For details on the Wi-Fi setting, refer to the owner's manual supplied with your smart device.

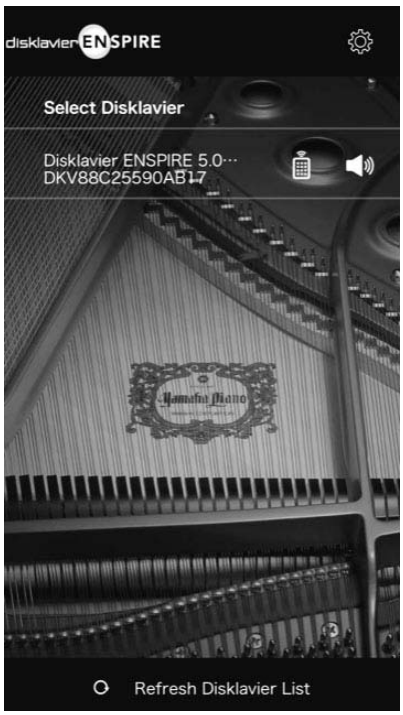
Note:
[DKV**********] differs depending on each Disklavier.

Using the ENSPIRE Controller App

■ Connect a smart device to this product

After you have connected your smart device to a network, open the ENSPIRE Controller app and select this product from the list. Tapping this product name will open the control screen of that Disklavier.

Display screen of ENSPIRE Controller app "Select Disklavier"



Display screen of ENSPIRE Controller app "Control Screen"

Note:
For the smart device, refer to the glossary (page 32).

Note:
When the speaker mark is tapped on the Select Disklavier ENSPIRE screen of the app, a chord (C-E-G) is automatically played one time for individual confirmation from the selected piano.

Yamaha Music ID Registration

To use Disklavier Premium Pass and other services, initial registration to Yamaha Music ID is required using an Internet-connected device.

Please register at the following website:
https://shop.usa.yamaha.com/en/customer/account/login/

Once you have a Yamaha Music ID account, you will interact with that account using the ENSPIRE Controller app. To use these services fully, you are required to enter your registered ID (e-mail address) and password on the ENSPIRE Controller app.

Chapter 3

Other Settings

Updating this product

Yamaha product firmware may occasionally be updated to improve functionality and operability. Certain functions may not be available with older firmware versions, so we recommend following the instructions below to update to the latest version.

Note:
- To update this product, you will need a USB flash drive with 2GB or more of free space.
- You can also update this product using the ENSPIRE Controller app. To update this product using the app, Internet connection is required.

1 Download the update program file.

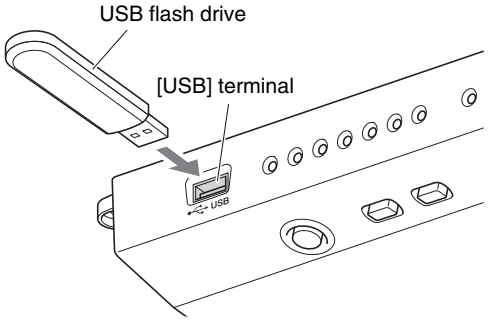
You can download the update program from the following site:
https://download.yamaha.com/

2 Copy "en_update.bin" included in the downloaded file to the root directory of the USB flash drive.

Note:
It is recommended that the USB flash drive only contains the update program file.

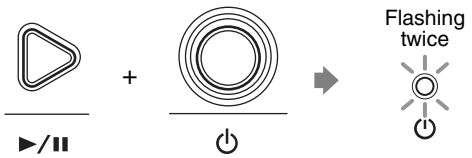
3 Press the [⏻] (Standby/On) button to turn the power off.

4 Connect the USB flash drive to the [USB] terminal on the front of the switch box.



5 While holding down the [►/❚❚] (Play/Pause) button, press the [⏻] (Standby/On) button.

Notice:
DO NOT turn the power off or disconnect the USB flash drive during update.



If any available update program is detected, this product starts to update. The update progress is indicated with the [- VOLUME +] indicators.

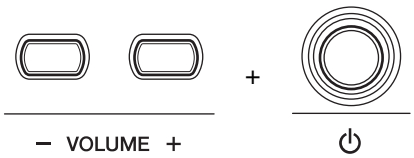
When the update is complete, this product restarts automatically. After this product restarts, check the firmware version using the ENSPIRE Controller app.

Initializing Network Settings

If the ENSPIRE Controller app cannot connect to this product due to the improper network settings, follow the procedure below to initialize network settings on this product.

1 **Press the [⏻] (Standby/On) button to turn the power off.**

2 **While holding down the [- VOLUME +] buttons, press the [⏻] (Standby/On) button.**



After this product is turned on, restart the ENSPIRE Controller app.

Chapter 4

Troubleshooting

If you are having difficulty operating this product, see if any of the symptoms listed below apply to your problem and follow the recommended remedy.

Power

Symptom	Remedy
This product does not turn on.	Make sure that the main switch on the power supply unit is turned on.
	Make sure that the AC power cable is securely connected to a suitable AC wall outlet.
	If this product still cannot be turned on, disconnect it from the AC wall outlet, and consult your Yamaha piano dealer.

Switch Box

Symptom	Remedy
The switch box does not appear to work correctly.	Turn off the switch box, wait 5 seconds, then turn it back on. If the problem continues, consult your Yamaha piano dealer.
The switch box becomes hot.	The chassis of the switch box may become hot depending on usage conditions.

Playback

Symptom	Remedy
This product does not read a song file.	Make sure that the name of the SMF song has the extension of ".mid" and the audio song has ".wav" or ".mp3."
Some notes drop out during playback.	When a piano song is played back at a low volume, complex note trills and faint pianissimo passages sometimes drop out. In such cases, increase this product volume level.

SILENT Piano™ Function (for pianos equipped with the SILENT Piano™ function)

Symptom	Remedy
Sound is not output properly or evenly.	Since the keyboard was pressed when the power is turned on, the keyboard position is detected incorrectly. Turn off the power and turn it on again to reset the function. Do not touch any keys when turning the power on.

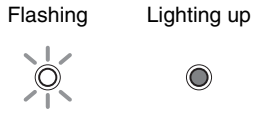
Network

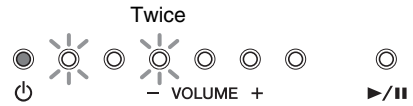
Symptom	Remedy
This product cannot connect to the Internet via a wireless router (access point).	Make sure that the wireless router (access point) is turned on.
	This product and the wireless router (access point) might be too far apart. Place this product and the wireless router (access point) closer to each other.
	There might be an obstacle between this product and the wireless router (access point). Move the wireless router (access point) to a location where there are no obstacles between them.
	If you connect this product and the wireless router (access point) using an Ethernet cable, enable the DHCP server function on your wireless router (access point).
Wireless network is not found.	Microwave ovens or other wireless devices in your network area might disturb the wireless communication. Turn off these devices.
	Access to the network is restricted by the firewall settings of the wireless router (access point). Check the firewall setting of the wireless router (access point).
The ENSPIRE Controller app does not detect this product.	This product and smart device are not on the same network. Check the network connections and settings on the wireless router (access point), and then connect this product and smart device to the same network.
A sudden sound comes from the piano when wireless connection to a smart device is used.	When the speaker mark is tapped on the Select Disklavier ENSPIRE screen of the app, a chord (C-E-G) is automatically played one time for individual confirmation from the selected piano. This is not a malfunction.

Error Indications

The error indicator may flash in red when some error has occurred. Refer to the table below for an explanation of the indication.

Example of Indication:



Indication	Situation	Remedy
	Firmware update is failed.	Turn off the power of this product. Download the update program and try to update the firmware again. If the problem still persists, consult your Yamaha piano dealer.
	Two or more USB flash drives are connected at the same time.	You can use only one USB flash drive at a time. Disconnect the other USB flash drive.
	The USB flash drive is protected.	Unprotect the USB flash drive.
	The wireless router (access point) is not found.	Make sure that the wireless router (access point) is turned on.
		If you connect this product and the wireless router (access point) using an Ethernet cable, make sure that the cable is firmly connected to the wireless router (access point).
	This product cannot obtain the IP address.	Check the settings of your network devices.
	The piano control unit does not work properly.	Consult your Yamaha piano dealer. If you are using the ENSPIRE Controller app, please tell them the message on the screen.
		

- Error message also appears on the control screen of the ENSPIRE Controller app. To close the message, tap on “Close” on the pop-up.
- Pressing any of [- VOLUME +] or [►/❚❚] (Play/Pause) buttons turns off the error indicator, and the [- VOLUME +] indicators return to the previous status.

Chapter 5

Glossary

This glossary provides basic definitions of terms used frequently in this manual.

DHCP

This is a standard or protocol by which IP addresses and other low-level network configuration information can be dynamically and automatically assigned each time a connection is made to the Internet.

Ensemble Song

A song which contains piano parts and accompanying instrumental voices. An ensemble song contains the same left- and right-hand parts as an L/R song, and in addition, up to 13 accompanying instrument tracks. These extra tracks are played by the internal XG tone generator. The accompanying tracks may be used for acoustic bass, drums, strings, vibes, etc.

General MIDI (GM)

An addition to the MIDI standard that simplifies the transfer of MIDI song files between instruments of different manufacturers. A MIDI song recorded using a GM compatible tone generator should play back correctly when used with any GM compatible tone generator. The standard specifies that a GM compatible tone generator must support 24-note polyphony, 16 parts, and 128 standard voices.

Internet

A huge network made up of networks, the Internet allows high-speed data transfer among computers, mobile phones and other devices.

ISP (Internet Service Provider)

A communications business that offers Internet connection services. In order to connect to the Internet, it is necessary to have active service with an Internet service provider.

LAN

Short for Local Area Network, this is a data-transfer network that connects a group of computers at a single location (such as an office or home) by means of a special cable.

MIDI

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

PianoSoft™

PianoSoft software contains prerecorded songs made by Yamaha specifically for use with this product.

PianoSoftAudio

PianoSoftAudio software contains real audio and MIDI signals for playing back on this product.

PianoSoftPlus™

PianoSoftPlus software contains Ensemble songs that can be played on this product.

Polyphony

The maximum number of voices (or sounds) that can be produced at a time from MIDI instruments.

Router

A device for connecting multiple computer networks. For example, a router is necessary when connecting several computers in a house or office, to allow all of them access the Internet and share data. A router is usually connected between a modem and a computer, although some modems have a built-in router.

Smart Device

This refers to portable multi-functional terminals such as smartphones and tablet terminals that can use the Internet connection and application software.

SMF

Abbreviation for Standard MIDI File.

SMF Song Format

A song file format supported by MIDI sequencers and music software.

Song

Normally, a short piece of music with lyrics. However, for clarity in Disklavier manuals, the term is used to refer to any piece of music of any genre.

Standard MIDI File

A file of MIDI data that can be read and used by a number of different MIDI devices and computers.

USB

An interface for connecting an external “plug and play” device. This product is equipped with three TO DEVICE terminals with USB 2.0 standard and one TO HOST terminal. An external storage device, such as USB flash drive, can be used with this product by connecting it to a TO DEVICE terminal. Also this product enables you to enjoy a variety of MIDI features by connecting a computer to TO HOST terminal.

Voice

The sounds produced by a tone generator expressing various instruments.

Wi-Fi

Wi-Fi (Wireless Fidelity) is a technology that allows an electronic device to exchange data or connect to the Internet wirelessly using radio waves. Wi-Fi offers the advantage of eliminating the complexity of making connections with network cables by using wireless connection. Only products that complete Wi-Fi Alliance interoperability tests can carry the “Wi-Fi Certified” trademark.

WPS

WPS (Wi-Fi Protected Setup) is a standard established by the Wi-Fi Alliance, which allows easy establishment of a wireless home network.

