YAMAHA

PSR-D1

DJX

Owner's Manual

GENERAL MIDI

SPECIAL MESSAGE SECTION (U.S.A.)

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.

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.

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

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 old 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

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep these precautions 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:

- Do not open the instrument or attempt to disassemble the internal parts or modify them in any way. The instrument contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.
- 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 the AC adaptor cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the instrument, or if any unusual smells or smoke should appear to be caused by it, immediately turn off the power switch, disconnect the adaptor plug from the outlet, and have the instrument inspected by qualified Yamaha service personnel.
- Use the specified adaptor (PA-5B, PA-5C or an equivalent recommended by Yamaha) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Before cleaning the instrument, always remove the electric plug from the outlet. Never insert or remove an electric plug with wet hands.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.

⚠ *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:

- 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.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord.
- 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.
- Unplug the AC power adaptor when not using the instrument, or during electrical storms.
- Always make sure all batteries are inserted in conformity with the +/- polarity markings. Failure to do so might result in overheating, fire, or battery fluid leakage.
- Always replace all batteries at the same time. Do not use new batteries together with old ones. Also, do not mix battery types, such as alkaline batteries with manganese batteries, or batteries from different makers, or different types of batteries from the same maker, since this can cause overheating, fire, or battery fluid leakage.
- Do not dispose of batteries in fire.
- Do not attempt to recharge batteries that are not intended to be charged.
- If the instrument is not to be in use for a long time, remove the batteries from it, in order to prevent possible fluid leakage from the battery.
- Keep batteries away from children.
- 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.
- 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 near other electrical products such as televisions, radios, or speakers, since this might cause interference which can affect proper operation of the other products.
- 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.
- When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths. Also, 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.
- Use only the stand/rack specified for the instrument. When attaching the stand or rack, use the provided screws only. Failure to do so could cause damage to the internal components or result in the instrument falling over.
- Do not operate the instrument for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

■SAVING USER DATA

- Save all data to an external device such as the Yamaha MIDI Data Filer MDF3, in order to help prevent the loss of important data due to a malfunction or user operating error.

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.

Make sure to discard used batteries according to local regulations.

* The illustrations and LCD screens as shown in this owner's manual are for instructional purposes only, and may be different from the ones on your instrument.

Congratulations on your purchase of the Yamaha DJX!

You now own a portable keyboard that combines advanced functions, great sound and exceptional ease-of-use in a highly compact package. Its outstanding features also make it a remarkably expressive and versatile instrument.

Read this Owner's Manual carefully while playing your new DJX in order to take full advantage of its various features.

Main Features

Real-time Controls

The DJX is equipped with an amazing set of real-time performance controls, that let you "tweak" the sound of various instrument parts — as you play!

- **Control Knobs**
  These five knobs let make various dynamic changes to the voices and patterns.
- **ASSIGN knob**
  Included in the control knobs is a special ASSIGN knob that can be assigned to control any one of a variety of functions.
- **RIBBON CONTROLLER**
  This expressive control can also be assigned to control any one of a variety of functions.
- **Part Select (PART CONTROL)**
  Use this to select the Part you want to use with the control knobs or RIBBON CONTROLLER.
- **Part On/Off (PART CONTROL)**
  This function lets you alternately mute and unmute specific instrument parts of the pattern as it's playing.
- **PITCH BEND wheel**
  Use this to raise and lower the pitch of the voice as you play.

Digital Sampling

This function lets you record your own sounds to be played from the keyboard. Up to twelve different samples can be recorded. Simple editing functions, such as setting the end point and looping, are also provided.

Other powerful features include:

- Exceptionally realistic and dynamic sounds with 284 voices, utilizing digital recordings of actual instruments.
- Dual voice and Split voice modes that let you layer two voices together or assign two voices to separate sections of the keyboard
- Four high-quality effects — Reverb, Chorus, DSP, and Arpeggiator — each with a variety of different types.
- 100 pattern styles, each with different Lead In/Out and Beat A/B sections. All styles also have their own four Break Out patterns. The DJX also gives you convenient control over pattern Styles — including BPM (Tempo) and independent Pattern Volume.
- Powerful song recording operations for recording and playing back complete compositions (three User songs are available). Up to six tracks can be recorded to a song, including a special chord track for style pattern.
- Performance Setup, for automatically calling up an appropriate voice for playing with the selected style. Plus, there are 16 User Performance Setup memory spaces that let you save your custom panel settings for instant recall.
- Touch response for maximum expressive level control over the voices.
- Convenient footswitch control over various functions — including sustain, start/stop, and more.
- GM (General MIDI) compatibility and full GM voice set.
- Large custom LCD gives you easy, at-a-glance confirmation of all important settings, as well as chord and note indications.
- Comprehensive MIDI functions that let you integrate the DJX into a MIDI music system, for sequence recording and other advanced applications.
- Built-in, high-quality stereo amplifier/speaker system.

Contents

PANEL CONTROLS AND TERMINALS 6
- Front Panel 6
- Rear Panel 7

SETTING UP 8
POWER REQUIREMENTS 8
TURNING ON THE POWER 8
ACCESSORY JACKS 9

Quick Guide 10
Step 1 The DJX — Take it for a spin! 10
Step 2 Using the Keyboard 12
Step 3 Demo Song/Voice/Style ... 14
Step 4 Digital Sampling 16
Step 5 Function Parameters 18
Step 6 Assigning Various Controls to the ASSIGN Knob, RIBBON CONTROLLER, and Footswitch 20

PANEL DISPLAY INDICATIONS 22

PLAYING VOICES — THE VOICE MODE 24
PLAYING A VOICE — MAIN VOICE ... 25
- About Panel Voices and GM Voices 26
- Drum Kit Voice Chart (voices 141 - 155) 26

Function Parameters — Main Voice .. 27
TRANSPOSE AND TUNING 28
Transpose 28
Tuning 29
PLAYING TWO VOICES — DUAL VOICE 29
Function Parameters — Dual Voice ... 30
PLAYING TWO VOICES — SPLIT VOICE 31
Function Parameters — Split Voice 32
ADDITIONAL VOICE FUNCTIONS — VOICE SET, TOUCH SENSITIVITY, AND PITCH BEND RANGE 33
Function Parameters — Voice Set, Touch Sensitivity and Pitch Bend Range 33

EFFECTS 34
REVERB 34
CHORUS 35
DSP 36
ARPEGGIATOR 37
Function Parameters — Effects 37
- Effect Types 38

SONG PLAYBACK — THE SONG MODE 40
SELECTING AND PLAYING A SONG ... 40
CHANGING THE BPM (TEMPO) 41
ABOUT THE BEAT DISPLAY 42
ADJUSTING THE SONG VOLUME 43

PATTERNS — THE STYLE MODE 44
SELECTING A STYLE AND PLAYING THE PATTERN 44
PATTERN CONTROLS 47
PATTERN SECTIONS (BEAT A, BEAT B AND BREAK OUTS) 48
CHANGING THE BPM (TEMPO) 48
ADJUSTING THE PATTERN VOLUME 49
FINGERING 50
BEAT REVERSE 52
PART ON/OFF 52
- About the Parts 53

SETTING THE PATTERN SPLIT POINT 54
Function Parameter — Pattern Split Point 55

PERFORMANCE SETUP 56
PERFORMANCE SETUP — USER 56
Recording a User Performance Setup 56
Recalling a User Performance Setup 57
- Selecting a User Bank 57

PERFORMANCE SETUP — PRESET 58
Selecting a Preset Performance Setup 58

THE KNOBS 59
USING THE KNOBS 59
- About CUTOFF and RESONANCE 62
- About GROOVE 62

ASSIGN KNOB 63
ASSIGN Knob Parameters 64

RIBBON CONTROLLER 66
USING THE RIBBON CONTROLLER 66
RIBBON CONTROLLER Parameters ... 67
- How the RIBBON CONTROLLER works 68

DIGITAL SAMPLING 69
ABOUT DIGITAL SAMPLING 69
RECORDING A SAMPLE AND PLAYING IT 70
- Guidelines for sampling 71
- Trigger Level 71
- Sampling memory capacity 73
- Deleting a sample 74
- Recording additional samples 74

SAMPLE EDITING 75
Setting the End Point 75
Creating Loops 78
- About the resolution settings 79

SONG RECORDING 80
RECORDING A USER SONG — REALTIME RECORDING 81
- Additional Operations 84

RECORDING A USER SONG — STEP RECORDING 85
Recording Notes 86
- Additional Operations 88

Replacing a Note or Rest 89
Entering Velocity Curves 90
Velocity Curve Chart 90
CLEARING A SONG 91

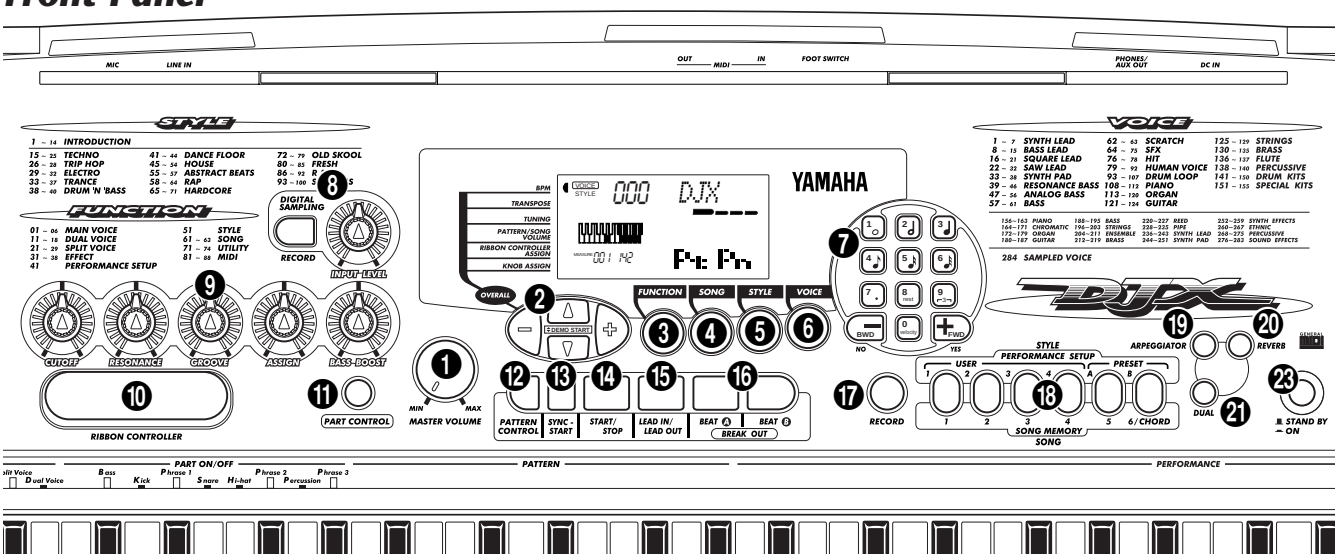
MIDI FUNCTIONS 92
WHAT IS MIDI? 92
Channel Messages 93
System Messages 93
CONNECTING TO A PERSONAL COMPUTER 94
- MIDI Terminals 94

FUNCTION PARAMETERS — MIDI 95
USING BULK DUMP SEND/ SAMPLING SEND TO SAVE DATA 97
Saving Bulk Data/Sampling Data 97
Loading Bulk Data/Sampling Data 99
USING INITIAL SETUP SEND WITH A SEQUENCER 100
Sending Initial Setup Data 100

TROUBLESHOOTING 102
DATA BACKUP & INITIALIZATION 103
VOICE LIST 104
DRUM KIT LIST 108
STYLE LIST 111
MIDI IMPLEMENTATION CHART 112
SPECIFICATIONS 115
INDEX 116

PANEL CONTROLS AND TERMINALS

Front Panel



❶ MASTER VOLUME dial
This determines the overall volume of the DJX.

❷ OVERALL, DEMO START buttons (▲, ▼, +, -)
These are for selecting the various "overall" functions and setting their values. (See page 22.) They are also used to play the Demo songs. (See pages 14, 40.) In the Digital Sampling function, these are used to select and set the sample editing parameters. (See page 75.)

❸ FUNCTION button
This selects the Function mode. (See page 18.)

❹ SONG button
This selects the Song mode. (See page 40.)

❺ STYLE button
This selects the Style mode. (See pages 15, 44.)

❻ VOICE button
This selects the Voice mode. (See pages 14, 25.)

❼ Numeric keypad, +/- buttons
These are for selecting songs, voices, and styles. (See pages 40, 25, and 44.) They are also used for making various settings, such as:

- Selecting and changing the Function parameters (page 18)
- Setting note values and other settings for the Step Record function (page 86)

❽ DIGITAL SAMPLING section — RECORD button and INPUT LEVEL knob
These two controls are used for the Digital Sampling functions. (See page 69.)

❾ Knobs — CUTOFF, RESONANCE, GROOVE, ASSIGN, BASS BOOST
These controls allow you to make expressive, dynamic, real-time changes to various aspects of the voices and styles. (See page 59.)

❿ RIBBON CONTROLLER
This assignable control allows you to make expressive, dynamic, real-time changes to various aspects of the voices and styles. (See page 66.)

⓫ PART CONTROL button
This turns the Part Control function on and off. (See page 59.)

⓬ PATTERN CONTROL button
When the Style mode is selected, this alternately enables or disables keyboard control over the pattern chords. (See page 45.)

⓭ SYNC-START button
This turns the Sync-Start function on and off. (See page 46.)

⓮ START/STOP button
When the Style mode is selected, this alternately starts and stops the pattern. (See pages 45, 47.) In the Song mode, this alternately starts and stops song playback. (See page 41.)

⓯ LEAD IN/LEAD OUT button
When the Style mode is selected, this is used to control the Lead In and Lead Out functions. (See pages 46, 47.)

⓰ BEAT A/B (BREAK OUT) buttons
When the Style mode is selected, these are used to change pattern sections and control the Break Out function. (See page 48.)

⓱ RECORD button
This is used for selecting and enabling the recording functions: Song (pages 82, 85) and Performance Setup (page 56).

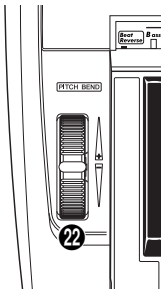
⓲ PERFORMANCE SETUP / SONG MEMORY buttons
When the Style mode is selected, these are used to select the Performance Setup registrations (pages 57, 58). When the Song mode is selected, these are used to select specific tracks (pages 82, 86).

⓳ ARPEGGIATOR button
This turns the Arpeggiator effect on and off. (See page 37.)

⓴ REVERB button
This turns the Reverb effect on and off. (See page 34.)

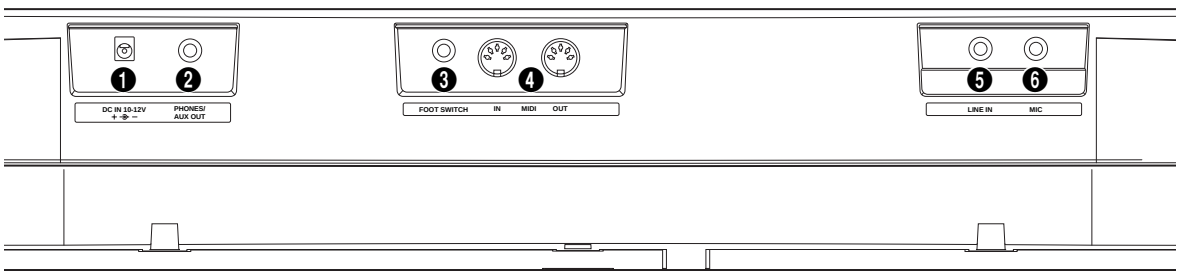
㉑ DUAL button
This turns the Dual mode on and off. (See page 29.)

㉒ PITCH BEND wheel
This is used for raising or lowering the pitch of the voices as you play. It affects only the voices played in the PERFORMANCE section of the keyboard. The pitch range of the wheel can also be set (see page 33).



㉓ STAND BY/ON switch

Rear Panel



❶ DC IN 10-12V jack
This is for connection to a PA-5B/5C AC power adaptor. (See page 8.)

❷ PHONES/AUX OUT jack
This is for connection to a set of stereo headphones or to an external amplifier/speaker system. (See page 9.)

❸ FOOT SWITCH jack
This is for connection to an optional FC4 or FC5 Footswitch. The footswitch is generally used to control sustain, but it can conveniently be set to control one of a variety of functions instead. (See pages 9, 21.)

❹ MIDI IN, OUT terminals
These are for connection to other MIDI instruments and devices. (See page 94.)

❺ LINE IN jack
This is used with the Digital Sampling functions, and is for connection to and recording of an external audio source (line level), such as a CD player or cassette deck. (See pages 9, 70.) (Connector: mono, 1/4" phone jack.)

❻ MIC jack
This is used with the Digital Sampling functions, and is for connection to a microphone for recording acoustic audio. (See pages 9, 70.) (Connector: mono, 1/4" phone jack.)

SETTING UP

This section contains information about setting up your DJX for playing. Make sure to read this section carefully before using the instrument.

POWER REQUIREMENTS

Although the DJX will run either from an optional AC adaptor or batteries, Yamaha recommends use of the more environmentally safe AC adaptor. Follow the instructions below according to the power source you intend to use.

CAUTION ⚠

Never interrupt the power supply (e.g. remove the batteries or unplug the AC adaptor) during any DJX record operation! Doing so can result in a loss of data.

Using an AC Power Adaptor

To connect your DJX to a wall socket, you will need the optionally available Yamaha PA-5B/5C Power Adaptor. Use of other AC adaptors could result in damage to the instrument, so be sure to ask for the right kind. Connect one end of the adaptor to the DC IN 10-12V jack on the rear panel of your DJX, and the other end to a suitable electrical outlet.

WARNING ⚠

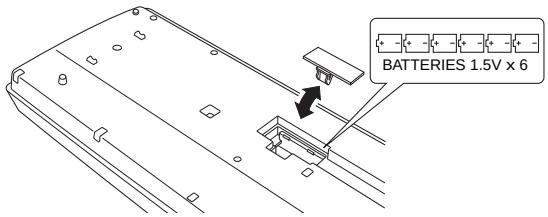
• Use ONLY a Yamaha PA-5B/5C AC Power Adaptor (or other adaptor specifically recommended by Yamaha) to power your instrument from the AC mains. The use of other adaptors may result in irreparable damage to both the adaptor and the DJX.

• Unplug the AC Power Adaptor when not using the DJX, or during electrical storms.

Using Batteries

■ Inserting Batteries

Turn the instrument upside-down and remove the battery compartment lid. Insert six 1.5-volt size "D" (SUM-1, R-20 or equivalent) batteries as shown in the illustration, making sure that the positive and negative terminals are properly aligned, and replace the lid.



■ When the Batteries Run Down

When the batteries run low and the battery voltage drops below a certain level, the DJX may not sound or function properly. As soon as this happens, replace them with a complete set of six new batteries.

CAUTION ⚠

• Never mix old and new batteries or different types of batteries (e.g., alkaline and manganese).

• To prevent possible damage from battery leakage, remove the batteries from the instrument if it is not to be used for a long time.

TURNING ON THE POWER

With the AC power adaptor connected or with batteries installed, simply press the power switch until it locks in the ON position. When the instrument is not in use, be sure to turn the power off. (Press the switch again so that it pops up.)

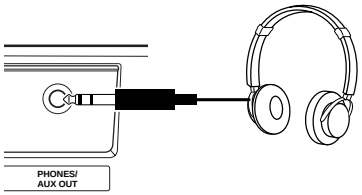
CAUTION ⚠

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

ACCESSORY JACKS

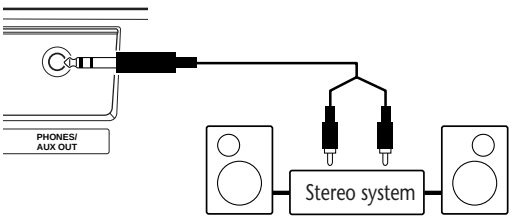
■ Using Headphones

For private practicing and playing without disturbing others, connect a set of stereo headphones to the rear panel PHONES/AUX OUT jack. Sound from the built-in speaker system is automatically cut off when you insert a headphone plug into this jack.



■ Connecting a Keyboard Amplifier or Stereo System

Though the DJX is equipped with a built-in speaker system, you can also play it through an external amplifier/speaker system. First, make sure the DJX and any external devices are turned off, then connect one end of a stereo audio cable to the LINE IN or AUX IN jack(s) of the other device and the other end to the rear panel PHONES/AUX OUT jack on the DJX.

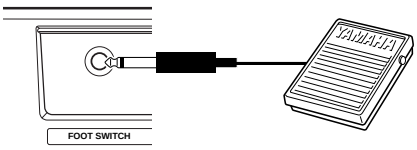


CAUTION ⚠

To prevent damage to the speakers, set the volume of the external devices at the minimum setting before connecting them. Failure to observe these cautions may result in electric shock or equipment damage.

■ Using a Footswitch

This feature lets you use an optional footswitch (Yamaha FC4 or FC5) to control a variety of functions. (See page 21.)

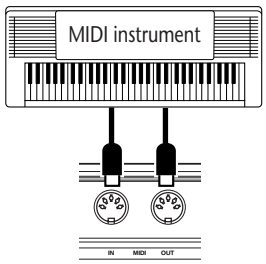


NOTE

• Make sure that the footswitch plug is properly connected to the FOOT SWITCH jack before turning on the power.
• Do not press the footswitch while turning the power on. Doing this changes the recognized polarity of the footswitch, resulting in reversed footswitch operation.

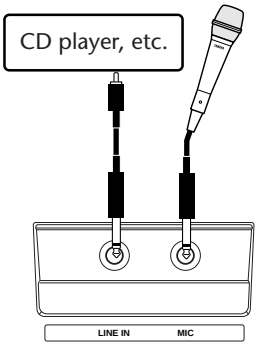
■ Using the MIDI Terminals

The DJX also features MIDI terminals, allowing you to interface the DJX with other MIDI instruments and devices. (For more information, see page 94.)



■ Using the MIC and LINE IN jacks

These are for recording an external audio source in the Digital Sampling functions (page 70). The MIC jack is for connection to a microphone for recording vocals and acoustic instruments. The LINE IN jack is for connecting to and recording a line level signal, such as that of a CD player or cassette deck.



CAUTION ⚠

Never connect a line level signal (CD player, cassette deck, electronic instrument, etc.) into the MIC input jack! Doing this could damage the DJX and its Digital Sampling functions.

Quick Guide

Unless you enjoy reading manuals, you're probably eager to start playing your new DJX right now. If so, this next section is for you!

Sure, the DJX is ready to play right out of the box — but we urge you to take the time to read this short, easy-to-understand section. If you've never even touched an electronic keyboard before, following the steps in this section will make you a master of the DJX in virtually no time at all! Plus, it will give you the tools to explore and use the advanced functions in your music.

Enjoy!

Step 1 The DJX – Take it for a spin!

Can't wait to get going? Here's all you need to lay down the beat and start jamming on your new DJX! Just follow the numbers...

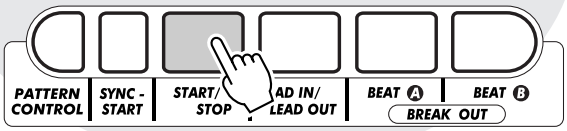
Give it some juice...

1 Plug in the adaptor, and turn on the power.

Start it up!

2 Start the pattern by pressing the START/STOP button. You can also start the pattern by pressing any one of the keys in the PATTERN section of the keyboard.

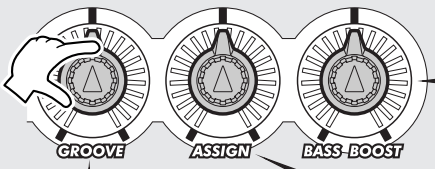
• Want to find out more? See page 45.



Work out on the knobs!

3 These three knobs give you dynamic, real-time control over the pattern. Try 'em out!

• Want to find out more? See page 59.



BASS BOOST knob
Pump up the bass of the entire DJX sound with this knob!

ASSIGN knob
You call the shots with this knob... Assign it to control dynamics, tempo/pitch, or any one of a variety of functions!

GROOVE knob
Change the "feel" or timing of the pattern. Turn this to give it some swing, make it laid-back... or just play it straight.

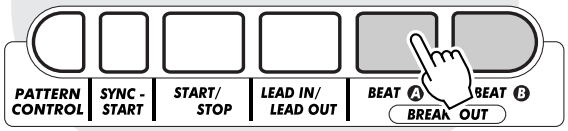
Cut loose on the ribbon!

