KX25/KX49/KX61 Owner's Manual Cover(dummy)

2007/07/12 v010

SPECIAL MESSAGE SECTION

This product utilizes batteries or an external power supply (adapter). DO NOT connect this product to any power supply or adapter other than one described in the manual, on the name plate, or specifically recommended by Yamaha.

WARNING: Do not place this product in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! If you must use an extension cord, the minimum wire size for a 25' cord (or less) is 18 AWG. NOTE: The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.

This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by Yamaha. If a cart, etc., is used, please observe all safety markings and instructions that accompany the accessory product.

SPECIFICATIONS SUBJECT TO CHANGE:

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

This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. DO NOT operate for long periods of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.

IMPORTANT: The louder the sound, the shorter the time period before damage occurs.

Some Yamaha products may have benches and / or accessory mounting fixtures that are either supplied with the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured BEFORE using.

Benches supplied by Yamaha are designed for seating only. No other uses are recommended.

NOTICE:

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

ENVIRONMENTAL ISSUES:

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

Battery Notice:

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

This product may also use "household" type batteries. Some of these may be rechargeable. Make sure that the battery being charged is a rechargeable type and that the charger is intended for the battery being charged.

When installing batteries, do not mix batteries with new, or with batteries of a different type. Batteries MUST be installed correctly. Mismatches or incorrect installation may result in overheating and battery case rupture.

Warning:

Do not attempt to disassemble, or incinerate any battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by the laws in your area. Note: Check with any retailer of household type batteries in your area for battery disposal information

Disposal Notice:

Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc. If your dealer is unable to assist you, please contact Yamaha directly.

NAME PLATE LOCATION:

The name plate is located on the bottom of the product. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.

Model			

Serial No.

Purchase Date

PLEASE KEEP THIS MANUAL

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.

(class B)

COMPLIANCE INFORMATION STATEMENT (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: Electronic Keyboard
Model Name: KX25/KX49/KX61

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.

See user manual instructions if interference to radio reception is suspected.

(FCC DoC)

OBSERVERA!

Apparaten kopplas inte ur växelströmskällan (nätet) så länge som den ar ansluten till vägguttaget, även om själva apparaten har stängts av.

ADVARSEL: Netspæendingen til dette apparat er IKKE afbrudt, sålæenge netledningen siddr i en stikkontakt, som er t endt — også selvom der or slukket på apparatets afbryder.

VAROITUS: Laitteen toisiopiiriin kytketty käyttökytkin ei irroita koko laitetta verkosta.

(standby)

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

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

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

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



WARNING

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

Power supply/AC power adaptor

- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Use the specified adaptor (PA-3C, PA-130 or an equivalent recommended by Yamaha) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.
- Do not place the AC adaptor cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.

Do not open

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

Water warning

- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings. 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.

Fire warning

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

If you notice any abnormality

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



CAUTION

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

Power supply/AC power adaptor

- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord.
- Unplug the AC power adaptor when not using the instrument, or during electrical storms.
- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.

Location

- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not use the instrument in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the instrument, TV, or radio may generate noise.
- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected adaptor and other cables.

(3)-11

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. Also, be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.

Maintenance

 When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

Handling caution

• Do not insert a finger or hand in any gaps on the instrument.

- Never insert or drop paper, metallic, or other objects into the gaps on the panel or keyboard. If this happens, turn off the power immediately and unplug the power cord from the AC outlet. Then have the instrument inspected by qualified Yamaha service personnel.
- Do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Do not use the instrument/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.

Saving data

Saving and backing up the created Control Template

 The Control Template created by using a computer or via the panel operation of the KX will be stored on internal memory of the KX.
 Stored data may be lost due to malfunction or incorrect operation.
 Save important data to a computer by using the special Editor software "KX Editor" (page 6).

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.

Even when the power switch is in the "STANDBY" position, electricity is still flowing to the instrument at the minimum level. When you are not using the instrument for a long time, make sure you unplug the AC power adaptor from the wall AC outlet.

SPECIAL NOTICES

- The USB-MIDI Driver, Extensions for Steinberg DAW, the corresponding manuals and the copryrights under exclusive ownership by Yamaha Corporation.
- The software included in the Cubase Al4 DVD-ROM and the copyrights thereof are under exclusive ownership by Steinberg Media Technologies GmbH.
 Note that Yamaha does not offer technical support for the DAW software in the DVD-ROM.
- The VSTi tools included in the "VSTi" folder of the TOOLS for KX DVD-ROM and the copyrights thereof are under exclusive ownership by the respective
 companies. Note that Yamaha does not offer technical support for the DAW software in the DVD-ROM.
- Use of the software and this manual is governed by the license agreement which the purchaser fully agrees to upon breaking the seal of the software packaging. (Please read carefully the Software Licensing Agreement at the end of this manual before installing the application.)
- Copying of the software or reproduction of this manual in whole or in part by any means is expressly forbidden without the written consent of the
 manufacturer.
- Yamaha makes no representations or warranties with regard to the use of the software and documentation and cannot be held responsible for the results of
 the use of this manual and the software.
- This disk containing the software is not meant for use with an audio/visual system (CD player, DVD player, etc.). Do not attempt to use the disk on equipment other than a computer.
- Future upgrades of application and system software and any changes in specifications and functions will be announced separately on Yamaha site.
- The screen displays as illustrated in this manual are for instructional purposes, and may appear somewhat different from the screens which appear on your computer.
- This product incorporates and bundles computer programs and contents in which Yamaha owns copyrights or with respect to which it has license to use
 others' copyrights. Such copyrighted materials include, without limitation, all computer software, style files, MIDI files, WAVE data, musical scores and
 sound recordings. Any unauthorized use of such programs and contents outside of personal use is not permitted under relevant laws. Any violation of
 copyright has legal consequences. DON'T MAKE, DISTRIBUTE OR USE ILLEGAL COPIES.
- Copying of the commercially available musical data including but not limited to MIDI data and/or audio data is strictly prohibited except for your personal use.
- Windows is a registered trademark of Microsoft® Corporation in the United States and other countries.
- Apple, Mac and Macintosh are trademarks of Apple Inc., registered in the U.S. and other countries.

The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

Introduction

Thank you for purchasing the Yamaha KX25 / KX49 / KX61 USB KEYBOARD STUDIO.

The package includes the MIDI keyboard for controlling a computer via USB and the DAW application software, Cubase Al4. Simply connecting a computer to the KX via a USB cable port enables you to configure an ideal environment for music production.

In order to take full advantage of the KX's superior functionality and enjoy years of trouble-free use, please read this manual before you begin using the product. Also, keep this book in a safe place for future reference.

Features

Link with Cubase

This keyboard is equipped with the Link functions matching Cubase 4 / Studio 4 / AI 4, letting you produce music with tremendous efficiency.

Track Operations of the VSTi (VST instrument)

From the KX panel, you can perform the VSTi operations such as track creation and Voice selection.

Four Knobs letting you control various parameters

This keyboard is equipped with the four knobs useful for control the parameters of the VSTi software synthesizer. Just by selecting the Control Template for the software synthesizer you want to control, you can use the knobs to control parameters of the software synthesizer. The KX provides 30 preset Control Templates for various software synthesizers, which can be edited or customized to assign your favorite functions to the knobs.

Powerful Arpeggio feature

The KX features the Arpeggiator, letting you play various phrases depending on the notes you pressed. You can easily call up various phrases such as the analog synthesizer-like one, backing performance of guitar or bass and drum/percussion rhythm pattern.

USB bus-powered supported

The KX can be used as a bus-powered type device (powered by the host computer via the USB connector). Simply connecting a computer to the KX via a USB cable supplies the power from the computer to the KX.

Included Accessories

- AC power adaptor (PA-3C, PA-130, or an equivalent)*
- Owner's Manual (this book)
- USB cable (black, 1.5m)
- Cubase AI4 DVD-ROM
- TOOLs for KX DVD-ROM
- * May not be included depending on your particular area. Please check with your Yamaha dealer.

About the KX Editor

The KX Editor is the application tool of the computer and used for editing various settings for the KX instrument. This special software can be downloaded from Yamaha site.

About the Disks Included in the Package

The software on these disks is for the Windows XP and Mac OSX 10.4 or later.

Disk Installation Procedure

Before breaking the seal of the disk's packaging, please read carefully the "TOOLS for KX LICENSE AGREEMENT" and "Cubase AI4 LICENSE AGREEMENT" described at the end of this manual.

- 1. Verify that your system meets the operating requirements of the software by refering to the "System Requirements for software" below.
- Install Cubase Al4, Extensions for Steinberg DAW and USB-MIDI Driver by following the Setup procedure on page 13.



If any of Cubase 4, Cubase Studio 4, and Cubase Al4 has already been installed, install only Extensions for Steinberg DAW and USB-MIDI Driver.

3. Start up the software.

For subsequent operations, refer to the corresponding pages of this manual and the manual for Cubase Al4 (online help/PDF manual).



To view PDF files on Windows, you must install Adobe Reader on your computer. If you do not have Adobe Reader, you can download the application from the Adobe website at the following URL:

http://www.adobe.com

System Requirements for Software

The system requirements below are necessary for using the KX by connecting it to a computer, or for using the included DAW.



\\/:-- al a...a

- · The system requirements below may differ slightly depending on the particular operating system.
- For details on minimum requirements for other DAW software, refer to the respective owner's manual.

Windows		Mac	
OS:	Windows XP Professional/XP Home	OS:	Mac OSX 10.4 or later
	Edition	Computer:	Power Mac G4 1GHz or Core Solo
Computer:	Intel Pentium 1.4 GHz or better		1.5GHz or better
Memory:	512MB	Memory:	512MB
Display		Display	
Resolution:	1024 x 768 pixel	Resolution:	1024 x 768 pixel
Interface:	Equipped with the USB connector	Interface:	Equipped with the USB connector
Hard Disk:	Free disk space of 400 MB or more; high-speed hard disk	Hard Disk:	Free disk space of 400 MB or more; high-speed hard disk
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NOTE A D	VD drive is required for installation.	NOTE A	OVD drive is required for installation.
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Turning the Power On and Off

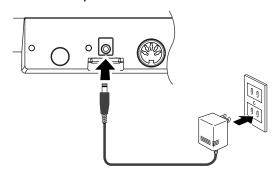
Power Supply

The KX can be powered from one of the following two power supplies.

- Power supply from the AC power adaptor
- Power supply from the connected host computer (USB bus-power)

Connecting the AC Power Adaptor

- Make sure that the STANDBY/ON switch of the KX is in the STANDBY position.
- 2. Connect the plug of the power adaptor to the DC IN terminal on the rear panel.
- 3. Plug the power adaptor into a standard household power outlet.



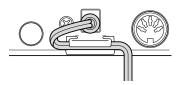
! WARNING

Use only the included power adaptor (PA-3C or PA-130) or an equivalent recommended by Yamaha).
 Use of a different adaptor may result in equipment damage, overheating, or fire. In such cases, the product warranty will be void immediately even within the effective warranty period.

ACAUTION

 Wrap the DC output cable of the adaptor around the cable clip (as shown below) to prevent accidental unplugging of the cable during operation. Avoid tightening the cord more than necessary or pulling on the cord strongly while it is wrapped around the cable clip to prevent wear on the cord or possible breakage of the clip.

KX61



Using the KX as a USB bus-powered device

The KX is the bus-powered type device which can be powered by the host computer connected via a USB cable. In this case, the AC power adaptor is not necessary.

- Make sure that the STANDBY/ON switch of the KX is in the STANDBY position.
- Connect a computer to the USB TO HOST connector of the KX by using a USB cable.
- 3. Start the computer.



- While the KX is turned ON, the computer connected to the KX via USB cannot enter the power-saving mode (such as sleep and suspended) even if you do not operate the computer for a long time. This situation vampires the power of the computer although you do not use the computer. Especially when the computer is powered by the battery (not the power adaptor), make sure that the STANDBY/ON switch of the KX is in the STANDBY position to save the power consumption.
- The USB bus-power function can be used only when connecting the KX to a computer directly without using a hub or connecting the KX to a computer via a self-powered USB hub. This function cannot be used when connecting the KX to a computer via a bus-powered USB hub.
- The USB bus-power function will not work when using the AC adaptor.

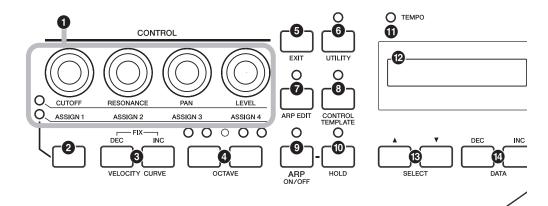
Turning the Power On and Off

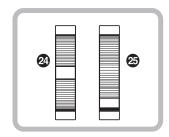
- Turn the power ON by pressing the [STANDBY/ON] switch so that this switch is in the ON position.
- 2. Turn the power off by pressing the [STANDBY/ON] switch again so that this switch is returned to the STANDBY position.

! CAUTION

 Note that a small amount of current continues to flow while the switch is in the STANDBY position. If you do not plan to use the KX again for a long while, be sure to unplug the adaptor from the wall outlet and unplug the USB cable from the KX.

Front and Rear Panels

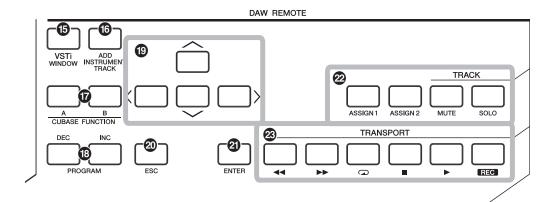


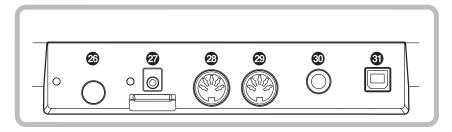


- 2 Knob Functions Select buttonPage 22
 Use this button to select one of the two functions assigned to each knob.
- 3 VELOCITY CURVE [DEC] and [INC] buttonsPage 27
 Use these buttons to select one of the velocity curves of the keyboard.
- OCTAVE buttonsPage 27
 Use these buttons to change the note range of the keyboard by octave.
- **5** [EXIT] buttonPage 26 Press this button to return to the original display.
- **6 [UTILITY] buttonPage 34** Press this button to call up the display which lets you set the system related parameters.
- [CONTROL TEMPLATE] button.....Page 23 Use this button to select a template assigned to CONTROL knobs.