XG

Yamaha XG is an extension of the GM (General MIDI) format. Its greater polyphony, more voices, and use of effects enhances the compatibility between MIDI devices. When a song in the Yamaha XG format is played on another XG-compatible tone generator or synthesizer, it plays and sounds as the original composer/creator intended.

Chapter 6

Specifications

General Specifications

Compatible Storage Medium		USB flash drive
Built-in Songs		500 songs
Compatible File Formats		Standard MIDI File (SMF) format 0, Standard MIDI File (SMF) format 1, WAVE, MP3
Compatible Song Formats		PianoSoft, PianoSoftPlus, PianoSoftAudio, SmartKey
Switch Box	Buttons	POWER ⏻, VOLUME –/+, PLAY/PAUSE, MAINTENANCE
	Switches	AUTO PLAY, AUTO OFF MODE, WLAN
	Dimension (W × D × H)	220 x 70 x 30 mm (8-11/16 x 2-3/4 x 1-3/16 inch)
Control Center Unit	Dimension (W × D × H)	224 x 130 x 76 mm (8-13/16 x 5-1/8 x 3 inch)
Connectors	MIDI	MIDI IN, MIDI OUT
	Audio	OUTPUT, OMNI (SYNC) IN, OMNI (SYNC) OUT, DIGITAL OUT, HEADPHONE (mini)
	Others	LAN, USB (TO HOST × 1, TO DEVICE × 3)
Tone Generator	Piano Sound	CFX Binaural Sampling, CFX Stereo Sampling
	Pitch Control	414.8 Hz to 466.8 Hz (tunable in 0.2 Hz increments)
	Polyphony	256 notes (max.)
	Voices for Playing	16 voices (Piano, Electric Piano 1, Electric Piano 2, Electric Piano 3, Harpsichord 1, Harpsichord 2, Vibraphone, Celesta, Pipe Organ 1, Pipe Organ 2, Pipe Organ 3, Pipe Organ 4, Jazz Organ, Strings, Choir, Synth Pad)
	Voice Module Modes	XG, GM
	Normal Voices	480 Voices
	Drum Kits	12 kits
Power Source		AC 100V to 240V, 50/60Hz
Supplied Accessories		Owner's Manual, Built-in song list, Audio cable, AC adaptor (PA-300C or an equivalent recommended by Yamaha), Power cord, USB wireless LAN adaptor (UD-WL01), Bracket
Option Accessories		Bracket for CF Series Grand Piano (DKCB-900CF)

Specifications are subject to change without prior notice.

MEMO

disklavier ENSPIRE™

Disklavier Control Unit DKC-900

Appendix

XG Voice List

Voice Group	Voice Name	MSB	LSB	PRG	Element
Piano	GrandPiano	0	0	1	2*
	GrndPianoKSP	0	1	1	1
	MellowGrPno	0	18	1	2
	PianoStrings	0	40	1	2
	Dream	0	41	1	2
	BrightPiano	0	0	2	2
	BritePnoKSP	0	1	2	1
	ElecGrandPno	0	0	3	2
	ElecGrPnoKSP	0	1	3	2
	DetunedCP80	0	32	3	2
	LayeredCP1	0	40	3	2
	LayeredCP2	0	41	3	2
	Honkytonk	0	0	4	2
	HonkytonkKSP	0	1	4	2
	El.Piano1	0	0	5	2
	El.Piano1KSP	0	1	5	1
	MellowEP1	0	18	5	2
	ChorusEP1	0	32	5	2
	HardEl.Piano	0	40	5	2
	VXfadeEl.P1	0	45	5	2
	60sEl.Piano1	0	64	5	1
	El.Piano2	0	0	6	2
	El.Piano2KSP	0	1	6	1
	ChorusEP2	0	32	6	2
	DXEPHard	0	33	6	2
	DXLegend	0	34	6	2
	DXPhaseEP	0	40	6	2
	DX+AnalogEP	0	41	6	2
	DXKotoEP	0	42	6	2
	VXfadeEl.P2	0	45	6	2
	Harpsichord	0	0	7	1
	Harpsi.KSP	0	1	7	1
	Harpsichord2	0	25	7	2
	Harpsichord3	0	35	7	2
	Clavi.	0	0	8	1
	Clavi.KSP	0	1	8	1
	Clavi.Wah	0	27	8	2
	PulseClavi.	0	64	8	1
	PierceClavi.	0	65	8	2
Chromatic Percussion	Celesta	0	0	9	1
	Glockenspiel	0	0	10	1
	MusicBox	0	0	11	2
	Orgel	0	64	11	2
	Vibraphone	0	0	12	1
	VibesKSP	0	1	12	1
	HardVibes	0	45	12	2
	Marimba	0	0	13	1
	MarimbaKSP	0	1	13	1
	SineMarimba	0	64	13	2
	Balimba	0	97	13	2
	LogDrums	0	98	13	2
	Xylophone	0	0	14	1
	TubularBells	0	0	15	1
	ChurchBells	0	96	15	2
	Carillon	0	97	15	2
	Dulcimer	0	0	16	1
	Dulcimer2	0	35	16	2
	Cimbalom	0	96	16	2
	Santur	0	97	16	2
Organ	DrawbarOrgan	0	0	17	1
	DetDrawOrgan	0	32	17	2
	60sDrawOrg1	0	33	17	2
	60sDrawOrg2	0	34	17	2
	70sDrawOrg1	0	35	17	2
	DrawbarOrg2	0	36	17	2
	60sDrawOrg3	0	37	17	2
	EvenBarOrg	0	38	17	2
	16+2'2_3Org	0	40	17	2
	OrganBass	0	64	17	1
	70sDrawOrg2	0	65	17	2
	CheezyOrgan	0	66	17	2
	DrawbarOrg3	0	67	17	2
	Perc.Organ	0	0	18	1
	70sPercOrg1	0	24	18	2
	DetPercOrgan	0	32	18	2
	LightOrgan	0	33	18	2

* The number of elements becomes 4 when the damper pedal is pressed.

Voice Group	Voice Name	MSB	LSB	PRG	Element
Organ	Perc.Organ2	0	37	18	2
	RockOrgan	0	0	19	1
	RotaryOrgan	0	64	19	2
	SlowRotary	0	65	19	2
	FastRotary	0	66	19	2
	ChurchOrgan	0	0	20	2
	ChurchOrgan3	0	32	20	2
	ChurchOrgan2	0	35	20	2
	NotreDame	0	40	20	2
	OrganFlute	0	64	20	2
	Trem.OrganF1	0	65	20	2
	ReedOrgan	0	0	21	1
	PuffOrgan	0	40	21	2
	Accordion	0	0	22	1
	AccordIt	0	32	22	2
	Harmonica	0	0	23	1
	Harmonica2	0	32	23	2
	TangoAccord	0	0	24	1
	TangoAccord2	0	64	24	2
Guitar	NylonGuitar	0	0	25	1
	NylonGuitar2	0	16	25	1
	NylonGuitar3	0	25	25	2
	VelGtrHarmo	0	43	25	1
	Ukulele	0	96	25	1
	SteelGuitar	0	0	26	1
	SteelGuitar2	0	16	26	1
	12StrGuitar	0	35	26	2
	Nylon&Steel	0	40	26	2
	Steel&Body	0	41	26	2
	Mandolin	0	96	26	2
	JazzGuitar	0	0	27	1
	MellowGuitar	0	18	27	1
	JazzAmp	0	32	27	2
	CleanGuitar	0	0	28	1
	ChorusGuitar	0	32	28	2
	MutedGuitar	0	0	29	1
	FunkGuitar1	0	40	29	2
	MuteSteelGtr	0	41	29	2
	FunkGuitar2	0	43	29	1
	JazzMan	0	45	29	2
	Overdriven	0	0	30	1
	GuitarPinch	0	43	30	1
	Distortion	0	0	31	1
	FeedbackGtr	0	40	31	2
	FeedbackGtr2	0	41	31	2
	GtrHarmonics	0	0	32	1
	GtrFeedback	0	65	32	1
	GtrHarmonic2	0	66	32	1
Bass	AcousticBass	0	0	33	1
	JazzRhythm	0	40	33	2
	VXUprghtBass	0	45	33	2
	FingerBass	0	0	34	1
	FingerDark	0	18	34	2
	FlangeBass	0	27	34	2
	Bass&DistEG	0	40	34	2
	FingerSlap	0	43	34	1
	FingerBass2	0	45	34	2
	Mod.Bass	0	65	34	2
	PickBass	0	0	35	1
	MutePickBass	0	28	35	1
	FretlessBass	0	0	36	1
	Fretless2	0	32	36	2
	Fretless3	0	33	36	2
	Fretless4	0	34	36	2
	Syn.Fretless	0	96	36	2
	SmthFretless	0	97	36	2
	SlapBass1	0	0	37	1
	ResonantSlap	0	27	37	1
	PunchThumb	0	32	37	2
	SlapBass2	0	0	38	1
	Velo.Sw.Slap	0	43	38	1
	SynthBass1	0	0	39	1
	SynBass1Dark	0	18	39	1
	FastResoBass	0	20	39	1
	AcidBass	0	24	39	1
	ClaviBass	0	35	39	2

XG Voice List

Voice Group	Voice Name	MSB	LSB	PRG	Element
Bass	TechnoBass	0	40	39	2
	Orbiter	0	64	39	2
	SquareBass	0	65	39	1
	RubberBass	0	66	39	2
	Hammer	0	96	39	2
	SynthBass2	0	0	40	2
	MellowSyBass	0	6	40	1
	SequenceBass	0	12	40	2
	ClickSynBass	0	18	40	2
	SynBass2Dark	0	19	40	1
	SmoothSyBass	0	32	40	2
	ModulrSyBass	0	40	40	2
	DXBass	0	41	40	2
	XWireBass	0	64	40	2
Strings	Violin	0	0	41	1
	SlwAtkViolin	0	8	41	1
	Viola	0	0	42	1
	Cello	0	0	43	1
	Contrabass	0	0	44	1
	Trem.Strings	0	0	45	1
	SlwAtTremStr	0	8	45	1
	SuspenseStr	0	40	45	2
	PizzicatoStr	0	0	46	1
	Orch.Harp	0	0	47	1
	YangChin	0	40	47	2
	Timpani	0	0	48	1
Ensemble	Strings1	0	0	49	1
	StereoStrngs	0	3	49	2
	SlwAtkStrngs	0	8	49	1
	ArcoStrings	0	24	49	2
	60'sStrings	0	35	49	2
	Orchestra	0	40	49	2
	Orchestra2	0	41	49	2
	TremOrchstra	0	42	49	2
	Velo.Strings	0	45	49	2
	Strings2	0	0	50	1
	S.SlowStrngs	0	3	50	2
	LegatoStrngs	0	8	50	2
	WarmStrings	0	40	50	2
	Kingdom	0	41	50	2
	70'sStrings	0	64	50	1
	Strings3	0	65	50	1
	SynStrings1	0	0	51	2
	ResoStrings	0	27	51	2
	SynStrings4	0	64	51	2
	SynStrings5	0	65	51	2
	SynStrings2	0	0	52	2
	ChoirAahs	0	0	53	1
	StereoChoir	0	3	53	2
	ChoirAahs2	0	16	53	2
	MellowChoir	0	32	53	2
	ChoirStrings	0	40	53	2
	VoiceOohs	0	0	54	1
	SynthVoice	0	0	55	1
	SynthVoice2	0	40	55	2
	Choral	0	41	55	2
	AnalogVoice	0	64	55	1
	OrchestraHit	0	0	56	2
	OrchestrHit2	0	35	56	2
	Impact	0	64	56	2
Brass	Trumpet	0	0	57	1
	Trumpet2	0	16	57	1
	BriteTrumpet	0	17	57	2
	WarmTrumpet	0	32	57	2
	Trombone	0	0	58	1
	Trombone2	0	18	58	2
	Tuba	0	0	59	1
	Tuba2	0	16	59	1
	MutedTrumpet	0	0	60	1
	FrenchHorn	0	0	61	1
	Fr.HornSolo	0	6	61	1
	FrenchHorn2	0	32	61	2
	HornOrchestr	0	37	61	2
	BrassSection	0	0	62	1
	Tp&TbSection	0	35	62	2
	BrassSect2	0	40	62	2
	HighBrass	0	41	62	2
	MellowBrass	0	42	62	2
	SynthBrass1	0	0	63	2
	QuackBrass	0	12	63	2
	ResoSynBrass	0	20	63	2
	PolyBrass	0	24	63	2