4 Slide your finger along the RIBBON CONTROLLER and hear how the sound changes. There are tons of things you can assign to this, too!

• Want to find out more? See page 66.

Mix up the beats!

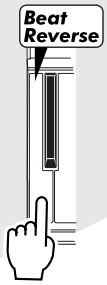
5 Play around with the BEAT A and BEAT B buttons, and get the rhythm to flow.

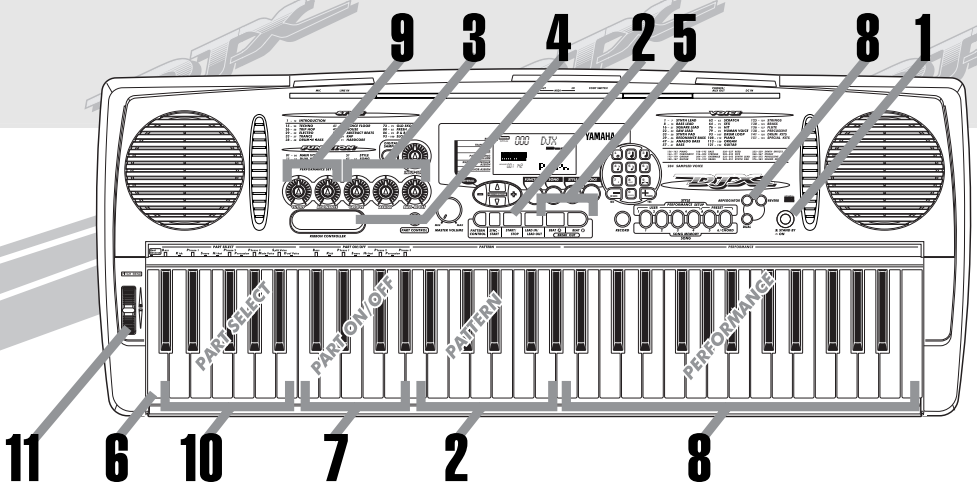


Shake it up and turn it 'round!

6 A special Beat Reverse key lets you break up the beat and hit the top of the measure. Play the key repeatedly and stutter the rhythm a bit!

• Want to find out more? See page 52.

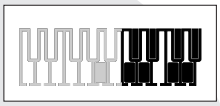


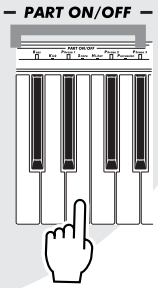


Drop Parts out, fly Parts in!

7 **With the PART ON/OFF keys, you're an instant maestro of mix. Check the name of the Part (instrument) over each key, then press it to turn the Part off and on. The Parts that are currently turned on are shown by darkened keys in the display.**

• Want to find out more? See page 52.

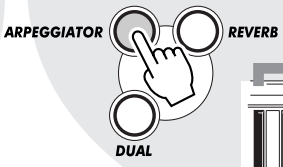


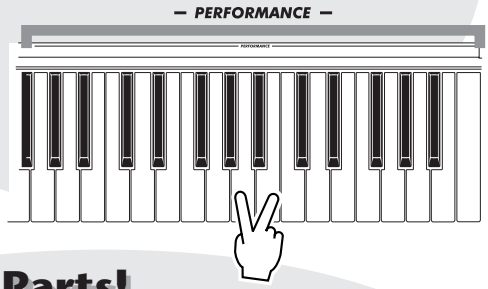


Arpeggiator magic!

8 **First, press the ARPEGGIATOR button to turn the function on. Then, hold down two or three keys at the same time in the PERFORMANCE section of the keyboard, and let the Arpeggiator work its magic!**

• Want to find out more? See page 37.





Tweak the voice — while you play!

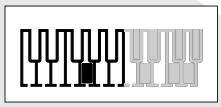
9 **Turn the two voice-related knobs for some wild effects, while you play the voice from the PERFORMANCE section of the keyboard.**

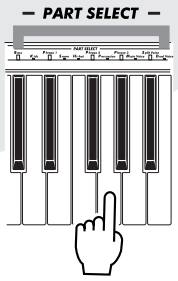
• Want to find out more? See page 59.

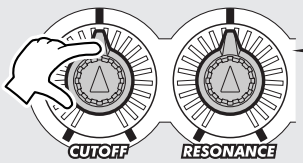
Pick your own Parts!

10 **You can select different Parts to be controlled with the voice-related knobs (in step 9 above) by pressing one of the PART SELECT keys. The selected Part is shown as a darkened key in the display.**

• Want to find out more? See page 60.







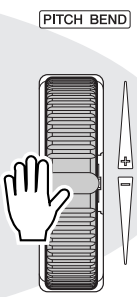
RESONANCE knob
Set this to determine how much the CUTOFF knob affects the sound. Turn it to the right for maximum filter effect, and to the left for more subtle filter changes.

CUTOFF knob
Just like on vintage analog synthesizers, this knob lets you sweep the cutoff frequency of the filter as you play the keyboard. Turn it to the right to "open up" the filter for a brighter sound, and turn it to the left to "shut down" the filter.

Play the wheel!

11 **The highly expressive PITCH BEND wheel rounds out the DJX's set of amazing power tools! Play the keyboard, and bend the pitch up by moving the wheel up with your left thumb. Bring the pitch down by moving the wheel down. Let go of the wheel, and the pitch naturally snaps back to normal!**

• Want to find out more? See page 7.

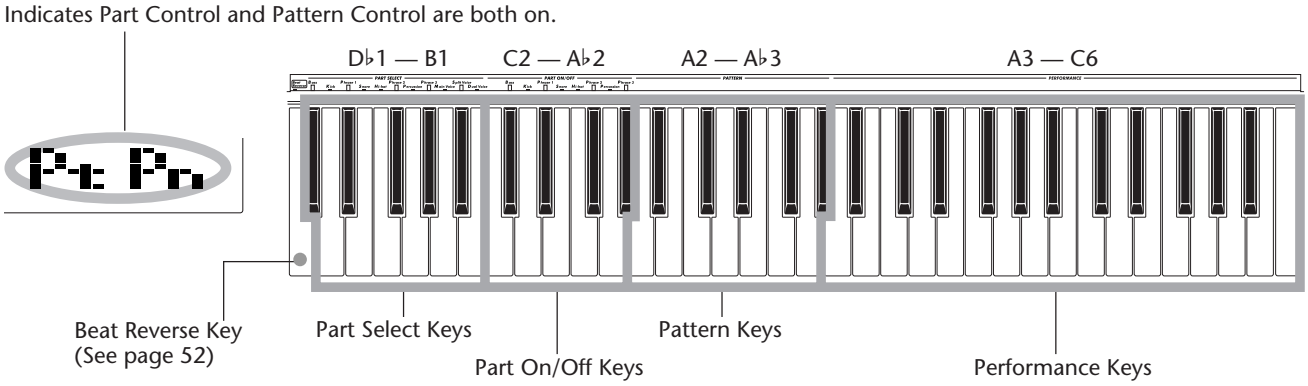


Step 2 Using the Keyboard

Using the DJX's Multi-function Keyboard

The keyboard of the DJX is far different (and more powerful!) than any you've ever seen. Let's take a look...

Each time you turn on the DJX, the keyboard is "split" into the following functions:



What do these keys do?

Part Select
These keys let you select specific Parts for control with the knobs and the RIBBON CONTROLLER. (See page 60.)

Part On/Off
These keys let you mute/un-mute specific Parts of a pattern before or during playback. (See page 52.)

Pattern
These keys let you instantly change the chords of the pattern. (See page 50.)

Performance
These keys are for normal playing of the selected voice (or voices).

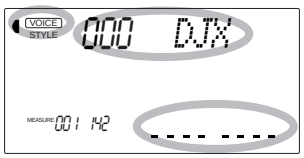
Special DJX Demo Voice

A special DJX Demo voice (#000) is automatically selected each time you turn on the power. This voice has a huge variety of sounds, with each key playing a different sound — percussion, drum loops, scratch, special FX, human voice and many others!

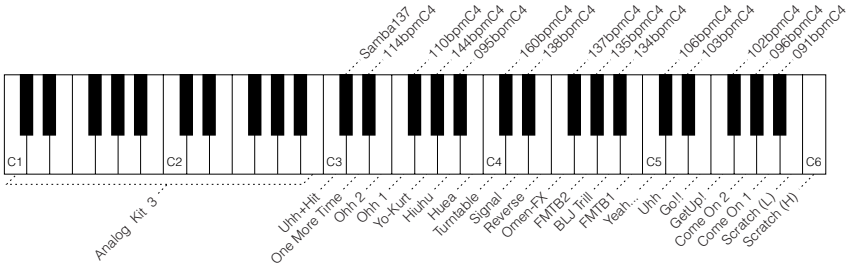
To hear the DJX Demo voice properly across the entire keyboard, make sure that Part Control, Pattern Control and Sync-Start are off. (See page 13.)

1 Enter the Voice mode.

2 Select voice #000.



3 Play different keys and listen to the variety of sounds.

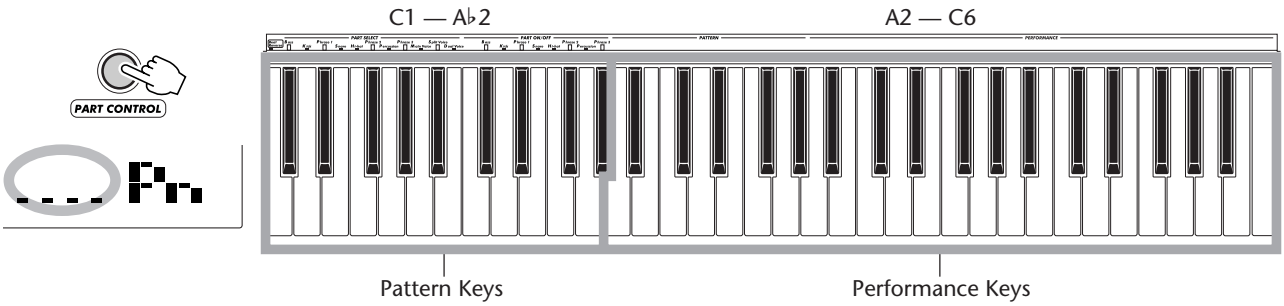


More keyboard settings

Other keyboard settings are available depending on the on/off settings of Part Control and Pattern Control. (You can turn these on and off with the PART CONTROL and PATTERN CONTROL buttons.)

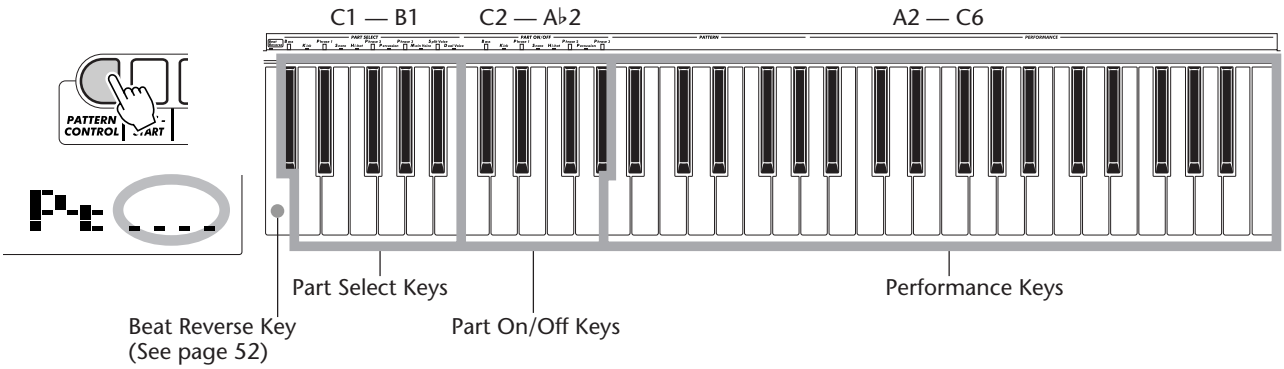
When Part Control is off:

Turn Part Control off by pressing the PART CONTROL button.



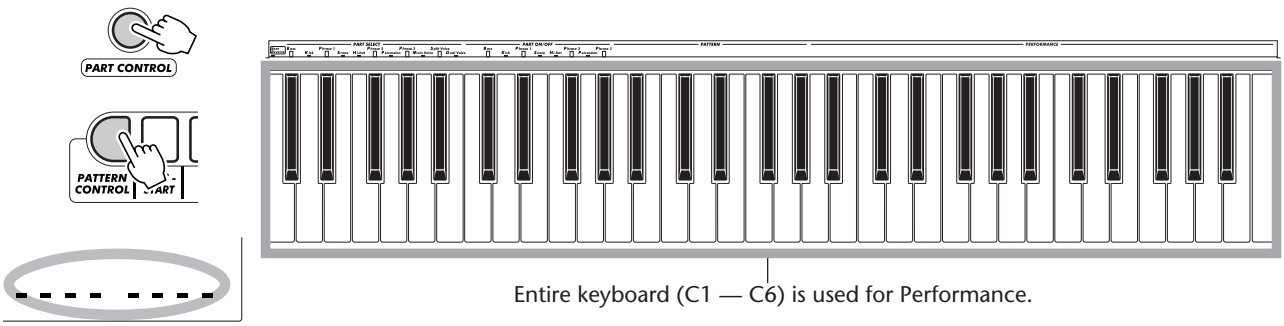
When Pattern Control is off:

Turn Pattern Control off by pressing the PATTERN CONTROL button.



When Part Control and Pattern Control are both off:

Turn Part Control off by pressing the PART CONTROL button; turn Pattern Control off by pressing the PATTERN CONTROL button. In this condition, you can play the entire keyboard normally.

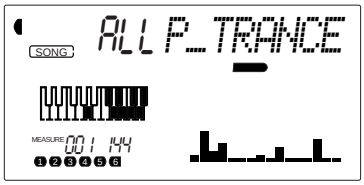


Step 3 Demo Song/Voice/Style

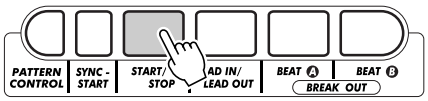
Playing back all three songs

The DJX has three Demo songs that showcase the authentic voices and dynamic patterns of the instrument.

1 **Simultaneously press both OVERALL ▲/▼ buttons.**



2 **Stop the song.**



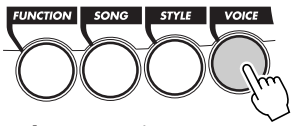
Want to find out more? See page 41.

Selecting a voice

The DJX features a total of 284 high-quality voices. Let's try a few of them out...

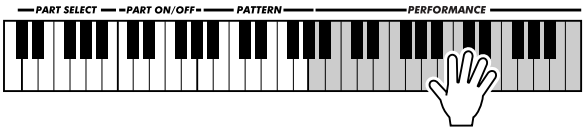
Panel voices ..... 1 - 140 (140 voices)
141 - 155 (15 drum kit voices)
GM voices ..... 156 - 283 (128 voices)
Sampling voice 284

1 **Enter the Voice mode.**



2 **Select a voice.**

3 **Play the keyboard.**



Want to find out more? See page 25.

Panel Voice List

No.	Voice Name
0	DJX
	SYNTH LEAD
1	Fuzzline
2	Talkbox
3	Acid Sync
4	Universe
5	Adrenaline
6	Fragile
7	Cut Glass
	BASS LEAD
8	Killer S
9	Reso-X
10	Choppy
11	PhatMan
12	Organese
13	Happy Vibes
14	TriTouch
15	Sync
	SQUARE LEAD
16	MC-Line
17	Alien
18	Psyche
19	Clanger
20	Square Lead 1
21	Square Lead 2

No.	Voice Name
	SAW LEAD
22	Break It
23	Scary
24	Move It
25	Robot Lead
26	Fat
27	Seq Ana
28	Stab
29	Pulse Saw
30	Sawtooth Lead 1
31	Sawtooth Lead 2
32	Bedtime
	SYNTH PAD
33	Sequenza
34	Insomnia
35	Wave2001
36	Amber
37	Eerie
38	Trance Pad
	RESONANCE BASS
39	Techno Bass
40	Kickin'B
41	Bassline
42	Nu Floor
43	Fish303
44	No.No.No

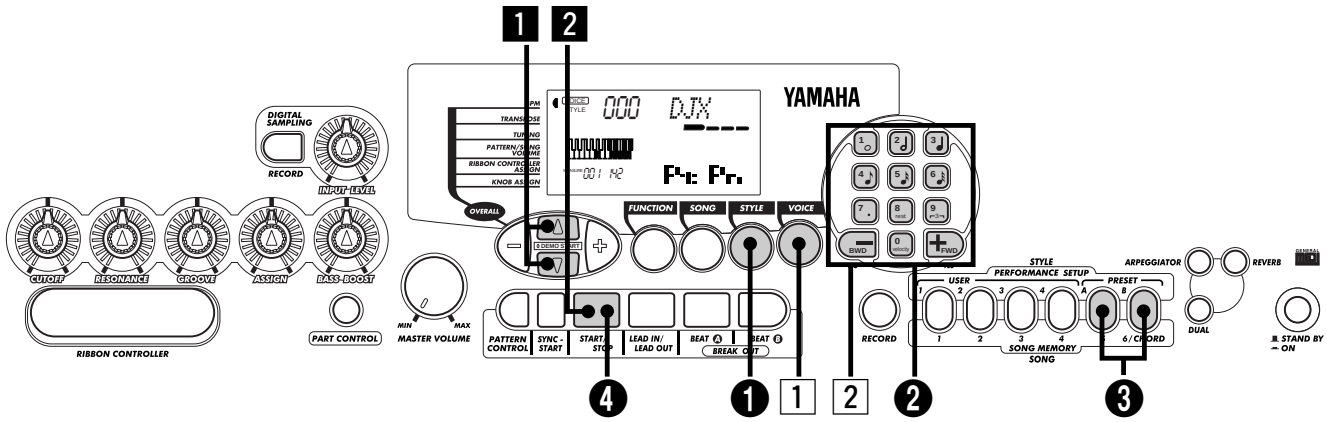
No.	Voice Name
45	Nu Swing
46	Synth Bass
	ANALOG BASS
47	Analog Bass
48	Dance Bass
49	Snap Bass
50	Old Mini
51	Power Bass
52	Dub Bass
53	Factory
54	Hyper
55	Kidz Bass
56	Techno
	BASS
57	Acoustic Bass
58	Finger Bass
59	Pick Bass
60	Fretless Bass
61	Slap Bass
	SCRATCH
62	Scratch
63	Killer DJ
	SFX
64	FMTB 1
65	BLJ Trill
66	Omen-FX

No.	Voice Name
67	Rave Pipe 1
68	Rave Pipe 2
69	FMTB 2
70	GtrChord
71	HiquiTB
72	Reverse
73	Signal
74	Aah
75	Turntable
	HIT
76	Metal Hit
77	Sharp Hit
78	Mild Hit
	HUMAN VOICE
79	Come On 1
80	Come On 2
81	GetUp!
82	Go!!
83	Huea
84	Hiuhu
85	Yo-Kurt
86	Oh Babe
87	Ohh 1
88	Ohh 2
89	One More Time
90	Uhh

No.	Voice Name
91	Uhh+Hit
92	Yeah...
	DRUM LOOP
93	091bpmC4
94	095bpmC4
95	096bpmC4
96	102bpmC4
97	103bpmC4
98	106bpmC4
99	110bpmC4
100	114bpmC4
101	134bpmC4
102	135bpmC4
103	137bpmC4
104	138bpmC4
105	144bpmC4
106	160bpmC4
107	Samba137
	PIANO
108	Funky Electric Piano
109	DX Electric Piano
110	CP 80
111	Bell Electric Piano
112	Clavi
	ORGAN
113	Jazz Organ 1

No.	Voice Name
114	Jazz Organ 2
115	Rock Organ
116	Cheez Organ
117	16'+2' Organ
118	Dance Organ
119	MissU
120	R&B Organ
	GUITAR
121	Octave Guitar
122	Clean Guitar
123	Muted Guitar
124	Overdriven Guitar
	STRINGS
125	Strings
126	Marcato Strings
127	Synth Strings
128	StringPad
129	Pizzicato
	BRASS
130	Techno Brass
131	Jump Brass
132	Brass Phase
133	Synth Brass
134	Bright Brass
135	Brass Tek

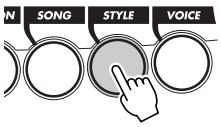
No.	Voice Name
	FLUTE
136	Ethnic Flute
137	Coco Flute
	PERCUSSIVE
138	Claps-X
139	Rim-X
140	Tom-X
	DRUM KITS
141	Standard Kit 1
142	Standard Kit 2
143	Room Kit
144	Rock Kit
145	Electronic Kit 1
146	Analog Kit 1
147	Dance Kit
148	Jazz Kit
149	Brush Kit
150	Symphony Kit
	SPECIAL KITS
151	Analog Kit 2
152	Analog Kit 3
153	Electronic Kit 2
154	B900 Kit
155	DJX Kit

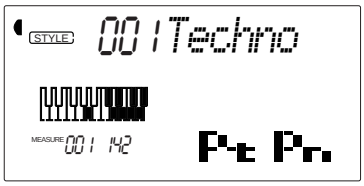


Selecting a style

The PortaTone features 100 different styles in various music genres. With the Performance Setup function, you can call up voice and other settings that best match the selected style. Each style has been programmed with two Preset Performance Setups.

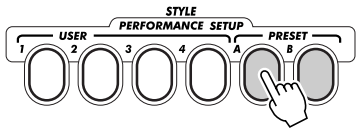
❶ Enter the Style mode.



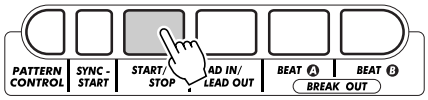


❷ Select a style.
For a list of styles, see below.

❸ Press one of the Performance Setup buttons: Preset A or B.



❹ Start the pattern and play the keyboard.



Want to find out more? See page 44.

Style List

No.	Style Name
	INTRODUCTION
1	Pop Techno
2	Trip Hop
3	Electro Beat
4	Goa
5	Hard Step 8th
6	Handbag 1
7	Romantic House
8	Ambient
9	Acid Jazz
10	Treach
11	Steppa
12	Struttin'
13	All That
14	Soulful
	TECHNO
15	Tribal Techno
16	Gabba
17	Soft Gabba
18	Euro Techno

No.	Style Name
19	Modern Detroit Techno
20	Vintage Detroit Techno
21	Modern Berlin Techno
22	Minimal Techno
23	Speed Garage
24	Acid Techno
25	Samba Techno
	TRIP HOP
26	Funky Trip Hop
27	Pop Trip Hop
28	Vintage Trip Hop
	ELECTRO
29	Plastic Electro
30	Cosmic Beat
31	Body Rock
32	Compilation
	TRANCE
33	Trance
34	Psychodelic Trance
35	Relaxx

No.	Style Name
36	Hypnotic
37	Dark Trance
	DRUM'N'BASS
38	Drum'n'Bass
39	Hard Jungle
40	Soul 2001
	DANCE FLOOR
41	Euro Dance
42	Euro Latin
43	Pop Reggae
44	Handbag 2
	HOUSE
45	House
46	Acid House
47	Deep House
48	Progressive House
49	Tribal House
50	Vintage Chicago
51	Hard Floor
52	Hip House

No.	Style Name
53	Club House
54	Dub House
	ABSTRACT BEATS
55	Digital Rock
56	Underground
57	Chill Out
	RAP
58	Bomb
59	Dance Hall
60	Hype
61	Money
62	Ragga
63	Shakin'
64	Tip
	HARDCORE
65	Buggin'
66	Diesel
67	Hi Rolla
68	Homies
69	SuckaMC

No.	Style Name
70	SupaBad
71	WestSide
	OLD SKOOL
72	Beatbox
73	Delight
74	Flares
75	Funked Up
76	Jack
77	Old Skool
78	Party
79	Theque
	FRESH
80	Chillin'
81	Dreamin'
82	EastSide
83	Grind
84	Hezee
85	Loc

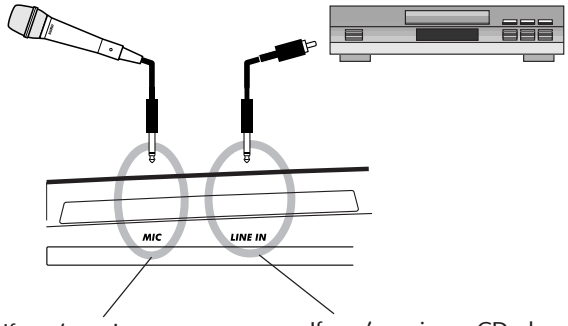
No.	Style Name
	R & B
86	Bouncy
87	Do it up
88	Hump
89	Plush
90	Pow!
91	Skippin'
92	Solid
	SLO JAMS
93	1stLuv
94	Cool
95	DaLadies
96	Daydream
97	Loverz
98	On Hit
99	Pushin'
100	Sultry

Step 4 Digital Sampling

Join the sampling revolution!