- TEMPO LEDPage 29
 This LED lamp flashes in time with the tempo of the Arpeggio.
- 2 SELECT buttons......Page 26
 Use these buttons to select the parameter to be edited.
- DATA [DEC] and [INC] buttons
 Pages 17, 28

 Use each of these buttons to increase or decrease the value of the selected parameter.
- Oisplay Page 26
 Shows the related information according to your panel operations.
- (5) [VSTi WINDOW] button......Page 20
 Press this button to switch between displaying and hiding the VSTi window on the Cubase.





- CUBASE FUNCTION [A] and [B] buttons
 Page 25
 Use these buttons to control Cubase because some functions of Cubase can be assigned to these buttons.
- PROGRAM [DEC] and [INC] buttons
 Page 20

Use these buttons to select the Voice program of the VSTi assigned to the track selected on the DAW software.

- [ESC] buttonPage 19 This button works the same as the ESC key on your computer.
- This button works the same as the ENTER key on your computer.
- Track Control buttons......Page 19
 Use these buttons to control Cubase tracks remotely.
- Use these buttons to control the transport functions such as recording and playback in Cubase remotely.

- Pitch Bend wheelPages 12, 17
 Controls the pitch bend effect, making continuous pitch change.
- **DC IN connector......Page 9**Connect an AC adaptor to this jack.

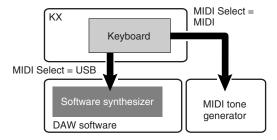
- 30 SUSTAIN jackPage 16 Connect an optional foot switch (such as Yamaha FCxxx) to this jack.

What You Can Do With KX

The KX lets you use the following functions as well as the MIDI keyboard function.

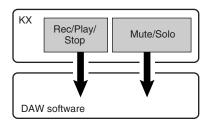
Keyboard performance

You can play the keyboard or control various controller such as the Pitch Bend wheel and Modulation wheel to play the VSTi on the computer connected via USB or play the MIDI tone generator connected via MIDI.



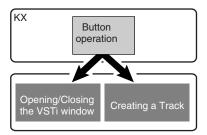
Transport/Track operations on the DAW software

You can perform the transport controls such as Rec/Play/Stop and the track controls such as Mute/Solo switching in Cubase remotely.



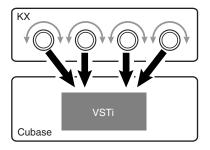
Window operations on the VSTi

When using Cubase, you can open or close the VSTi related window and create the track for the VSTi from the KX.



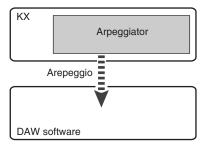
Parameter control of the tone generator in the computer

You can remotely control parameters of the tone generators such as the VSTi and synthesizer by using the CONTROL knobs.



Phrase/rhythm performance by using the Arpeggiator

You can easily call up various phrases such as the analog synthesizer-like one, backing performance of guitar or bass and drum/percussion rhythm pattern.



Setting Up

Installation using the Cubase AI 4 DVD-ROM

Important!

Since the End-User Software License Agreement (EUSLA) showed on your PC-display in your installing the "DAW" software is replaced by the agreement on page 40, you should disregard the EUSLA. Read the Cubase AI 4 License Agreement on page 40 carefully, and install the software if you agree to it.



Install Cubase Al4 before installing Extensions for Steinberg DAW. It is because the KX project templates will be installed in the installation destination of Cubase Al4.

For Windows:

- 1. Start the computer and log on to the Administrator account.
- Insert the Cubase Al4 DVD-ROM into the DVD-ROM drive.
- 3. Open the DVD-ROM, then double-click the file "CubaseAl4.msi."

Follow the instructions on the screen to install Cubase Al4.

For Macintosh:

- 1. Start the computer and log on to the Administrator account.
- 2. Insert the Cubase AI4 DVD-ROM into the DVD-ROM drive.
- 3. Open the DVD-ROM, then double-click the file "CubaseAl4.mpkg."

Follow the instructions on the screen to install Cubase Al4.



- When installing Cubase Al4, you will need a working internet connection to register your Cubase Al 4.
 Make sure to fill in all required fields for user registration. If you do not register the product, you will be unable to use the application after a limited period of time expires.
- If you are using Cubase 4 or Cubase Studio 4, install either application before you install Extensions for Steinberg DAW. The KX project templates will be installed in the application installation destination.

Installation using the TOOLS for KX DVD-ROM

"TOOLS for KX" DVD-ROM includes the following application software tools.

- Installer of "Extensions for Steinberg DAW"
- USB-MIDI driver
- VSTi installer developed by other companies

From among the above tools, "Extensions for Steinberg DAW" should be installed so that you can use Cubase conveniently and the USB-MIDI Driver should be installed so that communication between the KX and the computer can be performed. VSTi can be installed as desired.



- If you want to install the VSTi developed by other companies, follow the Installation Guide for each VSTi located in the "VSTis" folder.
- For information on how to uninstall each software, refer to the Installation Guide located in a folder of each software.

For Windows:

- Make sure that the power to the KX is turned off
- 2. Disconnect all MIDI cables that connect MIDI devices to MIDI IN/OUT connectors on the
- After disconnecting all other USB devices from the computer, connect the KX directly to the computer (without using a hub) by using a USB cable.
- 4. Start the computer and log on to the Administrator account.
- Insert the "TOOLS for KX DVD-ROM" into the DVD-ROM drive.
- 6. Open the "Extensions for Steinberg DAW" folder in the DVD-ROM, then double-click the file "setup.exe"

The first display for installing "Extensions for Steinberg DAW" appears.

Click [Next] to call up the "Welcome to the InstallShield Wizard for Yamaha Extensions for Steinberg DAW" window.



- If the same version of Extensions for Steinberg DAW has already been installed in your computer, the completion of the maintenance window appears. In this case, click [Finish].
- If a newer version of Extensions for Steinberg DAW has already been installed in your computer, a dialog box appears indicating that the newer software has already been installed. In this case, you do not need to install the software. Click [OK] in the dialog box.
- If an older version of Extensions for Steinberg DAW has been installed in your computer, the software should be updated. (The procedure is the same as for installing it from scratch.)
- 8. Click [Next] to start the installation.

To cancel the installation procedure, click [Cancel].



During the installation procedure, you can select the type of "Extensions for Steinberg DAW" by selecting "Custom" in the "Setup Type" dialog.

- 9. When the installation is complete, a message indicating that installation is complete appears. Click [Finish].
- **10.** Turn the power on of the KX by pressing the [STANDBY/ON] switch.

The KX will be recognized by the connected computer.

11. Install the USB-MIDI driver.



Installation of the USB MIDI driver is described in "installationguide_**.pdf" stored in the "USB-MIDI Driver" folder.

The installation has been completed.

For Macintosh:

- Make sure that the power to the KX is turned off.
- Disconnect all MIDI cables that connect MIDI devices to MIDI IN/OUT connectors on the KX.
- After disconnecting all other USB devices from the computer, connect the KX directly to the computer (without using a hub) by using a USB cable.
- 4. Start the computer and log on to the Administrator account.
- 5. Insert the "TOOLS for KX DVD-ROM" into the DVD-ROM drive.
- 6. Open the "Extensions for Steinberg DAW" folder in the DVD-ROM, then double-click the file "Yamaha Extensions for Steinberg DAW.mpkg".

The "Welcome to the InstallShield Wizard for Yamaha Extensions for Steinberg DAW" window appears.

7. Click [Continue].



- If a dialog box appears asking if you want to install the software, click [Continue].
- If "Extensions for Steinberg DAW" has been installed, it will be overwritten by the new installed version.
- **8.** Execute the installation by following the directions appearing on the screen.



- You can select only the startup disk as installation destination.
- During the installation procedure, you can select the type of "Extensions for Steinberg DAW" by selecting "Customize" in the "Installation Type" dialog.
- 9. When the installation is complete, a message indicating that installation is complete appears. Click [Close].
- 10. Install the USB-MIDI driver.



- Installation of the USB MIDI driver is described in "installationguide_**.pdf" stored in the "USB-MIDI_Driver" folder.
- The "Keyboard Setup Assistant" window appears when connecting the KX to a computer via USB. In this case, click the red circle at the top left corner to close this window.



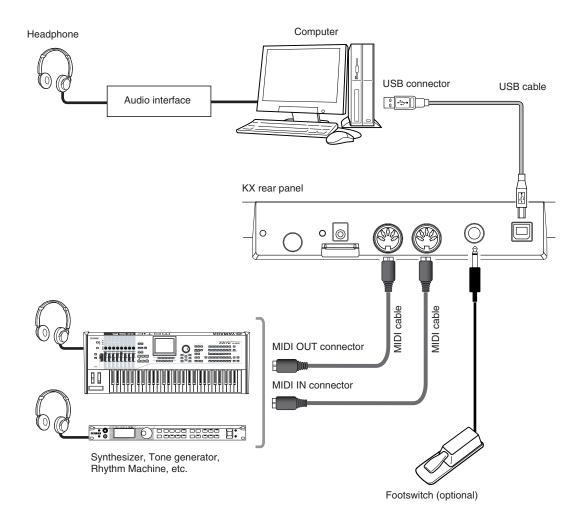
11. Turn the power on of the KX by pressing the [STANDBY/ON] switch.

The KX will be recognized by the connected Mac computer.

The installation has been completed.

Connection

The following connection, for example, is necessary for using the KX.





- With the initial default settings (MIDI Select = USB ...page 34, MIDI Thru = MIDI → USB ...page 36), the KX can control the DAW software on your computer via a USB cable after installation procedures (pages 13–15) have been completed. For example, you can play the Voices of the software synthesizer like VSTi standard on your computer by playing the keyboard of the KX. Furthermore, MIDI messages generated on the MIDI device (synthesizer on the above illustration) connected to the KX via a MIDI cable can be transmitted through the KX to the computer. It means song playback of the MIDI device can play the Voices of the software synthesizer like VSTi standard on your computer.
- When the MIDI Select parameter (page 34) is set to "MIDI," the USB connector will be inactive resulting that MIDI communication can be performed only via the MIDI connectors. In the example illustration above, you can play the sound of the tone generator by playing the KX keyboard.

Using the KX with Cubase

The KX features a special Link function that enables you to link the KX with Cubase. Using this function, you can produce music with tremendous efficiency by creating a track from the KX. As an example, this section describes using Cubase 4 with the Link function.

Setting up on the KX

To use the Link function with Cubase, it is necessary to change the settings of the KX according to the DAW on your computer.



The procedure here is not necessary when using Cubase Al4 included in the accessory DVD-ROM.

1. Press the [UTILITY] button to call up the Utility display.

2. Use the SELECT buttons to call up "DAW Select."

In this state, you can select the DAW software controlled from the KX.

- 3. Use the DATA [DEC] and [INC] buttons to select the desired DAW software.
 - When using Cubase 4/Cubase Studio 4: Select "Cubase4."
 - When using Cubase Al4: Select "CubaseAl."
- 4. Press the [EXIT] button to return to the original display.

Setting up on Cubase

The MIDI messages generated on the KX (by playing the keyboard, controlling the Pitch Ben Wheel and the Modulation Wheel, and so on) are transmitted via the USB-MIDI port1 from the KX to Cubase. The messages transmitted via the USB-MIDI port1 and port2 are not related to the music performance (including the Intsrument change), resulting that the computer may recognize these messages as the Instrument change and play the unexpected sound. To avoid such a situation, you should remove the checkmark of "All MIDI Input" for the USB-MIDI port 2 and port 3.



- Explanation here uses the display of Windows. You can perform the instructions below also when using Macintosh.
- For information about the USB-MIDI port 1–3 handled by the KX, refer to page 32.
- Select "Device Setup" from the "Device" menu of Cubase.

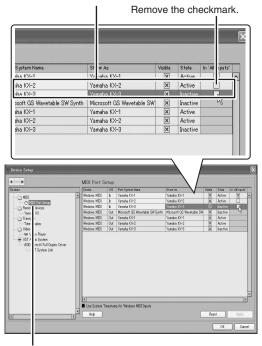
The Device dialog appears.

2. Click "MIDI Port Setup" in the Devices

The MIDI ports of Cubase appear at right of the dialog.

3. Remove the checkmark by clicking the check box of "All MIDI Input" for the KX MIDI Port 2 and 3 respectively.

Yamaha KX Yamaha KX Port 2/3



Click "MIDI Port Setup."

- 4. Click [OK] close the dialog.
- 5. Quit Cubase.

Start the KX and Cubase

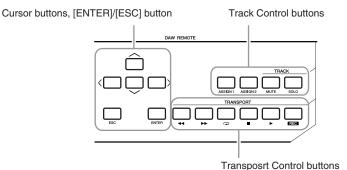
- Make sure that the STANDBY/ON switch of the KX is in the STANDBY position, then connect the KX to your computer by using a USB cable.
- 2. Press the STANDBY/ON switch to turn the power ON.
- 3. Start Cubase on the computer.



Cubase cannot recognize the KX if you turn the power of the KX ON after starting Cubase. Make sure to start Cubase before turning the power the KX ON.

Controlling the Transport and Tracks remotely

You can perform the transport controls (such as recording and playback) and the track controls such as Mute/Solo switching in Cubase via the panel operation of the KX.



Cursor buttonsThis button works the same as the Cursor keys on your

computer.

[ENTER] button This button works the same

as the Enter (return) key on

your computer.

[ESC] button.....This button works the same

as the Esc (esc) key on your computer, such as the operation cancel.

Track Control buttons

Select the track of Cubase and perform the Mute/Solo switching of the selected track.

[ASSIGN 1] button Executes the MIDI Quantize

command.

[ASSIGN 2] buttons ... Executes the Delete

Command.

[MUTE] button......Switches the Mute of the

selected track On or Off.