Voice Group	Voice Name	MSB	LSB	PRG	Element
Brass	SynthBrass3	0	27	63	2
	JumpBrass	0	32	63	2
	AnaVelBrass1	0	45	63	2
	AnalogBrass1	0	64	63	2
	SynthBrass2	0	0	64	1
	SoftBrass	0	18	64	2
	SynthBrass4	0	40	64	2
	ChoirBrass	0	41	64	2
	AnaVelBrass2	0	45	64	2
	AnalogBrass2	0	64	64	2
Reed	SopranoSax	0	0	65	1
	AltoSax	0	0	66	1
	SaxSection	0	40	66	2
	HyperAltoSax	0	43	66	1
	TenorSax	0	0	67	1
	BreathyTenor	0	40	67	2
	SoftTenorSax	0	41	67	2
	TenorSax2	0	64	67	1
	BaritoneSax	0	0	68	1
	Oboe	0	0	69	1
	EnglishHorn	0	0	70	1
	Bassoon	0	0	71	1
	Clarinet	0	0	72	1
Pipe	Piccolo	0	0	73	1
	Flute	0	0	74	1
	Recorder	0	0	75	1
	PanFlute	0	0	76	1
	BlownBottle	0	0	77	2
	Shakuhachi	0	0	78	1
	Whistle	0	0	79	1
	Ocarina	0	0	80	1
Synth. Lead	SquareLead	0	0	81	2
	SquareLead2	0	6	81	1
	LMSquare	0	8	81	2
	Hollow	0	18	81	1
	Shroud	0	19	81	2
	Mellow	0	64	81	2
	SoloSine	0	65	81	2
	SineLead	0	66	81	1
	SawtoothLead	0	0	82	2
	SawtoothLd2	0	6	82	1
	ThickSaw	0	8	82	2
	DynamicSaw	0	18	82	1
	DigitalSaw	0	19	82	2
	BigLead	0	20	82	2
	HeavySynth	0	24	82	2
	WaspySynth	0	25	82	2
	PulseSaw	0	40	82	2
	Dr.Lead	0	41	82	2
	VelocityLead	0	45	82	2
	Seq.Analog	0	96	82	2
	CalliopeLead	0	0	83	2
	PureLead	0	65	83	2
	ChiffLead	0	0	84	2
	Rubby	0	64	84	2
	CharangLead	0	0	85	2
	DistortedLd	0	64	85	2
	WireLead	0	65	85	2
	VoiceLead	0	0	86	2
	SynthAahs	0	24	86	2
	VoxLead	0	64	86	2
	FifthsLead	0	0	87	2
	BigFive	0	35	87	2
	Bass&Lead	0	0	88	2
	Big&Low	0	16	88	2
	Fat&Perky	0	64	88	2
	SoftWhirl	0	65	88	2
Synth. Pad	NewAgePad	0	0	89	2
	Fantasy	0	64	89	2
	WarmPad	0	0	90	2
	ThickPad	0	16	90	2
	SoftPad	0	17	90	2
	SinePad	0	18	90	2
	HornPad	0	64	90	2
	RotaryStrngs	0	65	90	2
	PolySynthPad	0	0	91	2
	PolyPad80	0	64	91	2
	ClickPad	0	65	91	2
	AnalogPad	0	66	91	2
	SquarePad	0	67	91	2
	ChoirPad	0	0	92	2
	Heaven	0	64	92	2

Voice Group	Voice Name	MSB	LSB	PRG	Element
Synth. Pad	Itopia	0	66	92	2
	CCPad	0	67	92	2
	BowedPad	0	0	93	2
	Glacier	0	64	93	2
	GlassPad	0	65	93	2
	MetallicPad	0	0	94	2
	TinePad	0	64	94	2
	PanPad	0	65	94	2
	HaloPad	0	0	95	2
	SweepPad	0	0	96	2
	Shwimmer	0	20	96	2
	Converge	0	27	96	2
	PolarPad	0	64	96	2
	Celestial	0	66	96	2
Synth. Effects	Rain	0	0	97	2
	ClaviPad	0	45	97	2
	HarmoRain	0	64	97	2
	AfricanWind	0	65	97	2
	Carib	0	66	97	2
	SoundTrack	0	0	98	2
	Prologue	0	27	98	2
	Ancestral	0	64	98	2
	Crystal	0	0	99	2
	SynthDr.Comp	0	12	99	2
	Popcorn	0	14	99	2
	TinyBells	0	18	99	2
	RoundGlocken	0	35	99	2
	GlockenChime	0	40	99	2
	ClearBells	0	41	99	2
	ChorusBells	0	42	99	2
	SynthMallet	0	64	99	1
	SoftCrystal	0	65	99	2
	LoudGlocken	0	66	99	2
	ChristmasBel	0	67	99	2
	VibeBells	0	68	99	2
	DigitalBells	0	69	99	2
	AirBells	0	70	99	2
	BellHarp	0	71	99	2
	Gamelimba	0	72	99	2
	Atmosphere	0	0	100	2
	WarmAtmos.	0	18	100	2
	HollwRelease	0	19	100	2
	NylonElPiano	0	40	100	2
	NylonHarp	0	64	100	2
	HarpVox	0	65	100	2
	Atmos.Pad	0	66	100	2
	Planet	0	67	100	2
	Brightness	0	0	101	2
	FantasyBells	0	64	101	2
	Smokey	0	96	101	2
	Goblins	0	0	102	2
	GoblinsSynth	0	64	102	2
	Creeper	0	65	102	2
	RingPad	0	66	102	2
	Ritual	0	67	102	2
	ToHeaven	0	68	102	2
	Night	0	70	102	2
	Glisten	0	71	102	2
	BellChoir	0	96	102	2
	Echoes	0	0	103	2
	Echoes2	0	8	103	2
	EchoPan	0	14	103	2
	EchoBells	0	64	103	2
	BigPan	0	65	103	2
	SynthPiano	0	66	103	2
	Creation	0	67	103	2
	StarDust	0	68	103	2
	Reso&Panning	0	69	103	2
	Sci-Fi	0	0	104	2
	Starz	0	64	104	2
Ethnic	Sitar	0	0	105	1
	DetunedSitar	0	32	105	2
	Sitar2	0	35	105	2
	Tambra	0	96	105	2
	Tamboura	0	97	105	2
	Banjo	0	0	106	1
	MutedBanjo	0	28	106	1
	Rabab	0	96	106	2
	Gopichant	0	97	106	2
	Oud	0	98	106	2
	Shamisen	0	0	107	1
	Koto	0	0	108	1

Voice Group	Voice Name	MSB	LSB	PRG	Element
Ethnic	Taisho-kin	0	96	108	2
	Kanoon	0	97	108	2
	Kalimba	0	0	109	1
	Bagpipe	0	0	110	2
	Fiddle	0	0	111	1
	Shanai	0	0	112	1
	Shanai2	0	64	112	1
	Pungi	0	96	112	1
	Hichiriki	0	97	112	2
Percussive	TinkleBell	0	0	113	2
	Bonang	0	96	113	2
	Altair	0	97	113	2
	GamelanGongs	0	98	113	2
	StereoGamlan	0	99	113	2
	RamaCymbal	0	100	113	2
	AsianBells	0	101	113	2
	Agogo	0	0	114	2
	SteelDrums	0	0	115	1
	GlassPerc.	0	97	115	2
	ThaiBells	0	98	115	2
	Woodblock	0	0	116	1
	Castanets	0	96	116	1
	TaikoDrum	0	0	117	1
	GranCassa	0	96	117	1
	MelodicTom	0	0	118	2
	MelodicTom2	0	64	118	1
	RealTom	0	65	118	2
	RockTom	0	66	118	2
	SynthDrum	0	0	119	1
	AnalogTom	0	64	119	1
	ElectroPerc.	0	65	119	2
	Rev.Cymbal	0	0	120	1
Sound Effects	GtrFretNoise	0	0	121	1
	BreathNoise	0	0	122	1
	Seashore	0	0	123	2
	BirdTweet	0	0	124	2
	TelephonRing	0	0	125	1
	Helicopter	0	0	126	1
	Applause	0	0	127	1
	Gunshot	0	0	128	1
SFX	CuttingNoise	64	0	1	1
	CuttingNoiz2	64	0	2	2
	StringSlap	64	0	4	1
	Fl.KeyClick	64	0	17	1
	Shower	64	0	33	1
	Thunder	64	0	34	1
	Wind	64	0	35	1
	Stream	64	0	36	2
	Bubble	64	0	37	2
	Feed	64	0	38	2
	Dog	64	0	49	1
	Horse	64	0	50	1
	BirdTweet2	64	0	51	1
	Ghost	64	0	55	2
	Maou	64	0	56	2
	PhoneCall	64	0	65	1
	DoorSqueak	64	0	66	1
	DoorSlam	64	0	67	1
	ScratchCut	64	0	68	1
	ScratchSplit	64	0	69	2
	WindChime	64	0	70	1
	TelphonRing2	64	0	71	1
	CarEngineIgn	64	0	81	1
	CarTiresSqel	64	0	82	1
	CarPassing	64	0	83	1
	CarCrash	64	0	84	1
	Siren	64	0	85	2
	Train	64	0	86	1
	JetPlane	64	0	87	2
	Starship	64	0	88	2
	Burst	64	0	89	2
	RollrCoaster	64	0	90	2
	Submarine	64	0	91	1
	Laugh	64	0	97	1
	Scream	64	0	98	1
	Punch	64	0	99	1
	Heartbeat	64	0	100	1
	FootSteps	64	0	101	1
	MachineGun	64	0	113	1
	LaserGun	64	0	114	2
	Explosion	64	0	115	2
	Firework	64	0	116	2