Yes, Digital Sampling is built into your new DJX — and it's truly easy to use. Try it out!

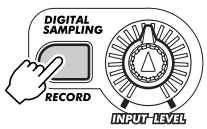
1 Set up the DJX for sampling.
Connect in one of the two ways shown below.

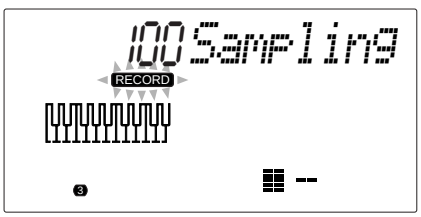


If you're using a microphone, plug it into the MIC jack on the rear panel.

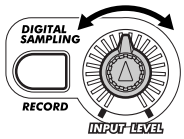
If you're using a CD player, plug it into the LINE IN jack on the rear panel. (DON'T plug it into the MIC jack! This could damage the DJX!)

2 Enter the Sampling mode.
Press the RECORD button in the DIGITAL SAMPLING section.

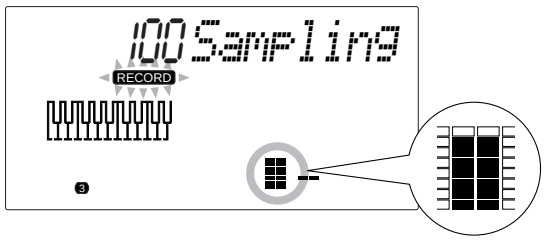




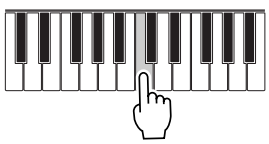
3 Set the sampling level.
Turn the INPUT LEVEL knob (while singing into the microphone or playing the CD).

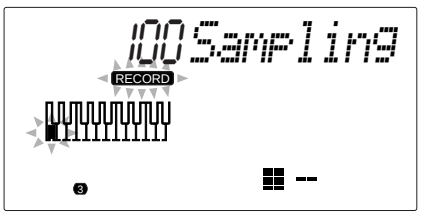


Make sure the "level meter" in the display doesn't go above this level:

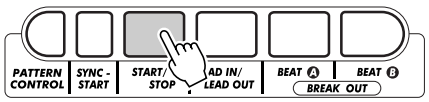


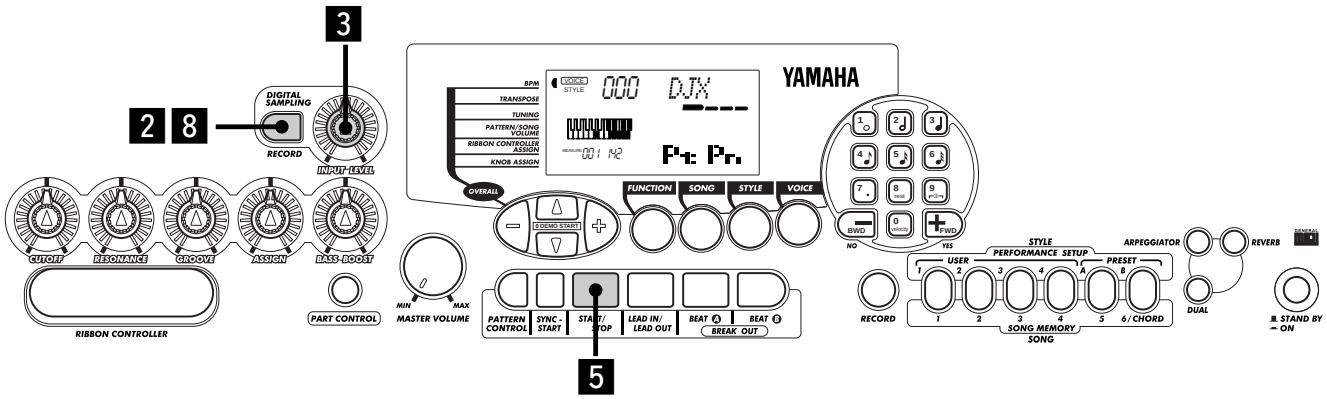
4 Press a key on the keyboard.
Press middle C (C3) for this example. The sound you record will be assigned to this key.

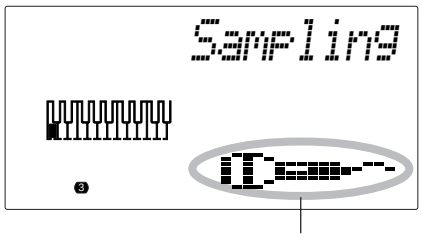




5 Set sampling to standby.
Press the START/STOP button.





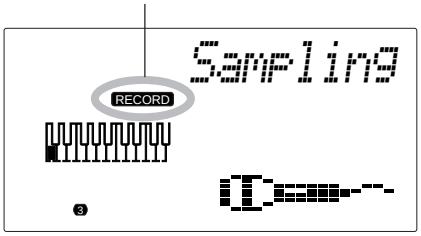


Microphone icon indicates sample recording.

6 Start recording.

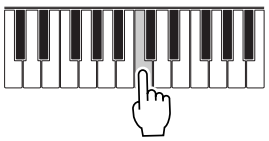
Sing into the microphone or play the CD. Sampling starts when the DJX receives the signal. Sampling also automatically stops after about three seconds.

RECORD indication stays lit during actual sampling.



7 Play the sample from the keyboard.

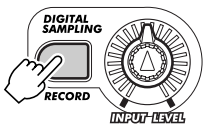
Try pressing and holding various keys on the keyboard and listen to your new sample.



8 Exit from the Sampling mode.

Press the RECORD (DIGITAL SAMPLING) button again.

Voice #284 ("Sampled") is automatically selected for playing.



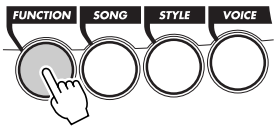
Want to find out more? See page 69.

Step 5 Function Parameters

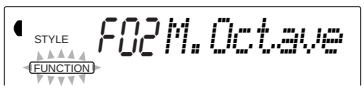
Using the Function parameters

The DJX has a variety of settings in the Function parameters.
These give you detailed control over many of the DJX's features. Here's how to use them:

1 Press the FUNCTION button.

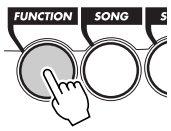


2 Select a Function number.
For a list of functions, see page 19.



The Function number can be selected while the "FUNCTION" indication is flashing.

Enter the Function number on the numeric keypad.



Press the FUNCTION button; each press advances through the numbers. Hold down the button to continuously advance through the numbers.

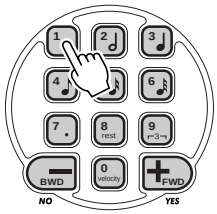
IMPORTANT

• Since the "FUNCTION" indication flashes for only a couple of seconds, make sure to select the parameter quickly after step 1 above.

3 After "FUNCTION" in the display stops flashing, change the value or setting.
After a couple of seconds, the "FUNCTION" indication stops flashing and remains lit. At the same time, the Function number ("F02" in the example above) changes automatically to the current value of the Function parameter.

Current value of the selected Function parameter.

4 Use the numeric keypad to change the value or setting. For on/off settings, use the +/- buttons.



Restoring the Default Value
If you've changed the parameter setting, you can instantly restore the default setting by pressing both +/- buttons simultaneously.

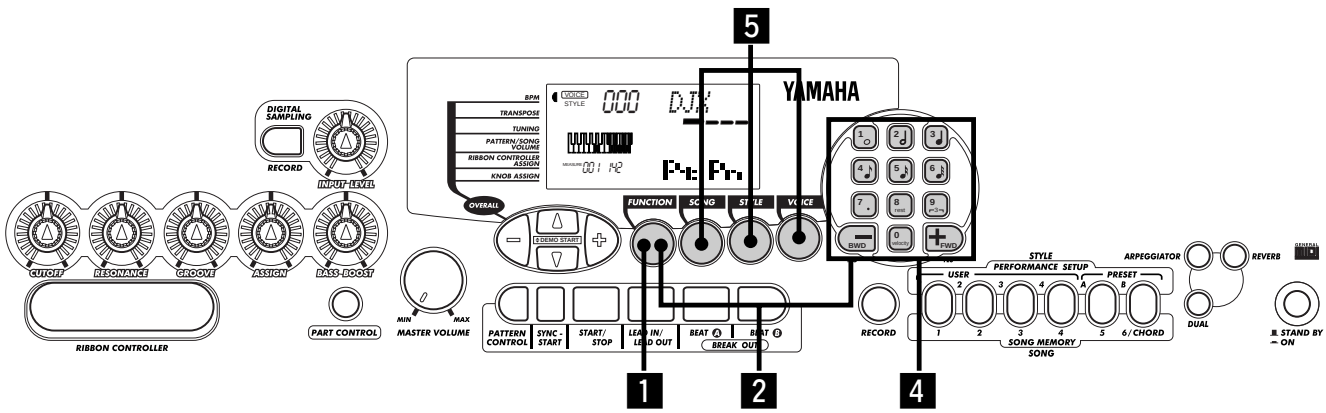
Negative values
To directly enter negative values (for those parameters that have negative values), simultaneously hold down the - button and press the desired number button.

5 Exit the Function mode.
Once you've made all desired settings, press one of the other mode buttons (SONG, STYLE, or VOICE).

Function Parameters List

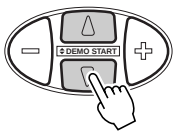
Function			page
F01	M.Volume	Main Voice Volume	27
F02	M.Octave	Main Voice Octave	27
F03	M.Pan	Main Voice Pan	27
F04	M.RevLvl	Main Voice Reverb Send Level	27
F05	M.ChoLvl	Main Voice Chorus Send Level	27
F06	M.DspLvl	Main Voice DSP Effect Send Level	27
F11	D.Volume	Dual Voice Volume	30
F12	D.Octave	Dual Voice Octave	30
F13	D.Pan	Dual Voice Pan	30
F14	D.RevLvl	Dual Voice Reverb Send Level	30
F15	D.ChoLvl	Dual Voice Chorus Send Level	30
F16	D.DspLvl	Dual Voice DSP Effect Send Level	30
F17	D.Voice	Dual Voice	30
F18	Dual	Dual On/Off	30
F21	S.Volume	Split Voice Volume	32
F22	S.Octave	Split Voice Octave	32
F23	S.Pan	Split Voice Pan	32
F24	S.RevLvl	Split Voice Reverb Send Level	32
F25	S.ChoLvl	Split Voice Chorus Send Level	32
F26	S.DspLvl	Split Voice DSP Effect Send Level	32
F27	S.Voice	Split Voice	32
F28	Split	Split On/Off	32
F29	SplitPnt	Split Point	32
F31	Reverb	Reverb On/Off	38

Function			page
F32	RevType	Reverb Type	38
F33	Chorus	Chorus On/Off	38
F34	ChoType	Chorus Type	38
F35	Dsp	DSP On/Off	38
F36	DspType	DSP Type	38
F37	Arpgator	Arpeggiator On/Off	38
F38	ArpgType	Arpeggiator Type	38
F41	UserBank	Performance Setup User Bank	57
F51	PtrnSPnt	Pattern Split Point	55
F61	USng1Clr	User Song 1 Clear	91
F62	USng2Clr	User Song 2 Clear	91
F63	USng3Clr	User Song 3 Clear	91
F71	FootSw	Footswitch	21
F72	VoiceSet	Voice Set	33
F73	TouchSns	Touch Sensitivity	33
F74	PBRange	Pitch Bend Range	33
F81	RemoteCh	Remote Channel	95
F82	KbdOut	Keyboard Out	95
F83	PtrnOut	Pattern Out	95
F84	Local	Local On/Off	96
F85	ExtClock	External Clock	96
F86	BulkSend	Bulk Data Send	96,97
F87	InitSend	Initial Data Send	96,100
F88	SmplSend	Sampling Send	96,97



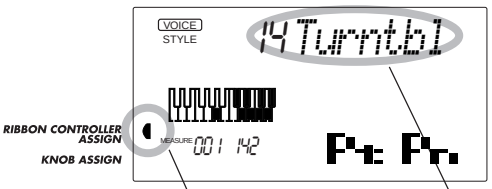
ASSIGN Knob and RIBBON CONTROLLER — Changing the Assignment

1 **Press the OVERALL ▲ or ▼ button repeatedly until the dark bar at the left of the display is directly opposite "KNOB ASSIGN" or "RIBBON CONTROLLER ASSIGN."**



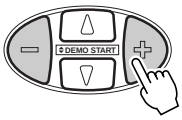
For more information on the ASSIGN knob and RIBBON CONTROLLER, see pages 63, 66.

2 **Change the assignment for the selected controller by using the OVERALL +/- buttons.**



Currently selected controller.

Currently assigned control or function.

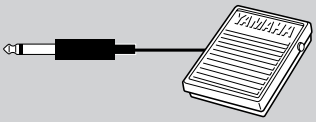


ASSIGN Knob/RIBBON CONTROLLER Function List

Function Name	Display Name	Description
Cutoff Frequency *	Cutoff	This is the same parameter as controlled by the CUTOFF knob (page 61).
Resonance *	Resonanc	This is the same parameter as controlled by the RESONANCE knob (page 61).
Reverb Send Level	RevLevel	This determines the depth of the Reverb effect. (See page 34.) Turning the knob also automatically turns on Reverb, if it was originally turned off.
Chorus Send Level	ChoLevel	This determines the depth of the Chorus effect. (See page 35.)
DSP Send Level	DspLevel	This determines the depth of the DSP effect. (See page 36.)
Modulation	Mod	This creates a vibrato-like pitch wavering effect.
Attack Time	Attack	This determines the "attack" of the sound — or, in other words, how long it takes for the sound to reach full volume when a note is played. For certain percussive sounds, this may have little or no audible effect.
Release Time	Release	This determines how long the sound sustains after a note is released. For certain percussive sounds, this may have little or no audible effect.
Pan	Pan	This determines the position of the sound in the stereo image (left, center, or right).
Volume	Volume	This determines the volume (level) of the sound.
Groove * **	Groove	This is the same parameter as controlled by the GROOVE knob (page 61).
Dynamics **	Dynamics	This makes both subtle and dramatic changes in the Pattern by altering the level of the individual notes. This affects the entire Pattern.
Dynamics Strength **	Strength	This determines the amount or strength of the level change in the Dynamics parameter (#09, above). This affects the entire Pattern.
Turntable **	Turntbl	This determines both the tempo and the pitch of the entire DJX sound, affecting all Parts of the Pattern and all voices.
Arpeggiator Speed ***	ArpSpeed	This determines the speed of the Arpeggiator function. (See page 37.)

* These functions can be assigned only to the RIBBON CONTROLLER.
** These functions are effective regardless of the Part Select setting. (See page 60.)
*** These Function parameters are effective only for the Main voice, regardless of the Part Select settings.

Footswitch Control – Changing the Assignment



The DJX has a footswitch feature that can be used to control a variety of functions and operations. By using your foot to conveniently control these functions, you free your hands to concentrate on your performance.

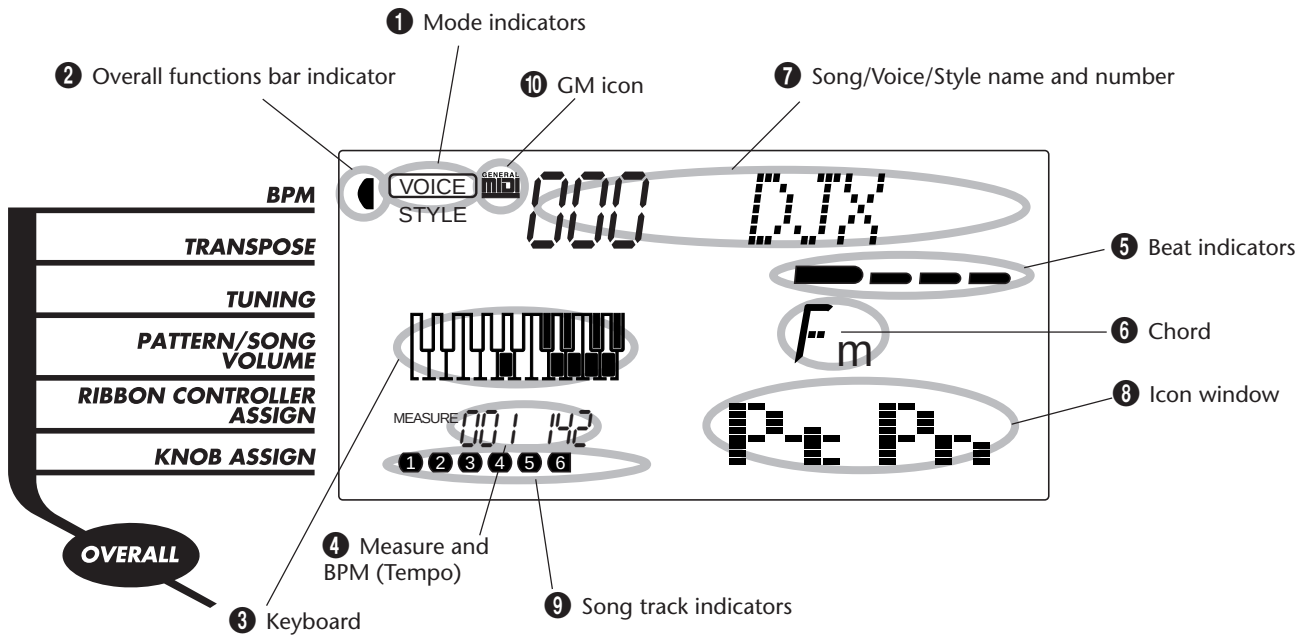
Assignment of the footswitch is done from Function parameter #71. (For instructions on using the Function parameters, see page 18.) The default setting for the footswitch is #13 Tap.

Footswitch Function List

Function Name	Display Name	Description
Sustain	Sustain	Damper pedal or sustain operation. Pressing the footswitch applies a natural sustain to the keyboard-played voice.
Arpeggiator Hold	ArpgHold	When the Arpeggiator effect (page 37) is turned on, this lets you use the footswitch to keep the Arpeggiator cycling, even when you take your fingers from the keyboard or play different notes. Press and hold the footswitch for as long as you want the Arpeggiator effect to be active.
Start/Stop	StartStp	When the Song mode or Style mode is active, this provides the same function as the START/STOP button (see pages 41, 45). Each press of the footswitch alternately starts and stops song or pattern playback.
Lead In/Lead Out	Ld InOut	When the Style mode is active, this provides the same function as the LEAD IN/ LEAD OUT button (see pages 46, 47). Pressing the footswitch twice while the Pattern is playing back causes the Lead Out section to gradually slow down (page 47).
Beat A	Beat A	When the Style mode is active, this provides the same function as the BEAT A (BREAK OUT) button (see page 48).
Beat B	Beat B	When the Style mode is active, this provides the same function as the BEAT B (BREAK OUT) button (see page 48).
Arpeggiator On/Off	Arpgator	When the Style mode is active, this provides the same function as the ARPEGGIATOR button (and the Arpeggiator On/Off parameter, #37). (See page 37.)
Dual On/Off	Dual	This provides the same function as the DUAL button (and the Dual On/Off parameter, #18). (See page 29.)
Split On/Off	Split	This provides the same function as the Split On/Off parameter, #28. (See page 31.)
Reverb On/Off	Reverb	This provides the same function as the REVERB button (and the Reverb On/Off parameter, #31). (See page 34.)
Chorus On/Off	Chorus	This provides the same function as the Chorus On/Off parameter, #33. (See page 35.)
DSP On/Off	Dsp	This provides the same function as the DSP On/Off parameter, #35. (See page 36.)
Tap	Tap	This useful function lets you use the footswitch to tap out the BPM (Tempo) and automatically start a selected song or pattern at that tapped speed. Simply tap (press/release) the footswitch (four times for a 4/4 time signature), and the song or pattern starts automatically at the BPM you tapped. The BPM can also be changed during playback by tapping the footswitch twice at the desired tempo.

PANEL DISPLAY INDICATIONS

The DJX features a large multi-function display that shows all important settings for the instrument. The section below briefly explains the various icons and indications in the display.



❶ Mode indicators

These indicate the currently selected mode — Voice, Style, Song, or Function — with the mode name encircled in a rounded rectangle. When "STYLE" or "SONG" appear without the rectangle, the corresponding mode is active in the background.

In the first example, the Style mode is selected.

In the second example, the Voice mode has been selected, but the Style mode is still active in the background. (This means that the style controls are active and can be used to play the currently selected style.)

❷ Overall functions bar indicator

The DJX has five Overall functions or controls. The currently selected function is indicated by a dark bar that appears next to its name (printed on the panel).

❸ Keyboard

When Part Control (page 59) is turned on, this indicates the status of the PART SELECT and PART ON/OFF keys. The lower octave in the display corresponds to the PART SELECT keys; the selected Part's key is dark. The upper octave in the display corresponds to the PART ON/OFF keys; dark keys indicate the corresponding Part is on.

❹ Measure and BPM (Tempo)

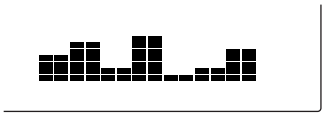
These show the current measure during playback of a song or style, and the currently set BPM (Tempo) value for the song or style.

❺ Beat indicators
These dark bars (one large, three small) flash in sequence and in time with the song or style. The large bar indicates the first beat of the measure. (See page 42.)

❻ Chord
When a user song (with chords) is being played back, this indicates the current chord root and type. It also indicates chords played in the PATTERN section of the keyboard when the Style mode and Pattern Control are on.

❼ Song/Voice/Style name and number
This portion of the display indicates the name and number of the currently selected song, voice, or style. It also displays the name and current value or setting of the Overall functions and the Function parameters, as well as other important operation messages.

❽ Icon window
Depending on the mode or function selected, this displays various symbols (icons) and other messages to provide convenient, at-a-glance information about the DJX operation. For example, when a song or pattern is playing, this displays the level of each instrumental track.



❾ Song track indicators
In song recording and playback, these indicate the status of the tracks. (See pages 82, 86.)

❿ GM icon
This appears when a GM (General MIDI) voice is selected. (See page 26.)

GM System Level 1

"GM System Level 1" is an addition to the MIDI standard which ensures that any GM-compatible music data can be accurately played by any GM-compatible tone generator, regardless of manufacturer. The GM mark is affixed to all software and hardware products that support GM System Level 1. The DJX supports GM System Level 1.

PLAYING VOICES – THE VOICE MODE

The Voice mode features 270 authentic voices (including 128 General MIDI voices), plus 15 special drum kits — all of which have been created with Yamaha's sophisticated AWM (Advanced Wave Memory) tone generation system. The Voice mode gives you many powerful and versatile tools for playing and enhancing these Voices.

The voices are divided into various instrument categories, all of which are printed on the panel for convenience. For a complete list of the available voices, see page 104.

The Voice mode is actually divided into three separate modes: Main, Dual and Split. In the **Main Voice** mode (see page 25), you can play a single voice over the entire range of the keyboard. The **Dual Voice** mode (page 29) allows you to "layer" two different voices together for rich, complex sounds. The **Split Voice** mode (page 31) lets you set up two different voices for playing from separate sections of the keyboard.

The DJX includes special Drum Kit voices — #141 - #155 — that let you play various drum and percussion sounds from the keyboard. (Refer to the Drum Kit Voice chart on page 26.) Symbols are also printed above the keyboard, conveniently indicating which sounds are played from which keys.

The DJX also has a special "Sampled" voice #284, to which your own original samples can be recorded. (See page 69.)