[SOLO] button......Switches the Solo of the

selected track On or Off.

Transport Control buttons

Use these buttons to control the transport functions such as recording and playback.

[•	44	1	button	rewind
-----	----	---	--------	--------

[>>] button.....fast forward

[] button.....repeat on/off

[■] button.....stop

[▶] button.....play

[REC] buttonrecord

Setting up the VSTi

You can create a track for the VSTi and open/close the VSTi window from the KX panel operation remotely. Performing such operations (normally performed on Cubase) from the KX panel allows you to produce music with tremendous efficiency.

Creating a track for the VSTi

You can simply create a track for the VSTi (Instrument Track) from the KX panel operation remotely.

1. Press the [ADD INSTRUMENT TRACK] button of the KX.

The [Add Instrument Track] dialog appears.



NOTE ()

Please keep in mind that a new Instrument Track cannot be created if any project file is not opened. After opening a project file or create a new project file, perform this procedure.

- Click "No VST Instrument" by using a mouse.
- 3. Select the desired VSTi by using the Cursor buttons of the KX.
- 4. Press the [ENTER] button to fix the selected VSTi.

The [Add Instrument Track] dialog closes.

Opening the VSTi window and selecting an Instrument

When the Instrument Track is selected on the Project window or the other window, you can open the VSTi window quickly at the touch of the button on the KX's panel.

 On the KX, use the Cursor buttons to select an Instrument Track of which the VSTi window you want to call up.



2. On the KX, press the [VSTi WINDOW] button to open the VSTi window.

The VSTi window of the track selected in step 1 will appear.



3. On the computer, click the Instrument select box of the VSTi window to call up the window as illustrated below.



- 4. On the KX, use the PROGRAM [DEC] and [INC] buttons to select an Instrument.
- 5. Press the [VSTi WINDOW] button again to close the VSTi window.

Changing the MIDI message type generated via the PROGRAM [DEC] and [INC] buttons

With the default initial settings, pressing either of the PROGRAM [DEC] and [INC] buttons transmits two types of the MIDI messages: Program Change and VSTi Remote. Depending on the VSTi, an Instrument is selected via several cases: only the Program Change, only the VSTi Remote message, and both the Program Change and VSTi Remote. You can set which message is transmitted when pressing the PROGRAM [DEC]/[INC] button according to the specification of the VSTi.

1. Press the [UTILITY] button.

The LED lamp above the button lights and the Utility display appears.

2. Use the SELECT [▲] and [▼] buttons to call up "PrgChgMode."

Pr9Ch9Mode ▶PC+Remot

Use the DATA [DEC] and [INC] buttons to select the desired setting from the following menus.

PC+Remote	When this is selected, pressing the PROGRAM [DEC]/[INC] button transmits both the Program Change message and the VSTi Remote messages.
ProgChg	When this is selected, pressing the PROGRAM [DEC]/[INC] button transmits only the Program Change message.
Remote	When this is selected, pressing the PROGRAM [DEC]/[INC] button transmits only the VSTi Remote message.

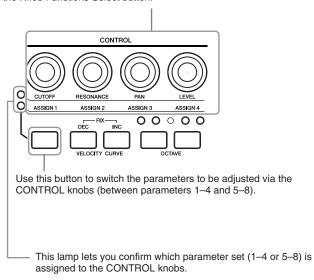
Press the [EXIT] button to return to the Top display.

Controlling the VSTi by using the CONTROL knobs

Operating the CONTROL knobs on the KX panel edits or controls various parameters of the VSTi used on the computer. The KX provides the 30 Control Templates which can be used for the VSTi software synthesizers. By selecting the desired one from 30 Control Templates, you can assign the functions appropriate for the current VSTi to the CONTROL knobs.

When using Cubase, selecting an Instrument track or changing the VSTi assigned to the current track will change the Control Template on the KX automatically. This means that you need not select the Control Template manually when using Cubase.

Use these knobs to adjust the values of the VSTi parameters. Eight parameters can be adjusted because you can switch the parameter assignment by using the Knob Functions Select button.



When the Top display is shown, the names of the parameters to be adjusted via the CONTROL knobs are shown normally. When controlling the knob, the values of the parameters are shown for a while then the original display appears again.

Using the Automation function of Cubase lets you record your knob operations to an Instrument track. For details about the Automation function, refer to the manual of Cubase.



- · For details about the available Control Template, refer to the Control Template List on page 43.
- · The time of the value indication can be changed. For details, refer to "Utility Settings" on page 34.
- When using the DAW other than Cubase, you need to change the Control Template manually via the KX panel operation.

Selecting/Editing a Control Template

When using the DAW other than Cubase, the Control Template on the KX is not selected automatically by the DAW operation on the computer unlike the Cubase, meaning that you need to select a Control Template manually via the panel operation on the KX.

When using any DAW including Cubase, you can edit the Control Template to change the type of the message generated via the knob operation and functions assigned to the knobs.

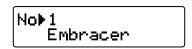


Using the KX Editor (page 6) which can be downloaded from Yamaha web site, lets you edit all the Control Templates.

Selecting a Control Template

Press the [CONTROL TEMPLATE] button.
 The LED lamp lights and the Control Template selection display appears.



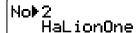


In this state, you can select the Control Template.



When the different display appears even if pressing the [CONTROL TEMPLATE] button, press the [CONTROL TEMPLATE] button again or press the SELECT [▲] button once or twice to call up the Control Template selection display.

2. Use the DATA [DEC] and [INC] buttons to select the desired Control Template.





You can increase the value by 10 by simultaneously holding down the [DEC] button and pressing the [INC] button, while you can decrease the value by 10 by simultaneously holding down the [INC] button and pressing the [DEC] button.

3. Press the [EXIT] button to return to the original display.

The LED lamp of the [CONTROL TEMPLATE] button will be turned off.

In this state, the VSTi parameters according to the template selected in step 2 are assigned to the CONTROL knobs.

Changing the message type generated by using the CONTROL knob (Editing a Control Template)

You can select the type of the MIDI messages generated and transmitted by controlling the CONTROL knob: "Control Change (CC)" and "VSTi Remote." Normally, the VSTi can be controlled by the Control Change or VSTi Remote.

Control Change The MIDI Control Change messages adjust the VSTi parameters.

VSTi Remote The automation function of the VSTi adjusts the VSTi

parameters.

The KX provides the Control Templates each of which includes the settings most appropriate for each VSTi. Note that the settings of each template can be edited as desired.



- The VSTi Remote function is available only when using the Cubase 4 / Cubase Studio 4 / Cubase Al4.
- The setting here is to be store on internal memory automatically (without the store operation). If you want to back up the setting here, use the KX Editor (page 6) to store the setting to a computer.
- 1. Press the [CONTROL TEMPLATE] button.
 The LED lamp lights and the Control Template selection display appears.

NOTE 🛭

When the different display appears even if pressing the [CONTROL TEMPLATE] button, press the [CONTROL TEMPLATE] button again or press the SELECT [▲] button once or twice to call up the Control Template selection display.

- 2. Use the DATA [DEC] and [INC] buttons to select the desired Control Template.
- 3. Use the SELECT [▲] and [▼] buttons to call up "KnobOutSel."

KnobOutSel ▶Remote

4.	Use the DATA [DEC] and [INC] buttons to
	select the desired type of the message.

CC:	Control change
Remote:	VSTi remote

Press the [EXIT] button to return to the original display.

Changing the Control Change generated by using the CONTROL knob (Editing a Control Template)

When the KnobOutSel parameter (page 23) is set to "CC" (Control Change), you can change the Control Change number assigned to the CONTROL knob from the default one to your desired one.



The setting here is to be store on internal memory automatically (without the store operation). If you want to back up the setting here, use the KX Editor (page 6) to store the setting to a computer.

1. Press the [CONTROL TEMPLATE] button.
The LED lamp lights and the Control Template selection display appears.

NOTE [

When the different display appears even if pressing the [CONTROL TEMPLATE] button, press the [CONTROL TEMPLATE] button again or press the SELECT [▲] button once or twice to call up the Control Template selection display.

- 2. Use the DATA [DEC] and [INC] buttons to select the desired Control Template.
- 3. Use the SELECT [▲] and [▼] buttons to select the desired CONTROL knob.

Assi9n1 CC▶111 Assi9n2 CC:112



The Control Changes which can be used to adjust the parameters differ depending on the VSTi. For details, refer to the manual of the VSTi.

 Use the DATA [DEC] and [INC] buttons to change the Control Change number of the selected CONTROL knob.



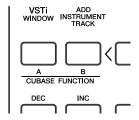
The display of the KX shows the Control Change number in decimal. Keep in mind that the Control Change number may be described in hexadecimal depending on the manual of the VSTi.

5. Press the [EXIT] button to return to the original display.

Using the Buttons for controlling Cubase

Using the CUBASE FUNCTION

When using Cubase, you can call up various windows of Cubase by using the CUBASE FUNCTION [A] and [B] buttons.



■ When using Cubase 4/Cubase Studio 4:

The CUBASE FUNCTION [A] button can be used for calling up the Sound Frame dialog. The CUBASE FUNCTION [B] button can be used for calling up the Mixer window.

■ When using Cubase Al4:

The CUBASE FUNCTION [A] button can be used for calling up the List Editor window. CUBASE FUNCTION [B] button can be used for calling up the Mixer window.

The functions of the CUBASE FUNCTION [A] and [B] buttons can be changed as desired. For details, see the next section.

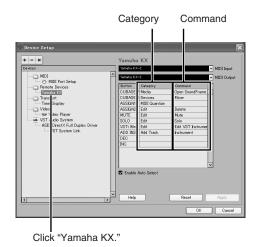
Assigning the function to the buttons for controlling Cubase

The buttons for controlling Cubase can be changed as necessary. To do this, follow the instructions below:

 Select "Device Setup" from the "Device" menu.

The "Device Setup" dialog appears.

2. Click "Yamaha KX" in the Device column.



The following buttons are assignable.

- CUBASE FUNCTION [A] and [B] buttons
- [ASSIGN 1] and [ASSIGN 2] buttons
- [MUTE] button
- [SOLO] button
- [VSTi WINDOW] button
- [ADD INSTRUMENT] button
- 3. Click the Category column of the desired button, then select the desired Category from the pop-up menu.

When selecting the Category including multiple commands, click the Command column then select the desired function from the pop-up menu.

4. Click [OK] after completing the setup.

The "Device Setup" dialog closes.

Basic operation on the KX

This section describes the basic operations such as how to shift the octave range of the keyboard and use the display interface.

Indication on the display

The display shows various parameters depending on your panel operation.

Top display

This display appears when turning the power ON. Parameters edited via the CONTROL knobs are shown on the display.

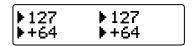




The display illustrated below may appear when turning the power ON. This indicates that Cubase and VSTi have not been started on the computer connected to the KX via USB. If you intend to use Cubase, start Cubase and VSTi, resulting that this indication disappear and the Top display illustrated above appear. If you intend to use the DAW other than Cubase, set the DAW Select parameter (page 34) to the corresponding one (other than "Cubase" or "Cubase Al").



Operating any of the CONTROL knob calls up the values on the display. After a while, the display returns to the original indication.





You can set the desired amount of time for which the values are contemporarily indicated on the display. For instructions, see page 34.

Arpeggio Edit display

This display appears by pressing the [ARP EDIT] button so that its lamp lights. This display lets you select the Arpeggio type and set the related parameters. Press the [EXIT] button to return to the original Top display.



Control Template display

This display appears by pressing the [CONTROL TEMPLATE] button so that its lamp lights. This display lets you select a template assigned to the CONTROL knobs. Press the [EXIT] button to return to the original Top display.

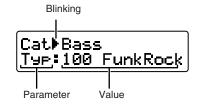


Utility display

This display appears by pressing the [UTILITY] button so that its lamp lights. This display lets you set the system related parameters. Press the [EXIT] button to return to the original Top display.



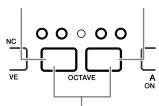
From these displays, you can call up the desired parameters by using the SELECT [▲] and [▼] buttons. Note that ":" is indicated at the left of the editable parameter. You can confirm which parameter is actually editable because ":" of the current parameter blinks.



Changing the octave range

Use these buttons to shift the note range of the keyboard by octave, up/down to three octaves. The initial default setting (no transpose) is recalled by pressing both the buttons simultaneously.

Pressing the button to shifts the range of the keyboard down in octave. Pressing the button to shi the range of the keyboard in octave.



Reverts the octave setting to default.

The current octave range can be confirmed via the status of the LED lamp above the button.

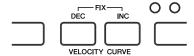
	,
(Flashing)	three octaves lower
0000	two octaves lower
0000	one octave lower
0000	Initial default setting
0000	one octave upper
0000	two octaves upper
O O O O (Flashing)	three octaves upper

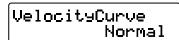
NOTE (2)

You can invert the LED status (on or off) of the OCTAVE buttons. For information about how to invert the LED status (on or off), refer to "Utility Settings" on page 34.

Selecting the Velocity Curve

You can select the desired Velocity Curve which indicates how velocities are applied to your pressing strength. Use the VELOCITY CURVE [DEC] and [INC] buttons to select a Velocity Curve.





The following Velocity Curves are available:

Soft2	This curve provides increased response (more than "Soft1"), especially for lower velocities.
Soft1	This curve provides increased response, especially for lower velocities.
Normal	This linear "curve" produces one-to-one correspondence between the strength of your keyboard playing (velocity) and the actual sound change.
Hard1	This curve effectively lessens the overall response compared to the "norm" curve.
Hard2	A stronger playing produces the velocities according to the curve almost equivalent to "Normal" and a softer playing decreases the response. This curve is suitable for playing the HALionOne.

Press the VELOCITY CURVE [DEC] and [INC] buttons simultaneously to select "Fix." The Fix setting lets you play the notes with the fixed velocity no matter how hard or soft you play the notes.



You can set the fixed velocity by pressing one of the VELOCITY CURVE [DEC] and [INC] buttons. Pressing both the buttons simultaneously exits from this status (Fix setting) to the last selected Velocity Curve.