XG Drum Kit List

: Same as Standard Kit 1

: No Sound

Bank Select MSB (0-127)				127	127	127	127	127	127
Bank Select LSB (0-127)				0	0	0	0	0	0
Program Change (0-127)				0	1	8	16	24	25
Program Change (1-128)				1	2	9	17	25	26
MIDI		Key Off	Alternate Group	Standard Kit1	Standard Kit2	Room Kit	Rock Kit	Electro Kit	Analog Kit
Note #	Note								
13	C#-1		3	Surdo Mute					
14	D-1		3	Surdo Open					
15	D#-1			Hi Q					
16	E-1			Whip Slap					
17	F-1		4	Scratch H					
18	F#-1		4	Scratch L					
19	G-1			Finger Snap					
20	G#-1			Click Noise					
21	A-1			Metronome Click					
22	A#-1			Metronome Bell					
23	B-1			Seq Click L					
24	C0			Seq Click H					
25	C#0			Brush Tap					
26	D0	○		Brush Swirl					
27	D#0			Brush Slap					
28	E0	○		Brush Tap Swirl				Reverse Cymbal	Reverse Cymbal
29	F0	○		Snare Roll					
30	F#0			Castanet				Hi Q 2	Hi Q 2
31	G0			Snare Soft	Snare Soft 2		Snare Noisy	Snare Snappy Electro	Snare Noisy 4
32	G#0			Sticks					
33	A0			Kick Soft				Kick 3	Kick 3
34	A#0			Open Rim Shot	Open Rim Shot H Short				
35	B0			Kick Tight			Kick 2	Kick Gate	Kick Analog Short
36	C1			Kick	Kick Shot		Kick Gate	Kick Gate Heavy	Kick Analog
37	C#1			Side Stick	Side Stick Light				Side Stick Analog
38	D1			Snare	Snare Short	Snare Snappy	Snare Rock	Snare Noisy 2	Snare Analog
39	D#1			Hand Clap					
40	E1			Snare Tight	Snare Tight H	Snare Tight Snappy	Snare Rock Tight	Snare Noisy 2	Snare Analog 2
41	F1			Floor Tom L		Tom Room 1	Tom Room 1	Tom Electro 1	Tom Analog 1
42	F#1		1	Hi-Hat Closed					Hi-Hat Closed Analog
43	G1			Floor Tom H		Tom Room 2	Tom Room 2	Tom Electro 2	Tom Analog 2
44	G#1		1	Hi-Hat Pedal					Hi-Hat Closed Analog 2
45	A1			Low Tom		Tom Room 3	Tom Room 3	Tom Electro 3	Tom Analog 3
46	A#1		1	Hi-Hat Open					Hi-Hat Open Analog
47	B1			Mid Tom L		Tom Room 4	Tom Room 4	Tom Electro 4	Tom Analog 4
48	C2			Mid Tom H		Tom Room 5	Tom Room 5	Tom Electro 5	Tom Analog 5
49	C#2			Crash Cymbal 1					Crash Analog
50	D2			High Tom		Tom Room 6	Tom Room 6	Tom Electro 6	Tom Analog 6
51	D#2			Ride Cymbal 1					
52	E2			Chinese Cymbal					
53	F2			Ride Cymbal Cup					
54	F#2			Tambourine					
55	G2			Splash Cymbal					
56	G#2			Cowbell					Cowbell Analog
57	A2			Crash Cymbal 2					
58	A#2			Vibraslap					
59	B2			Ride Cymbal 2					
60	C3			Bongo H					
61	C#3			Bongo L					
62	D3			Conga H Mute					Conga Analog H
63	D#3			Conga H Open					Conga Analog M
64	E3			Conga L					Conga Analog L
65	F3			Timbale H					
66	F#3			Timbale L					
67	G3			Agogo H					
68	G#3			Agogo L					
69	A3			Cabasa					
70	A#3			Maracas					Maracas 2
71	B3	○		Samba Whistle H					
72	C4	○		Samba Whistle L					
73	C#4			Guiro Short					
74	D4	○		Guiro Long					
75	D#4			Claves					Claves 2
76	E4			Wood Block H					
77	F4			Wood Block L					
78	F#4			Cuica Mute				Scratch H 2	Scratch H 2
79	G4			Cuica Open				Scratch L 2	Scratch L 2
80	G#4		2	Triangle Mute					
81	A4		2	Triangle Open					
82	A#4			Shaker					
83	B4			Jingle Bells					
84	C5			Bell Tree					
85	C#5								
86	D5								
87	D#5								
88	E5								
89	F5								
90	F#5								
91	G5								

* Key Off: Keys marked with a circle stop sounding the instant they are released.
* Alternate Group: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number.

: Same as Standard Kit 1

: No Sound

Bank Select MSB (0-127)				127	127	127	127	126	126
Bank Select LSB (0-127)				0	0	0	0	0	0
Program Change (0-127)				27	32	40	48	0	1
Program Change (1-128)				28	33	41	49	1	2
MIDI		Key Off	Alternate Group	Dance Kit	Jazz Kit	Brush Kit	Symphony Kit	SFX Kit1	SFX Kit2
Note #	Note								
13	C#-1		3						
14	D-1		3						
15	D#-1								
16	E-1								
17	F-1		4						
18	F#-1		4						
19	G-1								
20	G#-1								
21	A-1								
22	A#-1								
23	B-1								
24	C0								
25	C#0								
26	D0	○							
27	D#0								
28	E0	○		Reverse Cymbal					
29	F0	○							
30	F#0			Hi Q 2					
31	G0			Snare Techno	Snare Jazz H	Brush Slap 2			
32	G#0								
33	A0			Kick Techno Q			Kick Soft 2		
34	A#0			Rim Gate		Open Rim Shot Light			
35	B0			Kick Techno L			Gran Cassa		
36	C1			Kick Techno	Kick Jazz	Kick Jazz	Gran Cassa Mute	Cutting Noise	Phone Call
37	C#1			Side Stick Analog	Side Stick Light	Side Stick Light		Cutting Noise 2	Door Squeak
38	D1			Snare Clap	Snare Jazz L	Brush Slap 3	Band Snare		Door Slam
39	D#1							String Slap	Scratch Cut
40	E1			Snare Dry	Snare Jazz M	Brush Tap 2	Band Snare 2		Scratch H 3
41	F1			Tom Analog 1		Tom Brush 1			Wind Chime
42	F#1		1	Hi-Hat Closed 3					Telephone Ring 2
43	G1			Tom Analog 2		Tom Brush 2			
44	G#1		1	Hi-Hat Closed Analog 3					
45	A1			Tom Analog 3		Tom Brush 3			
46	A#1		1	Hi-Hat Open 3					
47	B1			Tom Analog 4		Tom Brush 4			
48	C2			Tom Analog 5		Tom Brush 5			
49	C#2			Crash Analog			Hand Cymbal		
50	D2			Tom Analog 6		Tom Brush 6			
51	D#2						Hand Cymbal Short		
52	E2							Flute Key Click	Car Engine Ignition
53	F2								Car Tires Squeal
54	F#2								Car Passing
55	G2								Car Crash
56	G#2			Cowbell Analog					Siren
57	A2						Hand Cymbal 2		Train
58	A#2								Jet Plane
59	B2						Hand Cymbal 2 Short		Starship
60	C3								Burst
61	C#3								Roller Coaster
62	D3			Conga Analog H					Submarine
63	D#3			Conga Analog M					
64	E3			Conga Analog L					
65	F3								
66	F#3								
67	G3								
68	G#3							Shower	Laugh
69	A3							Thunder	Scream
70	A#3			Maracas 2				Wind	Punch
71	B3	○						Stream	Heart Beat
72	C4	○						Bubble	Foot Steps
73	C#4							Feed	
74	D4	○							
75	D#4			Claves 2					
76	E4								
77	F4								
78	F#4			Scratch H 2					
79	G4			Scratch L 2					
80	G#4		2						
81	A4		2						
82	A#4								
83	B4								
84	C5							Dog	Machine Gun
85	C#5							Horse	Laser Gun
86	D5							Bird Tweet 2	Explosion
87	D#5								Firework
88	E5								
89	F5								
90	F#5							Ghost	
91	G5							Maou	

* Key Off: Keys marked with a circle stop sounding the instant they are released.
* Alternate Group: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number.

MIDI Data Format

MIDI Channel Message (1)

[MIDI (Silent)]

MIDI Events	Status byte	1st Data byte			2nd Data byte			MIDI Reception		MIDI Transmission		
	Status	Data	(HEX)	Parameter	Data	(HEX)	Parameter	Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
Key Off [GM1] [GM2]	8nH (n: Channel Number)	kk		Key Number (0-127)	vv		Velocity (0-127)	○	○	×	×	×
Key On [GM1] [GM2]	9nH (n: Channel Number)	kk		Key Number (0-127)	vv		Key On: vv=1-127 Key Off: vv=0	○	○	×	×	×
Control Change	BnH	0	(00H)	Bank Select MSB [GM2]	0 64 118 119 120 121 126 127	(00H) (40H) (76H) (77H) (78H) (79H) (7EH) (7FH)	Normal SFX Voice GS Rhythm GS Normal GM2 Rhythm GM2 Normal SFX Kit Drum Kit	○	○	×	×	×
		1	(01H)	Modulation [GM1] [GM2]	0-127	(00H...7FH)	Data	○	×	×	×	×
		5	(05H)	Portamento Time [GM2]	0-127	(00H...7FH)	Data	○	×	×	×	×
		6	(06H)	Data Entry MSB [GM2]	0-127	(00H...7FH)	Data	○	×	×	×	×
		7	(07H)	Main Volume [GM1] [GM2]	0-127	(00H...7FH)	Data	○	○	×	×	×
		10	(0AH)	Panpot [GM1] [GM2]	0-127	(00H...7FH)	L64…C…R63	○	×	×	×	×
		11	(0BH)	Expression [GM1] [GM2]	0-127	(00H...7FH)	Data	○	×	×	×	×
		32	(20H)	Bank Select LSB [GM2]	0-127	(00H...7FH)	Data	○	○	×	×	×
		38	(26H)	Data Entry LSB [GM2]	0-127	(00H...7FH)	Data	○	×	×	×	×
		64	(40H)	Damper [GM1] [GM2]	0-127	(00H...7FH)	Data	○	○	×	×	×
		65	(41H)	Portamento [GM2]	0-127	(00H...7FH)	OFF: 0-63 ON: 64-127	○	×	×	×	×
		66	(42H)	Sostenuto [GM2]	0-127	(00H...7FH)	OFF: 0-63 ON: 64-127	○	○	×	×	×
		67	(43H)	Soft Pedal [GM2]	0-127	(00H...7FH)	OFF: 0-63 ON: 64-127	○	○	×	×	×
		71	(47H)	Harmonic Content [GM2]	0-127	(00H...7FH)	-64…0…+63	○	×	×	×	×
		72	(48H)	Release Time [GM2]	0-127	(00H...7FH)	-64…0…+63	○	×	×	×	×
		73	(49H)	Attack Time [GM2]	0-127	(00H...7FH)	-64…0…+63	○	×	×	×	×
		74	(4AH)	Brightness [GM2]	0-127	(00H...7FH)	-64…0…+63	○	×	×	×	×
		75	(4BH)	Decay Time [GM2]	0-127	(00H...7FH)	-64…0…+63	○	×	×	×	×
		76	(4CH)	Vibrate Rate [GM2]	0-127	(00H...7FH)	-64…0…+63	○	×	×	×	×
		77	(4DH)	Vibrate Depth [GM2]	0-127	(00H...7FH)	-64…0…+63	○	×	×	×	×
		78	(4EH)	Vibrate Delay [GM2]	0-127	(00H...7FH)	-64…0…+63	○	×	×	×	×
		84	(54H)	Portamento Control	0-127	(00H...7FH)	Key no. (0-127)	○	×	×	×	×
		91	(5BH)	Effect1 Depth (Reverb Send Level) [GM2]	0-127	(00H...7FH)	Data	○	×	×	×	×
		93	(5DH)	Effect3 Depth (Chorus Send Level) [GM2]	0-127	(00H...7FH)	Data	○	×	×	×	×
		94	(5EH)	Effect4 Depth (Variation Send Level)	0-127	(00H...7FH)	Data	○	×	×	×	×
		96	(60H)	RPN Increment	—	—	The data byte is ignored	○	×	×	×	×
		97	(61H)	RPN Decrement	—	—	The data byte is ignored	○	×	×	×	×
		98	(62H)	NRPN LSB	0-127	(00H...7FH)	Data	○	×	×	×	×
		99	(63H)	NRPN MSB	0-127	(00H...7FH)	Data	○	×	×	×	×
		100	(64H)	RPN LSB [GM2]	0-127	(00H...7FH)	Data	○	×	×	×	×
		101	(65H)	RPN MSB [GM2]	0-127	(00H...7FH)	Data	○	×	×	×	×
Mode Message	BnH (n: Channel Number)	120	(78H)	All Sound Off [GM2]	0	(00H)	Data	○	○	×	×	×
		121	(79H)	Reset All Controllers [GM1] [GM2]	0	(00H)	Data	○	○	×	×	×
		122	(7AH)	Local Control	0 127	(00h) (7FH)	OFF ON	○	○	×	×	×
		123	(7BH)	All Note Off [GM1] [GM2]	0	(00H)	Data	○	○	×	×	×
		124	(7CH)	Omni Off [GM2]	0	(00H)	Data	○	×	×	×	×
		125	(7DH)	Omni On [GM2]	0	(00H)	Data	○	×	×	×	×
		126	(7EH)	Mono [GM2]	0-16	(00H...10H)	Data	○	×	×	×	×
		127	(7FH)	Poly [GM2]	0	(00H)	Data	○	×	×	×	×
Program Change [GM1] [GM2]	CnH (n: Channel Number)	pp	(00H...7FH)	Voice Number (0-127)	—	—	—	○	○	×	×	×
Channel After Touch [GM1] [GM2]	DnH (n: Channel Number)	vv	(00H...7FH)	Data	—	—	—	○	×	×	×	×
Polyphonic After Touch	AnH (n: Channel Number)	kk	(00H...7FH)	Key Number (0-127)	vv	(00H...7FH)	Data	○	○	×	×	×
Pitch Bend Change [GM1] [GM2]	EnH (n: Channel Number)	cc	(00H...7FH)	LSB	dd	(00H...7FH)	MSB	○	×	×	×	×
Realtime Message	F8H MIDI Clock	—		—	—		—	×		×		
	FAH Start	—		—	—		—	×		×		
	FBH Continue	—		—	—		—	×		×		
	FCH Stop	—		—	—		—	×		×		
	FEH Active Sens [GM2]	—		—	—		—	○		○		
	FFH System Reset	—		—	—		—	×		×		

* For upright pianos (excluding some models), the sostenuto pedal information (Control Change 66) is not transmitted.