FAST ▸▸ ▸TRACK

1 ***Select the Voice mode.*** *(Press the VOICE button.)*

2 ***Select a voice*** *(with the numeric keypad).*

You can also select a Dual voice and/or a Split voice:

Dual voice

1 ***Turn on the Dual voice.*** *(Press the DUAL button.)*

2 ***Select the Dual voice*** *(from the Function mode).*

Split voice

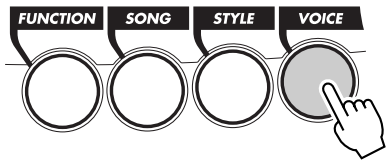
1 ***Turn on the Split voice*** *(from the Function mode).*

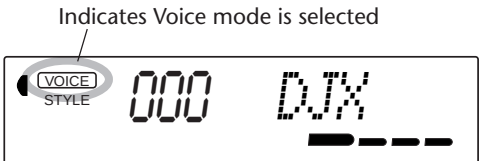
2 ***Select the Split voice*** *(Function mode).*

PLAYING A VOICE – MAIN VOICE

1 Select the Voice mode.

Press the VOICE button.





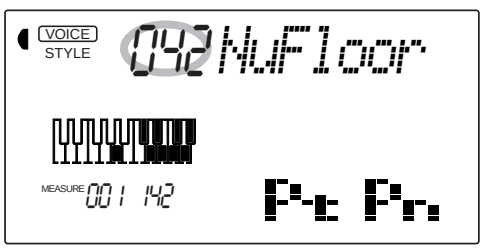
2 Select the desired voice number.

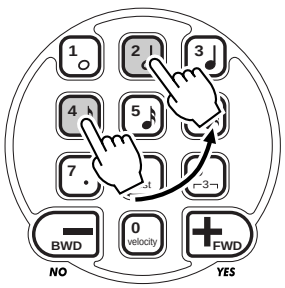
Use the numeric keypad. The basic categories of voices and their numbers are shown at the right side of the panel. A complete list of the available voices is given on page 104.

There are three ways to select voices: 1) directly entering the voice number with the numeric keypad, 2) using the +/- keys to step up and down through the voices, or 3) pressing the VOICE button to advance through the voice numbers.

Using the numeric keypad

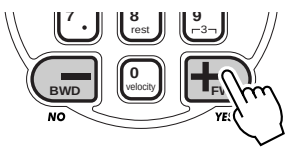
Enter the digits of the voice number as indicated on the panel. For example, to select voice #42, press "4" on the numeric keypad, then "2."





Using the +/- keys

Press the + key to select the next voice number, and press the - key to select the previous voice. Holding down either key continuously scrolls up or down through the numbers. The +/- keys have a "wrap around" feature. For example, pressing the + key from voice #284 returns to voice #000.



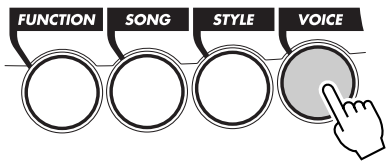
NOTE

All two-digit voice numbers can be selected without entering an initial "0." However, when selecting voice numbers 0 - 28, the DJX pauses briefly before actually calling up the voice. (This pause allows for entering three-digit voice numbers, such as "235." Entering the numbers "2" then "9" immediately calls up voice #29, since there are no voices #290 or higher.)

If you want to immediately call up voices #0 - #28, enter one or two zeros before the number; for example, select voice #9 by pressing "0," "0," then "9." Pressing only "0" does not change the voice.

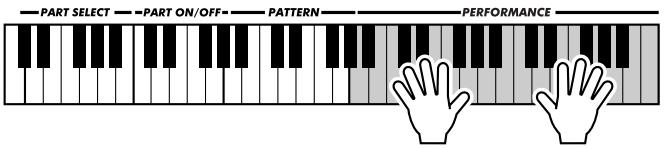
Using the VOICE button

Press the VOICE button to select the next voice number. (This functions exactly the same as the + button.)



3 *Play the selected voice.*

To change to another voice, repeat step 2 above.



NOTE

Each voice is automatically called up with the most suitable octave range setting. Thus, playing middle C with one voice may sound higher or lower than another voice at the same key.

HOT TIPS

When you select a voice, the DJX also automatically calls up various settings that are appropriate for the voice. [This is true when Voice Set (Function #72, page 33) is set to on — the default setting.]

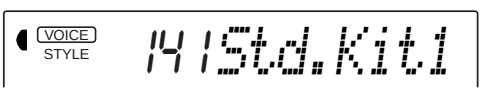
About Panel Voices and GM Voices

GENERAL MIDI

Keep in mind that the DJX has two separate sets of voices: Panel voices and GM (General MIDI) Voices. The GM Voices can also be used for optimum playback of GM-compatible song data. This means that any GM song data (played from a sequencer or other MIDI device) will sound just as the composer or programmer intended.
When a GM voice is selected, the General MIDI icon appears at the top left of the display.

Drum Kit Voice Chart (voices 141 - 155)

When one of the 15 panel Drum Kit voices are selected you can play different drums and percussion instruments on the keyboard.



No.	Name	LCD
DRUM KITS		
141	Standard Kit 1	Std.Kit1
142	Standard Kit 2	Std.Kit2
143	Room Kit	Room Kit
144	Rock Kit	Rock Kit
145	Electronic Kit 1	ElctKit1
146	Analog Kit 1	AnlgKit1
147	Dance Kit	DanceKit
148	Jazz Kit	Jazz Kit
149	Brush Kit	BrushKit
150	Symphony Kit	SymphKit
SPECIAL KITS		
151	Analog Kit 2	AnlgKit2
152	Analog Kit 3	AnlgKit3
153	Electronic Kit 2	ElctKit2
154	B900 Kit	B900 Kit
155	DJX Kit	DJX Kit

Function Parameters — Main Voice

The Function parameters provide additional settings for the Main voice. These settings are especially useful when using a second voice in the Dual or Split modes, since they let you change or enhance the sound of the Main voice separate from the Dual or Split voice. These settings include:

- *Volume*
- *Octave*
- *Pan*
- *Reverb Send Level*
- *Chorus Send Level*
- *DSP Effect Send Level*

Selecting and changing the Function parameters:
Press the FUNCTION button, then use the numeric keypad to select the parameter number. After "FUNCTION" stops flashing, use the numeric keypad or +/- buttons to change the setting. (For details, see page 18.)

NOTE
These settings are not saved when you turn off the power. If you wish to save them, save them to a User bank in the Performance Setup feature (page 56).

Function Parameters

No.	Parameter Name	Display Name	Range/Settings	Description
F01	Main Voice Volume	M.Volume	0 — 127	This determines the volume of the Main voice, letting you create an optimum mix with the Dual or Split voice.
F02	Main Voice Octave	M.Octave	-2 — 2 (octaves)	This determines the octave range for the Main voice. Use this to set the most suitable range for the Main voice when using the Split mode, or use it to create an octave layer in the Dual mode.
F03	Main Voice Pan	M.Pan	-7 (full left) — 0 (center) — 7 (full right)	This determines the pan position of the Main voice in the stereo image.
F04	Main Voice Reverb Send Level	M.RevLvl	0 — 127	This determines how much of the Main voice's signal is sent to the Reverb effect. (See page 34.) Higher values result in a louder Reverb effect.
F05	Main Voice Chorus Send Level	M.ChoLvl	0 — 127	This determines how much of the Main voice's signal is sent to the Chorus effect. (See page 35.) Higher values result in a louder Chorus effect.
F06	Main Voice DSP Effect Send Level	M.DspLvl	0 — 127	This determines how much of the Main voice's signal is sent to the DSP effect. (See page 36.) Higher values result in a louder DSP effect.

TRANSPOSE AND TUNING

You can also adjust the tuning and change the transposition (key) of the entire DJX sound with the Transpose and Tuning functions.

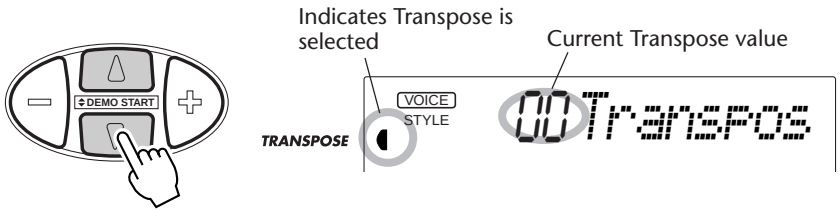
NOTE
The Transpose and Tuning settings have no effect on the Drum Kit voices (#141 - #155).

Transpose

Transpose determines the key of both the main voice and the pattern of the selected style. It also determines the pitch of the songs. This allows you to easily match the pitch of the DJX to other instruments or singers, or play in a different key without changing your fingering. The Transpose settings can be adjusted over a range of ± 12 semitones (± 1 octave).

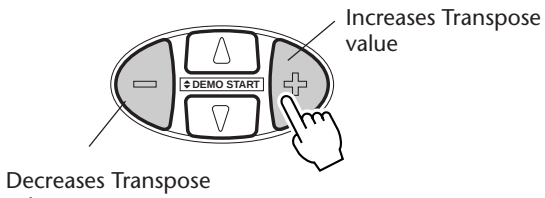
1 Select the Transpose function in the Overall menu.

Press one of the OVERALL ▲/▼ buttons, repeatedly if necessary, until "Transpos" appears in the display.



2 Change the value.

Use the OVERALL +/- buttons to increase or decrease the Transpose value. Holding down either button continuously increases or decreases the value.



HOT TIPS

Restoring the Default Transpose Value

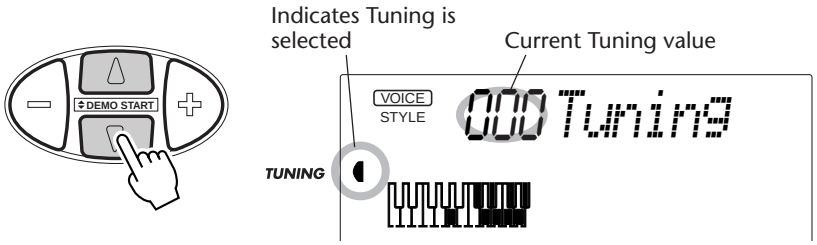
If you've changed the Transpose setting, you can instantly restore the default setting of "00" by pressing both OVERALL +/- buttons simultaneously (when Transpose is selected in the Overall menu).

Tuning

Tuning determines the fine pitch setting of both the main voice and the pattern of the selected style. It also determines the pitch of the songs. This allows you to accurately match the tuning with that of other instruments. The Tuning settings can be adjusted over a range of ± 100 (approx. ± 1 semitone).

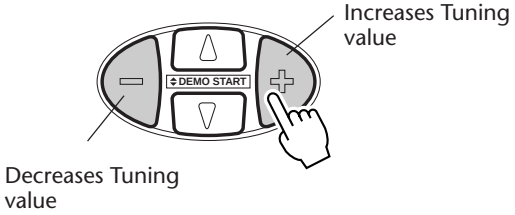
1 Select the Tuning function in the Overall menu.

Press one of the OVERALL ▲/▼ buttons, repeatedly if necessary, until "Tuning" appears in the display.



2 Change the value.

Use the OVERALL +/- buttons to increase or decrease the Tuning value. Holding down either button continuously increases or decreases the value.



HOT TIPS

Restoring the Default Tuning Value

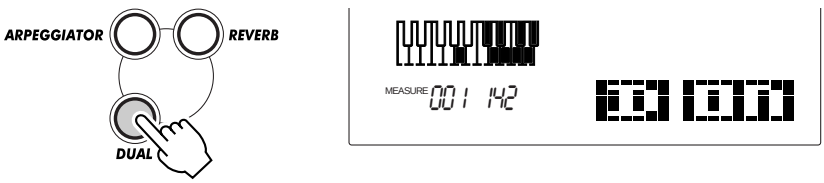
If you've changed the Tuning setting, you can instantly restore the default setting of "00" by pressing both OVERALL +/- buttons simultaneously (when Tuning is selected in the Overall menu).

PLAYING TWO VOICES – DUAL VOICE

The Dual Voice mode lets you create richly textured sounds by "layering" two different voices together — one voice being the Main voice selected in the normal way (page 25), and the other a Dual voice selected as described below.

1 Turn on the Dual Voice mode.

Press the DUAL button.



When you play the keyboard, both the currently selected Main and Dual voices will be heard.

To turn the Dual mode off, press the DUAL button again.

HOT TIPS

The Dual Voice mode can also be turned on and off with a connected footswitch. (See page 21.)

2 Select the desired Dual voice and make other settings for the voice (if desired) in the Function mode.

Selecting and changing the Function parameters:
Press the FUNCTION button, then use the numeric keypad to select the parameter number. After "FUNCTION" stops flashing, use the numeric keypad or +/- buttons to change the setting. (For details, see page 18.)

3 Exit the Function mode.

Once you've made all desired settings, press one of the other mode buttons (SONG, STYLE, or VOICE).

IMPORTANT

• For the Dual voice to be heard properly, make sure to:
** Select a different voice (#17, Dual Voice).*
** Set the volume to an appropriate level (#11, Dual Volume).*

NOTE

These settings are not saved when you turn off the power. If you wish to save them, save them to a User bank in the Performance Setup feature (page 56).

Function Parameters — Dual Voice

The Function parameters provide all settings for the Dual voice. Like the similar settings in the Main Voice mode, these settings let you change or enhance the sound of the Dual voice separate from the Main voice. These settings include:

- *Volume*
- *Octave*
- *Pan*
- *Reverb Send Level*
- *Chorus Send Level*
- *DSP Effect Send Level*
- *Dual Voice*
- *Dual On/Off*

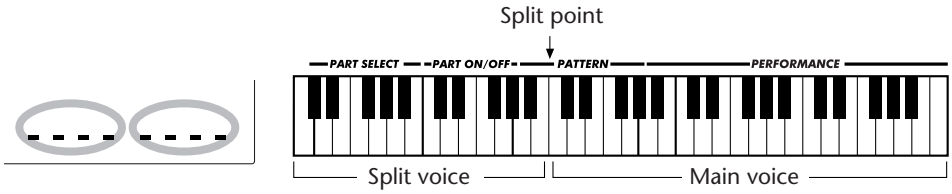
Function Parameters

No.	Parameter Name	Display Name	Range/Settings	Description
F11	Dual Voice Volume	D.Volume	0 — 127	This determines the volume of the Dual voice, letting you create an optimum mix with the Main voice.
F12	Dual Voice Octave	D.Octave	-2 — 2 (octaves)	This determines the octave range for the Dual voice. Use this to create an octave layer with the Main voice.
F13	Dual Voice Pan	D.Pan	-7 (full left) — 0 (center) — 7 (full right)	This determines the pan position of the Dual voice in the stereo image. For a spacious sounding effect, set this value at or near -7, and set the Main Voice Pan (page 27) at the opposite positive value.
F14	Dual Voice Reverb Send Level	D.RevLvl	0 — 127	This determines how much of the Dual voice's signal is sent to the Reverb effect. (See page 34.) Higher values result in a louder Reverb effect for the Dual voice.
F15	Dual Voice Chorus Send Level	D.ChoLvl	0 — 127	This determines how much of the Dual voice's signal is sent to the Chorus effect. (See page 35.) Higher values result in a louder Chorus effect for the Dual voice.
F16	Dual Voice DSP Effect Send Level	D.DspLvl	0 — 127	This determines how much of the Dual voice's signal is sent to the DSP effect. (See page 36.) Higher values result in a louder DSP effect for the Dual voice.
F17	Dual Voice	D.Voice	0 — 284	This determines the Dual voice. (See list on page 104.)
F18	Dual On/Off	Dual	on, off	This turns the Dual Voice mode on/off. (This is the same function as that of the DUAL button. It can also be controlled by a connected footswitch; see page 21.)

PLAYING TWO VOICES – SPLIT VOICE

In the Split Voice mode, you can assign two different Voices to opposite parts of the PERFORMANCE section of the keyboard, and play one Voice with your left hand while your right plays another. For example, you could play bass with the left hand and play piano with the right. The right-hand (or upper) Voice is selected in the Main Voice mode (page 25), and the left-hand (or lower) Voice is selected in the Split Voice mode, as described below.

Where the Split voice is actually played on the keyboard depends on the Part Control and Pattern Control on/off settings. When both of these are off, the entire keyboard can be used for the Main and Split voices. (For details, see page 13.)



1 Turn the Split voice on in the Function parameters (#28).

To do this, press the FUNCTION button, then use the numeric keypad to select parameter number 28. After "FUNCTION" stops flashing, use the +/- buttons to change the setting. (For details, see page 18.)

2 Make other settings for the Split voice (if desired) in the Function mode.

3 Exit the Function mode.

Once you've made all desired settings, press one of the other mode buttons (SONG, STYLE, or VOICE).

IMPORTANT

• For the Split voice to be heard properly, make sure to:
** Turn the following functions off: Part Control (page 59) and Pattern Control (page 45).*
** Set the volume to an appropriate level (#21, Split Volume).*
** Set the octave to a musically appropriate setting (#22 Split Octave). For example, a bass voice might best be played with a "-1" setting, while a strings voice might sound best at "1."*
** Set the desired Split Point (#29). For most purposes, however, the default Split Point of "071" (Main voice starts at middle C) is suitable. (See the "Parameters" list below for details.)*

NOTE

These settings are not saved when you turn off the power. If you wish to save them, save them to a User bank in the Performance Setup feature (page 56).

Function Parameters — Split Voice

The Function parameters provide all settings for the Split voice. Like the similar settings in the Main Voice mode, these settings let you change or enhance the sound of the Split voice separate from the Main voice. These settings include:

- *Volume*
- *Octave*
- *Pan*
- *Reverb Send Level*
- *Chorus Send Level*
- *DSP Effect Send Level*
- *Split Voice*
- *Split On/Off*
- *Split Point*

Function Parameters

No.	Parameter Name	Display Name	Range/Settings	Description
F21	Split Voice Volume	S.Volume	0 — 127	This determines the volume of the Split voice, letting you create an optimum mix with the Main voice.
F22	Split Voice Octave	S.Octave	-2 — 2 (octaves)	This determines the octave range for the Split voice. Use this to set the most suitable range for the Split (lower) voice.
F23	Split Voice Pan	S.Pan	-7 (full left) — 0 (center) — 7 (full right)	This determines the pan position of the Split voice in the stereo image. For a spacious sounding effect, set this value at or near -7, and set the Main Voice Pan (page 27) at the opposite positive value.
F24	Split Voice Reverb Send Level	S.RevLvl	0 — 127	This determines how much of the Split voice's signal is sent to the Reverb effect. (See page 34.) Higher values result in a louder Reverb effect for the Split voice.
F25	Split Voice Chorus Send Level	S.ChoLvl	0 — 127	This determines how much of the Split voice's signal is sent to the Chorus effect. (See page 35.) Higher values result in a louder Chorus effect for the Split voice.
F26	Split Voice DSP Effect Send Level	S.DspLvl	0 — 127	This determines how much of the Split voice's signal is sent to the DSP effect. (See page 36.) Higher values result in a louder DSP effect for the Split voice.
F27	Split Voice	S.Voice	0 — 284	This determines the Split voice. (See list on page 104.)
F28	Split On/Off	Split	on, off	This turns the Split Voice mode on/off. This can also be controlled by a connected footswitch. (See page 21.)
F29	Split Point	SplitPnt	000 — 127	This determines the highest key for the Split voice and sets the Split "point" — in other words, the key that separates the Split (lower) and Main (upper) voices. (The Split voice sounds up to and including the Split Point key.) The default Split Point is 071 (B3). The value can also be set directly by pressing the desired key while this parameter is selected. While this is being set, the keyboard does not produce any sound. After setting this, make sure to select a different parameter or exit the Function mode before playing the keyboard. **NOTE** • The Split Point setting is related to and affected by the Pattern Split Point setting. (See page 54.) • In order to use the entire keyboard for the Split and Main voices, turn the following functions off: Part Control (page 59) and Pattern Control (page 45).

ADDITIONAL VOICE FUNCTIONS – VOICE SET, TOUCH SENSITIVITY, AND PITCH BEND RANGE

Voice Set, Touch Sensitivity, and Pitch Bend Range are three important voice-related parameters, and are found in the Function parameters.

When Voice Set (described in greater detail below) is set to on, you can automatically call up a variety of voice-related settings that best suit the selected voice.

Touch Sensitivity (also described below) gives you dynamic, expressive control over the voices by letting you set how the volume of the DJX responds to your playing strength.

Pitch Bend Range lets you set the amount of pitch change when using the PITCH BEND wheel. (See page 7.)

Function Parameters — Voice Set, Touch Sensitivity and Pitch Bend Range

Selecting and changing the Function parameters:
Press the FUNCTION button, then use the numeric keypad to select the parameter number. After "FUNCTION" stops flashing, use the numeric keypad or +/- buttons to change the setting. (For details, see page 18.)

Function Parameters

No.	Parameter Name	Display Name	Range/Settings	Description
F72	Voice Set	VoiceSet	oFF, on	When this is set to on, selecting a voice also automatically calls up special voice-related parameters and values that best suit the voice. The parameters included in Voice Set are: • Main Voice — Volume, Octave, Pan • Dual Voice — Number, Volume, Octave, Pan, Reverb Send Level, Chorus Send Level, DSP Send Level • Arpeggiator — Type, On/Off Use the panel ARPEGGIATOR and DUAL buttons to turn the respective functions on or off.
F73	Touch Sensitivity	TouchSns	1 — 3	A setting of "1" results in limited touch response; this setting produces a relatively narrow dynamic range, no matter how lightly or strongly you play the keys. "2" lets you play over a normal dynamic range (soft to loud), while "3" is designed for playing very soft passages, giving you slightly more detailed control in the soft volume range.
F74	Pitch Bend Range	PBRange	1 — 12 (semitones)	This determines the amount that pitch is raised or lowered when using the PITCH BEND wheel. At the minimum setting, moving the PITCH BEND wheel up or down changes the pitch by a maximum of 1 semitone or half-step in either direction. At the maximum setting of 12, pitch is changed over a range of ± one octave (12 semitones). The PITCH BEND wheel affects only the voices played in the PERFORMANCE section of the keyboard.

EFFECTS

The DJX is equipped with a wide variety of effects that can be used to enhance the sound of the voices. Four general categories of effects are provided — Reverb, Chorus, DSP, and Arpeggiator — and each category has many effect types to choose from.

Application of the effects is also exceptionally flexible. All four effects can be used simultaneously, and the degree of the Reverb, Chorus, and DSP effects can be adjusted independently for each of the voices: Main, Dual, and Split.

FAST ▶▶ ▶TRACK

1 ***Turn on the effect.***

2 ***Set the effect type*** *(Function mode)**.***

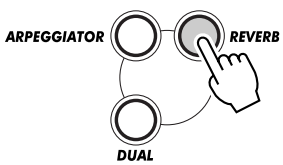
3 ***Set the effect send level for the desired voices — Main, Dual, Split*** *(Function mode). (Not necessary for Arpeggiator.)*

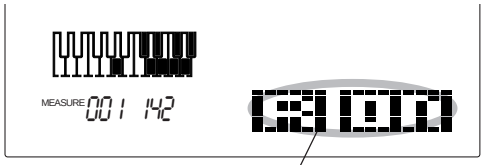
REVERB

The Reverb effect reproduces the natural ambient "wash" of sound that occurs when a instrument is played in a room or concert hall. A total of eight different Reverb types simulating various different performance environments are available.

1 *Turn on the Reverb effect.*

Press the REVERB button.





Indicates that Reverb is on

2 *Set the desired Reverb Type (#32) in the Function mode.*

Selecting and changing the Function parameters:
Press the FUNCTION button, then use the numeric keypad to select the parameter number. After "FUNCTION" stops flashing, use the numeric keypad or +/- buttons to change the setting. (For details, see page 18.)

For a list of the Reverb Types, see page 39.

HOT TIPS

Reverb can also be turned on and off with a connected footswitch (page 21), or from Function parameter #31 (page 38).

NOTE

• The panel REVERB on/off button affects only the keyboard played voices. If you want to turn off the Reverb effect for the overall DJX sound (including accompaniment and songs), set the Reverb Type (#9, page 39) to "off."

• These settings are not saved when you turn off the power. If you wish to save them, save them to a User bank in the Performance Setup feature (page 56).

• Three additional Reverb Types are available when controlling the DJX from a MIDI device. (For details, see page 114.)

3 Set the Reverb Send Level for the desired voice(s).

The Main, Dual, and Split voices can each be set to have different amounts of Reverb. Use the corresponding Reverb Send Level parameters in the Function mode (Main: #04, Dual: #14, Split: #24) to control this. (See pages 27, 30, 32.)

4 Exit the Function mode.

Once you've made all desired settings, press one of the other mode buttons (SONG, STYLE, or VOICE).