From the Utility display (page 26), you can select a Velocity Curve and specify the velocity value carefully when the Fix is selected. For details, refer to "Utility Settings" on page 34.

Using the Arpeggiator

The Arpeggiator lets you play various phrases depending on the notes you pressed. You can trigger the phrase according to the chord you play and the drum/percussion rhythm simply by pressing a note with just one finger. This section describes how to use the Arpeggiator.

Arpeggio playback

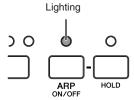
The KX features 342 different Arpeggio types. You can select an Arpeggio type as desired then start playback simply by pressing any note on the keyboard.

NOTE [

The tempo of the Arpeggio playback can be synchronized with the tempo of the DAW on the computer. For details, see page 29.

 Press the [ARP ON/OFF] button so that its indicator lights.

While the lamp is turned on, the Arpeggio will be play according to the pressed key.



The following two types of playback are available:

■ The Arpeggio will play only while holding down the note on the keyboard.

When the lamp of the [HOLD] button is turned off, the Arpeggio will play only while holding down the note on the keyboard.

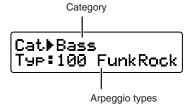
■ The Arpeggio playback will continue after the notes are released.

When the lamp of the [HOLD] button is turned on, the Arpeggio playback will continue even if you release the notes on the keyboard.

2. Press the [ARP EDIT] button.

The LED lamp of the [ARP EDIT] button lights and the Arpeggio Edit display appears.

3. Use the SELECT buttons to select "Cat."



The KX provides the Arpeggio types (page 44) divided into the Categories. You can reach the desired Arpeggio type more quickly by selecting a Category first.

- 4. Use the DATA [DEC] and [INC] buttons to select the category of the desired Arpeggio type.
- 5. Use the SELECT buttons so that the "Typ:" blinks then use the DATA [INC] or [DEC] button to select the Arpeggio type.
- **6.** Select the Arpeggio type by using the DATA [DEC] and [INC] buttons.



- If changing the Arpeggio type during playback, the new Arpeggio type may actually start after a while.
- You can operate the CONTROL knobs, Pitch Bend wheel and Modulation Wheel while selecting an Arpeggio type.
- Hold the [DEC] or [INC] button to continuously change the value.
- You can increase the value by 10 by simultaneously holding down the [INC] button and pressing the [DEC] button, while you can decrease the value by 10 by simultaneously holding down the [DEC] button and pressing the [INC] button.
- Press the [EXIT] button to return to the Top display.

MIDI Clock controlling the Arpeggio Tempo

With the initial default setting, the tempo of the Arpeggio playback is determined as follows.

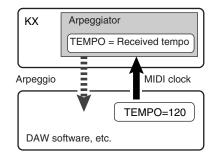
When the MIDI clocks are received from an external MIDI device:

The Arpeggio will play back according to the tempo of the received MIDI clocks.

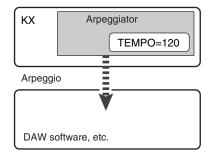
When the MIDI clocks are not received:

The Arpeggio will play back according to the internal tempo set on the KX.

When the MIDI clocks are received from an external MIDI device:



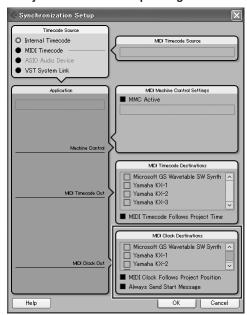
When the MIDI clocks are not received:



When using Cubase, you can transmit the MIDI clocks from the computer to the KX by following the procedure below.

NOTE [] For instructions on setting the KX internal tempo, refer to "Utility Settings" on page 34.

1. Select "Sync Setup" from the "Transport" menu on Cubase to call up the Synchronization Setup dialog.



2. Enter the checkmark to the "Yamaha KX1" (when using Windows) and "MIDI
Clock Follows Project Position" of the
"MIDI Clock Destination" at the lower
right of the dialog.

When using Mac OS, enter the checkmark to the USB-MIDI Port 1 via which the performance data is transferred



The KX provides three USB MIDI Ports each of which can be used for a certain use. For details, refer to "Using the KX with a DAW other than Cubase" on page 31.

3. Click [OK] to close the "Synchronization Setup" dialog.



- MIDI clocks are transmitted from Cubase (on the computer) only when recording or playback is performed on Cubase
- For information about the DAW software other than Cubase and how to transmit the clocks from the MIDI device, refer to the owner's manual of the DAW software/MIDI device.
- You can select the setting which lets you always use the internal MIDI clock of the KX to play the Arpeggio even if the external clocks are received from the external MIDI device. For details, refer to "Utility Settings" on page 34.

Editing an Arpeggio

Each Arpeggio type can be edited as desired. For example, you can apply swing feel to the Arpeggio playback and adjust the gate time of the notes of the Arpeggio playback sequence.



The Arpeggio type can be edited during playback. Note that the Arpeggio may not play back properly if editing the Arpeggio type during playback.

1. Press the [ARP EDIT] button.

The LED lamp above the button lights and the Arpeggio Edit display will appear.

Cat≯Bass Typ:100 FunkRock

2. Use the SELECT buttons to call up the desired parameter.

For details about the Arpeggio parameters, refer to the next page.

3. Use the DATA [DEC] and [INC] buttons to change the value.

A change here is applied to playback immediately. Editing a parameter during Arpeggio playback lets you confirm the result in real time.

4. When you are satisfied with the result, press the [EXIT] button to return to the Control Top display.

The settings you made here will be stored automatically without the special operation. The settings here will be maintained even if you turn the power off or change the Arpeggio type.



If you want to initialize the settings, use the Factory Set operation as explained on page 34.

Arpeggio parameters

Display	Settings	Description
Cat	DrPc, CPrc, Bass, Seq, ChSq, HySq, ApKb, Orgn, GtPl, Strn, Bras, RdPp, Lead	Determines the Category of the Arpeggio type you want to call up. For details, see page 44.
Тур	1–342	Determines the Arpeggio type you want to call up. For details, see page 44.
Variation	Orig, Up, Down, Alt1, Alt2, Rnd	Determines the playback variation of the Arpeggio. When any value other than "Orig" is selected, you can shift the pitch up and down in octave for the Arpeggio playback by adjusting the "OctRange" parameter. OrigThe original data preprogrammed in the KX will play back. UpThe Arpeggio of ascending notes will play. DownThe Arpeggio of descending notes will play. Alt1Alternates Up and Down arpeggios. The turnaround note is played once. Alt2Alternates Up and Down arpeggios. The turnaround note is played twice. RndThe Arpeggio will play randomly according to the pressed notes.
OctRange	-3 - 0 - +3	Determines the octave setting of the Arpeggio playback.
GateTime	0%–200%	Determines the gate time of the Arpeggio notes.
BeatStretch	50, 66, 75, 100, 133, 150, 200%	Adjusts the tempo of the Arpeggio playback based on the current original tempo. When "50%" is selected, for example, the playback time will be halved (tempo is doubled). When "200%" is selected, on the other hand, the playback time will be doubled (tempo is halved).
Swing	-120% – 0% – +120%	Adjusts the timing of the even-numbered back-beat notes of which the type is specified via the SwingValue parameter to produce a swing feel.
SwingValue	1/32 (32nd note), 3/16 (16th note triplet, 1/16 (16th note), 3/8 (8th note triplet), 1/8 (8th note), 3/4 (1/4 note triplet, 1/4 (1/4 note)	Determines the type of note that serves as the basis for the Swing parameter.
VelMode	Orig, Thru	Determines how the velocities are applied to playback notes of the selected Arpeggio type. OrigThe Arpeggio type is played back with the velocity values preprogrammed in the Arpeggio sequence data. ThruThe Arpeggio type is played back with the velocity value specified by pressing the key.

Using the KX with a DAW other than Cubase

The KX provides the setup templates which enable you to use the other DAW such as SONAR 5, Logic Pro7, Digital Performer 5 as well as Cubase. If you want to use such a DAW, follow the procedure below:

NOTE

For details about the Remote Control settings, refer to the manual of the DAW software.

1. Press the [UTILITY] button.

The LED lamp above the button lights and the Utility display appears.

Are Tempo⊧ 120

2. Use the SELECT buttons to call up "DAW Select."

DAW Select ▶CubaseAI Use the DATA [DEC] and [INC] buttons to select one of the following DAW software tools.

Settings	DAW
LogicPro	Apple Logic Pro
DigiPerf	MOTU Digital Performer
SONAR	Cakewalk Sonar

Press the [EXIT] button to return to the Top display.

The setup has been completed. To each DAW software, the following operations are available.

Button on the KX	Operation		
[••]	rewind		
[▶▶]	fast forward		
[Repeat On/Off		
[■]	stop		
[▶]	play		
REC	record		
CUBASE FUNCTION [A]	This button works the same as the F1 key on the Mackie Control.		
CUBASE FUNCTION [B]	This button works the same as the F2 key on the Mackie Control.		
[ASSIGN 1]	This button works the same as the F3 key on the Mackie Control.		
[ASSIGN 2]	This button works the same as the F4 key on the Mackie Control.		
[MUTE]	This button works the same as the F5 key on the Mackie Control.		
[SOLO]	This button works the same as the F6 key on the Mackie Control.		
[VSTi WINDOW]	This button works the same as the F7 key on the Mackie Control.		
[ADD INSTRUMENT TRACK]	This button works the same as the F8 key on the Mackie Control.		
Program [DEC]	Transmits the Program Change number decreased by 1 from the current number.		
Program [INC]	Transmits the Program Change number increased by 1 from the current number.		
Cursor buttons	This button works the same as the Cursor keys on your computer.		
[ENTER]	This button works the same as the Enter (Return) key on your computer.		
[ESC]	This button works the same as the Esc (esc) key on your computer.		

NOTE []

If you perform the Remote Control setup for the Remote Control on the DAW software, you can perform various operations by using the Cubase buttons such as the CUBASE FUNCTION [A] button and [ADD INSTRUMENT TRACK] button. For instructions on assigning the function to the button, refer to the manual of the DAW software.

MIDI ports on the KX

The KX provides the three MIDI ports and each of them can transmit/receive MIDI messages by using a USB cable as described below:

USB MIDI Port 1 (KX-1): This port is used for communication of the performance data like note on/off generated by playing the keyboard.

USB MIDI Port 2 (KX-2): This port is used for communication of data generated by controlling the Transport function and the CONTROL knobs.

USB MIDI Port 3 (KX-3): This port is used for communication of data generated by controlling the KX Editor.



- When the MIDI Select parameter is set to "MIDI" (page 34) resulting the USB TO HOST connector becomes inactive, the data communication described above cannot be performed.
- When using the DAW software other than Cubase, perform the MIDI setup manually on the DAW software so that the MIDI Port1 can handle the performance data like note on/off and the MIDI Port2 can handle the data generated by controlling the Transport function.
- When using the DAW software other than Cubase, the MIDI Port2 cannot handle the data generated by controlling the CONTROL knobs.
- When using a Macintosh computer, the MIDI Port is indicated with the name specified on the "Audio MIDI Setup" window.

When using Digital Performer (Mark of the Unicorn Inc.) or Logic Pro (Apple Inc.):

In each of these cases, you need to set the MIDI Port in the "Audio MIDI setup."

- 1. In the start up disk of Mac OS X (normally named "Macintosh HD"), open "Application" then "Utilities" and double click "Audio MIDI Setup".
- 2. Click [MIDI Devices] if the [Audio Device] window is indicated.

The YAMAHA KX icon appears if the KX is recognized by the Macintosh computer.



3. Add three new external devices by clicking the [Add Device] icon three times.

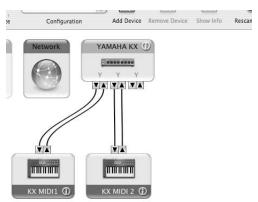
Each "new external device" corresponds to each of the MIDI Ports in the KX. It is a good idea to input your desired device name in the Properties of the new external device in order to easily recognize the MIDI port later.

 Connect the MIDI input/output plugs of the KX icon to the MIDI input/output plugs of the new external device.

The MIDI input/output plugs of the KX icon correspond to the MIDI ports separately as follows:

YAMAHA KX YAMAHA KX Port1 (Left plug): MIDI Port 1
YAMAHA KX YAMAHA KX Port2 (Center plug): MIDI Port 2

Connect the plugs so that each port can handle MIDI messages.



NOTE (

YAMAHA KX YAMAHA KX Port3 (right most plug) used for data communication of the KX Editor is not necessary to be set.

Utility Settings

In the Utility display, you can make various settings such as the Arpeggio tempo, MIDI transmit/receive settings, and display related settings.

Basic Operation

1. Press the [UTILITY] button.

The LED lamp above the button lights and the Utility display appears.

Are Tempo⊧ 120

2. Use the SELECT buttons to select the parameter to be edited.

For details about parameters, refer to "Utility Parameters" listed below.

3. Use the DATA [INC] and [DEC] buttons to change the value.

NOTE []

If selecting "BulkTransmit" or "FactorySet", you can execute each of these functions by pressing the DATA [INC] button.

4. After setting, press the [ENTER] button to return to the Utility Top display.

The settings you made here will be stored automatically without the special operation. The settings will be maintained until executing the Factory Set operation.

Utility Parameters

Display	Range	Initial Value	Description
Tempo	10–300	120	Determines the tempo (BPM) of the Arpeggio playback. The Arpeggio will play according to the speed of the MIDI clocks transmitted from an external device or computer when the Sync parameter is set to "Auto" (only when the MIDI clock is transmitted continuously) or "External."
Sync	Auto, Internal, External	Auto	Determines the tempo source transmitting the MIDI clocks which the Arpeggio playback follows. Auto
Clock	Off, On	On	Determines whether the tempo clock of the Arpeggio playback is output as a MIDI message. On
VeloCurve	Soft2, Soft1, Normal, Hard1, Hard2, Fix	Normal	Determines the Velocity Curve. For information about each value, see page 27.