MIDI Channel Message (2)

■ Parameters Controlled by NRPN (Non-Registered Parameter Numbers)

[MIDI (Silent)]

NRPN		Data Entry		Parameter	Data Range	MIDI Reception		MIDI Transmission		
MSB	LSB	MSB	LSB			Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
01H	08H	mmH	—	Vibrato Rate	mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
01H	09H	mmH	—	Vibrato Depth	mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
01H	0AH	mmH	—	Vibrato Delay	mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
01H	20H	mmH	—	Low Pass Filter Cutoff Frequency	mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
01H	21H	mmH	—	Low Pass Filter Resonance	mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
01H	30H	mmH	—	EQ BASS	mm: 00H-40H-7FH (-64…0…+63)	×	×	×	×	×
01H	31H	mmH	—	EQ TREBLE	mm: 00H-40H-7FH (-64…0…+63)	×	×	×	×	×
01H	34H	mmH	—	EQ BASS Frequency	mm: 04H-28H (32…2.0k [Hz])	×	×	×	×	×
01H	35H	mmH	—	EQ TREBLE Frequency	mm: 1CH-3AH (500…16.0k [Hz])	×	×	×	×	×
01H	63H	mmH	—	EG Attack Time	mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
01H	64H	mmH	—	EG Decay Time	mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
01H	66H	mmH	—	EG Release	mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
14H	rrH	mmH	—	Drum Low Pass Filter Cutoff Frequency	rr: drum instrument note number mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
15H	rrH	mmH	—	Drum Low Pass Filter Resonance	rr: drum instrument note number mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
16H	rrH	mmH	—	Drum EG Attack Rate	rr: drum instrument note number mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
17H	rrH	mmH	—	Drum EG Decay Rate	rr: drum instrument note number mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
18H	rrH	mmH	—	Drum Pitch Coarse	rr: drum instrument note number mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
19H	rrH	mmH	—	Drum Pitch Fine	rr: drum instrument note number mm: 00H-40H-7FH (-64…0…+63)	○	×	×	×	×
1AH	rrH	mmH	—	Drum Level	rr: drum instrument note number mm: 00H-7FH (0…127)	○	×	×	×	×
1CH	rrH	mmH	—	Drum Pan	rr: drum instrument note number mm: 00H, 01H-40H-7FH (RND, L63…C…R63)	○	×	×	×	×
1DH	rrH	mmH	—	Drum Reverb Send Level	rr: drum instrument note number mm: 00H-7FH (0…127)	○	×	×	×	×
1EH	rrH	mmH	—	Drum Chorus Send Level	rr: drum instrument note number mm: 00H-7FH (0…127)	○	×	×	×	×
1FH	rrH	mmH	—	Drum Variation Send Level	rr: drum instrument note number mm: 00H-7FH (0…127) (Variation Connection = SYSTEM) mm: 00H, 01H-7FH (OFF, ON) (Variation Connection = INSERTION)	○	×	×	×	×
24H	rrH	mmH	—	Drum HPF Cutoff Frequency	rr: drum instrument note number mm: 00H-40H-7FH (-64…0…+63)	×	×	×	×	×
30H	rrH	mmH	—	Drum EQ Bass Gain	rr: drum instrument note number mm: 00H-7FH (0…127)	×	×	×	×	×
31H	rrH	mmH	—	Drum EQ Treble Gain	rr: drum instrument note number mm: 00H-7FH (0…127)	×	×	×	×	×
34H	rrH	mmH	—	Drum EQ Bass Frequency	rr: drum instrument note number mm: 04H-28H (32…2.0k [Hz])	×	×	×	×	×
35H	rrH	mmH	—	Drum EQ Treble Frequency	rr: drum instrument note number mm: 1CH-3AH (500…16.0k [Hz])	×	×	×	×	×
40H	rrH	mmH	—	Drum VELOCITY PITCH SENS.	rr: drum instrument note number mm: 00H-0FH (0…15)	×	×	×	×	×
41H	rrH	mmH	—	Drum VELOCITY LPF CUTOFF SENS.	rr: drum instrument note number mm: 00H-0FH (0…15)	×	×	×	×	×

* NRPN MSB: 14H-1FH (for drums) message is accepted as long as the channel is set with a drum voice.
* Data Entry LSB will be ignored.

■ Parameters Controlled by RPN (Registered Parameter Numbers)

[MIDI (Silent)]

RPN		Data Entry		Parameter	Data Range	MIDI Reception		MIDI Transmission		
MSB	LSB	MSB	LSB			Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
00H	00H	mmH	—	Pitch Bend Sensitivity [GM1] [GM2]	mm: 00H-18H (0…+24 [semitones])	○	×	×	×	×
00H	01H	mmH	llH	Fine Tune [GM1] [GM2]	mm ll: 00H 00H -100 [cent] … mm ll: 40H 00H 0 [cent] … mm ll: 7FH 7FH 100 [cent]	○	×	×	×	×
00H	02H	mmH	—	Coarse Tune [GM1] [GM2]	mm: 28H-40H-58H (-24…0…+24 [semitones])	○	×	×	×	×
00H	05H	mmH	llH	Modulation Sensitivity [GM2]	mm: Specified in semitone increments ll: Specified in 100/128 cent increments	○	×	×	×	×
7FH	7FH	—	—	Null [GM2]	—	○	×	×	×	×

MIDI Parameter Change Table

■ MIDI Parameter Change Table (XG SYSTEM)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI (Silent)] MIDI Reception		MIDI Transmission		
								Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
00	00	00	4	00-0F 00-0F 00-0F 00-0F	MASTER TUNE	-102.4…0…+102.3 [cent] 1st bit3-0→bit15-12 2nd bit3-0→bit11-8 3rd bit3-0→bit7-4 4th bit3-0→bit3-0	Panel setting value	×	×	×	×	×
		04	1	00-7F	MASTER VOLUME	0…127	7F	○	×	×	×	×
		05	1	00-7F	MASTER ATTENUATOR	0…127	00	×	×	×	×	×
		06	1	28-58	TRANSPOSE	-24…0…+24 [semitones]	40	○	×	×	×	×
		7D	1	N	DRUM SETUP RESET	N: Drum setup number	—	○	×	×	×	×
		7E	1	00	XG SYSTEM ON	00=XG system ON	—	○	×	×	×	×
		7F	1	00	ALL PARAMETER RESET	00=ON	—	○	×	×	×	×
TOTAL SIZE			07									

■ MIDI Parameter Change Table (SYSTEM INFORMATION)

Address (H)			Size (H)	Data (H)	Parameter	Description	[MIDI (Silent)] MIDI Reception		MIDI Transmission		
							Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
01	00	00 … 0D	E	20-7F … 20-7F	Model Name 1 … Model Name 14	32…127 (ASCII CHARACTER) … 32…127 (ASCII CHARACTER)	—	—	×	×	○
		0E	1		NOT USED		—	—	—	—	—
		0F	1		NOT USED		—	—	—	—	—
TOTAL SIZE			10								

* Transmitted in response to dump request. Not received.

■ MIDI Parameter Change Table (EFFECT1)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI (Silent)] MIDI Reception		MIDI Transmission		
								Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
02	01	00	2	00-7F 00-7F	REVERB TYPE MSB REVERB TYPE LSB	Refer to Effect Parameter List	01(=HALL1) 00	○	×	×	×	×
		02	1	00-7F	REVERB PARAMETER 1	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		03	1	00-7F	REVERB PARAMETER 2	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		04	1	00-7F	REVERB PARAMETER 3	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		05	1	00-7F	REVERB PARAMETER 4	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		06	1	00-7F	REVERB PARAMETER 5	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		07	1	00-7F	REVERB PARAMETER 6	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		08	1	00-7F	REVERB PARAMETER 7	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		09	1	00-7F	REVERB PARAMETER 8	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		0A	1	00-7F	REVERB PARAMETER 9	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		0B	1	00-7F	REVERB PARAMETER 10	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		0C	1	00-7F	REVERB RETURN	-∞dB…0dB…+6dB (0…64…127)	40	○	×	×	×	×
		0D	1	01-7F	REVERB PAN	L63…C…R63	40	○	×	×	×	×
TOTAL SIZE			0E									

02	01	10	1	00-7F	REVERB PARAMETER 11	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		11	1	00-7F	REVERB PARAMETER 12	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		12	1	00-7F	REVERB PARAMETER 13	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		13	1	00-7F	REVERB PARAMETER 14	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		14	1	00-7F	REVERB PARAMETER 15	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
		15	1	00-7F	REVERB PARAMETER 16	Refer to Effect Parameter List	Depends on Reverb Type	○	×	×	×	×
TOTAL SIZE			06									

[MIDI (Silent)]

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception		MIDI Transmission		
								Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
02	01	20	2	00-7F 00-7F	CHORUS TYPE MSB CHORUS TYPE LSB	Refer to Effect Parameter List	41(=CHORUS1) 00	○	×	×	×	×
		22	1	00-7F	CHORUS PARAMETER 1	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		23	1	00-7F	CHORUS PARAMETER 2	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		24	1	00-7F	CHORUS PARAMETER 3	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		25	1	00-7F	CHORUS PARAMETER 4	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		26	1	00-7F	CHORUS PARAMETER 5	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		27	1	00-7F	CHORUS PARAMETER 6	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		28	1	00-7F	CHORUS PARAMETER 7	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		29	1	00-7F	CHORUS PARAMETER 8	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		2A	1	00-7F	CHORUS PARAMETER 9	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		2B	1	00-7F	CHORUS PARAMETER 10	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		2C	1	00-7F	CHORUS RETURN	-∞dB…0dB…+6dB (0…64…127)	40	○	×	×	×	×
		2D	1	01-7F	CHORUS PAN	L63…C…R63	40	○	×	×	×	×
		2E	1	00-7F	SEND CHORUS TO REVERB	-∞dB…0dB…+6dB (0…64…127)	00	○	×	×	×	×
TOTAL SIZE			0F									