NOTE

If the Reverb Send Level is set to a value near or at "000," the Reverb effect may not be heard.

CHORUS

The Chorus effect lets you enhance the sound of a voice with through the use of pitch modulation. Two basic types are provided: Chorus and Flanger. Chorus produces a thicker, warmer, and more animated sound, whereas Flanger creates a swirling, metallic effect. A total of four Chorus types are available.

1 Turn on the Chorus effect (#33) and set the Chorus Type (#34) in the Function mode.

Selecting and changing the Function parameters:
Press the FUNCTION button, then use the numeric keypad to select the parameter number. After "FUNCTION" stops flashing, use the numeric keypad or +/- buttons to change the setting. (For details, see page 18.)

For a list of the Chorus Types, see page 39.

2 Set the Chorus Send Level for the desired voice(s).

The Main, Dual, and Split voices can each be set to have different amounts of Chorus. Use the corresponding Chorus Send Level parameters in the Function mode (Main: #05, Dual: #15, Split: #25) to control this. (See pages 27, 30, 32.)

3 Exit the Function mode.

Once you've made all desired settings, press one of the other mode buttons (SONG, STYLE, or VOICE).

HOT TIPS

The Chorus effect can also be turned on and off with a connected footswitch. (See page 21.)

NOTE

• The Chorus effect is applied only to the keyboard-played voices.

• These settings are not saved when you turn off the power. If you wish to save them, save them to a User bank in the Performance Setup feature (page 56).

• Three additional Chorus Types are available when controlling the DJX from a MIDI device. (For details, see page 114.)

NOTE

If the Chorus Send Level is set to a value near or at "000," the Chorus effect may not be heard.

DSP

The DSP effect section provides many reverb and chorus effects, plus a wealth of other useful and dynamic effects for enhancing and changing the sound of the voices. Included among these miscellaneous effects are reverse gate reverb, phaser, rotary speaker, tremolo, echo, delay, distortion, equalization, and wah. A total of thirty-three DSP types are available.

1 Turn on the DSP effect (#35) and set the DSP Type (#36) in the Function mode.

Selecting and changing the Function parameters:
Press the FUNCTION button, then use the numeric keypad to select the parameter number. After "FUNCTION" stops flashing, use the numeric keypad or +/- buttons to change the setting. (For details, see page 18.)

For a list of the DSP Types, see page 39.

2 Set the DSP Send Level for the desired voice(s).

The Main, Dual, and Split voices can each be set to have different amounts of DSP. Use the corresponding DSP Send Level parameters in the Function mode (Main: #06, Dual: #16, Split: #26) to control this. (See pages 27, 30, 32.)

3 Exit the Function mode.

Once you've made all desired settings, press one of the other mode buttons (SONG, STYLE, or VOICE).

HOT TIPS

The DSP effect can also be turned on and off with a connected footswitch. (See page 21.)

NOTE

• The DSP effect is applied only to the keyboard-played voices.

• These settings are not saved when you turn off the power. If you wish to save them, save them to a User bank in the Performance Setup feature (page 56).

• Eighteen additional DSP Types are available when controlling the DJX from a MIDI device. (For details, see page 114.)

NOTE

If the DSP Send Level is set to a value near or at "000," the DSP effect may not be heard.

ARPEGGIATOR

The Arpeggiator effect lets you automatically create a variety of patterns and arpeggios in the Main voice, simply by holding one or more keys in the PERFORMANCE section of the keyboard. A total of sixteen different Arpeggiator types are available.

The speed of the Arpeggiator depends on the BPM setting (page 41). The speed can also be controlled as you play with the ASSIGN knob or RIBBON CONTROLLER (when either of those controls are set to "Arpeggiator Speed"; see pages 64 and 67).

1 Turn on the Arpeggiator effect.

Press the ARPEGGIATOR button.

2 Set the Arpeggiator Type (#38) in the Function mode.

Selecting and changing the Function parameters:
Press the FUNCTION button, then use the numeric keypad to select the parameter number. After "FUNCTION" stops flashing, use the numeric keypad or +/- buttons to change the setting. (For details, see page 18.)

For a list of the Arpeggiator Types, see page 38.

3 Exit the Function mode.

Once you've made all desired settings, press one of the other mode buttons (SONG, STYLE, or VOICE).

HOT TIPS

- *The DJX also has an Arpeggiator Hold function that lets you use a connected footswitch to keep the Arpeggiator cycling, even when you take your hands from the keyboard. (See page 21.)*
- *The Arpeggiator effect can also be turned on and off with a connected footswitch (page 21), or from Function parameter #37 (page 38).*

NOTE

- *These settings are not saved when you turn off the power. If you wish to save them, save them to a User bank in the Performance Setup feature (page 56).*
- *If keys are being held when the Arpeggiator is turned on, the Arpeggiator effect begins only when another key is pressed. If keys are being held when the Arpeggiator is turned off, the Arpeggiator effect continues until all keys are released.*

Function Parameters — Effects

The Effect Function parameters provide all effect-related settings (with the exception of the Send parameters in the Main, Dual, and Split sections). These settings include:

- *Reverb On/Off*
- *Reverb Type*
- *Chorus On/Off*
- *Chorus Type*
- *DSP On/Off*
- *DSP Type*
- *Arpeggiator On/Off*
- *Arpeggiator Type*

Function Parameters

No.	Parameter Name	Display Name	Range/Settings	Description
F31	Reverb On/Off	Reverb	on, off	This turns the Reverb effect on/off. (This is the same function as that of the REVERB button. It can also be controlled by a connected footswitch; see page 21.)
F32	Reverb Type	RevType	(See "Reverb Type" list below.)	(See "Reverb Type" list below.)
F33	Chorus On/Off	Chorus	on, off	This turns the Chorus effect on/off. This can also be controlled by a connected footswitch. (See page 21.)
F34	Chorus Type	ChoType	(See "Chorus Type" list below.)	(See "Chorus Type" list below.)
F35	DSP On/Off	Dsp	on, off	This turns the DSP effect on/off. This can also be controlled by a connected footswitch. (See page 21.)
F36	DSP Type	DspType	(See "DSP Type" list below.)	(See "DSP Type" list below.)
F37	Arpeggiator On/Off	Arpgator	on, off	This turns the Arpeggiator effect on/off. (This is the same function as that of the ARPEGGIATOR button. It can also be controlled by a connected footswitch; see page 21.)
F38	Arpeggiator Type	ArpgType	(See "Arpeggiator Type" list below.)	(See "Arpeggiator Type" list below.)

■ Effect Types

Arpeggiator Types

No.	Name	LCD Display	Description
1	Techno-A	Techno-A	Typical Eurobeat techno pattern.
2	Techno-B	Techno-B	Typical UK techno pattern.
3	Techno-C	Techno-C	Typical Japanese techno pattern.
4	Techno-D	Techno-D	Typical German techno pattern.
5	Dance/House	DAHouse	Syncopated dance or house music pattern.
6	Syncopation	Syncopa	Syncopated pattern with extreme octave jumps.
7	BaseLine	BaseLine	Arpeggio pattern especially suited for bass. (Best with just one or two notes.)
8	Echo	Echo	Two-measure pattern with echo effect.
9	Techno echo	TekkEcho	Techno pattern with echo effect.
10	Sweep	Sweep	Two-measure pattern with extreme octave jumps.
11	Pulse	Pulse	Two-measure pattern with extreme octave jumps; works well with one note held in lower octave (for bass pulse).
12	Up	Up	Arpeggio pattern of ascending notes (for all notes held).
13	Down	Down	Arpeggio pattern of descending notes (for all notes held).
14	Up & Down (A)	UpDownA	Arpeggio pattern (version A) of ascending and descending notes (for all notes held).
15	Up & Down (B)	UpDownB	Arpeggio pattern (version B) of ascending and descending notes (for all notes held).
16	Random	Random	Random arpeggio pattern (for all notes held).

Reverb Types

No.	Reverb Type	Display Name	Description
1 2	Hall 1 Hall 2	Hall1 Hall2	Concert hall reverb.
3 4	Room 1 Room 2	Room1 Room2	Small room reverb.
5 6	Stage 1 Stage 2	Stage1 Stage2	Reverb for solo instruments.
7 8	Plate 1 Plate 2	Plate1 Plate2	Simulated steel plate reverb.
9	Off	Off	No effect.

Chorus Types

No.	Chorus Type	Display Name	Description
1 2	Chorus 1 Chorus 2	Chorus1 Chorus2	Conventional chorus program with rich, warm chorusing.
3 4	Flanger 1 Flanger 2	Flanger1 Flanger2	Pronounced three-phase modulation with a slight metallic sound.
5	Off	Off	No effect.

DSP Types

No.	DSP Type	Display Name	Description
1 2	Hall 1 Hall 2	Hall1 Hall2	Concert hall reverb.
3 4	Room 1 Room 2	Room1 Room2	Small room reverb.
5 6	Stage 1 Stage 2	Stage1 Stage2	Reverb for solo instruments.
7 8	Plate 1 Plate 2	Plate1 Plate2	Simulated steel plate reverb.
9 10	Early Reflection 1 Early Reflection 2	ER1 ER2	Early reflections only.
11	Gate Reverb	Gate1	Gated reverb effect, in which the reverberation is quickly cut off for special effects.
12	Reverse Gate	Gate2	Similar to Gate Reverb, but with a reverse increase in reverb.
13 14	Chorus 1 Chorus 2	Chorus1 Chorus2	Conventional chorus effect with rich, warm chorusing.
15 16	Flanger 1 Flanger 2	Flanger1 Flanger2	Pronounced three-phase modulation with slight metallic sound.
17	Symphonic	Symphony	Exceptionally rich & deep chorusing.
18	Phaser	Phaser	Pronounced, metallic modulation with periodic phase change.
19 20	Rotary Speaker 1 Rotary Speaker 2	Rotary1 Rotary2	Rotary speaker simulation.
21 22	Tremolo 1 Tremolo 2	Tremolo1 Tremolo2	Rich Tremolo effect with both volume and pitch modulation.
23	Guitar Tremolo	Tremolo3	Simulated electric guitar tremolo.
24	Auto Pan	AutoPan	Several panning effects that automatically shift the sound position (left, right, front, back).
25	Auto Wah	AutoWah	Repeating filter sweep “wah” effect.
26	Delay Left - Center - Right	DelayLCR	Three independent delays, for the left, right and center stereo positions.
27	Delay Left - Right	DelayLR	Initial delay for each stereo channel, and two separate feedback delays.
28	Echo	Echo	Stereo delay, with independent feedback level settings for each channel.
29	Cross Delay	CrossDly	Complex effect that sends the delayed repeats “bouncing” between the left and right channels.
30	Distortion Hard	D Hard	Hard-edge distortion.
31	Distortion Soft	D Soft	Soft, warm distortion.
32	EQ Disco	EQ Disco	Equalizer effect that boosts both high and low frequencies, as is typical in most disco music.
33	EQ Telephone	EQ Tel	Equalizer effect that cuts both high and low frequencies, to simulate the sound heard through a telephone receiver.
34	Off	Off	No effect.

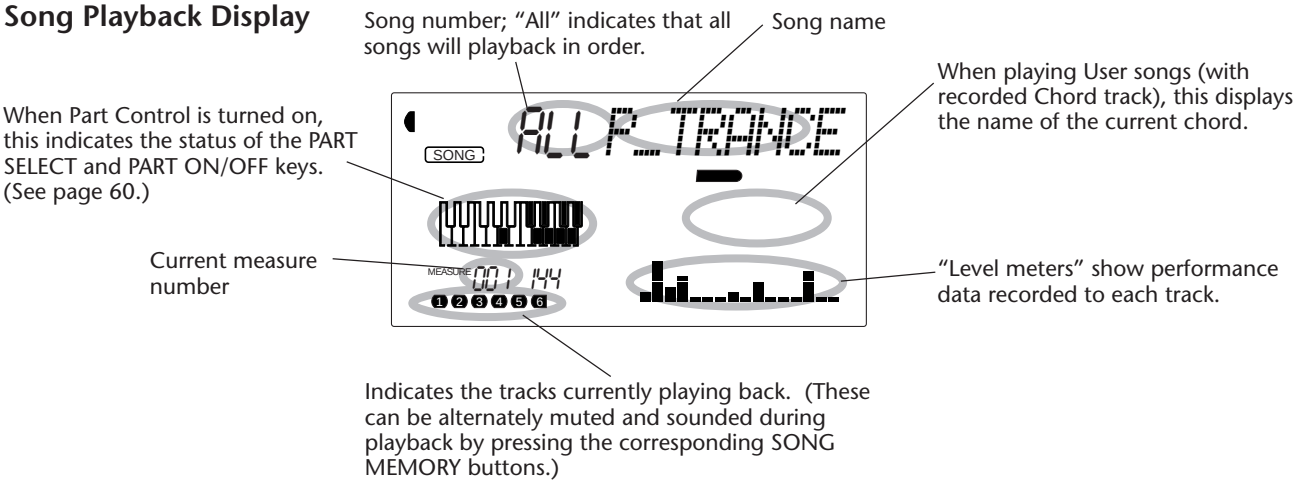
SONG PLAYBACK – THE SONG MODE

The Song mode features six songs — three demo songs that have been created using the rich and dynamic sounds of the DJX, and three User songs to which you can record your own performance.

The demo songs are generally for your listening enjoyment; however, you can also play along with them on the keyboard.

The User songs are "empty" and cannot be played until something has been recorded to them. (For instructions on recording your own songs, see page 80.)

Song Playback Display



FAST TRACK

1 ***Select the Song mode.*** *(Press the SONG button.)*

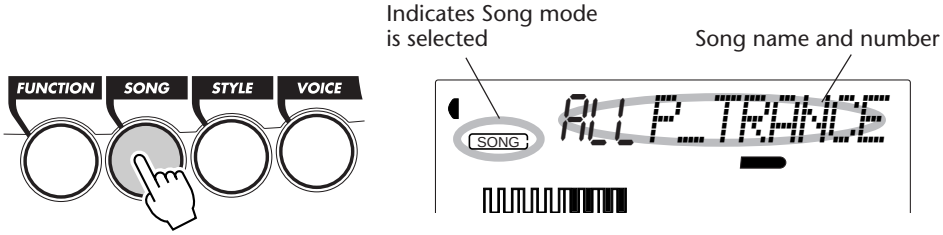
2 ***Select a song*** *(with the numeric keypad).*

3 ***Start*** *(and stop)* ***song playback*** *(with the START/STOP button).*

SELECTING AND PLAYING A SONG

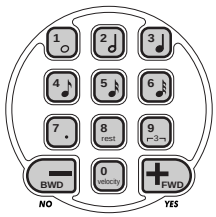
1 Select the Song mode.

Press the SONG button.



2 Select the desired song number.

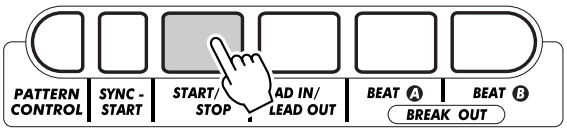
Use the numeric keypad.



Song numbers can be selected in the same way as with the voices (see page 25). You can use the numeric keypad to directly enter the song number, use the +/- keys to step up and down through the songs, or press the SONG button to advance through the song numbers.

3 Start the selected song.

Press the START/STOP button. As the song plays back, the measure number and chords are shown in the display.



4 If you want to change to another song, repeat step 2 above.

5 Stop the song.

Press the START/STOP button. If playback was started by pressing the START/STOP button, the selected song stops automatically.

HOT TIPS

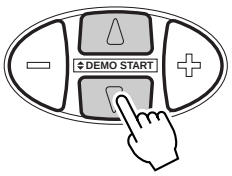
- *You can play along with the song using the currently selected voice, or even select a different voice for playing along. Simply call up the Voice mode while the song is playing back and select the desired voice.*
- *Start/stop can also be controlled by using a connected footswitch. (See page 21.)*

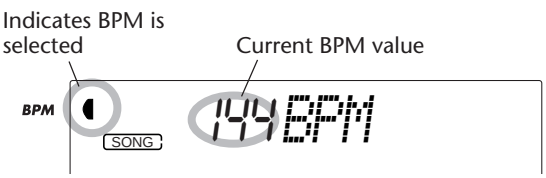
CHANGING THE BPM (TEMPO)

The BPM (Tempo) of song (and pattern) playback can be adjusted over a range of 32 - 280 bpm (beats per minute).

1 Select the BPM function in the Overall menu.

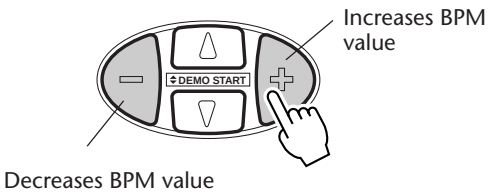
Press one of the OVERALL ▲/▼ buttons, repeatedly if necessary, until "BPM" appears in the display.





2 *Change the value.*

Use the OVERALL +/- buttons to increase or decrease the BPM value. Holding down either button continuously increases or decreases the value.



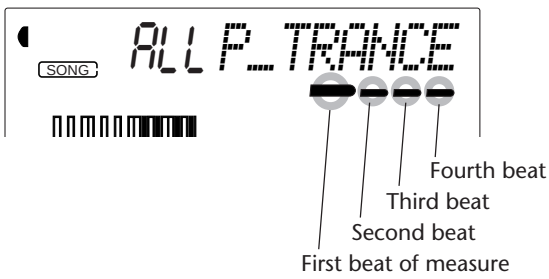
Restoring the Default BPM Value

Each song and style has been given a default or standard BPM. If you've changed the BPM, you can restore the original default setting by pressing both OVERALL +/- buttons simultaneously (when BPM is selected in the Overall menu).

Also, the BPM (Tempo) of a song or style returns to the default setting when selecting a different song or style. (The set BPM remains, however, when switching styles during playback.) When you turn on the power of the DJX, the BPM (Tempo) is automatically set to 142 bpm.

ABOUT THE BEAT DISPLAY

This section of the display provides a convenient, easy-to-understand indication of the rhythm for song and style playback. The dark bars below the name section in the display flash in time with the beat. The first dark bar indicates the first beat of the measure, and the other bars flash in sequence to indicate subsequent beats.

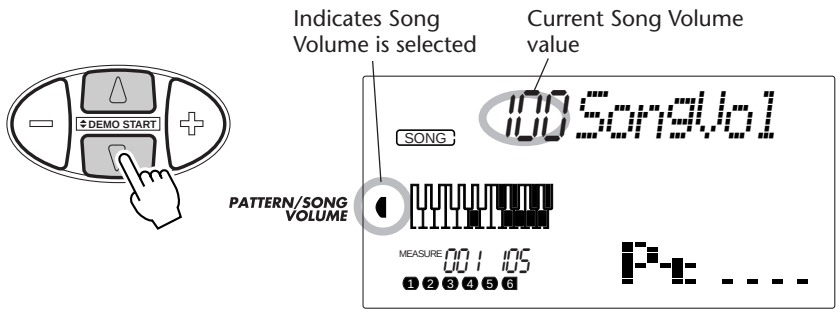


ADJUSTING THE SONG VOLUME

The playback volume of the song can be adjusted. This volume control affects only the song volume. The volume range is 000 - 127.

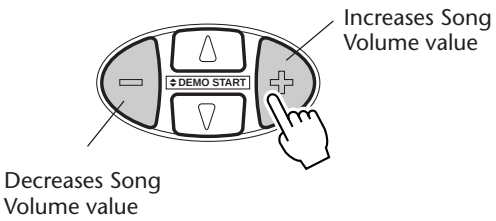
1 Select the Song Volume function in the Overall menu.

Press one of the OVERALL ▲/▼ buttons, repeatedly if necessary, until "SongVol" appears in the display.



2 Change the value.

Use the OVERALL +/- buttons to increase or decrease the Song Volume value. Holding down either button continuously increases or decreases the value.



Restoring the Default Value

To restore the default Song Volume value (100), press both OVERALL +/- buttons simultaneously (when Song Volume is selected in the Overall menu).

NOTE

Song Volume cannot be changed unless the Song mode is active. (This function becomes Pattern Volume when the Style mode is active.)

PATTERNS – THE STYLE MODE

The Style mode provides a wealth of exciting, dynamic patterns — including rhythms, beats, and instrumental parts — covering virtually the entire spectrum of dance and contemporary music!

A total of 100 different styles are available, in a variety of dance music genres. Each style is made up of separate "sections" — Lead In, Beat A and B (with Break Outs), and Lead Out — letting you call up different sections as you perform. Each style also has its own "companion" voice selection — so that when you select a style, the best matching voice for that style is automatically called up.

The pattern features that are built into the styles give you the excitement of full instrumental backing for your performance. They also make it possible to easily control the backing bass, chords, and other phrases — just by playing single notes or chords in the PATTERN section of the keyboard. (See pages 50.)

FAST ▶▶ ▶TRACK

1 ***Select the Style mode.*** *(Press the STYLE button.)*

2 ***Select a style*** *(with the numeric keypad).*

3 ***Turn Pattern Control on*** *(if it isn't on already).*

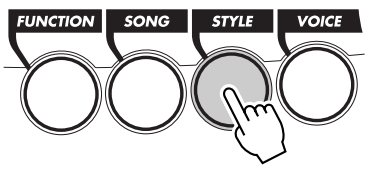
4 ***Start the pattern.*** *(Press the START/STOP button or use the Sync-Start function.)*

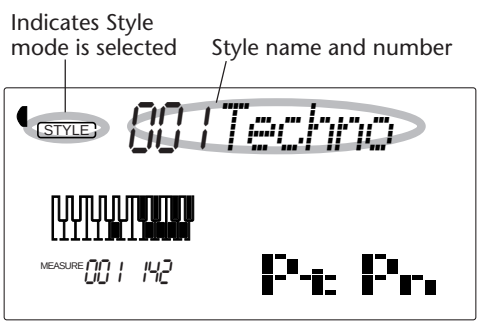
5 ***Stop the pattern.*** *(Press one of these buttons: START/STOP, LEAD IN/LEAD OUT, or SYNC-START.)*

SELECTING A STYLE AND PLAYING THE PATTERN

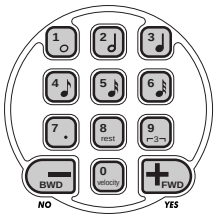
1 *Select the Style mode.*

Press the STYLE button.





2 Select the desired style number.

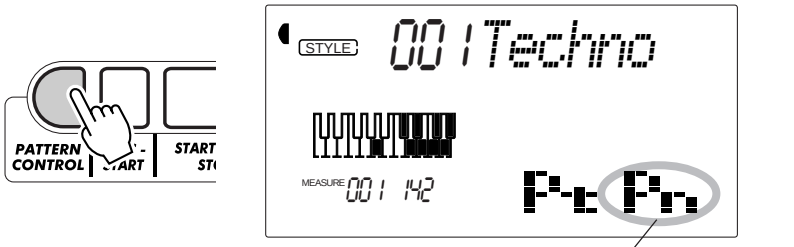


Use the numeric keypad. The basic categories of styles and their numbers are shown at the left of the panel. A complete list of the available styles is given on page 111.

Style numbers can be selected in the same way as with the voices (see page 25). You can use the numeric keypad to directly enter the style number, use the +/- keys to step up and down through the styles, or press the STYLE button to advance through the style numbers.

3 Turn Pattern Control on (if it isn't on already).

If Pattern Control is off ("- - - -" appears in the Pattern Control section of the icon window), press the PATTERN CONTROL button to turn it on.



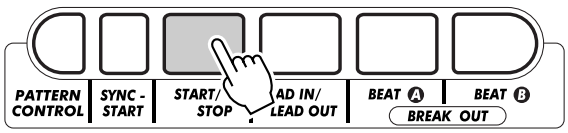
Indicates Pattern Control is on.

4 Start the pattern.

You can do this in one of the following ways:

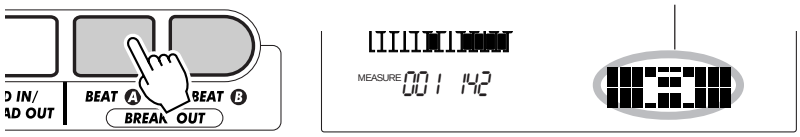
Pressing the START/STOP button

The pattern starts playing immediately. The currently selected Beat A or B section will play.



You can select the Beat A or B section by pressing the appropriate button — BEAT A or BEAT B — before pressing the START/STOP button. (The icon section of the display briefly shows the letter of the selected section: "A" or "B.")