Display	Range	Initial Value	Description
VeloFix	1–127	100	Determines the velocity value when the VelCurve is set to "Fix.".
DAW Select	CubaseAl, Cubase4, LogicPro, DigiPerf, SONAR	Cubase AI	Determines the DAW software you use on the computer with the KX.
ProgChgMode	PC+Remot, ProgChg, Remote	PC+Remot	Determines the type of the MIDI message generated by pressing the PROGRAM [INC] and [DEC] buttons. PC+Remot When this is selected, the Program Change message is transmitted via the USB-MIDI Port1 and the Function message* of Mackie Control is transmitted via the USB-MIDI Port2. ProgChg When this is selected, the Program Change message is transmitted via the USB=MIDI Port1. Remote When this is selected, the Function message* of Mackie Control is transmitted via the USB-MIDI Port2. * The "Function message" indicates that the message for the Functions 9 or 10 of Mackie Control. The [DEC] button on the KX corresponds to the Function 9 while the [INC] button corresponds to the Function 10.
MIDI Select	USB, MIDI	USB	Determines the connector for MIDI data transmission/reception.
MIDI Transmit Ch	01–16	01	Determines the MIDI channel over which the KX transmits MIDI messages (generated via your keyboard performance).
MIDI In Thru	Off, MIDI Out, USB Out	USB Out	Determines whether the MIDI messages received via the MIDI IN connector will be transmitted via the MIDI OUT connector or USB connector.
Device Number	OFF, 1-16, All	10	Determines the MIDI Device Number of the KX.
Display Time	OFF, 1.0sec, 1.5sec, 2.0sec, 3.0sec, 4.0sec, 5.0sec, Hold	1.5sec	Determines the duration (time) for which the value (like the one called up by operating the CONTROL knob) is shown temporarily on the display.
Octave LED	Normal, Reverse	Normal	Determines the status of OCTAVE LED lamps. When "Normal" is selected, the LED lamps work as described on page 27. When "Reverse" is selected, the right and left of the LED status are reversed.
BulkTransmit	_	_	Transmits all the settings of the KX to the DAW software or external MIDI device as Bulk data. Press the DATA [INC] button to start transmission.
FactorySet	_	_	Restores the Factory-programmed System of the KX.

Restoring the Factory-programmed System (Factory Set)

You can restore the factory default settings of the KX. Follow the instructions below to execute the Factory Set.

ACAUTION

- The edited Arpeggio types and Control Templates will be lost by executing the Factory Set. Important data should be saved to the computer by using the KX Editor (page 6).
- 1. From the Top display, press the [UTILITY] button so that its lamp lights.

2. Use the SELECT buttons to call up "FactorySet."

> Factory Set ▶Yes⇒Inc

- **3.** Press the DATA [INC] button. "Are you sure?" appears on the display.
- 4. Press the DATA [INC] button again to execute the Factory Set.

After the Factory Set has been completed, the display called up in step 2 appears.

Setting the MIDI Thru parameter

With the initial default settings (MIDI Select = USB, MIDI Thru = MIDI → USB), MIDI messages received via the MIDI IN connector of the KX will be transmitted through the USB TO HOST connector (USB MIDI Port1). As necessary, you can change the MIDI Thru setting so that MIDI messages received via the MIDI IN connector can be transmitted through the MIDI OUT connector, or the MIDI messages received via the USB TO HOST connector (USB MIDI Port1) can be transmitted through the MIDI OUT connector.

- 1. Press the [UTILITY] button.
 - The LED lamp above the button lights and the Utility display appears.
- 2. Use the SELECT [▲] and [▼] buttons to call up the "MIDI Thru" parameter.

MIDI Thru ▶MIDI⇒USB

Use the DATA [DEC] and [INC] buttons to select the desired value among the following values.

Off	When this is selected, the MIDI Thru function is not available, meaning that MIDI messages received via the MIDI IN or USB TO HOST connector will not be transmitted through any connector.
MIDI → MIDI	When this is selected, MIDI messages received via the MIDI IN connector will be transmitted through the MIDI OUT connector.
MIDI → USB	When this is selected, MIDI messages received via the MIDI IN connector will be transmitted through the USB TO HOST connector (USB MIDI Port1).
USB → MIDI	When this is selected, MIDI messages of USB MIDI Port1 received via the USB TO HOST connector will be transmitted through the MIDI OUT connector.



"MIDI → USB" and "USB → MIDI" can be selected only when the MIDI Select parameter is set to "USB" (page 34).

After selecting, press the [EXIT] button to return to the Top display.

Troubleshooting

The power of the instrument does not turn on.

- When you do not connect the computer to the KX, confirm whether or not the AC power adaptor is properly plugged into the KX?
- When you do not use the AC power adaptor, confirm whether or not a USB cable is properly plugged into the KX and computer.
- Confirm whether not the USB hub with the buspowered type is used for connecting the KX and computer. If you have to use the USB hub, use the self-powered type or use the AC power adaptor of the KX.

Communication problem between the computer and the KX.

- Confirm whether or not a USB cable is properly plugged into the KX and computer.
- Confirm whether or not the MIDI Select parameter is set to "MIDI." When using the KX and computer, set MIDI Select parameter to "USB."

DAW software on a computer cannot be remotely controlled.

- Confirm whether or not the DAW software specified as the DAW Select parameter on the Utility display matches the DAW software you actually use on your computer.
- Confirm whether or not the Remote Control setting of the DAW software is proper. Refer to the Owner's Manual of each DAW software.

No sound of the software synthesizer like VSTi on the computer is produced even if playing the KX keyboard.

- Confirm whether or not a USB cable is properly plugged into the KX and computer.
- Confirm whether or not the volume of the DAW software or computer is set properly.
- Confirm whether or not the MIDI Select parameter is set to "MIDI." When using the KX and computer, set MIDI Select parameter to "USB."
- Confirm whether or not the Control Template corresponding to the VSTi used on the computer is selected currently on the KX. If not, call up the corresponding Control Template. If the corresponding Control Template is not provided on the KX by default, create the Control Template by using the KX Editor.

No sound of the MIDI tone generator connected to the KX via a MIDI cable is produced even if playing the KX keyboard.

- Confirm whether or not the MIDI cable is connected properly.
- Confirm whether or not the MIDI Select parameter is set to "USB." When using the KX and MIDI device, set MIDI Select parameter to "MIDI."

The Arpeggiator does not play back with the software synthesizer sound on the computer connected to the KX via USB even if starting the Arpeggiator on the KX.

 Confirm whether or not the Sync parameter of the Utility display is set to "External." If so, start playback or recording on the DAW to transmit MIDI clocks from the computer to the KX, or set the Sync parameter to "Auto" or "Internal."

Cubase does not recognize the KX.

- Confirm whether or not the "USB-MIDI Driver" and "Extensions for Steinberg DAW" have been installed. If not, install them.
- Confirm whether or not the KX is turned on before starting Cubase. If not, do so.



Regarding the problems such as "No sound" and "Noise sound," refer to the Troubleshooting in the manual of the DAW software.

Message List

LCD Indication	Description
MIDI buffer full.	Failed to process the MIDI data because too much data was received at one time.
MIDI checksum error.	The check sum for the data received is incorrect.
MIDI data error.	An error occurred when receiving MIDI data.
USB error.	An error about the USB TO HOST connector occurred.
Keyboard error.	An error about the keyboard occurred.
Memory error.	An error about the memory for storing occurred.
Device number is off.	The Device number is set to "off."
Device number mismatch.	The Device numbers do not match.
Executing	Displayed while the operation is being performed. Please wait.
Completed	Displayed when the operation has been completed.
Template No.xx <xxxxxxx></xxxxxxx>	Displayed when the Control Template is selected automatically.
Are you sure? No→Dec/Yes→Inc	Prompts you to confirm whether or not you perform the operation. Pressing the [INC] button performs the operation while pressing the [DEC] button to cancel the operation.
Receiving MIDI bulk.	The KX is receiving MIDI bulk data.

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Appendix

Specifications

	KX25	25 keys (Initial Touch)			
Keyboard	KX49	49 keys (Initial Touch)			
	KX61	61 keys (Initial Touch)			
Sequencer block	Arpeggiator	approximately 300 types			
Remote Control block	DAW	For Windows: Cubase 4, SONAR 5.2 For Macintosh: Cubase 4, Logic 7.2, Digital Performer 5.1 * Functions to be controlled differ depending on the software.			
Controller	Pitch Bend Whe Modulation Whe CONTROL know	701 / 1			
Display	16 characters x 2 lines LED lamp with the back light				
Connectors	USB (TO HOST MIDI IN/OUT DC-IN FOOT SWITCH				
Power Consumption	???? W (when using the AC power adaptor) ???? W (when using this product as a bus-powered device)				
	KX25: XXXX				
Dimensions, weight	KX49: XXXX				
	KX61: XXXX				
Accessories		otor (PA-3C, PA-130, or an equivalent) cs x 2, Owner's Manual (this book)			

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

Control Template List

No.	Manufacturer	Product name	Indication on the KX display
1	Steinberg	HALion One	HALionOne
2		Mystic	Mystic
3		Prologue	Prologue
4		Spector	Spector
5		Embracer	Embracer
6		Monologue	Monologue
7		Hypersonic2	Hypersonic
8		HALion3	HALion
9	Native Instruments	PRO-53	Pro-53
10		FM8	FM8
11		MASSIVE	Massive
12	KORG	Polysix	Polysix
13		WAVESTATION	Wavestation
14		Mono/Poly	MonoPoly
15		M1	M1
16		MS-20	MS-20
17	M-AUDIO / GForce	impOSCar	impOSCar
18		Minimonsta	Minimonsta
19		Oddity	Oddity
20	Arturia	Analog Factory	AnalogFactory
21		CS-80V	CS-80V
22		Jupiter-8V	Jupiter-8V
23		Minimoog V	Minimoog V
24	Novation Music	V-Station	V-Station
25		Bass Station	BassStation
26	reFX	VANGUARD	Vanguard
27	IK Multimedia	SampleTank2	SampleTank
28	Spectrasonics	ATMOSPHERE	Atmosphere
29		TRILOGY	Trilogy
30			Generic

About what function is assigned to each knob when each Template is selected, refer to the following page: http://www.yamahasynth.com/

Arpeggio Type List

General Voice types which can be selected on HALionOne and are most suitable for the respective Arpeggio Types are listed in the "Voice Type" column.

Category	Arp. No.	Arp. Name	Time Signature	Length	Original Tempo	Voice Type
DrPc	1	ContmpRk	4/4	4	126	Stereo GM
DrPc	2	StndRock	4/4	4	131	:
DrPc	3	PowerRck	4/4	4	120	:
DrPc	4	AlternRk	4/4	4	100	RockSt2
DrPc	5	MondoRck	4/4	4	94	:
DrPc	6	XoverRk	4/4	2	100	:
DrPc	7	Rck&Roll	4/4	4	172	Stereo GM
DrPc	8	GuitrPp1	4/4	2	90	:
DrPc	9	GuitrPp2	4/4	4	100	:
DrPc	10	Unpluggd	4/4	4	120	:
DrPc	11	FingrPck	4/4	4	94	:
DrPc	12	Brit Pop	4/4	2	86	:
DrPc	13	EP Balld	4/4	2	60	:
DrPc	14	8BtBasic	4/4	4	120	:
DrPc	15	8Bt Soft	4/4	4	100	:
DrPc	16	16BtBld1	4/4	4	75	:
DrPc	17	16BtBld2	4/4	2	64	:
DrPc	18	16Bt Pop	4/4	4	103	:
DrPc	19	6/8 Pop	4/4	4	100	:
DrPc	20	6/8Balld	4/4	2	58	:
DrPc	21	Funk	4/4	4	107	:
DrPc	22	FunkRock	4/4	4	95	
DrPc	23	JazzFunk	4/4	4	120	:
DrPc	24	SlowEasy	4/4	4	72	:
DrPc	25	ClubJazz	4/4	4	125	
DrPc	26	PopShuff	4/4	4	94	
DrPc	27	GosplFnk	4/4	4	106	
DrPc	28	StdDisco	4/4	4	120	
DrPc	29	PhilyDsc	4/4	2	100	
DrPc	30	ChartPop	4/4	4	92	Hip Hop 1
DrPc	31	New R&B	4/4	1	97	
DrPc	32	Smooth	4/4	4	64	
DrPc	33	HipHop1	4/4	2	94	:
DrPc	34	HipHop2	4/4	2	105	
DrPc	35	HipHop3	4/4	2	103	R&B Kit 1
DrPc	36	Hip Rock	4/4	4	132	. INOU INIT I
DrPc	37	-	4/4	4	98	Hip Hop 1
	38	Regeton RegetnPc	4/4	4	98	
DrPc		SoulBeat				Perccussion
DrPc	39		4/4	4	124	Stereo GM
DrPc	40	SoulShuf	4/4	4	98	: :
DrPc	41	Big Beat	4/4	4	115	RockSt2
DrPc	42	Breakbt	4/4	4	115	Tekno Kit
DrPc	43	Lo Beat	4/4	2	140	R&B Kit 1
DrPc	44	DrumnBas	4/4	2	154	
DrPc	45	Techno	4/4	8	135	Tekno Kit
DrPc	46	Trance	4/4	4	140	:
DrPc	47	DreamDnc	4/4	4	136	:
DrPc	48	Ibiza	4/4	2	135	R&B Kit 1
DrPc	49	EuroTeck	4/4	2	140	Tekno Kit
DrPc	50	Club Hus	4/4	2	128	R&B Kit 1