02	01	30	1	00-7F	CHORUS PARAMETER 11	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		31	1	00-7F	CHORUS PARAMETER 12	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		32	1	00-7F	CHORUS PARAMETER 13	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		33	1	00-7F	CHORUS PARAMETER 14	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		34	1	00-7F	CHORUS PARAMETER 15	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
		35	1	00-7F	CHORUS PARAMETER 16	Refer to Effect Parameter List	Depends on Chorus Type	○	×	×	×	×
TOTAL SIZE			06									

[MIDI (Silent)]

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception		MIDI Transmission		
								Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
02	01	40	2	00-7F 00-7F	VARIATION TYPE MSB VARIATION TYPE LSB	Refer to Effect Parameter List	05 (=DELAY L, C, R) 00	○	×	×	×	×
		42	2	00-7F 00-7F	VARIATION PARAMETER 1 MSB VARIATION PARAMETER 1 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		44	2	00-7F 00-7F	VARIATION PARAMETER 2 MSB VARIATION PARAMETER 2 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		46	2	00-7F 00-7F	VARIATION PARAMETER 3 MSB VARIATION PARAMETER 3 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		48	2	00-7F 00-7F	VARIATION PARAMETER 4 MSB VARIATION PARAMETER 4 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		4A	2	00-7F 00-7F	VARIATION PARAMETER 5 MSB VARIATION PARAMETER 5 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		4C	2	00-7F 00-7F	VARIATION PARAMETER 6 MSB VARIATION PARAMETER 6 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		4E	2	00-7F 00-7F	VARIATION PARAMETER 7 MSB VARIATION PARAMETER 7 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		50	2	00-7F 00-7F	VARIATION PARAMETER 8 MSB VARIATION PARAMETER 8 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		52	2	00-7F 00-7F	VARIATION PARAMETER 9 MSB VARIATION PARAMETER 9 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		54	2	00-7F 00-7F	VARIATION PARAMETER 10 MSB VARIATION PARAMETER 10 LSB	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		56	1	00-7F	VARIATION RETURN	-∞dB…0dB…+6dB (0…64…127)	40	○	×	×	×	×
		57	1	01-7F	VARIATION PAN	L63…C…R63	40	○	×	×	×	×
		58	1	00-7F	SEND VARIATION TO REVERB	-∞dB…0dB…+6dB (0…64…127)	00	○	×	×	×	×
		59	1	00-7F	SEND VARIATION TO CHORUS	-∞dB…0dB…+6dB (0…64…127)	00	○	×	×	×	×
		5A	1	00-01	VARIATION CONNECTION	INSERTION, SYSTEM	00	○	×	×	×	×
		5B	1	00-7F	VARIATION PART NUMBER	Reception: Part1…16 (0…15) Transmission: Part1…16 (0…15) AD (64) OFF (127)	7F	○	×	×	×	×
		5C	1	00-7F	MW VARIATION CONTROL DEPTH	-64…0…+63	40	○	×	×	×	×
		5D	1	00-7F	BEND VARIATION CONTROL DEPTH	-64…0…+63	40	○	×	×	×	×
		5E	1	00-7F	CAT VARIATION CONTROL DEPTH	-64…0…+63	40	○	×	×	×	×
		5F	1	00-7F	AC1 VARIATION CONTROL DEPTH	-64…0…+63	40	○	×	×	×	×
		60	1	00-7F	AC2 VARIATION CONTROL DEPTH	-64…0…+63	40	○	×	×	×	×
TOTAL SIZE			21									

02	01	70	1	00-7F	VARIATION PARAMETER 11	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		71	1	00-7F	VARIATION PARAMETER 12	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		72	1	00-7F	VARIATION PARAMETER 13	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		73	1	00-7F	VARIATION PARAMETER 14	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		74	1	00-7F	VARIATION PARAMETER 15	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
		75	1	00-7F	VARIATION PARAMETER 16	Refer to Effect Parameter List	Depends on Variation Type	○	×	×	×	×
TOTAL SIZE			06									

■ MIDI Parameter Change Table (MULTI EQ)

Address (H)			Size (H)	Data (H)	Parameter	Description	[MIDI (Silent)] MIDI Reception: Song Part	MIDI Reception: Piano Playback Channel	MIDI Transmission: Panel Operation	MIDI Transmission: Song Playback	MIDI Transmission: MIDI Input
02	40	00	1	00-04	EQ TYPE	flat, jazz, pops, rock, classic	×	×	×	×	×
		01	1	34-4C	EQ GAIN1	-12…0…+12 [dB]	×	×	×	×	×
		02	1	04-28	EQ FREQUENCY1	32…2.0k [Hz]	×	×	×	×	×
		03	1	01-78	EQ Q1	0.1…12.0	×	×	×	×	×
		04	1	00-01	EQ SHAPE1	shelving, peaking	×	×	×	×	×
		05	1	34-4C	EQ GAIN2	-12…0…+12 [dB]	×	×	×	×	×
		06	1	0E-36	EQ FREQUENCY2	100…10.0k [Hz]	×	×	×	×	×
		07	1	01-78	EQ Q2	0.1…12.0	×	×	×	×	×
		08	1		NOT USED		—	—	—	—	—
		09	1	34-4C	EQ GAIN3	-12…0…+12 [dB]	×	×	×	×	×
		0A	1	0E-36	EQ FREQUENCY3	100…10.0k [Hz]	×	×	×	×	×
		0B	1	01-78	EQ Q3	0.1…12.0	×	×	×	×	×
		0C	1		NOT USED		—	—	—	—	—
		0D	1	34-4C	EQ GAIN4	-12…0…+12 [dB]	×	×	×	×	×
		0E	1	0E-36	EQ FREQUENCY4	100…10.0k [Hz]	×	×	×	×	×
		0F	1	01-78	EQ Q4	0.1…12.0	×	×	×	×	×
		10	1		NOT USED		—	—	—	—	—
		11	1	34-4C	EQ GAIN5	-12…0…+12 [dB]	×	×	×	×	×
		12	1	1C-3A	EQ FREQUENCY5	0.5k…16.0k [Hz]	×	×	×	×	×
		13	1	01-78	EQ Q5	0.1…12.0	×	×	×	×	×
		14	1	00-01	EQ SHAPE5	shelving, peaking	×	×	×	×	×
TOTAL SIZE			15								

* The MULTI EQ parameter cannot be reset to its factory setting with XG SYSTEM on.

■ MIDI Parameter Change Table (EFFECT2)

Address (H)			Size (H)	Data (H)	Parameter	Description	[MIDI (Silent)] MIDI Reception: Song Part	MIDI Reception: Piano Playback Channel	MIDI Transmission: Panel Operation	MIDI Transmission: Song Playback	MIDI Transmission: MIDI Input
03	n	00	2	00-7F 00-7F	INSERTION EFFECT TYPE MSB INSERTION EFFECT TYPE LSB	Refer to Effect Parameter List		×	×	×	×
		02	1	00-7F	INSERTION EFFECT PARAMETER 1	Refer to Effect Parameter List		×	×	×	×
		03	1	00-7F	INSERTION EFFECT PARAMETER 2	Refer to Effect Parameter List		×	×	×	×
		04	1	00-7F	INSERTION EFFECT PARAMETER 3	Refer to Effect Parameter List		×	×	×	×
		05	1	00-7F	INSERTION EFFECT PARAMETER 4	Refer to Effect Parameter List		×	×	×	×
		06	1	00-7F	INSERTION EFFECT PARAMETER 5	Refer to Effect Parameter List		×	×	×	×
		07	1	00-7F	INSERTION EFFECT PARAMETER 6	Refer to Effect Parameter List		×	×	×	×
		08	1	00-7F	INSERTION EFFECT PARAMETER 7	Refer to Effect Parameter List		×	×	×	×
		09	1	00-7F	INSERTION EFFECT PARAMETER 8	Refer to Effect Parameter List		×	×	×	×
		0A	1	00-7F	INSERTION EFFECT PARAMETER 9	Refer to Effect Parameter List		×	×	×	×
		0B	1	00-7F	INSERTION EFFECT PARAMETER 10	Refer to Effect Parameter List		×	×	×	×
		0C	1	00-7F	INSERTION EFFECT PART NUMBER	Reception: Part1…16 (0…15) Transmission: Part1…16 (0…15) AD (64) OFF (127)		×	×	×	×
		0D	1	00-7F	MW INSERTION CONTROL DEPTH	-64…0…+63		×	×	×	×
		0E	1	00-7F	BEND INSERTION CONTROL DEPTH	-64…0…+63		×	×	×	×
		0F	1	00-7F	CAT INSERTION CONTROL DEPTH	-64…0…+63		×	×	×	×
		10	1	00-7F	AC1 INSERTION CONTROL DEPTH	-64…0…+63		×	×	×	×
		11	1	00-7F	AC2 INSERTION CONTROL DEPTH	-64…0…+63		×	×	×	×
TOTAL SIZE			12								
		20	1	00-7F	INSERTION EFFECT PARAMETER 11	Refer to Effect Parameter List		×	×	×	×
		21	1	00-7F	INSERTION EFFECT PARAMETER 12	Refer to Effect Parameter List		×	×	×	×
		22	1	00-7F	INSERTION EFFECT PARAMETER 13	Refer to Effect Parameter List		×	×	×	×
		23	1	00-7F	INSERTION EFFECT PARAMETER 14	Refer to Effect Parameter List		×	×	×	×
		24	1	00-7F	INSERTION EFFECT PARAMETER 15	Refer to Effect Parameter List		×	×	×	×
		25	1	00-7F	INSERTION EFFECT PARAMETER 16	Refer to Effect Parameter List		×	×	×	×
TOTAL SIZE			6								
		30	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 1 MSB INSERTION EFFECT PARAMETER 1 LSB	Refer to Effect Parameter List		×	×	×	×
		32	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 2 MSB INSERTION EFFECT PARAMETER 2 LSB	Refer to Effect Parameter List		×	×	×	×
		34	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 3 MSB INSERTION EFFECT PARAMETER 3 LSB	Refer to Effect Parameter List		×	×	×	×
		36	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 4 MSB INSERTION EFFECT PARAMETER 4 LSB	Refer to Effect Parameter List		×	×	×	×
		38	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 5 MSB INSERTION EFFECT PARAMETER 5 LSB	Refer to Effect Parameter List		×	×	×	×
		3A	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 6 MSB INSERTION EFFECT PARAMETER 6 LSB	Refer to Effect Parameter List		×	×	×	×
		3C	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 7 MSB INSERTION EFFECT PARAMETER 7 LSB	Refer to Effect Parameter List		×	×	×	×
		3E	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 8 MSB INSERTION EFFECT PARAMETER 8 LSB	Refer to Effect Parameter List		×	×	×	×
		40	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 9 MSB INSERTION EFFECT PARAMETER 9 LSB	Refer to Effect Parameter List		×	×	×	×
		42	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 10 MSB INSERTION EFFECT PARAMETER 10 LSB	Refer to Effect Parameter List		×	×	×	×
TOTAL SIZE			14								

* The EFFECT2 parameter cannot be reset to its factory setting with XG SYSTEM on.

The second byte of the address is considered as an insertion effect number.
n: insertion effect number

The insertion effect number range is from 0 to 1. Values outside the range are handled as unknown and ignored.
For effect types that do not require MSB, the parameters for address 02-0B will be received and the parameters for address 30-42 will not be received.
For effect types that require MSB, the parameters for address 30-42 will be received and the parameters for address 02-0B will not be received.
When bulk dumps that include effect type data are transmitted, the parameters for address 02-0B will always be transmitted. However, for effect types that require MSB, the parameters for address 02-0B will not be received when the bulk dump is received.