Indicates selected section (Beat A or B).

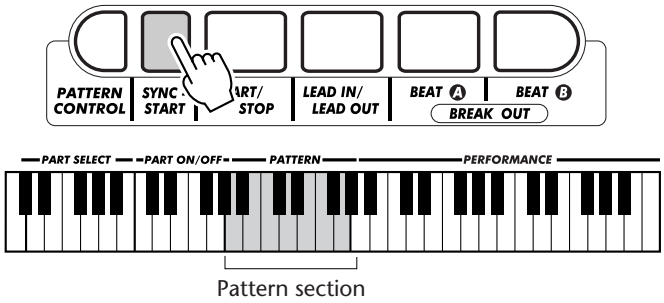


HOT TIPS

Start/stop can also be controlled by using a connected footswitch. (See page 21.)

Using Sync-Start

The DJX also has a Sync-Start function that allows you to start the pattern by simply pressing a key on the keyboard. To use Sync-Start, first press the SYNC-START button (the beat bars below the style name all flash to indicate Sync-Start stand-by), then press any key on the keyboard in the PATTERN section.

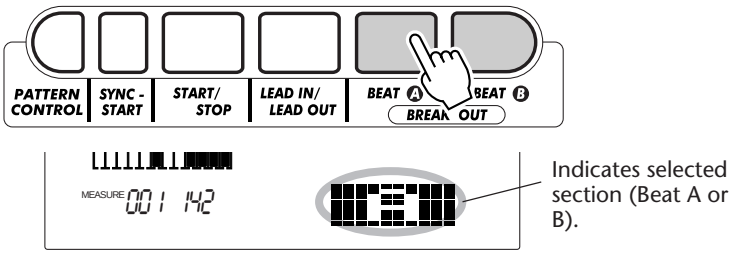


Starting with a Lead In section

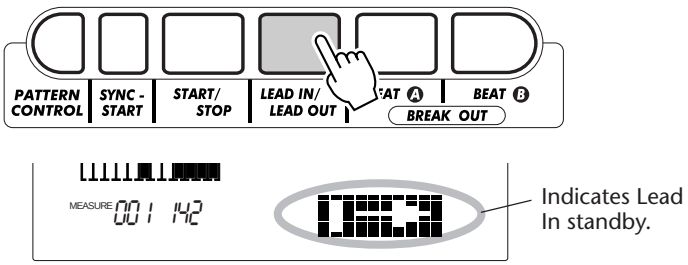
Each style has its own two- or four-measure Lead In section. Many of the Lead In sections also include special chord changes and embellishments to enhance your performance.

To start with a Lead In section:

1) Press the BEAT A or BEAT B button — to select which section (A or B) is to follow the Lead In.



2) Press the LEAD IN button.



To actually start the Lead In section and pattern, press the START/STOP button.

Once the Lead In section is finished, the icon section of the display briefly shows the letter "A" or "B" to indicate that the selected Beat section is currently playing.

NOTE

Sync-Start is automatically set to standby when:

** The power is turned on.*

** Part Control (page 59) is turned on.*

HOT TIPS

Lead In can also be controlled by using a connected footswitch. (See page 21.)

About the Beat Display
The dark bars underneath the style name in the display flash in time with the current tempo during playback (or Sync-Start standby) of the pattern. The flashing bars provide a visual indication of both the tempo and time signature of the pattern. (For more information, see page 42.)

5 *Stop the pattern.*

You can do this in one of three ways:

Pressing the START/STOP button
The pattern stops playing immediately.

Using a Lead Out section
Press the LEAD IN/LEAD OUT button. The pattern stops after the Lead Out section is finished.

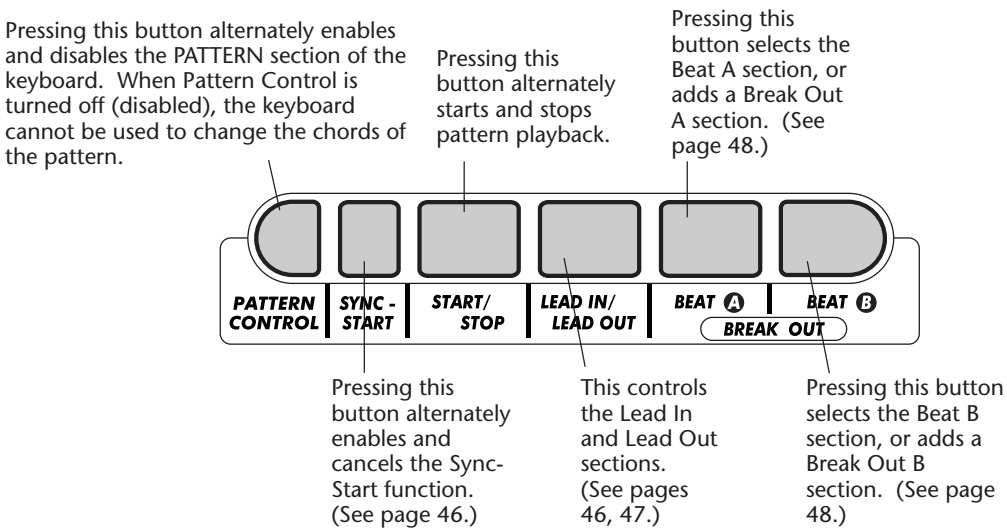
Pressing the SYNC-START button
This immediately stops the pattern and automatically enables Sync-Start, letting you re-start the pattern by simply playing a chord or key in the PATTERN section of the keyboard.

HOT TIPS

- *Start/stop and Lead Out can also be controlled by using a connected footswitch. (See page 21.)*
- *To have the Lead Out section gradually slow down as it is playing, press the LEAD IN/ LEAD OUT button twice quickly.*

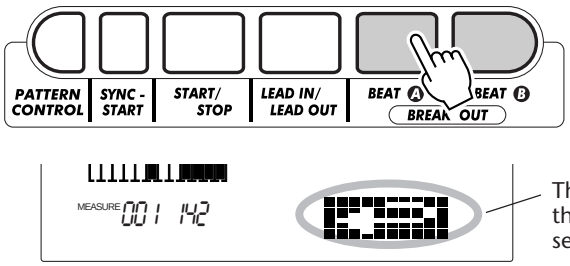
PATTERN CONTROLS

When the Style mode is active, the panel buttons below the display function as Pattern controls.



PATTERN SECTIONS (BEAT A, BEAT B AND BREAK OUTS)

While the pattern is playing, you can add variation by pressing one of the BEAT A/B (BREAK OUT) buttons. This automatically plays one of four Break Out sections, and smoothly leads into the next section — even if it is the same section.



Each style has four different Break Out sections that play in the following conditions:

- *Beat A → Beat A (Break Out "AA")*
- *Beat A → Beat B (Break Out "AB")*
- *Beat B → Beat A (Break Out "BA")*
- *Beat B → Beat B (Break Out "BB")*

HOT TIPS

This function can also be controlled by using a connected footswitch. (See page 21.)

NOTE

If you press the BEAT A or B button, the Break Out will begin immediately, and the newly selected section (A or B) will actually begin playing from the top of the next measure, unless the BEAT A or B button is pressed during the last beat of the measure — in which case the Break Out will begin from the first beat of the next measure.

CHANGING THE BPM (TEMPO)

The BPM (Tempo) of song (and pattern) playback can be adjusted over a range of 32 - 280 bpm (beats per minute). For instructions on changing the BPM (Tempo), see page 41.

NOTE

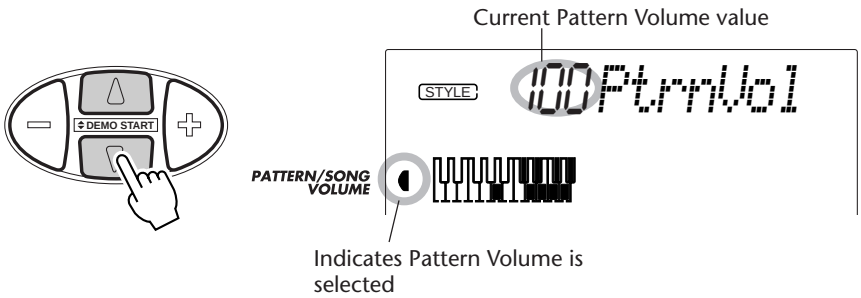
Each style has been given a default or standard BPM (Tempo). (For instructions on restoring the default BPM, see page 42.) When pattern playback is stopped and a different style is selected, the BPM returns to the default setting of the new style. When switching styles during playback, the last BPM setting is maintained. (This allows you to keep the same BPM, even when changing styles.)

ADJUSTING THE PATTERN VOLUME

The playback volume of the pattern can be adjusted. This volume control affects only the pattern volume. The volume range is 000 - 127.

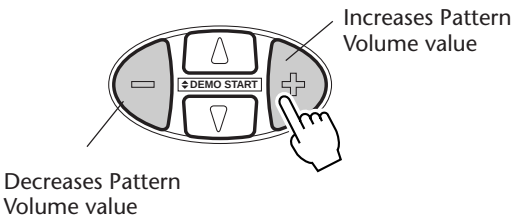
1 *Select the Pattern Volume function in the Overall menu.*

Press one of the OVERALL ▲/▼ buttons, repeatedly if necessary, until "PtrnVol" appears in the display.



2 *Change the value.*

Use the OVERALL +/- buttons to increase or decrease the Pattern Volume value. Holding down either button continuously increases or decreases the value.



Restoring the Default Value

To restore the default Pattern Volume value (100), press both OVERALL +/- buttons simultaneously (when Pattern Volume is selected in the Overall menu).

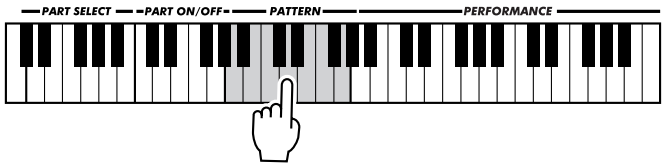
NOTE

Pattern Volume cannot be changed unless the Style mode is active.

FINGERING

When Pattern Control is set to on (page 45), the DJX automatically creates the backing tracks — drums, percussion, bass, chords, hits, and other phrases — and changes the chords of the backing right along with you. All you have to do is play single notes or chords in the PATTERN section of the keyboard — and the DJX follows you!

Naturally, you can play full chords (like those shown in the chart below), and the pattern will change harmonically in response. When you play single notes, the DJX automatically produces chords that are based on the root note you play and are best suited to the selected style.



For example, all single note chords in the Techno style (#001) are minor, all chords for Trip Hop (#002) are minor 7th 11th, etc. This lets you quickly and easily play the most musically useful and stylistically appropriate chord changes — just by pressing a single key!

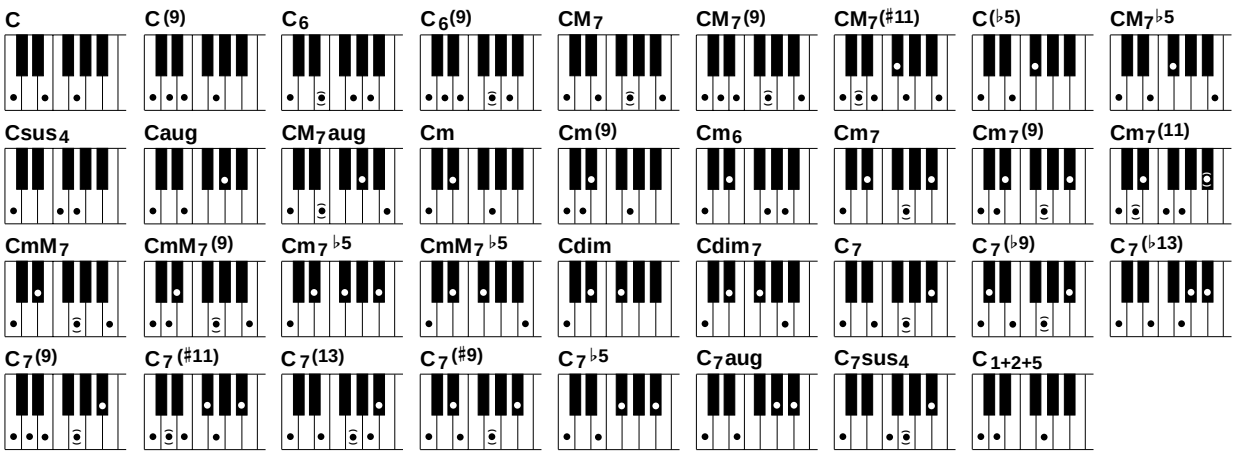
Using the key of C as an example, the chart below shows the types of chords that can be recognized. When Part Control is turned on, the range of the PATTERN section may be too narrow for proper recognition of all of the following chords in all twelve keys. For best results when playing full chords in the PATTERN section, turn Part Control off. (See page 59.)

NOTE

• Playing full chords may not change the pattern chord as intended. For example, playing major seventh chords will not change the chords of a pattern that has minor and dominant seventh phrases and lines.

• Chords played in the PATTERN section of the keyboard are also detected and played when the pattern is stopped. In effect, this gives you a "split keyboard," with bass and chords in the left hand and the normally selected voice in the right.

Recognized Chords (root note: C)



* Notes enclosed in parentheses are optional; the chords will be recognized without them.

Chord Name/[Abbreviation]	Normal Voicing	Chord (C)	Display
Major [M]	1 - 3 - 5	C	C
Add ninth [(9)]	1 - 2 - 3 - 5	C(9)	C(9)
Sixth [6]	1 - (3) - 5 - 6	C6	C6
Sixth ninth [6(9)]	1 - 2 - 3 - (5) - 6	C6(9)	C6(9)
Major seventh [M7]	1 - 3 - (5) - 7 or 1 - (3) - 5 - 7	CM7	CM7
Major seventh ninth [M7(9)]	1 - 2 - 3 - (5) - 7	CM7(9)	CM7(9)
Major seventh add sharp eleventh [M7(♯11)]	1 - (2) - 3 - ♯4 - 5 - 7 or 1 - 2 - 3 - ♯4 - (5) - 7	CM7(♯11)	CM7(♯11)
Flatted fifth [(♭5)]	1 - 3 - ♭5	C(♭5)	C♭5
Major seventh flatted fifth [M7♭5]	1 - 3 - ♭5 - 7	CM7♭5	CM7♭5
Suspended fourth [sus4]	1 - 4 - 5	Csus4	Csus4
Augmented [aug]	1 - 3 - ♯5	Caug	Caug
Major seventh augmented [M7aug]	1 - (3) - ♯5 - 7	CM7aug	CM7aug
Minor [m]	1 - ♭3 - 5	Cm	Cm
Minor add ninth [m(9)]	1 - 2 - ♭3 - 5	Cm(9)	Cm(9)
Minor sixth [m6]	1 - ♭3 - 5 - 6	Cm6	Cm6
Minor seventh [m7]	1 - ♭3 - (5) - ♭7	Cm7	Cm7
Minor seventh ninth [m7(9)]	1 - 2 - ♭3 - (5) - ♭7	Cm7(9)	Cm7(9)
Minor seventh add eleventh [m7(11)]	1 - (2) - ♭3 - 4 - 5 - (♭7)	Cm7(11)	Cm7(11)
Minor major seventh [mM7]	1 - ♭3 - (5) - 7	CmM7	CmM7
Minor major seventh ninth [mM7(9)]	1 - 2 - ♭3 - (5) - 7	CmM7(9)	CmM7(9)
Minor seventh flatted fifth [m7♭5]	1 - ♭3 - ♭5 - ♭7	Cm7♭5	Cm7♭5
Minor major seventh flatted fifth [mM7♭5]	1 - ♭3 - ♭5 - 7	CmM7♭5	CmM7♭5
Diminished [dim]	1 - ♭3 - ♭5	Cdim	Cdim
Diminished seventh [dim7]	1 - ♭3 - ♭5 - 6	Cdim7	Cdim7
Seventh [7]	1 - 3 - (5) - ♭7 or 1 - (3) - 5 - ♭7	C7	C7
Seventh flatted ninth [7(♭9)]	1 - ♭2 - 3 - (5) - ♭7	C7(♭9)	C7(♭9)
Seventh add flatted thirteenth [7(♭13)]	1 - 3 - 5 - ♭6 - ♭7	C7(♭13)	C7(♭13)
Seventh ninth [7(9)]	1 - 2 - 3 - (5) - ♭7	C7(9)	C7(9)
Seventh add sharp eleventh [7(♯11)]	1 - (2) - 3 - ♯4 - 5 - ♭7 or 1 - 2 - 3 - ♯4 - (5) - ♭7	C7(♯11)	C7(♯11)
Seventh add thirteenth [7(13)]	1 - 3 - (5) - 6 - ♭7	C7(13)	C7(13)
Seventh sharp ninth [7(♯9)]	1 - ♯2 - 3 - (5) - ♭7	C7(♯9)	C7(♯9)
Seventh flatted fifth [7♭5]	1 - 3 - ♭5 - ♭7	C7♭5	C7♭5
Seventh augmented [7aug]	1 - 3 - ♯5 - ♭7	C7aug	C7aug
Seventh suspended fourth [7sus4]	1 - 4 - (5) - ♭7	C7sus4	C7sus4
One plus two plus five [1+2+5]	1 - 2 - 5	C1+2+5	C

NOTE

• Notes in parentheses can be omitted.

• If you play any three adjacent keys (including black keys), the chord sound will be cancelled and only the rhythm instruments will continue playing (CHORD CANCEL function).

• Playing two same root keys in the adjacent octaves produces a pattern based only on the root.

• A perfect fifth (1 + 5) produces a pattern based only on the root and fifth, which can be used with both major and minor chords.

• The chord fingerings listed are all in "root" position, but other inversions can be used — with the following exceptions:

m7, m7♭5, 6, m6, sus4, aug, dim7, 7♭5, 6(9), m7(11), 1+2+5.

• Inversion of the 7sus4 chord are not recognized if the 5th is omitted.

• The Pattern will sometimes not change when related chords are played in sequence (e.g. some minor chords followed by the minor seventh).

• Two-note fingerings will produce a chord based on the previously played chord.

BEAT REVERSE

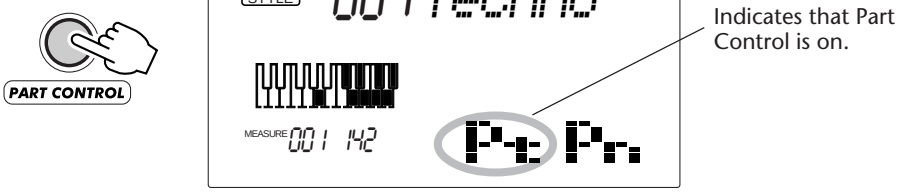
The DJX also has a special Beat Reverse key that lets you break up the pattern with stuttering rhythmic effects and unusual syncopations. Pressing the key automatically resets the pattern to the top of the measure (first beat).

1 Select a style and start the pattern.

Do this in the normal way. (Need a refresher course? See page 44.)

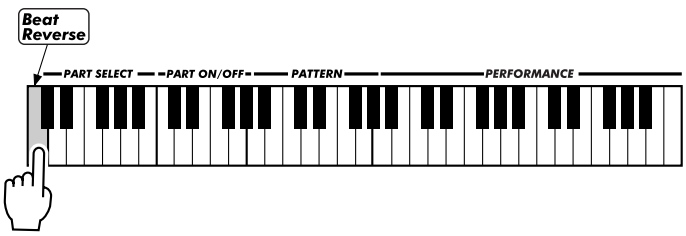
2 Turn Part Control on (if it isn't on already).

Press the PART CONTROL button.



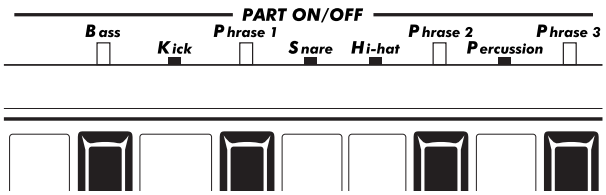
3 Press the Beat Reverse key (C1).

Press the lowest key on the keyboard (C1) each time you want the pattern to start again from the top. Press it repeatedly for stuttering effects and rhythmic hits.



PART ON/OFF

This exciting feature effectively puts you in the producer's chair — it lets you instantly and intuitively mute and un-mute individual Parts of the pattern, simply by pressing keys in the PART ON/OFF section of the keyboard.



1 Select a style and start the pattern.

Do this in the normal way. (Need a refresher course? See pages 44 - 46.)

2 Turn Part Control on (if it isn't on already).

Press the PART CONTROL button.

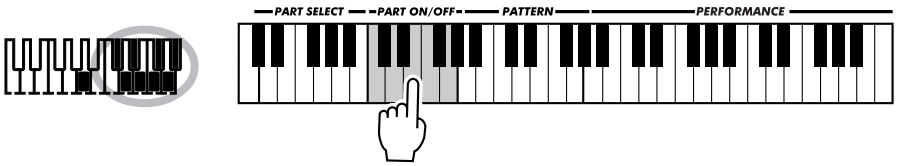
Indicates that Part Control is on.

NOTE

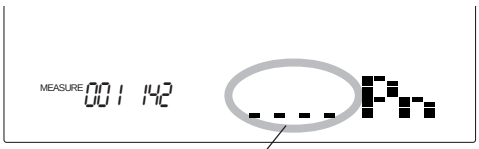
Each time Part Control is turned off and on again, the PART ON/OFF keys are reset to the default (all Parts on).

3 Press the appropriate keys to mute and un-mute the desired Parts.

As the pattern is playing back, press the key in the PART ON/OFF section that corresponds to the Part you want to mute/un-mute. (You can also press several keys at once, to instantly mute/un-mute several Parts.)



To turn the Part On/Off function off, press the PART CONTROL button again. (When Part Control is off, "- - - -" appears in the Part Control section of the icon window.)



Indicates Part Control (including Part On/Off) is off.

NOTE

• On certain patterns and sections, not all of the Parts may be available — in other words, some of the Parts may be "empty" and not sound. For example, Beat A of the "Acid" style (#009) doesn't have any Percussion, Phrase 2, or Phrase 3 Parts, so pressing the corresponding keys will have no effect; however, the Beat B section of that style does have the Percussion, Phrase 2, and Phrase 3 Parts.

• If you've recorded a pattern to the Chord track of the User song (see page 80), the Part On/Off function lets you easily mute and un-mute specific instrument Parts of the pattern as it plays back.

About the Parts

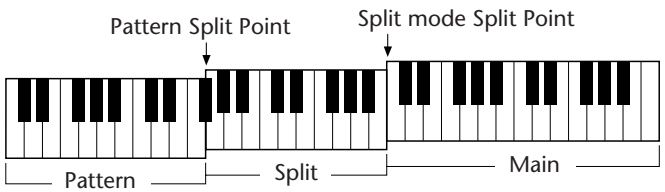
The actual instruments and musical backing used for Phrases 1, 2 and 3 may differ widely depending on the selected style. This applies to some of the other Parts as well. For example, the Snare Part in some patterns may not sound like a snare drum at all! (In particular, "Kick," "Snare," and "Hi-hat" refer mainly to those special elements of the rhythm — and not necessarily the sounds.)

SETTING THE PATTERN SPLIT POINT

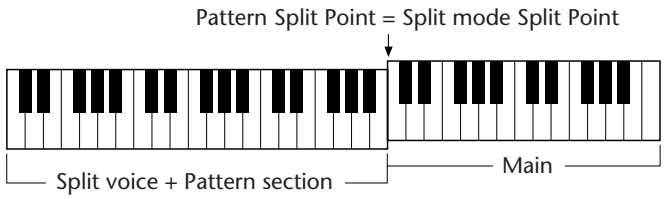
The Pattern Split Point determines the highest key for the pattern section. The pattern can be played with the keys up to and including the Pattern Split Point key.