DIPC	Category	Arp. No.	Arp. Name	Time Signature	Length	Original Tempo	Voice Type
DIPC	DrPc	51	House	4/4	2	123	:
DrPc 54 ModernJz 4/4 16 218 : DrPc 55 ShfBlues 4/4 4 115 Stereo GM DrPc 56 SlwBlues 4/4 2 49 : DrPc 57 PnBoogle 4/4 8 160 : DrPc 57 PnBoogle 4/4 4 102 : DrPc 58 Reggae 4/4 4 102 : DrPc 60 Salsa 4/4 2 123 : DrPc 60 SalsaPc 4/4 4 120 : DrPc 62 Samba 4/4 4 120 : DrPc 63 SambaPc 4/4 4 122 : DrPc 64 Bossa 4/4 4 124 : DrPc 65 BossaPc 4/4 4 124 : DrPc 66<	DrPc	52	Garage	4/4	2	127	Tekno Kit
DrPc 55 Shifblues 4 / 4 4 115 Stereo GM DrPc 56 SIwBlues 4 / 4 2 49 : DrPc 57 PnBoogie 4 / 4 8 160 : DrPc 58 Reggae 4 / 4 4 102 : DrPc 59 ReggeShf 4 / 4 4 90 : DrPc 60 Salsa 4 / 4 4 123 : DrPc 61 SalsaPc 4 / 4 4 120 : DrPc 62 Samba 4 / 4 4 120 : DrPc 63 SambaPc 4 / 4 4 124 : DrPc 64 Bossa 4 / 4 4 124 : DrPc 65 BossaPc 4 / 4 4 124 : DrPc 66 Spanish 4 / 4 2 110 Vibes <td< td=""><td>DrPc</td><td>53</td><td>AcoJazz</td><td>4/4</td><td>4</td><td>204</td><td>Jazz Kit</td></td<>	DrPc	53	AcoJazz	4/4	4	204	Jazz Kit
DrPc 56 SIWBlues 4 / 4 2 49 : DrPc 57 PnBoogie 4 / 4 8 160 : DrPc 58 Reggae 4 / 4 4 102 : DrPc 59 ReggeShf 4 / 4 4 90 : DrPc 60 Salsa 4 / 4 4 123 : DrPc 61 SalsaPc 4 / 4 4 120 : DrPc 62 Samba 4 / 4 4 120 : DrPc 63 SambaPc 4 / 4 4 124 : DrPc 64 Bossa 4 / 4 4 124 : DrPc 65 Spanish 4 / 4 4 124 : DrPc 66 Spanish 4 / 4 2 110 Wises CPrc 67 R&B Dsc 4 / 4 4 140 Marimba CPr	DrPc	54	ModernJz	4/4	16	218	:
DrPc 57 PnBoogie 4/4 8 160 : DrPc 58 Reggae 4/4 4 102 : DrPc 59 ReggeShf 4/4 4 90 : DrPc 60 Salsa 4/4 4 123 : DrPc 61 SalsaPc 4/4 4 120 : DrPc 62 Samba 4/4 4 120 : DrPc 63 SambaPc 4/4 4 120 : DrPc 63 SambaPc 4/4 4 124 : DrPc 65 BossaPc 4/4 4 124 : DrPc 66 Spanish 4/4 2 110 Vibes CPrc 67 R&B Dsc 4/4 2 110 Vibes CPrc 70 Ethnic2 7/4 3 120 Music Box CPrc <	DrPc	55	ShfBlues	4/4	4	115	Stereo GM
DrPc 58 Reggae 4/4 4 102 : DrPc 59 ReggeShf 4/4 4 90 : DrPc 60 Salsa 4/4 2 123 : DrPc 61 SalsaPc 4/4 4 123 : DrPc 62 Samba 4/4 4 120 : DrPc 63 SambaPc 4/4 4 124 : DrPc 63 SambaPc 4/4 4 124 : DrPc 64 Bossa 4/4 4 124 : DrPc 65 BossaPc 4/4 4 124 : DrPc 66 Spanish 4/4 2 110 Vibes CPrc 67 R&BDSc 4/4 2 110 Wibes CPrc 70 Ethnic2 7/4 3 120 Music Box CPrc 7	DrPc	56	SlwBlues	4/4	2	49	:
DrPc 59 ReggeShf 4 / 4 4 90 : DrPc 60 Salsa 4 / 4 2 123 : DrPc 61 SalsaPc 4 / 4 4 123 : DrPc 62 Samba 4 / 4 4 120 : DrPc 63 SambaPc 4 / 4 4 120 : DrPc 64 Bossa 4 / 4 4 124 : DrPc 65 BossaPc 4 / 4 4 124 : DrPc 66 Spanish 4 / 4 2 110 Vibes CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 68 Trance 4 / 4 4 140 Marimba CPrc 70 Ethnic2 7 / 4 3 120 Music Box CPrc 71 MOD 4 / 4 4 126 ;	DrPc	57	PnBoogie	4/4	8	160	:
DiPC 60 Salsa 4 / 4 2 123 : DiPC 61 SalsaPc 4 / 4 4 123 : DiPC 62 Samba 4 / 4 4 120 : DiPC 63 SambaPc 4 / 4 4 120 : DiPC 64 Bossa 4 / 4 4 124 : DiPC 65 BossaPc 4 / 4 4 124 : DiPC 66 Spanish 4 / 4 2 120 : CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 68 Trance 4 / 4 4 140 Marimba CPrc 69 Ethnic1 6 / 4 5 118 Celeste CPrc 70 Ethnic2 7 / 4 3 120 Music Box CPrc 71 MOD 4 / 4 1 120 Marimba	DrPc	58	Reggae	4/4	4	102	:
DrPc 61 SalsaPc 4/4 4 123 : DrPc 62 Samba 4/4 4 120 : DrPc 63 SambaPc 4/4 4 120 : DrPc 64 Bossa 4/4 4 124 : DrPc 65 BossaPc 4/4 4 124 : DrPc 66 Spanish 4/4 2 110 Vibes CPrc 67 R&B Dsc 4/4 2 110 Vibes CPrc 68 Trance 4/4 4 140 Marimba CPrc 69 Ethnic1 6/4 5 118 Celeste CPrc 70 Ethnic2 7/4 3 120 Music Box CPrc 71 MOD 4/4 4 126 ; Bass 73 CntmpRk1 4/4 4 126 ; Bass	DrPc	59	ReggeShf	4/4	4	90	:
Diffc 62 Samba 4 / 4 4 120 : Diffc 63 SambaPc 4 / 4 4 120 : Diffc 64 Bossa 4 / 4 4 124 : Diffc 65 BossaPc 4 / 4 4 124 : Diffc 66 Spanish 4 / 4 2 110 Vibes CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 68 Trance 4 / 4 4 140 Marimba CPrc 69 Ethnic1 6 / 4 5 118 Celeste CPrc 70 Ethnic2 7 / 4 3 120 Music Box CPrc 71 MOD 4 / 4 1 120 Glocken CPrc 72 Trill 4 / 4 4 126 : Bass 73 CntmRkl 4 / 4 4 126 :	DrPc	60	Salsa	4/4	2	123	:
DiPC 63 SambaPc 4/4 4 120 : DiPC 64 Bossa 4/4 4 124 : DiPC 65 BossaPc 4/4 4 124 : DiPC 66 Spanish 4/4 2 110 Vibes CPC 67 R&B Dsc 4/4 2 110 Vibes CPrc 67 R&B Dsc 4/4 4 140 Marimba CPrc 69 Ethnic1 6/4 5 118 Celeste CPrc 70 Ethnic2 7/4 3 120 Music Box CPrc 71 MOD 4/4 2 120 Glocken CPrc 71 MOD 4/4 4 126 :a CPrc 72 Trill 4/4 4 126 :a Bass 73 CntmpRk1 4/4 4 126 :a Bass </td <td>DrPc</td> <td>61</td> <td>SalsaPc</td> <td>4/4</td> <td>4</td> <td>123</td> <td>:</td>	DrPc	61	SalsaPc	4/4	4	123	:
DrPc 64 Bossa 4 / 4 4 124 : DrPc 65 BossaPc 4 / 4 4 124 : DrPc 66 Spanish 4 / 4 2 110 Vibes CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 68 Trance 4 / 4 4 140 Marimba CPrc 70 Ethnic2 7 / 4 3 120 Music Box CPrc 71 MOD 4 / 4 2 120 Glocken CPrc 72 Trill 4 / 4 1 120 Marimba Bass 73 CntmpRk1 4 / 4 4 126 Pick Bass Bass 75 StndRck1 4 / 4 4 126 Pick Bass Bass 76 StndRck2 4 / 4 4 120 <	DrPc	62	Samba	4/4	4	120	:
DrPc 65 BossaPc 4 / 4 4 124 : DrPc 66 Spanish 4 / 4 2 120 : CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 68 Trance 4 / 4 4 140 Marimba CPrc 69 Ethnic2 7 / 4 3 120 Music Box CPrc 70 Ethnic2 7 / 4 3 120 Music Box CPrc 71 MOD 4 / 4 2 120 Glocken CPrc 72 Trill 4 / 4 4 126 ; Bass 73 CntmpRk1 4 / 4 4 126 ; Bass 75 StndRck1 4 / 4 4 131 ; Bass 76 StndRck2 4 / 4 4 120 ; </td <td>DrPc</td> <td>63</td> <td>SambaPc</td> <td>4/4</td> <td>4</td> <td>120</td> <td>:</td>	DrPc	63	SambaPc	4/4	4	120	:
DrPc 66 Spanish 4 / 4 2 120 : CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 68 Trance 4 / 4 4 140 Marimba CPrc 70 Ethnic2 7 / 4 3 120 Music Box CPrc 71 MOD 4 / 4 2 120 Glocken CPrc 71 MOD 4 / 4 1 120 Marimba Bass 73 CntmpRk1 4 / 4 4 126 Pick Bass Bass 74 CntmpRk2 4 / 4 4 126 : Bass 75 StndRck1 4 / 4 4 131 ; Bass 76 StndRck2 4 / 4 4 120 ; Bass 78 PowerRk2 4 / 4 4 120 ;	DrPc	64	Bossa	4/4	4	124	:
CPrc 67 R&B Dsc 4 / 4 2 110 Vibes CPrc 68 Trance 4 / 4 4 140 Marimba CPrc 69 Ethnic1 6 / 4 5 118 Celeste CPrc 70 Ethnic2 7 / 4 3 120 Music Box CPrc 71 MOD 4 / 4 2 120 Glocken CPrc 72 Trill 4 / 4 1 120 Marimba Bass 73 CntmpRk1 4 / 4 4 126 Pick Bass Bass 74 CntmpRk2 4 / 4 4 126 : Bass 75 StndRck1 4 / 4 4 131 FingerBass Bass 76 StndRck2 4 / 4 4 120 pick Bass Bass 78 PowerRk2 4 / 4 4 120 ; Bass 80 XoverRk 4 / 4 4 172 <td>DrPc</td> <td>65</td> <td>BossaPc</td> <td>4/4</td> <td>4</td> <td>124</td> <td>:</td>	DrPc	65	BossaPc	4/4	4	124	:
CPrc 68 Trance 4 / 4 4 140 Marimba CPrc 69 Ethnic1 6 / 4 5 118 Celeste CPrc 70 Ethnic2 7 / 4 3 120 Music Box CPrc 71 MOD 4 / 4 2 120 Glocken CPrc 72 Trill 4 / 4 1 120 Marimba Bass 73 CntmpRk1 4 / 4 4 126 Pick Bass Bass 74 CntmpRk2 4 / 4 4 126 : Bass 75 StndRck1 4 / 4 4 131 FingerBass Bass 76 StndRck2 4 / 4 4 120 : Bass 77 PowerRk2 4 / 4 4 120 : Bass 79 AlternRk 4 / 4 4 100 FingerBass Bass 81 Rck&Roll 4 / 4 4 172	DrPc	66	Spanish	4/4	2	120	:
CPrc 69 Ethnic1 6 / 4 5 118 Celeste CPrc 70 Ethnic2 7 / 4 3 120 Music Box CPrc 71 MOD 4 / 4 2 120 Glocken CPrc 72 Trill 4 / 4 1 120 Marimba Bass 73 CntmpRk1 4 / 4 4 126 Pick Bass Bass 74 CntmpRk2 4 / 4 4 126 : Bass 75 StndRck1 4 / 4 4 131 FingerBass Bass 76 StndRck2 4 / 4 4 131 : Bass 78 PowerRk2 4 / 4 4 120 : Bass 79 AlternRk 4 / 4 4 100 FingerBass Bass 81 Rck&Roll 4 / 4 4 172 Pick Bass Bass 82 GuitrPp1 4 / 4 4 100<	CPrc	67	R&B Dsc	4/4	2	110	Vibes
CPrc 70 Ethnic2 7/4 3 120 Music Box CPrc 71 MOD 4/4 2 120 Glocken CPrc 72 Trill 4/4 1 120 Marimba Bass 73 CntmpRk1 4/4 4 126 Pick Bass Bass 74 CntmpRk2 4/4 4 126 : Bass 75 StndRck1 4/4 4 131 FingerBass Bass 76 StndRck2 4/4 4 131 : Bass 78 PowerRk2 4/4 4 120 : Bass 79 AlternRk 4/4 4 100 FingerBass Bass 80 XoverRk 4/4 4 172 Pick Bass Bass 81 Rck&Roll 4/4 4 172 Pick Bass Bass 82 GuitrPp1 4/4 4 100 Pick	CPrc	68	Trance	4/4	4	140	Marimba
CPrc 71 MOD 4/4 2 120 Glocken CPrc 72 Trill 4/4 1 120 Marimba Bass 73 CntmpRk1 4/4 4 126 Pick Bass Bass 74 CntmpRk2 4/4 4 126 : Bass 75 StndRck1 4/4 4 131 FingerBass Bass 76 StndRck2 4/4 4 131 : Bass 77 PowerRk2 4/4 4 120 Pick Bass Bass 78 PowerRk2 4/4 4 120 : Bass 79 AlternRk 4/4 4 100 FingerBass Bass 80 XoverRk 4/4 1 100 : Bass 81 Rck&Roll 4/4 4 172 Pick Bass Bass 82 GuitrPp1 4/4 4 100 Pick Bass <td>CPrc</td> <td>69</td> <td>Ethnic1</td> <td>6/4</td> <td>5</td> <td>118</td> <td>Celeste</td>	CPrc	69	Ethnic1	6/4	5	118	Celeste
CPrc 72 Trill 4/4 1 120 Marimba Bass 73 CntmpRk1 4/4 4 126 Pick Bass Bass 74 CntmpRk2 4/4 4 126 Pick Bass Bass 75 StndRck1 4/4 4 131 FingerBass Bass 76 StndRck2 4/4 4 131 : Bass 77 PowerRk1 4/4 4 120 Pick Bass Bass 78 PowerRk2 4/4 4 120 : Bass 79 AlternRk 4/4 4 100 FingerBass Bass 80 XoverRk 4/4 1 100 : Bass 81 Rck&Roll 4/4 4 172 Pick Bass Bass 82 GuitrPp1 4/4 4 100 Pick Bass Bass 84 Unpluggd 4/4 4 100 <	CPrc	70	Ethnic2	7/4	3	120	Music Box
Bass 73 CntmpRk1 4 / 4 4 126 Pick Bass Bass 74 CntmpRk2 4 / 4 4 126 : Bass 75 StndRck1 4 / 4 4 131 FingerBass Bass 76 StndRck2 4 / 4 4 131 : Bass 77 PowerRk1 4 / 4 4 120 Pick Bass Bass 78 PowerRk2 4 / 4 4 120 : Bass 79 AlternRk 4 / 4 4 100 FingerBass Bass 80 XoverRk 4 / 4 1 100 : Bass 81 Rck&Roll 4 / 4 4 172 Pick Bass Bass 82 GuitrPp1 4 / 4 2 90 FingerBass Bass 83 GuitrPp2 4 / 4 4 100 Pick Bass Bass 84 Unpluggd 4 / 4 4 <	CPrc	71	MOD	4/4	2	120	Glocken
Bass 74 CntmpRk2 4 / 4 4 126 : Bass 75 StndRck1 4 / 4 4 131 FingerBass Bass 76 StndRck2 4 / 4 4 131 : Bass 77 PowerRk1 4 / 4 4 120 Pick Bass Bass 78 PowerRk2 4 / 4 4 120 : Bass 79 AlternRk 4 / 4 4 100 FingerBass Bass 80 XoverRk 4 / 4 1 100 : Bass 81 Rck&Roll 4 / 4 4 172 Pick Bass Bass 82 GuitrPp1 4 / 4 2 90 FingerBass Bass 83 GuitrPp2 4 / 4 4 100 Pick Bass Bass 84 Unpluggd 4 / 4 4 112 FingerBass Bass 85 FingrPck 4 / 4 1	CPrc	72	Trill	4/4	1	120	Marimba
Bass 75 StndRck1 4/4 4 131 FingerBass Bass 76 StndRck2 4/4 4 131 : Bass 77 PowerRk1 4/4 4 120 Pick Bass Bass 78 PowerRk2 4/4 4 120 : Bass 79 AlternRk 4/4 4 100 FingerBass Bass 80 XoverRk 4/4 1 100 : Bass 81 Rck&Roll 4/4 4 172 Pick Bass Bass 82 GuitrPp1 4/4 2 90 FingerBass Bass 83 GuitrPp2 4/4 4 100 Pick Bass Bass 84 Unpluggd 4/4 4 112 FingerBass Bass 85 FingrPck 4/4 1 120 FingerBass Bass 86 Brit Pop 4/4 2 60	Bass	73	CntmpRk1	4/4	4	126	Pick Bass
Bass 76 StndRck2 4/4 4 131 : Bass 77 PowerRk1 4/4 4 120 Pick Bass Bass 78 PowerRk2 4/4 4 120 : Bass 79 AlternRk 4/4 4 100 FingerBass Bass 80 XoverRk 4/4 1 100 : Bass 81 Rck&Roll 4/4 4 172 Pick Bass Bass 82 GuitrPp1 4/4 2 90 FingerBass Bass 83 GuitrPp2 4/4 4 100 Pick Bass Bass 84 Unpluggd 4/4 4 113 Acoustic Bass 85 FingrPck 4/4 1 120 FingerBass Bass 86 Brit Pop 4/4 2 86 : Bass 87 EP Balld 4/4 4 120 :<	Bass	74	CntmpRk2	4/4	4	126	:
Bass 77 PowerRk1 4 / 4 4 120 Pick Bass Bass 78 PowerRk2 4 / 4 4 120 : Bass 79 AlternRk 4 / 4 4 100 FingerBass Bass 80 XoverRk 4 / 4 1 100 : Bass 81 Rck&Roll 4 / 4 4 172 Pick Bass Bass 82 GuitrPp1 4 / 4 2 90 FingerBass Bass 83 GuitrPp2 4 / 4 4 100 Pick Bass Bass 84 Unpluggd 4 / 4 4 113 Acoustic Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 89 8BtSoft 4 / 4 4 1	Bass	75	· ·		4	131	FingerBass
Bass 78 PowerRk2 4 / 4 4 120 : Bass 79 AlternRk 4 / 4 4 100 FingerBass Bass 80 XoverRk 4 / 4 1 100 : Bass 81 Rck&Roll 4 / 4 4 172 Pick Bass Bass 82 GuitrPp1 4 / 4 2 90 FingerBass Bass 83 GuitrPp2 4 / 4 4 100 Pick Bass Bass 84 Unpluggd 4 / 4 4 113 Acoustic Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 BBtBasic 4 / 4 4 120 : Bass 90 16BtBlld 4 / 4 4 100	Bass	76	StndRck2	4/4	4	131	:
Bass 78 PowerRk2 4 / 4 4 120 : Bass 79 AlternRk 4 / 4 4 100 FingerBass Bass 80 XoverRk 4 / 4 1 100 : Bass 81 Rck&Roll 4 / 4 4 172 Pick Bass Bass 82 GuitrPp1 4 / 4 2 90 FingerBass Bass 83 GuitrPp2 4 / 4 4 100 Pick Bass Bass 84 Unpluggd 4 / 4 4 113 Acoustic Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 BBtBasic 4 / 4 4 120 : Bass 90 16BtBlld 4 / 4 4 100	Bass	77	PowerRk1	4/4	4	120	Pick Bass
Bass 79 AlternRk 4 / 4 4 100 FingerBass Bass 80 XoverRk 4 / 4 1 100 : Bass 81 Rck&Roll 4 / 4 4 172 Pick Bass Bass 82 GuitrPp1 4 / 4 2 90 FingerBass Bass 83 GuitrPp2 4 / 4 4 100 Pick Bass Bass 84 Unpluggd 4 / 4 4 113 Acoustic Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 60 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 BBtBasic 4 / 4 4 120 : Bass 89 BtStSoft 4 / 4 4 100 : Bass 90 16BtBlld 4 / 4 4 103	Bass	78	PowerRk2		4		:
Bass 81 Rck&Roll 4 / 4 4 172 Pick Bass Bass 82 GuitrPp1 4 / 4 2 90 FingerBass Bass 83 GuitrPp2 4 / 4 4 100 Pick Bass Bass 84 Unpluggd 4 / 4 4 113 Acoustic Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 8BtBasic 4 / 4 4 120 : Bass 89 8BtSoft 4 / 4 4 100 : Bass 90 16BtBlld 4 / 4 4 75 : Bass 91 16Bt Pop 4 / 4 4 100 FingerBass Bass 92 6/8 Pop 4 / 4 4 100	Bass	79	AlternRk		4	100	FingerBass
Bass 81 Rck&Roll 4 / 4 4 172 Pick Bass Bass 82 GuitrPp1 4 / 4 2 90 FingerBass Bass 83 GuitrPp2 4 / 4 4 100 Pick Bass Bass 84 Unpluggd 4 / 4 4 113 Acoustic Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 8BtBasic 4 / 4 4 120 : Bass 89 8BtSoft 4 / 4 4 100 : Bass 90 16BtBlld 4 / 4 4 75 : Bass 91 16Bt Pop 4 / 4 4 100 FingreBass Bass 92 6/8 Pop 4 / 4 4 100	Bass	80	XoverRk	4/4	1	100	:
Bass 82 GuitrPp1 4 / 4 2 90 FingerBass Bass 83 GuitrPp2 4 / 4 4 100 Pick Bass Bass 84 Unpluggd 4 / 4 4 113 Acoustic Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 8BtBasic 4 / 4 4 120 : Bass 89 8BtSoft 4 / 4 4 100 : Bass 90 16BtBlld 4 / 4 4 75 : Bass 91 16Bt Pop 4 / 4 4 100 FingreBass Bass 92 6/8 Pop 4 / 4 4 100 FingreBass Bass 93 6/8Balld 4 / 4 2 58	Bass	81	Rck&Roll		4	172	Pick Bass
Bass 84 Unpluggd 4 / 4 4 113 Acoustic Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 8BtBasic 4 / 4 4 120 : Bass 89 8BtSoft 4 / 4 4 100 : Bass 90 16BtBlld 4 / 4 4 75 : Bass 91 16Bt Pop 4 / 4 4 100 FingrelSas Bass 92 6/8 Pop 4 / 4 4 100 Fingrelsass Bass 93 6/8Balld 4 / 4 2 58 : Bass 94 FingrBs1 4 / 4 1 115 : Bass 95 FingrBs2 4 / 4 2 150 : <td>Bass</td> <td>82</td> <td>GuitrPp1</td> <td>4/4</td> <td>2</td> <td>90</td> <td>FingerBass</td>	Bass	82	GuitrPp1	4/4	2	90	FingerBass
Bass 84 Unpluggd 4 / 4 4 113 Acoustic Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 8BtBasic 4 / 4 4 120 : Bass 89 8BtSoft 4 / 4 4 100 : Bass 90 16BtBlld 4 / 4 4 75 : Bass 91 16Bt Pop 4 / 4 4 100 FingrelSas Bass 92 6/8 Pop 4 / 4 4 100 Fingrelsass Bass 93 6/8Balld 4 / 4 2 58 : Bass 94 FingrBs1 4 / 4 1 115 : Bass 95 FingrBs2 4 / 4 2 150 : <td>Bass</td> <td>83</td> <td>GuitrPp2</td> <td>4/4</td> <td>4</td> <td>100</td> <td>Pick Bass</td>	Bass	83	GuitrPp2	4/4	4	100	Pick Bass
Bass 85 FingrPck 4 / 4 1 120 FingerBass Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 8BtBasic 4 / 4 4 120 : Bass 89 8BtSoft 4 / 4 4 100 : Bass 90 16BtBlld 4 / 4 4 75 : Bass 91 16Bt Pop 4 / 4 4 100 FingreBass Bass 92 6/8 Pop 4 / 4 4 100 FingreBass Bass 93 6/8Balld 4 / 4 2 58 : Bass 94 FingrBs1 4 / 4 1 115 : Bass 95 FingrBs2 4 / 4 3 115 : Bass 96 FingrBs3 4 / 4 2 89 : </td <td>Bass</td> <td>84</td> <td></td> <td></td> <td>4</td> <td></td> <td>Acoustic</td>	Bass	84			4		Acoustic
Bass 86 Brit Pop 4 / 4 2 86 : Bass 87 EP Balld 4 / 4 2 60 : Bass 88 8BtBasic 4 / 4 4 120 : Bass 89 8BtSoft 4 / 4 4 100 : Bass 90 16BtBlld 4 / 4 4 75 : Bass 91 16Bt Pop 4 / 4 4 103 SimpleSlap Bass 92 6/8 Pop 4 / 4 4 100 FingerBass Bass 93 6/8Balld 4 / 4 2 58 : Bass 94 FingrBs1 4 / 4 1 115 : Bass 95 FingrBs2 4 / 4 3 115 : Bass 96 FingrBs3 4 / 4 2 89 : Bass 98 FingrBs5 4 / 4 1 115 : <	Bass	85			1	120	FingerBass
Bass 87 EP Balld 4 / 4 2 60 : Bass 88 88tBasic 4 / 4 4 120 : Bass 89 8BtSoft 4 / 4 4 100 : Bass 90 16BtBlld 4 / 4 4 75 : Bass 91 16Bt Pop 4 / 4 4 103 SimpleSlap Bass 92 6/8 Pop 4 / 4 4 100 FingerBass Bass 93 6/8Balld 4 / 4 2 58 : Bass 94 FingrBs1 4 / 4 1 115 : Bass 95 FingrBs2 4 / 4 3 115 : Bass 96 FingrBs3 4 / 4 2 89 : Bass 97 FingrBs4 4 / 4 2 89 : Bass 98 FingrBs5 4 / 4 3 120 SimpleSlap </td <td></td> <td></td> <td>-</td> <td></td> <td>2</td> <td>86</td> <td>:</td>			-		2	86	:
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Bass 90 16BtBIld 4 / 4 4 75 : Bass 91 16Bt Pop 4 / 4 4 103 SimpleSlap Bass 92 6/8 Pop 4 / 4 4 100 FingerBass Bass 93 6/8Balld 4 / 4 2 58 : Bass 94 FingrBs1 4 / 4 1 115 : Bass 95 FingrBs2 4 / 4 3 115 : Bass 96 FingrBs3 4 / 4 2 150 : Bass 97 FingrBs4 4 / 4 2 89 : Bass 98 FingrBs5 4 / 4 1 115 : Bass 99 SlapBass 4 / 4 3 120 SimpleSlap							:
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Bass 99 SlapBass 4/4 3 120 SimpleSlap			_				
C DOSS I TOU I FOUNDOUGN I 4/4 I 4 I 95 I FINNDIRGE	Bass	100	FunkRock	4/4	4	95	FingerBass