■ MIDI Parameter Change Table (MULTI PART)

[MIDI (Silent)]

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception		MIDI Transmission		
								Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
08	nn	00	1	00-20	NOT USED			×	×	×	×	×
		01	1	00-7F	BANK SELECT MSB	0…127	part10=7F, other parts=00	○	○	×	×	×
		02	1	00-7F	BANK SELECT LSB	0…127	00	○	○	×	×	×
		03	1	00-7F	PROGRAM NUMBER	1…128	00	○	○	×	×	×
		04	1	00-0F, 7F	Rcv CHANNEL	1…16, OFF	Part No.	○	×	×	×	×
		05	1	00-01	MONO/POLY MODE	MONO, POLY	01	○	×	×	×	×
		06	1	00-02	SAME NOTE NUMBER KEY ON ASSIGN	SINGLE, MULTI, INST (for Drum)	01	○	×	×	×	×
		07	1	00-03	PART MODE	NORMAL, DRUM, DRUMS1…2	part10=02, other parts=00	○	×	×	×	×
		08	1	28-58	NOTE SHIFT	-24…0…+24 [semitones]	40	○	×	×	×	×
		09	2	00-0F 00-0F	DETUNE	-12.8…0…+12.7 [Hz] 1st bit3-0→bit7-4 2nd bit3-0→bit3-0	08 00	○	×	×	×	×
		0B	1	00-7F	VOLUME	0…127	64	○	×	×	×	×
		0C	1	00-7F	VELOCITY SENSE DEPTH	0…127	40	○	×	×	×	×
		0D	1	00-7F	VELOCITY SENSE OFFSET	0…127	40	○	×	×	×	×
		0E	1	00-7F	PAN	RND, L63…C…R63	40	○	×	×	×	×
		0F	1	00-7F	NOTE LIMIT LOW	C-2…G8	00	○	×	×	×	×
		10	1	00-7F	NOTE LIMIT HIGH	C-2…G8	7F	○	×	×	×	×
		11	1	00-7F	DRY LEVEL	0…127	7F	○	×	×	×	×
		12	1	00-7F	CHORUS SEND	0…127	00	○	×	×	×	×
		13	1	00-7F	REVERB SEND	0…127	28	○	×	×	×	×
		14	1	00-7F	VARIATION SEND	0…127	00	○	×	×	×	×
		15	1	00-7F	VIBRATO RATE	-64…0…+63	40	○	×	×	×	×
		16	1	00-7F	VIBRATO DEPTH	-64…0…+63	40	○	×	×	×	×
		17	1	00-7F	VIBRATO DELAY	-64…0…+63	40	○	×	×	×	×
		18	1	00-7F	FILTER CUTOFF FREQUENCY	-64…0…+63	40	○	×	×	×	×
		19	1	00-7F	FILTER RESONANCE	-64…0…+63	40	○	×	×	×	×
		1A	1	00-7F	EG ATTACK TIME	-64…0…+63	40	○	×	×	×	×
		1B	1	00-7F	EG DECAY TIME	-64…0…+63	40	○	×	×	×	×
		1C	1	00-7F	EG RELEASE TIME	-64…0…+63	40	○	×	×	×	×
		1D	1	28-58	H	-24…0…+24 [semitones]	40	○	×	×	×	×
		1E	1	00-7F	MW LOW PASS FILTER CONTROL	-9600…0…+9450 [cent]	40	○	×	×	×	×
		1F	1	00-7F	MW AMPLITUDE CONTROL	-100…0…+100 [%]	40	○	×	×	×	×
		20	1	00-7F	MW LFO PMOD DEPTH	0…127	0A	○	×	×	×	×
		21	1	00-7F	MW LFO FMOD DEPTH	0…127	00	○	×	×	×	×
		22	1	00-7F	MW LFO AMOD DEPTH	0…127	00	○	×	×	×	×
		23	1	28-58	BEND PITCH CONTROL	-24…0…+24 [semitones]	42	○	×	×	×	×
		24	1	00-7F	BEND LOW PASS FILTER CONTROL	-9600…0…+9450 [cent]	40	○	×	×	×	×
		25	1	00-7F	BEND AMPLITUDE CONTROL	-100…0…+100 [%]	40	○	×	×	×	×
		26	1	00-7F	BEND LFO PMOD DEPTH	0…127	00	○	×	×	×	×
		27	1	00-7F	BEND LFO FMOD DEPTH	0…127	00	○	×	×	×	×
		28	1	00-7F	BEND LFO AMOD DEPTH	0…127	00	○	×	×	×	×
TOTAL SIZE			29									
		30	1	00-01	Rcv PITCH BEND	OFF, ON	01	○	×	×	×	×
		31	1	00-01	Rcv CH AFTER TOUCH (CAT)	OFF, ON	01	○	×	×	×	×
		32	1	00-01	Rcv PROGRAM CHANGE	OFF, ON	01	○	×	×	×	×
		33	1	00-01	Rcv CONTROL CHANGE	OFF, ON	01	○	×	×	×	×
		34	1	00-01	Rcv POLY AFTER TOUCH (PAT)	OFF, ON	01	○	×	×	×	×
		35	1	00-01	Rcv NOTE MESSAGE	OFF, ON	01	○	×	×	×	×
		36	1	00-01	Rcv RPN	OFF, ON	01	○	×	×	×	×
		37	1	00-01	Rcv NRPN	OFF, ON	XGmode=01, GMmode=00	○	×	×	×	×
		38	1	00-01	Rcv MODULATION	OFF, ON	01	○	×	×	×	×
		39	1	00-01	Rcv VOLUME	OFF, ON	01	○	×	×	×	×
		3A	1	00-01	Rcv PAN	OFF, ON	01	○	×	×	×	×
		3B	1	00-01	Rcv EXPRESSION	OFF, ON	01	○	×	×	×	×
		3C	1	00-01	Rcv HOLD1	OFF, ON	01	○	×	×	×	×
		3D	1	00-01	Rcv PORTAMENTO	OFF, ON	01	○	×	×	×	×
		3E	1	00-01	Rcv SOSTENUTO	OFF, ON	01	○	×	×	×	×
		3F	1	00-01	Rcv SOFT PEDAL	OFF, ON	01	○	×	×	×	×
		40	1	00-01	Rcv BANK SELECT	OFF, ON	01	○	×	×	×	×
		41	1	00-7F	SCALE TUNING C	-63…0…+63 [cent]	40	○	×	×	×	×
		42	1	00-7F	SCALE TUNING C#	-63…0…+63 [cent]	40	○	×	×	×	×
		43	1	00-7F	SCALE TUNING D	-63…0…+63 [cent]	40	○	×	×	×	×
		44	1	00-7F	SCALE TUNING D#	-63…0…+63 [cent]	40	○	×	×	×	×
		45	1	00-7F	SCALE TUNING E	-63…0…+63 [cent]	40	○	×	×	×	×
		46	1	00-7F	SCALE TUNING F	-63…0…+63 [cent]	40	○	×	×	×	×
		47	1	00-7F	SCALE TUNING F#	-63…0…+63 [cent]	40	○	×	×	×	×
		48	1	00-7F	SCALE TUNING G	-63…0…+63 [cent]	40	○	×	×	×	×
		49	1	00-7F	SCALE TUNING G#	-63…0…+63 [cent]	40	○	×	×	×	×
		4A	1	00-7F	SCALE TUNING A	-63…0…+63 [cent]	40	○	×	×	×	×
		4B	1	00-7F	SCALE TUNING A#	-63…0…+63 [cent]	40	○	×	×	×	×
		4C	1	00-7F	SCALE TUNING B	-63…0…+63 [cent]	40	○	×	×	×	×
		4D	1	28-58	CAT PITCH CONTROL	-24…0…+24 [semitones]	40	○	×	×	×	×
		4E	1	00-7F	CAT LOW PASS FILTER CONTROL	-9600…0…+9450 [cent]	40	○	×	×	×	×
		4F	1	00-7F	CAT AMPLITUDE CONTROL	-100…0…+100 [%]	40	○	×	×	×	×
		50	1	00-7F	CAT LFO PMOD DEPTH	0…127	00	○	×	×	×	×
		51	1	00-7F	CAT LFO FMOD DEPTH	0…127	00	○	×	×	×	×
		52	1	00-7F	CAT LFO AMOD DEPTH	0…127	00	○	×	×	×	×

[MIDI (Silent)]

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception		MIDI Transmission		
								Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
		53	1	28-58	PAT PITCH CONTROL	-24…0…+24 [semitones]	40	○	×	×	×	×
		54	1	00-7F	PAT LOW PASS FILTER CONTROL	-9600…0…+9450 [cent]	40	○	×	×	×	×
		55	1	00-7F	PAT AMPLITUDE CONTROL	-100…0…+100 [%]	40	○	×	×	×	×
		56	1	00-7F	PAT LFO PMOD DEPTH	0…127	00	○	×	×	×	×
		57	1	00-7F	PAT LFO FMOD DEPTH	0…127	00	○	×	×	×	×
		58	1	00-7F	PAT LFO AMOD DEPTH	0…127	00	○	×	×	×	×
		59	1	00-5F	AC1 CONTROLLER NUMBER	0…95	10	○	×	×	×	×
		5A	1	28-58	AC1 PITCH CONTROL	-24…0…+24 [semitones]	40	○	×	×	×	×
		5B	1	00-7F	AC1 LOW PASS FILTER CONTROL	-9600…0…+9450 [cent]	40	○	×	×	×	×
		5C	1	00-7F	AC1 AMPLITUDE CONTROL	-100…0…+100 [%]	40	○	×	×	×	×
		5D	1	00-7F	AC1 LFO PMOD DEPTH	0…127	00	○	×	×	×	×
		5E	1	00-7F	AC1 LFO FMOD DEPTH	0…127	00	○	×	×	×	×
		5F	1	00-7F	AC1 LFO AMOD DEPTH	0…127	00	○	×	×	×	×
		60	1	00-5F	AC2 CONTROLLER NUMBER	0…95	11	○	×	×	×	×
		61	1	28-58	AC2 PITCH CONTROL	-24…0…+24 [semitones]	40	○	×	×	×	×
		62	1	00-7F	AC2 LOW PASS FILTER CONTROL	-9600…0…+9450 [cent]	40	○	×	×	×	×
		63	1	00-7F	AC2 AMPLITUDE CONTROL	-100…0…+100 [%]	40	○	×	×	×	×
		64	1	00-7F	AC2 LFO PMOD DEPTH	0…127	00	○	×	×	×	×
		65	1	00-7F	AC2 LFO FMOD DEPTH	0…127	00	○	×	×	×	×
		66	1	00-7F	AC2 LFO AMOD DEPTH	0…127	00	○	×	×	×	×
		67	1	00-01	PORTAMENTO SWITCH	OFF, ON	00	○	×	×	×	×
		68	1	00-7F	PORTAMENTO TIME	0…127	00	○	×	×	×	×
		69	1	00-7F	PITCH EG INITIAL LEVEL	-64…0…+63	40	○	×	×	×	×
		6A	1	00-7F	PITCH EG ATTACK TIME	-64…0…+63	40	○	×	×	×	×
		6B	1	00-7F	PITCH EG RELEASE LEVEL	-64…0…+63	40	○	×	×	×	×
		6C	1	00-7F	PITCH EG RELEASE TIME	-64…0…+63	40	○	×	×	×	×
		6D	1	01-7F	VELOCITY LIMIT LOW	1…127	01	○	×	×	×	×
		6E	1	01-7F	VELOCITY LIMIT HIGH	1…127	7F	○	×	×	×	×
TOTAL SIZE			3F									
		70	1		NOT USED		---	—	—	—	—	—
		71	1		NOT USED		---	—	—	—	—	—
		72	1	00-7F	EQ BASS GAIN	-12dB…+12dB	40	×	×	×	×	×
		73	1	00-7F	EQ TREBLE GAIN	-12dB…+12dB	40	×	×	×	×	×
TOTAL SIZE			04									
		74	1		NOT USED		---	—	—	—	—	—
		75	1		NOT USED		---	—	—	—	—	—
		76	1	04-28	EQ BASS FREQUENCY	32…2.0k [Hz]	0C	×	×	×	×	×
		77	1	1C-3A	EQ TREBLE FREQUENCY	500…16.0k [Hz]	36	×	×	×	×	×
		78	1		NOT USED		---	—	—	—	—	—
		79	1		NOT USED		---	—	—	—	—	—
		7A	1		NOT USED		---	—	—	—	—	—
		7B	1		NOT USED		---	—	—	—	—	—
		7C	1		NOT USED		---	—	—	—	—	—
		7D	1		NOT USED		---	—	—	—	—	—
		7E	1		NOT USED		---	—	—	—	—	—
		7F	1		NOT USED		---	—	—	—	—	—
TOTAL SIZE			0C									
0A	nn	40	1	00-7F	MW OFFSET LEVEL CONTROL	-100 - 100 [%]	40	○	×	×	×	×
		41	1	00-7F	BEND OFFSET LEVEL CONTROL	-100 - 100 [%]	40	○	×	×	×	×
		42	1	00-7F	CAT OFFSET LEVEL CONTROL	-100 - 100 [%]	40	○	×	×	×	×
		43	1	00-7F	PAT OFFSET LEVEL CONTROL	-100 - 100 [%]	40	○	×	×	×	×
		44	1	00-7F	AC1 OFFSET LEVEL CONTROL	-100 - 100 [%]	40	○	×	×	×	×
		45	1	00-7F	AC2 OFFSET LEVEL CONTROL	-100 - 100 [%]	40	○	×	×	×	×
TOTAL SIZE			06									