This parameter can be set lower (but not higher) than the Split Point in the Split mode. When set to different values, the two settings affect one another in the following way:

• ***When the Split mode Split Point is set higher than the Pattern Split Point:***

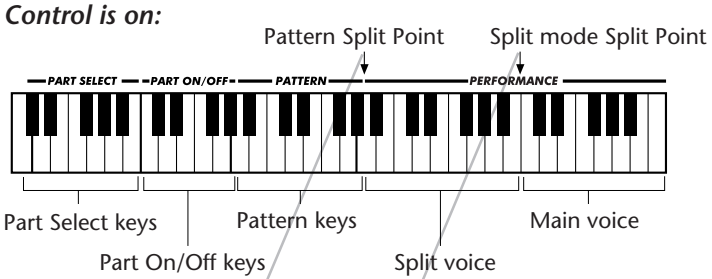


• ***When the Split mode Split Point is set to the same key as the Pattern Split Point:***

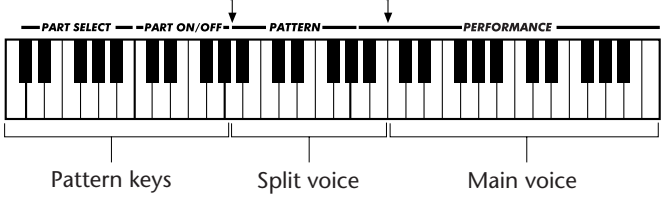


The actual split points (of both the Split voice and the Pattern keys) change according to the Part Control on/off setting. When Part Control is on, the split points are as set. When Part Control is turned off, both the split points drop one octave down, increasing the range of the Performance section. The following examples illustrate how the split points change in each case.

• ***When Part Control is on:***



• ***When Part Control is off:***



Function Parameter — Pattern Split Point

Selecting and changing the Pattern Split Point:
Press the FUNCTION button, then use the numeric keypad to select parameter number 51. After "FUNCTION" stops flashing, use the numeric keypad or +/- buttons to change the setting. (For details, see page 18.)
The value can also be set directly by pressing the desired key while this parameter is selected. After setting this, make sure to select a different parameter or exit the Function mode before playing the keyboard.

Function Parameters

No.	Parameter Name	Display Name	Range/Settings	Description
F51	Pattern Split Point	PtrnSPnt	000 — 127	This determines the highest key for the PATTERN section and sets the pattern split "point" — in other words, the key that separates the PATTERN section and the PERFORMANCE section. (When Pattern Control is turned on, the PATTERN section sounds up to and including the Pattern Split Point key.) The default Pattern Split Point is 068 (G♯3). This cannot be set higher than the Split Point in the Split mode (page 32). While this is being set, the keyboard does not produce any sound. After setting this, make sure to select a different parameter or exit the Function mode before playing the keyboard.

PERFORMANCE SETUP

Performance Setup is a powerful and convenient Style mode function that lets you instantly reconfigure virtually all settings of the DJX — with the touch of a single button. Two types of Performance Setups are available: User and Preset.

PERFORMANCE SETUP – USER

Four User banks each with four different settings — a total of sixteen — are available for your custom settings. Each of the sixteen User Performance Setups can have different settings for the following parameters:

- *Main voice number*
- *All Main voice settings (Volume**, Octave, Pan**, Reverb Send Level**, Chorus Send Level**, DSP Send Level**, Cutoff*, Resonance*, Attack*, Release*, and Modulation*)*
- *Dual voice number*
- *All Dual voice settings (On/Off, Volume**, Octave, Pan**, Reverb Send Level**, Chorus Send Level**, DSP Send Level**, Cutoff*, Resonance*, Attack*, Release*, and Modulation*)*
- *Split voice number*
- *All Split voice settings (On/Off, Split Point, Volume**, Octave, Pan**, Reverb Send Level**, Chorus Send Level**, DSP Send Level**, Cutoff*, Resonance*, Attack*, Release*, and Modulation*)*
- *Reverb Type and On/Off*
- *Chorus Type and On/Off*
- *DSP Type and On/Off*
- *Arpeggiator Type , On/Off, and Speed**
- *Style number, and style-related settings: Pattern Control On/Off, Section (Beat A or B), Pattern Split Point, Track settings (Part On/Off, Volume*, Pan*, Cutoff*, Resonance*, Reverb Send Level*, Chorus Send Level*, DSP Send Level*, Attack*, Release*, and Modulation*), Groove*, Dynamics*, and Dynamics Strength*
- *Part Select (Knobs and Ribbon Controller)*
- *Overall menu settings: BPM (Tempo), Transpose, Tuning, Pattern Volume, Ribbon Controller assignment, and Assign Knob assignment*
- *Footswitch assignment*
- *Touch Sensitivity*
- *Pitch Bend Range*

** Last settings made with the Knobs and the Ribbon Controller are memorized.*
*** Last settings made in the Function mode, and with the Knobs and Ribbon Controller are memorized.*

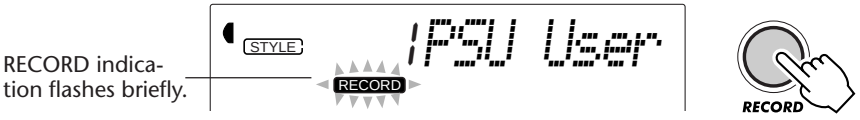
Recording a User Performance Setup

1 Make all desired settings for the DJX.

Virtually all DJX settings can be saved to a User button. Refer to the list above for details.

2 Select the PSU (Performance Setup) Record mode.

Press the RECORD button, repeatedly if necessary, until "PSU User" appears at the top of the display.

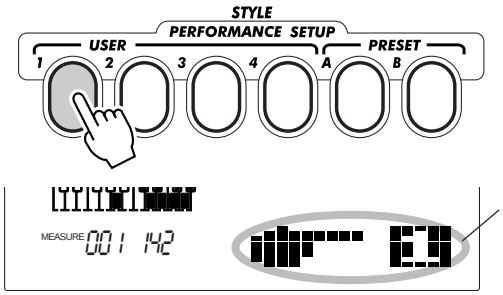


3 Select the desired bank.

Use the +/- buttons or the numeric keypad to select the desired User bank number (1 - 4).

4 Select the desired User number.

Press the corresponding USER PERFORMANCE SETUP button (1 - 4). Doing this records the settings to the selected button.



Briefly appears to indicate that settings have been saved to Performance Setup User button 1.

5 Exit from the Record mode.

Press the RECORD button.

Recalling a User Performance Setup

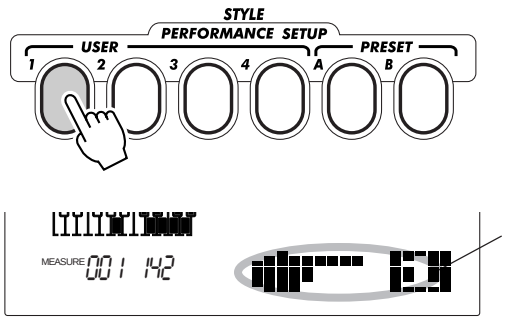
Once you've recorded your settings to a User button, you can instantly recall those settings any time you want.

1 Call up the Style mode.

Press the STYLE button.

2 Press the appropriate PERFORMANCE SETUP USER button.

Press the USER button (1 - 4) corresponding to the desired settings.



Briefly appears to indicate that Performance Setup User 1 is active.

Selecting a User Bank

Before selecting a User Performance Setup (in step #2), you may want to select a different bank. To do this:

1) Select Function #41. (Press the FUNCTION button, then use the +/- buttons or the numeric keypad to select #41.)

2) After the "FUNCTION" indication stops flashing, select the desired bank number with the +/- buttons or the numeric keypad.

PERFORMANCE SETUP – PRESET

Preset Performance Setups are used in a slightly different way than the User settings. First, select a style, then select a Preset Performance Setup. The Preset A and B settings have been specially programmed at the factory to match the selected style. This means that you can select the style you want, then choose a Preset that has the best suited voice, effect, and other settings for that style.

- *Main voice number*
- *All Main voice settings (Volume, Octave, Pan, Reverb Send Level, Chorus Send Level, and DSP Send Level)*
- *Dual voice number*
- *All Dual voice settings (On/Off, Volume, Octave, Pan, Reverb Send Level, Chorus Send Level, and DSP Send Level)*
- *Split voice number*
- *All Split voice settings (On/Off, Split Point, Volume, Octave, Pan, Reverb Send Level, Chorus Send Level, and DSP Send Level)*
- *Reverb Type and On/Off*
- *Chorus Type and On/Off*
- *DSP On/Off*
- *Arpeggiator Type, On/Off, and Speed*
- *Style-related settings: Pattern Control On*, Sync-Start On*, Section(Beat A or B)*, Pattern Split Point*, Part On/Off, Groove, Dynamics, and Dynamics Strength*
- *Part Select (Knobs and Ribbon Controller)*
- *Overall menu settings: Ribbon Controller assignment and Assign Knob assignment*
- *Pitch Bend Range*

** Set only when pattern is stopped.*

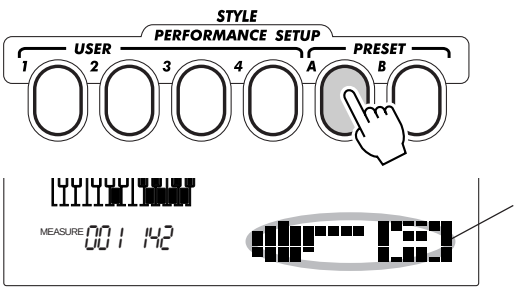
Selecting a Preset Performance Setup

1 Select a style.

Select one of the styles, as described in steps 1 - 2 on page 44.

2 Press the appropriate PERFORMANCE SETUP PRESET button.

Press the PRESET button (A, B) corresponding to the desired settings.



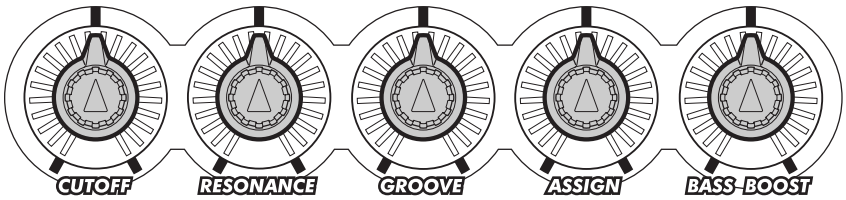
Briefly appears to indicate that Performance Setup Preset A is active.

3 Play the pattern.

Since both Sync-Start and Pattern Control are automatically set to On when Preset Performance Setup is on, playing a key or chord in the PATTERN section of the keyboard starts the pattern.

THE KNOBS

The Control Knobs of the DJX give you enormously expressive control over various parts of the sound. You can use the knobs to "tweak" the sound of any one of the voices (Main, Dual, or Split) as you perform. Or you can use them to change the sound of individual Parts of the pattern — in real time as the pattern plays!



USING THE KNOBS

FAST ▶▶ TRACK

1 ***Turn Part Control on.*** *(Press the PART CONTROL button.)*

2 ***Select the Part you want to control.*** *(Press one of the PART SELECT keys at the lower end of the keyboard.)*

3 ***Start the pattern. / Start the song.***

4 ***Turn the knobs to change the sound as you play.***

1 If Part Control isn't on, turn it on by pressing the PART CONTROL button.

When you turn on the DJX, Part Control is automatically set to on — so you may not need to do this step.

To find out whether Part Control is on or not, check the icon window in the display. If Part Control is on, the icon will look like this:

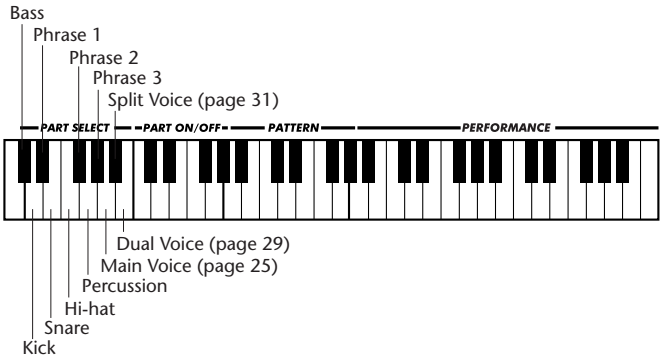
If Part Control is off, the icon will look like this:

To turn Part Control on/off, press the PART CONTROL button.

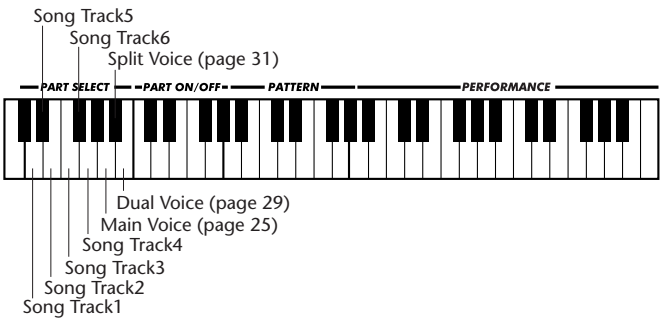
2 Select the Part you want to control.

Press one of the PART SELECT keys at the lower end of the keyboard (C♯1 - B1). Each of the keys corresponds to a different voice or part of the pattern — letting you select the individual instrument sound you want to tweak with the knobs.

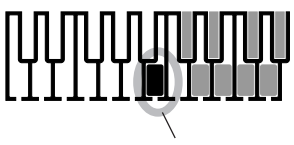
The name of each Part is printed above each key:



The PART SELECT keys function differently when the Song mode is selected:



The key indicating the selected part is darkened in the display.



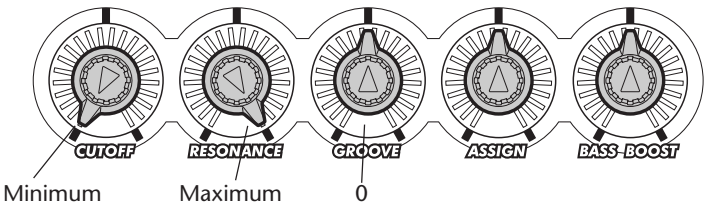
Indicates (Dual Voice) Part is selected.

3 Start the pattern. / Start the song.

Press the START/STOP button. For instructions on other ways to start the pattern, refer to page 46.

4 Turn the knobs to change the sound.

Turn the desired knob to the left for minimum (or negative) effect and to the right for maximum (or positive). Each knob has a center detent for the "0" or "12 o'clock" position, making it easy to "feel" your way back to zero.



Here's what each of the knobs do:

CUTOFF
Tweak this to create wah-wah and "swooshing" filter sweep effects in the selected Part or voice. (Want to find out more? See the box on page 62.)

RESONANCE
Tweak this to set the level for the CUTOFF knob above. For most applications, you'll want to set this at a certain point, and tweak the CUTOFF knob. (Want to find out more? See the box on page 62.)

GROOVE
Tweak this to change the "groove" or "feel" of the entire pattern. This affects only the pattern Parts (Bass, Kick, Phrase 1, Snare, Hi-hat, Phrase 2, Percussion, and Phrase 3) and not the voices. (Want to find out more? See the box on page 62.)

ASSIGN
This is a "wild card" knob — it can be assigned to control any one of 12 different functions. To find out how you can use the ASSIGN knob, see page 63.

BASS BOOST
This is similar to the bass control on a stereo amplifier; it affects all Parts and voices. To make the entire sound fatter with more bottom and depth, turn the knob to the right. Turning it to the left cuts the bass and creates a brighter, thinner sound. The BASS BOOST knob setting will also affect the range and depth of the CUTOFF and RESONANCE knobs. (This is especially true for the Bass Part or for "bassy" sounds.)

NOTE

Knob moves are strictly performance features — they are not transmitted via MIDI and cannot be recorded to a User song.

HOT TIPS

• Want to have even more keys in the PERFORMANCE section of the keyboard?

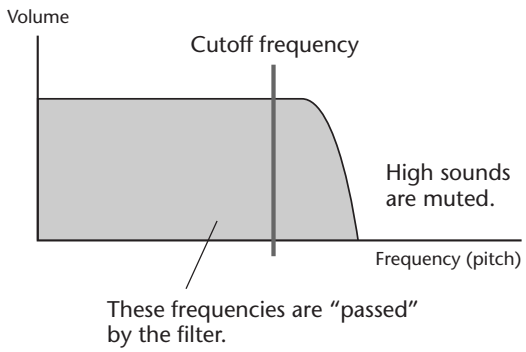
Try setting a lower Pattern Split Point value. For example, setting Pattern Split Point to "47" would let you use keys C2 and higher for playing the voices. (See page 54.)

• Want to instantly call up your favorite settings?

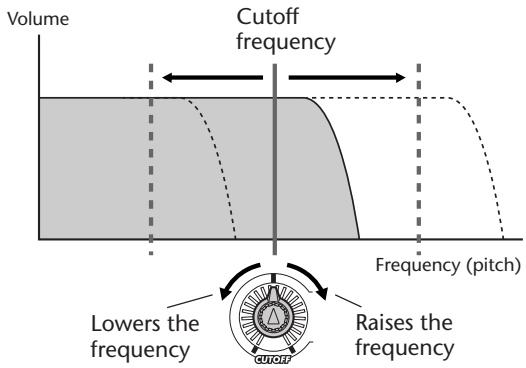
Many of the settings mentioned above (even the position of the GROOVE knob!) can be memorized as part of the Performance Setup parameters. Once you create a custom Performance Setup, you can instantly call it up by pressing the appropriate PERFORMANCE SETUP button. (For a list of memorized settings and how to use this function, see page 56.)

About CUTOFF and RESONANCE

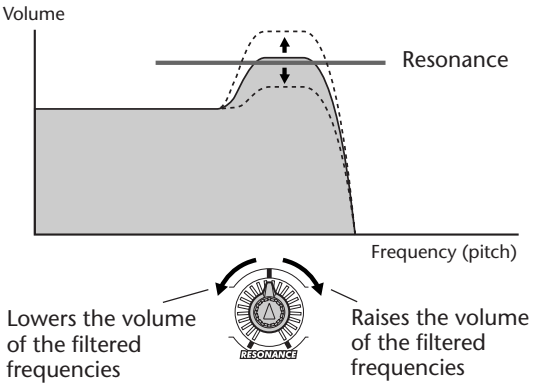
These are two filter controls found on many analog synthesizers. The filter lets a certain part of the sound (frequency range) of the sound be heard, while muting all higher sounds. The graph below shows how this works:



The cutoff frequency determines what frequency range is "passed" or let through by the filter — it determines what you hear. All higher frequencies are muted. With the CUTOFF knob, you can adjust this cutoff frequency; in other words, it lets you move the frequency "hump" across the full range of frequencies, like this:



Resonance lets you adjust the level or emphasis of the filter. Turning the RESONANCE knob to the right increases the volume of the resonant "peak" at and around the cutoff frequency; turning it to the left decreases the volume, like this:



What does this mean in terms of the sound? Setting the RESONANCE knob to the right makes the Cutoff effect stronger, or creates a wider tonal variation when you move the CUTOFF knob. Setting RESONANCE to the left makes Cutoff effect more "mellow," or narrows the range of tonal variation.

Keep in mind that the effect of the CUTOFF and RESONANCE knobs depend on each other's settings as well as the frequency of the sound to be controlled. Depending on the position of the RESONANCE knob, the CUTOFF knob may have no effect on the sound. The reverse is also true.

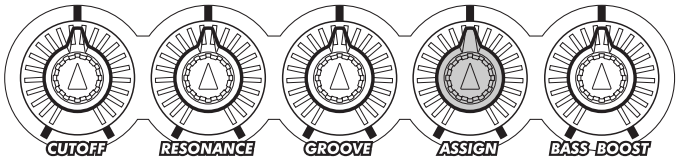
About GROOVE

Musically, Groove determines the amount of "swing" feel in the pattern. Technically, it slightly shifts the timing of the pattern to produce different rhythmic feels.

Depending on the position of the GROOVE knob, certain Parts (such as Phrase 1, 2, and 3) may not sound.

ASSIGN KNOB

The ASSIGN knob, as its name suggests, can be assigned to one of a wide variety of functions — twelve in all — that are not available on the other knobs.



FAST ▸▸ ▸TRACK

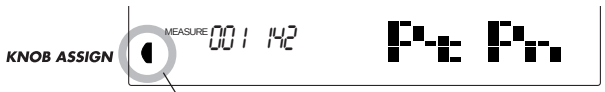
1 ***Select KNOB ASSIGN in the Overall menu.*** *(Press one of the OVERALL ▲/▼ buttons, repeatedly if necessary.)*

2 ***Select the Assign parameter.*** *(Use the OVERALL +/- buttons.)*

3 ***Use the ASSIGN knob in the same way as the other knobs.*** *(Need a refresher course? See "Fast Track," page 59.)*

1 Select KNOB ASSIGN in the Overall menu.

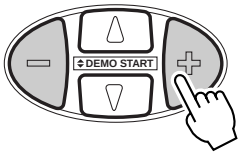
Press one of the OVERALL ▲/▼ buttons, repeatedly if necessary, until KNOB ASSIGN is selected. (The dark bar at the left of the display should be directly next to "KNOB ASSIGN" on the panel.)



Indicates Knob Assign is selected.

2 Select the Assign parameter.

Use the OVERALL +/- buttons to select the parameter to be controlled by the ASSIGN knob.



The following chart lists and briefly explains the parameters.

NOTE

• The default setting for the ASSIGN knob is #09 Dynamics.

• Selecting a Part is not necessary and has no effect for the following parameters:

- *Dynamics*
- *Dynamics Strength*
- *Turntable*
- *Arpeggiator Speed*

These parameters are already set to affect a certain Part or Parts.

ASSIGN Knob Parameters

No.	Parameter Name	Display Name	Description
01	Reverb Send Level	RevLevel	This determines the depth of the Reverb effect. (See page 34.) Turning the knob also automatically turns on Reverb, if it was originally turned off.
02	Chorus Send Level	ChoLevel	This determines the depth of the Chorus effect. (See page 35.) Turning the knob also automatically turns on Chorus, if it was originally turned off.
03	DSP Send Level	DspLevel	This determines the depth of the DSP effect. (See page 36.) Turning the knob also automatically turns on DSP, if it was originally turned off.
04	Modulation 0 (no modulation) Maximum Maximum ASSIGN	Mod	This creates a vibrato-like pitch wavering effect. When the knob is at the 12:00 position, there is no change in the sound. Turning it in either direction produces modulation.
05	Attack Time	Attack	This determines the "attack" of the sound — or, in other words, how long it takes for the sound to reach full volume when a note is played. For certain percussive sounds, this may have little or no audible effect. Turning the knob to the right produces longer (slower) attack times; turning it to the left produces a shorter (quicker) attack.
06	Release Time	Release	This determines how long the sound sustains after a note is released. For certain percussive sounds, this may have little or no audible effect. Turning the knob to the right produces longer release times (more sustain); turning it to the left produces a shorter release, resulting in a "clipped" sound.
07	Pan	Pan	This determines the position of the sound in the stereo image (left, center, or right). (The center position is at 12:00; turning the knob in either direction shifts the sound in the corresponding direction.)
08	Volume	Volume	This determines the volume (level) of the sound. The knob at full left (7:00) corresponds to a volume of "0." Full right corresponds to maximum volume.
09	Dynamics 0 (no change) Changes Dynamics template in steps. Turning in either direction produces the same result. ASSIGN	Dynamics	This makes both subtle and dramatic changes in the pattern by altering the level of the individual notes. Turning the ASSIGN knob steps through a variety of pre-programmed Dynamics settings (templates). Each template is programmed to increase or accent the level of certain notes in a pattern and decrease others. The effect of this parameter also depends on the Dynamics Strength setting (#10, below). Dynamics affects the entire pattern; Part Select has no effect. When the knob is at the 12:00 position, there is no change in the sound. Turning it in either direction changes the Dynamics template.
10	Dynamics Strength	Strength	This determines the amount or strength of the level change in the Dynamics parameter (#09, above). This affects the entire pattern; Part Select has no effect.
11	Turntable MEASURE 001 180 Shows current Turntable value (in bpm).	Turntbl	This determines both the tempo and the pitch of the entire DJX sound, affecting all Parts of the pattern and all voices. In effect, this is much like a continuous speed control on a record turntable. When the knob is turned all the way to the left (minimum), the pattern stops. The range of the effect is -59% to 41.4%. For tempo, the absolute minimum is 32 bpm and the maximum is 280 bpm. For pitch, the range is -800 cents to +600 cents. Depending on the selected voice, there may be little change in the pitch. The Turntable tempo value in the display changes as the knob is turned (see illustration).
12	Arpeggiator Speed	ArpSpeed	This determines the speed of the Arpeggiator function. (See page 37.)

NOTE

Keep in mind that the assigned parameter may have little or no effect, depending on the selected song, style, or voice.

HOT TIPS

• Want to use another one of these parameters at the same time?

Remember that the same parameters are also available on the RIBBON CONTROLLER. Simply assign the desired parameter to the RIBBON CONTROLLER. (See page 66.)

• Want to quickly switch among different ASSIGN knob parameters?

Use the Performance Setup function to save the knob assignment to one of the PERFORMANCE SETUP buttons for instant recall. Keep in mind that other important knob settings can also be saved. (See page 56.)