Category	Arp. No.	Arp. Name	Time Signature	Length	Original Tempo	Voice Type
Bass	101	JazFunk1	4/4	2	120	:
Bass	102	JazFunk2	4/4	4	120	:
Bass	103	SlowEasy	4/4	4	72	:
Bass	104	ClubJazz	4/4	4	125	:
Bass	105	PopShuff	4/4	4	94	Velo Slap
Bass	106	GosplFnk	4/4	4	106	FingerBass
Bass	107	StdDisco	4/4	1	120	:
Bass	108	PhilyDsc	4/4	2	100	:
Bass	109	ChartPop	4/4	4	92	SynthBass2
Bass	110	NewR&B1	4/4	1	97	:
Bass	111	NewR&B2	4/4	1	97	:
Bass	112	Smooth	4/4	2	64	:
Bass	113	HipHop1	4/4	2	105	:
Bass	114	HipHop2	4/4	2	94	:
Bass	115	HipHop3	4/4	2	94	:
Bass	116	HipHop4	4/4	2	94	
Bass	117	Hip Rock	4/4	4	132	FingerBass
Bass	118	Regeton	4/4	4	98	SynthBass ²
Bass	119	GruvBass	4/4	2	120	SynthBass2
Bass	120	SoulBeat	4/4	4	124	FingerBass
Bass	121	SoulShuf		4	98	i iliyetibasa
	122	ChillOut	4/4	2	79	
Bass			4/4	4		1
Bass	123	Big Beat	4/4		115	C
Bass	124	Breakbt1	4/4	4	115	SynthBass ²
Bass	125	Breakbt2	4/4	4	88	SynthBass2
Bass	126	DrumnBas	4/4	4	170	:
Bass	127	Techno	4/4	8	135	:
Bass	128	Trance	4/4	4	140	:
Bass	129	Tek Bass	4/4	1	138	:
Bass	130	DreamDnc	4/4	2	136	:
Bass	131	Ibiza	4/4	2	135	:
Bass	132	DiscoHus	4/4	4	126	:
Bass	133	ClubHus1	4/4	1	128	:
Bass	134	ClubHus2	4/4	1	128	:
Bass	135	Garage	4 / 4	2	127	:
Bass	136	HouseBas	4/4	4	120	:
Bass	137	AcidBass	4/4	1	120	:
Bass	138	AcoJazz1	4/4	4	204	Acoustic
Bass	139	AcoJazz2	4/4	4	204	:
Bass	140	ModrnJz1	4/4	16	218	:
Bass	141	ModrnJz2	4/4	16	218	:
Bass	142	ShfBlues	4/4	4	115	Pick Bass
Bass	143	SlwBlues	4/4	2	49	FingerBass
Bass	144	PnBoogie	4/4	8	160	Acoustic
Bass	145	Reggae	4/4	4	102	FingerBass
Bass	146	ReggeShf	4/4	4	90	:
Bass	147	Salsa	4/4	4	123	Acoustic
Bass	148	Montuno	4/4	4	100	FingerBass
Bass	149	Samba	4/4	2	120	· mgorbasc
Bass	150	Bossa	4/4	4	124	:
Bass	151	LatinHus	4/4	4	138	:
Bass	152	Spanish	4/4	1	120	:
Seq	153	Classic	4/4	1	120	Saw Ld
Seq	154	Oct Seq	4/4	1	130	Bass&Ld
Seq	155	RandmSeq	4/4	1	90	Sci-Fi