nn: part number

If there is a Drum voice assigned to the part, the following parameters are ineffective.
- BANK SELECT LSB
- PORTAMENTO
- MONO/POLY
- SCALE TUNING
- POLY AFTER TOUCH
- PITCH EG

■ MIDI Parameter Change Table (DRUM SETUP)

[MIDI (Silent)]

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception		MIDI Transmission		
								Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
3n	rr	00	1	00-7F	PITCH COARSE	-64…0…+63	40	○	×	×	×	×
		01	1	00-7F	PITCH FINE	-64…0…+63 [cent]	40	○	×	×	×	×
		02	1	00-7F	LEVEL	0…127	Depends on the note	○	×	×	×	×
		03	1	00-7F	ALTERNATE GROUP	OFF, 1…127	Depends on the note	○	×	×	×	×
		04	1	00-7F	PAN	RND, L63…C…R63	Depends on the note	○	×	×	×	×
		05	1	00-7F	REVERB SEND	0…127	Depends on the note	○	×	×	×	×
		06	1	00-7F	CHORUS SEND	0…127	Depends on the note	○	×	×	×	×
		07	1	00-7F	VARIATION SEND	0…127	7F	○	×	×	×	×
		08	1	00-01	KEY ASSIGN	SINGLE, MULTI	00	○	×	×	×	×
		09	1	00-01	Rcv NOTE OFF	OFF, ON	Depends on the note	○	×	×	×	×
		0A	1	00-01	Rcv NOTE ON	OFF, ON	01	○	×	×	×	×
		0B	1	00-7F	LOW PASS FILTER CUTOFF FREQUENCY	-64…0…+63	40	○	×	×	×	×
		0C	1	00-7F	LOW PASS FILTER RESONANCE	-64…0…+63	40	○	×	×	×	×
		0D	1	00-7F	EG ATTACK RATE	-64…0…+63	40	○	×	×	×	×
		0E	1	00-7F	EG DECAY1 RATE	-64…0…+63	40	○	×	×	×	×
		0F	1	00-7F	EG DECAY2 RATE	-64…0…+63	40	○	×	×	×	×
TOTAL SIZE			10									

		20	1	00-7F	EQ BASS GAIN	-12…+12 [dB]	40	×	×	×	×	×
		21	1	00-7F	EQ TREBLE GAIN	-12…+12 [dB]	40	×	×	×	×	×
		22	1		NOT USED		—	—	—	—	—	—
		23	1		NOT USED		—	—	—	—	—	—
		24	1	04-28	EQ BASS FREQUENCY	32…2.0k [Hz]	0C	×	×	×	×	×
		25	1	1C-3A	EQ TREBLE FREQUENCY	500…16.0k [Hz]	36	×	×	×	×	×
		26	1		NOT USED		—	—	—	—	—	—
		27	1		NOT USED		—	—	—	—	—	—
		28	1		NOT USED		—	—	—	—	—	—
		29	1		NOT USED		—	—	—	—	—	—
		2A	1		NOT USED		—	—	—	—	—	—
		2B	1		NOT USED		—	—	—	—	—	—
		2C	1		NOT USED		—	—	—	—	—	—
		2D	1		NOT USED		—	—	—	—	—	—
TOTAL SIZE			0E									

n: drum setup number (0-1)
rr: note number (0D-5B)

In the following cases, the unit will initialize all drum setups.
- XG SYSTEM ON received
- GM SYSTEM ON received
- GM LEVEL 2 SYSTEM ON received
- GS RESET received
- DRUM SETUP RESET received (only when in XG mode)

When a part to which a drum setup is assigned receives a program change, the assigned drum setup will be initialized.
If the same drum setup is assigned to two or more parts, changes in drum setup parameters (including program changes) will apply to all parts to which it is assigned.

System Exclusive Messages (1)

* Not received when Receive System Exclusive Message is set to off.
* Not transmitted when Transmit System Exclusive Message is set to off.

■ System Exclusive Messages (Universal Non Realtime Messages)

[MIDI (Silent)]

MIDI Event	Data Format	MIDI Reception		MIDI Transmission		
		Song Part	Piano Playback Channel	Panel Operation	Song Playback	MIDI Input
GM1 System On [GM1] [GM2]	F0 7E XN 09 01 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored 00001001 09 = Sub-ID #1=General MIDI Message 00000001 01 = Sub-ID #2=General MIDI On 11110111 F7 = End of Exclusive	○	×	×	×	×

System Exclusive Messages (2)

■ System Exclusive Messages (XG)

[MIDI (Silent)]

MIDI Event	Data Format	MIDI Reception		MIDI Transmission	
		Song Part	Piano Playback Channel	Panel Operation	Song Playback
XG Parameter Change	F0 43 1n 4C hh mm ll dd … F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0001nnnn 1n = Device Number n=always 0 (when transmit), n=0-F (when recieve) 01001100 4C = Model ID 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 0lllllll ll = Address Low 0ddddddd dd = Data … … 11110111 F7 = End of Exclusive	○ Refer to Parameter Change Table		×	×
XG Bulk Dump	F0 43 0n 4C aa bb hh mm ll dd … dd cc F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0000nnnn 0n = Device Number n=always 0 (when transmit), n=0-F (when recieve) 01001100 4C = Model ID 0aaaaaaa aa = Byte Count MSB 0bbbbbbb bb = Byte Count LSB 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 0lllllll ll = Address Low 0ddddddd dd = Data : : 0ddddddd dd = Data 0ccccccc cc = Checksum 11110111 F7 = End of Exclusive	○ Refer to Parameter Change Table		×	×
XG Parameter Request	F0 43 3n 4C hh ll F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0011nnnn 3n = Device Number n=always 0 (when transmit), n=0-F (when recieve) 01001100 4C = Model ID 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 0lllllll ll = Address Low 11110111 F7 = End of Exclusive	○ Refer to Parameter Change Table		×	×
XG Dump Request	F0 43 2n 4C hh mm ll F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0010nnnn 2n = Device Number n=always 0 (when transmit), n=0-F (when recieve) 01001100 4C = Model ID 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 0lllllll ll = Address Low 11110111 F7 = End of Exclusive	○ Refer to Parameter Change Table		×	×

■ System Exclusive Messages (Others)

[MIDI (Silent)]

MIDI Event	Data Format	MIDI Reception		MIDI Transmission	
		Song Part	Piano Playback Channel	Panel Operation	Song Playback
MIDI Master Tuning	F0 43 1n 27 30 00 00 mm ll cc F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0001nnnn 1n n= always 0(when transmit), n=0-F(when receive) 00100111 27 = Model ID of TG100 00110000 30 = Address High 00000000 00 = Address Mid 00000000 00 = Address Low 0000mmmm 0m = Master Tune MSB 0000llll 0l = Master Tune LSB 0ccccccc cc = don't care 11110111 F7 = End of Exclusive	×	×	×	×

■ System Exclusive Messages (Preset Voice)

[MIDI (Silent)]

MIDI Event	Data Format	MIDI Reception		MIDI Transmission	
		Song Part	Piano Playback Channel	Panel Operation	Song Playback
String Resonance Depth	F0 43 73 01 50 11 0n 02 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00-0F) 00000010 02 = SubID (String Resonance Depth) 0ddddddd dd = Depth (00-48) 11110111 F7 = End of Exclusive	○	×	×	×
Sustain Sample Depth	F0 43 73 01 50 11 0n 03 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00-0F) 00000011 03 = SubID (Sustain Sample Depth) 0ddddddd dd = Depth (00-48) 11110111 F7 = End of Exclusive	○	×	×	×
Key Off Sampling Depth	F0 43 73 01 50 11 0n 04 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00-0F) 00000100 04 = SubID (Key Off Sampling Depth) 0ddddddd dd = Depth (00-50) 11110111 F7 = End of Exclusive	○	×	×	×
Soft Pedal Depth	F0 43 73 01 50 11 0n 05 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00-0F) 00000101 05 = SubID (Soft Pedal Depth) 0ddddddd dd = Depth (00-7F) 11110111 F7 = End of Exclusive	○	×	×	×

* For each depth value, the rest value is 40H = voice parameter.

MEMO

MIDI IMPLEMENTATION CHART

Yamaha Disklavier
Model: DKC-900

Date: 01-AUG-2019
Version: 1.00

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default	1-16	1-16	Memorized
	Changed	1-16	1-16	
Mode	Default	3	3	
	Messages	×	3, 4 (m=1) *1, *2	
	Altered	**********	×	
Note Number		○ 21-108	0-127	
	: True Note	**********	0-127	
Velocity	Note ON	○ 9nH, v=1-127	○ v=1-127	
	Note OFF	○ 8nH, v=0-127	○	
After Touch	Key's	○ *4	×	
	Ch's	×	×	
Pitch Bend		×	○ 0-24 semi *1	
Control Change	0, 32	×	○ *1	Bank Select
	7, 11	×	○	
	1, 5, 10	×	○ *1	
	6, 38	×	○ *1	Data Entry
	64	○	○	Hold1 (Sustain)
	65	×	○ *1	Portamento
	66	○ *3	○ *1	Sostenuto
	67	○	○	Soft (Shift) Pedal
	71-74, 84	×	○ *1	
	91, 93, 94	×	○ *1	Effect Depth
	96-101	×	○ *1	
Prog Change		×	○ 0-127	
	: True #	**********		
System Exclusive		○	○	
Common	: Song Pos	×	×	
	: Song Sel	×	×	
	: Tune	×	×	
System Real Time	: Clock	×	×	
	: Commands	×	×	
Aux Messages	: All Sound OFF	○	○ (120, 126, 127)	
	: Reset All Cntrls	×	○ (121)	
	: Local ON/OFF	×	○	
	: All Notes OFF	○	○ (123-125)	
	: Active Sense	○	○	
	: Reset	×	×	
Notes	*1 = Only ESBL Part can recognized. *2 = m is always treated as 1 regardless of value. *3 = Transmit if this model has a Sostenuto Pedal. *4 = Applying further pressure on the key does not output key aftertouch information.			

Mode 1 : OMNI ON. POLY Mode 2 : OMNI ON. MONO ○ : YES
Mode 3 : OMNI OFF. POLY Mode 4 : OMNI OFF. MONO × : NO

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