Category	Arp. No.	Arp. Name	Time Signature	Length	Original Tempo	Voice Type
Seq	156	Vel Gruv	4/4	1	134	Saw Ld
Seq	157	X-Sweep	4/4	1	140	:
Seq	158	Simple1	4/4	1	130	Chiff Ld
Seq	159	Simple2	4/4	1	130	:
Seq	160	Simple3	4/4	1	130	:
Seq	161	Basic	4/4	1	130	Brightness
Seq	162	FifthSQ1	4/4	1	130	5th Ld
Seq	163	FifthSQ2	4/4	1	130	:
Seq	164	MuteLine	4/4	1	134	Saw Ld
Seq	165	Chodal	4/4	2	150	:
Seq	166	AlternRk	4/4	4	100	Charan Ld
Seq	167	Trance1	4/4	4	115	Chiff Ld
Seq	168	Trance2	4/4	1	140	Poly Synth
Seq	169	Trance3	4/4	4	140	:
Seq	170	Trance4	4/4	1	140	Square Ld
Seq	171	Trance5	4/4	1	140	:
Seq	172	Trance6	4/4	4	140	Bass&Ld
Seq	173	Trance7	4/4	1	140	Poly Synth
Seq	174	Trance8	4/4	1	130	:
Seq	175	Trance9	4/4	2	145	:
Seq	176	Trance10	4/4	2	145	:
Seq	177	DreamDnc	4/4	1	136	Square Ld
Seq	178	lbiza1	4/4	2	135	Charan Ld
Seq	179	lbiza2	4/4	2	135	Square Ld
Seq	180	Tekno	4/4	2	120	Saw Ld
Seq	181	SynArp1	4/4	1	130	
Seq	182	SynArp2	4/4	1	130	
Seq	183	SynArp3	4/4	1	130	
Seq	184	SynArp4	4/4	1	90	
Seq	185	SynArp5	4/4	1	138	
Seq	186	Melody1	4/4	1	70	Brightness
Seq	187	Melody2	4/4	1	70	. Drighthoos
Seq	188	Electro1	4/4	1	130	Saw Ld
Seq	189	Electro2	4/4	1	130	Jaw Lu
Seq	190	Electro3	4/4	1	130	
Seq	191	Electro4	4/4	1	130	
Seq	192	Electro5	4/4	1	130	
Seq	193	Electro6	4/4	1	130	
Seq	194	CompuBas	4/4	1	130	Bass&Ld
	195	Poly Arp	4/4	1	120	Saw Ld
Seq Seq	196	Tek Echo	4/4	2	120	Jaw Lu
	197			2		:
Seq		SuperArp	4/4		120	
Seq Seq	198	AcidLine	4/4	1	120	:
	199	Doves	4/4		150	:
Seq	200	PulsLine	4/4	2	120	Poly Cunth
Seq	201	SyncpEco Waggle	4/4	2	120	Poly Synth
Seq			4/4		140	Saw Ld Poly Synth
ChSq	203	SynChrd1	4/4	1	130	
ChSq		SynChrd2	4/4	1	90	Bass&Ld
ChSq	205	BasChrd1	4/4	2	130	:
ChSq	206	BasChrd2	4/4	1	130	Dalu Court
ChSq	207	ChillChd	4/4	1	90	Poly Synth
ChSq	208	TrancRtm	4/4	4	140	
ChSq	209	Ibiza	4/4	2	135	Bass&Ld
ChSq	210	Garage	4/4	2	127	:

Category	Arp.	Arp. Name	Time Signature	Length	Original Tempo	Voice Type
ChSq	211	Syncopat	4/4	2	120	Saw Ld
HySq	212	Hybrid1	4/4	1	130	:
HySq	213	Hybrid2	4/4	1	95	:
HySq	214	Hybrid3	4/4	1	130	
HySq	215	Hybrid4	4/4	1	130	Bass&Ld
HySq	216	Hybrid5	4/4	1	106	·
ApKb	217	Pf Arp1	4/4	2	64	Acoustic Piano
ApKb	218	Pf Arp2	4/4	2	74	·
ApKb	219	Pf Arp3	4/4	2	130	:
ApKb	220	Pf Arp4	4/4	1	116	
ApKb	221	Pf Arp5	4/4	1	82	:
ApKb	222	Pf Arp6	4/4	2	130	:
ApKb	223	Pf Arp7	4/4	2	130	:
ApKb	224	Pf Arp8	4/4	1	74	:
ApKb	225	70sRock1	4/4	2	130	
				4		:
ApKb	226	70sRock2	4/4		130	F Diana 1
ApKb	227	EP Balld	4/4	2	60	E_Piano 1
ApKb	228	Slowfeel	4/4	1	74	:
ApKb	229	16Bt Pop	4/4	4	103	:
ApKb	230	AnalgPop	4/4	2	93	:
ApKb	231	ClubJazz	4/4	4	125	Acoustic Piano
ApKb	232	ChartPop	4/4	1	92	E_Piano 1
ApKb	233	Swing EP	4/4	1	101	:
ApKb	234	6/8 R&B	4/4	2	61	:
ApKb	235	HipHop1	4/4	2	105	:
ApKb	236	HipHop2	4/4	2	105	:
ApKb	237	НірНор3	4/4	2	105	Harpsichord
ApKb	238	Clavi1	4/4	1	110	Brite Clav
ApKb	239	Clavi2	4/4	1	110	:
ApKb	240	Clavi3	4/4	1	124	:
ApKb	241	DrumnBas	4/4	4	170	E_Piano 1
ApKb	242	ClubHus	4/4	2	128	:
ApKb	243	HousePf	4/4	2	130	Rock Piano
ApKb	244	Reggae	4/4	2	92	Brite Clav
ApKb	245	Salsa	4/4	1	123	Rock Piano
ApKb	246	Montuno	4/4	2	100	:
ApKb	247	PnoLatin	4/4	2	120	:
Orgn	248	HouseOrg	4/4	1	130	Perc Organ
Orgn	249	Reggae	4/4	1	92	Draw Organ
Orgn	250	LatinOrg	4/4	1	110	Rock Organ
GtPI	251	Strum1	4/4	2	120	Steel
GtPI	252	Strum2	4/4	2	120	:
GtPI	253	Strum3	4/4	2	120	:
GtPI	254	SteelGtr	4/4	4	120	:
GtPI	255	GtrArp1	4/4	1	120	:
GtPI	256	GtrArp2	4/4	1	120	
GtPI	257	OvdrGtr1	4/4	4	120	Overdrive
GtPI	258	OvdrGtr2	4/4	4	120	:
GtPI	259	OvdrGtr3	4/4	4	120	:
GtPI	260	OvdrGtr4	4/4	4	120	:
GtPI	261	ContmpRk	4/4	4	126	:
GtPI	262	StndRck1	4/4	4	131	:
GtPI	263	StndRck2	4/4	4	131	
GtPI	264	PowerRk1	4/4	4	120	Distortion
GtPI	265	PowerRk2	4/4	4	120	:

Category	Arp. No.	Arp. Name	Time Signature	Length	Original Tempo	Voice Type
GtPI	266	PowerRk3	4/4	4	120	:
GtPI	267	AlterRk1	4/4	4	97	Overdrive
GtPI	268	AlterRk2	4/4	4	97	:
GtPI	269	XoverRk1	4/4	2	100	:
GtPI	270	XoverRk2	4/4	2	100	Distortion
GtPI	271	Rck&Roll	4/4	4	172	Clean
GtPI	272	GuitrPp1	4/4	2	90	Nylon
GtPI	273	GuitrPp2	4/4	1	90	:
GtPI	274	GuitrPp3	4/4	4	100	Steel
GtPI	275	GuitrPp4	4/4	4	100	Clean
GtPI	276	GuitrPp5	4/4	1	90	Nylon
GtPI	277	Unplug1	4/4	4	120	Steel
GtPI	278	Unplug2	4/4	2	120	:
GtPI	279	Unplug3	4/4	2	120	:
GtPI	280	FingrPk1	4/4	2	120	:
GtPI	281	FingrPk2	4/4	2	120	:
GtPI	282	BritPop1	4/4	2	86	:
GtPI	283	BritPop2	4/4	2	86	Clean
GtPI	284	EP Balld	4/4	2	60	:
GtPI	285	8BtBasic	4/4	4	120	:
GtPI	286	8BtSoft	4/4	4	100	Steel
GtPI	287	16BtBlld	4/4	4	75	Clean
GtPI	288	6/8 Pop	4/4	4	100	:
GtPI	289	6/8Balld	4/4	2	58	:
GtPI	290	Funky1	4/4	2	120	:
GtPI	291	Funky2	4/4	2	120	:
GtPI	292	Funky3	4/4	1	120	:
GtPI	293	CleanGt1	4/4	4	107	:
GtPI	294	CleanGt2	4/4	2	120	:
GtPI	295	CleanGt3	4/4	2	120	:
GtPI	296	CleanGt4	4/4	4	127	:
GtPI	297	CleanGt5	4/4	4	107	:
GtPI	298	Spanky	4/4	2	105	:
GtPI	299	FunkRock	4/4	4	94	:
GtPI	300	JazzFunk	4/4	4	120	:
GtPI	301	SlowEasy	4/4	4	72	:
GtPI	302	GosplFnk	4/4	4	106	:
GtPI	303	PopShuff	4/4	4	94	:
GtPI	304	StdDisco	4/4	4	120	:
GtPI	305	PhilyDsc	4/4	2	100	:
GtPI	306	New R&B	4/4	1	97	Steel
GtPI	307	Smooth	4/4	2	64	Nylon
GtPI	308	HipHop1	4/4	2	94	Mute
GtPI	309	HipHop2	4/4	2	94	:
GtPI	310	HipRock1	4/4	4	90	Overdrive
GtPI	311	HipRock2	4/4	4	132	:
GtPI	312	SoulBeat	4/4	4	124	Clean
GtPI	313	SoulShuf	4/4	4	98	:
GtPI	314	Big Beat	4/4	4	115	Overdrive
GtPI	315	AcoJazz	4/4	4	204	ModernJazz
GtPI	316	ModernJz	4/4	16	218	:
GtPI	317	ShfBlues	4/4	4	115	Mute
GtPI	318	SlwBlues	4/4	2	49	Overdrive
GtPI	319	PnBoogie	4/4	4	160	Clean
GtPI	320	Reggae	4/4	2	102	:

Category	Arp. No.	Arp. Name	Time Signature	Length	Original Tempo	Voice Type
GtPI	321	ReggeShf	4/4	4	90	:
GtPI	322	Samba	4/4	4	120	Nylon
GtPI	323	Bossa	4/4	4	124	:
GtPI	324	Spanish1	4/4	2	120	:
GtPI	325	Spanish2	4/4	2	120	Steel
GtPI	326	Lick1	4/4	4	120	Distortion
GtPI	327	Lick2	4/4	4	120	:
GtPI	328	Lick3	4/4	2	120	:
GtPI	329	Lick4	4/4	4	120	:
GtPI	330	Lick5	4/4	1	120	:
Strn	331	Strings	4/4	1	101	StereoSt1
Strn	332	New R&B	4/4	2	90	:
Strn	333	Pizz	4/4	1	120	Pizz
Bras	334	Funk1	4/4	4	132	Brass Sect
Bras	335	Funk2	4/4	1	132	:
Bras	336	Samba	4/4	2	120	:
RdPp	337	Нір Нор	4/4	2	105	TenorSax 2
RdPp	338	Soul	4/4	4	120	:
RdPp	339	Flutter	4/4	1	120	:
Lead	340	R&B Dsc1	4/4	1	110	Bass&Ld
Lead	341	R&B Dsc2	4/4	2	110	:
Lead	342	Regeton	4/4	4	98	Caliop Ld

MIDI Implimentation Chart

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

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

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

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