On your own...

• Select voice #136 ("EthnicFl"). Select the Main Voice Part (with the PART SELECT keys) and try these out:

- First, set the ASSIGN knob to control Attack, and set the knob to about 2:00. Notice how the abrupt breathy attack of the sound has mellowed.
- Next, set the ASSIGN knob to control Release, and set the knob to about 3:00. Notice how the flute has a far away reverberant sound, without the use of the Reverb effect.

• Select and play style #002 (TripHop). Select Percussion (with the PART SELECT keys), set the ASSIGN knob to control Release, and try this out:

- Turn the knob to about 4:00 for a sustained electronic triangle sound.

• In this example, you can use both Dynamics and Dynamics Strength at the same time.

- Set the ASSIGN knob to control Dynamics Strength (#10). Then, set the RIBBON CONTROLLER to control Dynamics (see page 67). Try pressing and holding down the RIBBON CONTROLLER in different places while turning the ASSIGN knob to hear changes in the pattern.

RIBBON CONTROLLER

The RIBBON CONTROLLER is a wonderfully expressive and easy-to-use performance controller. Once a sought-after feature found on vintage analog synthesizers, it is rarely included on modern instruments — until now, with the new DJX!

RIBBON CONTROLLER

The RIBBON CONTROLLER can be assigned to any one of fifteen different parameters. These include all the same parameters as can be used with the ASSIGN knob, plus the same parameters controlled by the CUTOFF, RESONANCE, and GROOVE knobs.

USING THE RIBBON CONTROLLER

FAST ▶▶ ▶TRACK

1 ***Select RIBBON CONTROLLER ASSIGN in the Overall menu.*** *(Press one of the OVERALL ▲/▼ buttons, repeatedly if necessary.)*

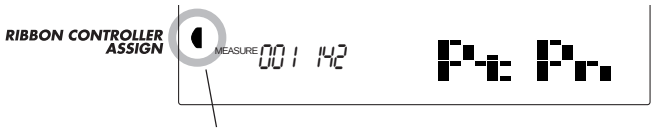
2 ***Select the Ribbon Controller Assign parameter.*** *(Use the OVERALL +/- buttons.)*

3 ***Select a Part*** *(with the PART SELECT keys)* ***and start the pattern*** *(with the START/STOP button).*

4 ***Use the RIBBON CONTROLLER to change the sound.***

1 Select RIBBON CONTROLLER ASSIGN in the Overall menu.

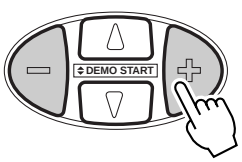
Press one of the OVERALL ▲/▼ buttons, repeatedly if necessary, until RIBBON CONTROLLER ASSIGN is selected. (The dark bar at the left of the display should be directly next to "RIBBON CONTROLLER ASSIGN" on the panel.)



Indicates Ribbon Controller Assign is selected.

2 Select the RIBBON CONTROLLER parameter.

Use the OVERALL +/- buttons to select the parameter to be controlled by the RIBBON CONTROLLER.



NOTE

• The default setting for the RIBBON CONTROLLER is #14 Turntable.

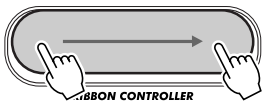
• Selecting a Part is not necessary and has no effect for the following parameters:

- *Dynamics*
- *Dynamics Strength*
- *Turntable*
- *Arpeggiator Speed*

These parameters are already set to affect a certain Part or Parts.

The following chart lists and briefly explains the parameters. For more information on the workings of the RIBBON CONTROLLER, see the box on page 68.

RIBBON CONTROLLER Parameters

No.	Parameter Name	Display Name	Description
01	Cutoff Frequency	Cutoff	This is the same parameter as controlled by the CUTOFF knob (page 61). The mid point on the ribbon corresponds to the 12:00 position of the CUTOFF knob.
02	Resonance	Resonanc	This is the same parameter as controlled by the RESONANCE knob (page 61). The mid point on the ribbon corresponds to the 12:00 position of the RESONANCE knob.
03	Reverb Send Level	RevLevel	This is the same parameter as #01 in the ASSIGN knob parameters. (See pages 34, 64.)
04	Chorus Send Level	ChoLevel	This is the same parameter as #02 in the ASSIGN knob parameters. (See pages 35, 64.)
05	DSP Send Level	DspLevel	This is the same parameter as #03 in the ASSIGN knob parameters. (See pages 36, 64.)
06	Modulation 0 (no modulation) Maximum 	Mod	This is the same parameter as #04 in the ASSIGN knob parameters. (See page 64.) However, unlike the ASSIGN knob (for which 12:00 corresponds to no modulation), the RIBBON CONTROLLER affects modulation in this way:
07	Attack Time	Attack	This is the same parameter as #05 in the ASSIGN knob parameters. (See page 64.)
08	Release Time	Release	This is the same parameter as #06 in the ASSIGN knob parameters. (See page 64.)
09	Pan	Pan	This is the same parameter as #07 in the ASSIGN knob parameters. (See page 64.) The mid point on the ribbon corresponds to the center pan position.
10	Volume	Volume	This is the same parameter as #08 in the ASSIGN knob parameters. (See page 64.)
11	Groove	Groove	This is the same parameter as controlled by the GROOVE knob (page 61). The mid point on the ribbon corresponds to the 12:00 position of the GROOVE knob.
12	Dynamics	Dynamics	This is the same parameter as #09 in the ASSIGN knob parameters. (See page 64.)
13	Dynamics Strength	Strength	This is the same parameter as #10 in the ASSIGN knob parameters. (See page 64.)
14	Turntable	Turntbl	This is the same parameter as #11 in the ASSIGN knob parameters. (See page 64.) When the far left part of the ribbon (minimum) is held, the Pattern stops.
15	Arpeggiator Speed	ArpSpeed	This is the same parameter as #12 in the ASSIGN knob parameters. (See page 64.)

NOTE

Keep in mind that the assigned parameter may have little or no effect, depending on the selected song, style, or voice.

3 Select a Part and start the pattern/song.

Do this in the same way as with the knobs:

1) Make sure Part Control is on. (Press the PART CONTROL button, if necessary.)

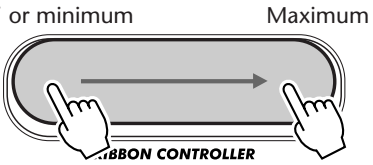
2) Select a Part (with the PART SELECT keys at the lower end of the keyboard).

3) Turn Part Control off (to free up more of the keyboard).

4) Start the pattern/song. (Press the START/STOP button.)

4 Use the RIBBON CONTROLLER to change the sound.

Touch the RIBBON CONTROLLER with one of your fingers, and move it along the ribbon to change the sound of the selected Part.



The leftmost position on the ribbon corresponds to "0" or minimum, and the rightmost to maximum. (For more information, see the boxed section below.)

HOT TIPS

• Want to use another one of these parameters at the same time?

Remember that the same parameters are also available on the ASSIGN knob. Simply assign the desired parameter to the ASSIGN knob. (See page 63.)

• Want to quickly switch among different RIBBON CONTROLLER parameters?

Use the Performance Setup function to save the RIBBON CONTROLLER assignment to one of the PERFORMANCE SETUP buttons for instant recall. Keep in mind that other important settings can also be saved. (See page 56.)

How the RIBBON CONTROLLER works

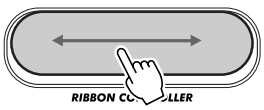
The RIBBON CONTROLLER starts affecting the sound the moment you touch it, and instantly changes the sound according to where you put your finger on the ribbon. It also automatically overrides the setting of the knobs. When you take your finger from the ribbon, the selected parameter instantly snaps back to the default setting.

How the RIBBON CONTROLLER works and how it relates to the knobs can best be explained by example:

Let's say that you've set the RIBBON CONTROLLER to affect Cutoff.

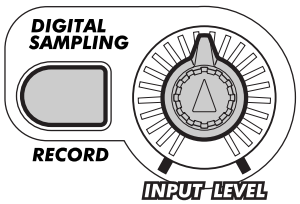
Next, you turn the CUTOFF knob to about the 3:00 or 4:00 position, making the sound brighter. Leaving the knob at that position maintains that bright sound.

Now, you touch the RIBBON CONTROLLER, and the sound instantly changes according to where your finger is on the ribbon — overriding the effect of the knob.



Keeping your finger on the ribbon and moving it back and forth changes the sound continuously. When you release your finger from the ribbon, the sound instantly reverts back to what it was when the CUTOFF knob was set to 12:00 (center).

DIGITAL SAMPLING



ABOUT DIGITAL SAMPLING

What is sampling? Technically, sampling is making a digital recording of a sound. The sound could be your voice or an acoustic instrument (taken from a microphone), or a recorded sound (from a CD or cassette player). Once it is recorded, the resulting "sample" can be edited (for example, trimmed or looped) and can then be played at various pitches from a keyboard.

Sampling, of course, is a revolutionary new technology. But it's much more than that. In case you haven't been paying attention, sampling is extraordinarily popular and is an integral part of most cutting-edge music of today. It's also the most revolutionary way of making music — since virtually anything can be sampled, and then digitally twisted and regurgitated into new music.

With the built-in Digital Sampling features, the DJX makes it exceptionally easy for you to use this groundbreaking technology in your own music! The samples you create are automatically stored to voice #284 ("Sampled"), and can be played from the keyboard like any other voice — and can be "tweaked" with the knobs, RIBBON CONTROLLER and PITCH BEND wheel as well!

NOTE

In this section, the words "sampling" and "recording" are used interchangeably; they refer to the same process.

NOTE

Keep in mind that the quality of the sample may differ from the original sound. In particular, noise and distortion may result (depending on the pitch range) when using the CUTOFF and RESONANCE knobs.

FAST ▸▸ TRACK

1 ***Set up the DJX for sampling.*** *(Connect a microphone or line level source.)*

2 ***Enter the Sampling mode*** *(by pressing the RECORD button in the DIGITAL SAMPLING section).*

3 ***Set the sampling level*** *(with the INPUT LEVEL knob).*

4 ***Press the key to which the new sample will be assigned.***

5 ***Set sampling to standby.*** *(Press the START/STOP button; sampling starts when audio signal is received.)*

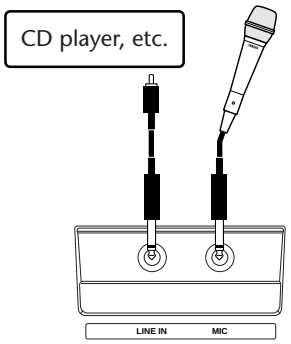
6 ***Stop sampling*** *(by pressing the START/STOP button).*

7 ***Exit from the Sampling mode*** *(by pressing the RECORD button again).*

RECORDING A SAMPLE AND PLAYING IT

1 Set up the DJX for sampling.

If you're sampling your voice or an acoustic instrument with a microphone, connect the microphone to the MIC input jack on the rear panel. If you're sampling a line source, such as a CD player, cassette deck, or electronic instrument, connect it to the LINE IN input jack.

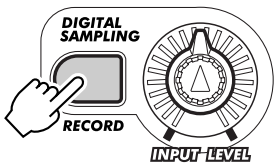


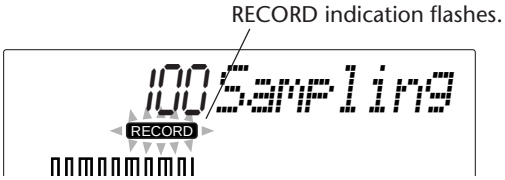
CAUTION

Never connect a line level signal (CD player, cassette deck, electronic instrument, etc.) into the MIC input jack! Doing this could damage the DJX and its Digital Sampling functions.

2 Enter the Sampling mode.

Press the RECORD button (in the DIGITAL SAMPLING section).

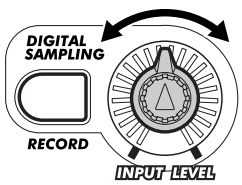




This automatically cancels any other DJX operation or function, and enters the Sampling mode. It also disables the MASTER VOLUME dial — the level of the sound is controlled only from the INPUT LEVEL knob.

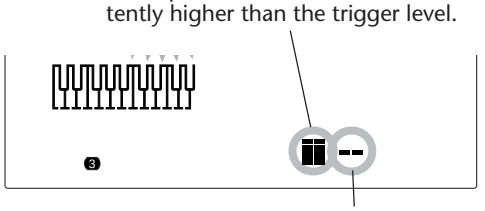
3 Set the sampling level.

Talk or sing into the microphone (or play back the connected line level source). As you do this, use the INPUT LEVEL knob to adjust the sampling level. Slowly turn it to the right until the level is appropriate. The "level meter" in the display indicates the level of the signal.



Slowly turn this until level is appropriate.

Input level meter
The input level bars should be consistently higher than the trigger level.



Trigger level meter

Normally, the trigger level (shown above) does not need to be set. However, you can change this setting if you want. For more information, see the boxed section "Trigger Level" below.

NOTE

If the trigger level is higher than the input signal, the signal will not be recorded. (For more information, see the boxed section "Trigger Level", on page 71.)

HOT TIPS *Guidelines for sampling*

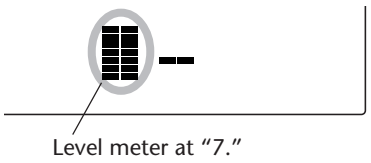
• Connections:
If you are using a microphone, make sure that it is connected to the MIC jack and not the LINE IN jack. Connecting a microphone to LINE IN will not damage the DJX; however, it will be impossible to get a recordable signal (the microphone level is too low).

• Avoiding feedback:
To avoid feedback, make sure that the microphone is pointed away from the speakers and is placed relatively distant from them.

• Sample start points:
Always record your sample as close to the intended start point as possible, since this cannot be changed later. For example, if you are sampling a four-beat rhythmic phrase from a CD, cue up the selection (and pause it) so that when you hit PLAY, the phrase plays from the top of the measure.

The trigger level setting can help with this as well, since it effectively puts sample recording on standby until a strong enough signal (e.g., the first beat of phrase) arrives to start recording. (See "Trigger Level" below.)

• Proper levels:
In general, you'll want to record the signal as "hot" as possible — loud enough to record and be heard properly, but soft enough to avoid clipping and distortion. The level meter is a total of 8 bars in height; try to keep the input level at a maximum of 7 bars.


Level meter at "7."

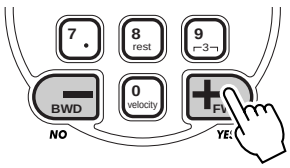
Signal peaks that occasionally push the meter to "8" may still result in a clean recording. However, you should avoid letting the signal pin the meter to "8" (unless you want a deliberately distorted recording). Also, let your ears be the judge — if you hear distortion in the signal, bring the input level down.

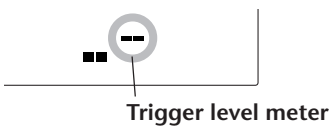
• Simultaneous MIC and LINE IN use:
Both the MIC and LINE IN inputs can be used simultaneously for sampling. The key to mixing your voice with a line input is in having an output control on the line source (e.g., CD player) — in that way you can adjust the balance of the line source with your vocals, then use the INPUT LEVEL knob on the DJX to control the overall level.

Trigger Level

Actually, the DJX does not start sampling immediately when the START/STOP button is pressed (in step #5). Once the START/STOP button is pressed, the DJX waits for a signal of a suitable level (set by the trigger level). When it hears such a signal, it starts sampling.

To set the trigger level, use the +/- buttons of the numeric keypad. Press the + button to raise the trigger level, and press the - button to lower it.

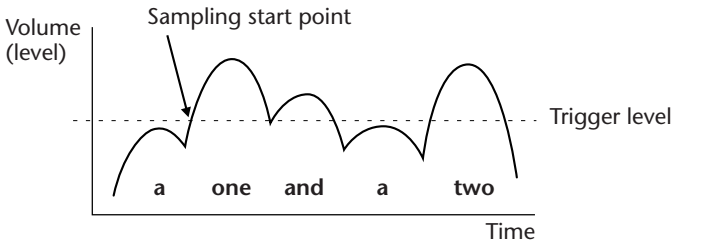



Trigger level meter

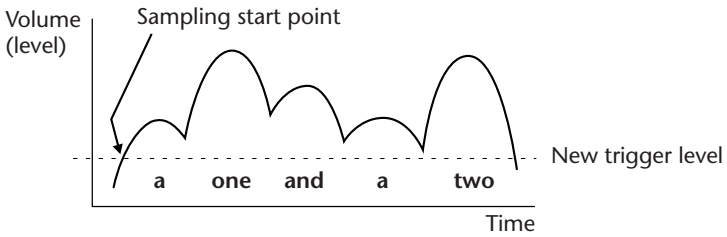
The higher the trigger level, the louder the signal must be to start (trigger) sampling.

NOTE
You can instantly restore the default trigger level setting by pressing both +/- buttons simultaneously.

To better understand how trigger level works, let's look at a specific example — sampling of the phrase "a one and a two." In this phrase, "one" and "two" are louder than the other words.



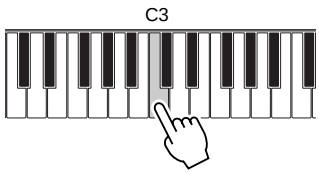
Since the first "a" is lower than the trigger level, the DJX doesn't actually start sampling until the word "one." If you want the phrase to be sampled from the first word, the trigger level should be set lower.

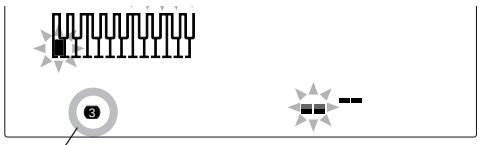


With this new trigger level setting, the entire phrase will be sampled. Be careful, however, not to set the trigger level too low, or else sampling may start from some accidental or extraneous sound (such as breathing noises, touching the microphone, etc.).

4 *Press the key to which the new sample will be assigned.*

Press the desired key on the keyboard.

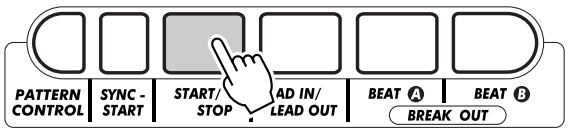




The numbers at the bottom left of the display indicate the octave of the selected key.

5 *Set sampling to standby.*

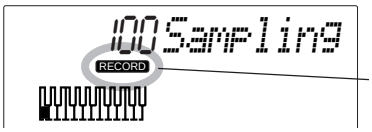
Press the START/STOP button. This does not actually start sample recording — sampling starts when an audio signal is received.



Sampling standby:

Microphone icon indicates sample recording.

During sampling:



RECORD indication stays lit during actual sampling.

NOTE

If you press the START/STOP button (to start sampling) without first pressing a key, a "Sel. Key" message briefly appears, prompting you to select a key.

NOTE

If you don't manually stop the sampling operation in step #6 below, the DJX automatically stops sampling after about three seconds (when half of the available memory is used).

6 Stop sampling.

Press the START/STOP button to stop sampling. The amount of remaining available recording time is shown in the display as a percentage ("100" is the maximum):

NOTE

Make sure to stop sampling immediately at the end of the sound. Recording extra unneeded sound decreases the amount of available memory for additional samples.

Sampling memory capacity

The DJX has memory space for approximately 6 seconds of sampling. Up to twelve separate samples can be recorded. (For information on recording additional samples, see page 74.)

Listed below are some example percentage figures for remaining available recording time, with the corresponding actual time (in seconds).

% Free	Available Time (approx.)
100	6 seconds
80	4.8 "
75	4.5 "
50	3.0 "
25	1.5 "
10	0.6 "

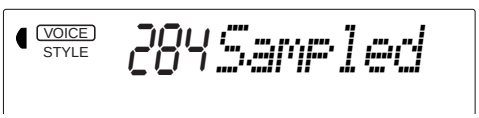
Keep in mind that although a total of six seconds are available for sampling, no one sample can be longer than three seconds. (The DJX automatically stops sampling after three seconds.)

When there is no more available recording time, the following display appears:

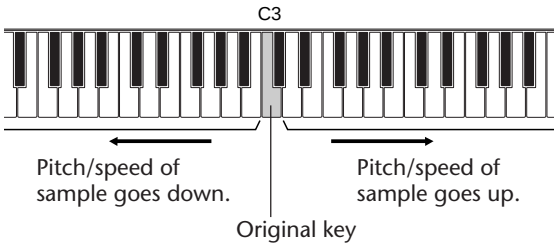
When all twelve available samples have been recorded (even if there is still available recording time), the following display appears:

7 Exit from the Sampling mode.

Press the RECORD button (in the DIGITAL SAMPLING section) again. Voice #284 ("Sampled") is automatically selected for playing.



Turn the INPUT LEVEL knob to its minimum (or disconnect the MIC or LINE IN input), and set the MASTER VOLUME dial appropriately for playing the voice. Notice that the pitch and speed of the sample "follows" the keyboard: Playing keys lower than the original results in a lower pitch and slower speed; playing higher keys results in higher pitch and faster speed.



CAUTION

Loss of power means loss of samples!

As long as the AC adaptor remains connected (or a working set of batteries is installed), the DJX retains the sample data, even if the STAND BY/ON switch is turned off. However, if power is interrupted for any reason, all sample data will be lost. (In this case, the original factory samples are automatically reloaded to voice #284.) Make sure to save any important samples, by using the Sampling Data Bulk Dump function (page 97).

Deleting a sample

You can easily delete any specific sample you've recorded. To do this:

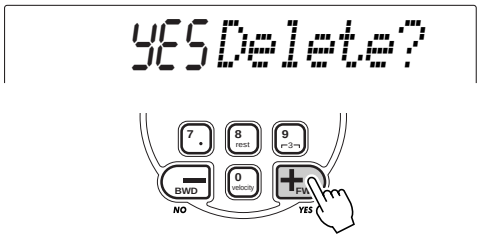
1 Enter the Sampling mode.

Press the RECORD button (in the DIGITAL SAMPLING section).

2 Press the original key of the sample.

3 Delete the sample by pressing the +/FWD button.

At the "Delete?" prompt in the display, press the +/FWD button to actually delete the sample.



"End" appears briefly in the display, before operation returns

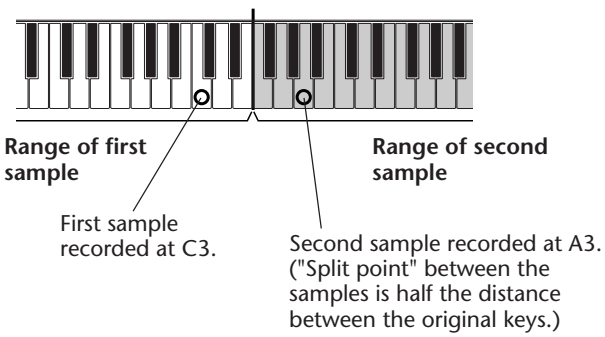
If you've inadvertently pressed the key to a sample you wish to keep, press the -/BWD button to cancel.

Recording additional samples

The DJX has space for a total of twelve samples. Recording of additional samples is very easy. Simply follow the same steps as you did in recording your first sample, but select a different key in step #4.

NOTE

Additional samples are mapped to the keyboard so that there is equal space between samples. For example, if you've recorded one sample to C3, and then recorded a new sample to A3, the samples are mapped to the keyboard in this fashion:

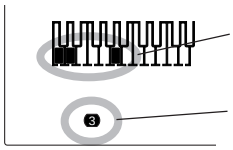


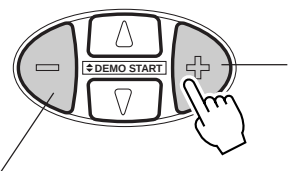
HOT TIPS

• Forgotten where all your samples are?

If you've recorded several samples, it may be hard to keep track of which keys you've recorded them to. The DJX lets you easily check where the original key of each of your samples is.

Each original key is darkened in the display. Since there is not enough room in the display to show the entire keyboard, each octave is shown separately (indicated by the number at the bottom). To step up or down through the octaves, use the OVERALL +/- buttons.





SAMPLE EDITING

The DJX also features some simple but powerful sample editing tools. These include setting the end point for a sample, and creating sample loops.

Setting the End Point

In this section, you'll learn how to set the end point of a recorded sample. The end point determines how much of a sample is played back each time you press a key. Three different resolutions — Coarse, Mid, and Fine — are provided to let you move around within the sample data when searching for the desired or best end point.

NOTE
Keep in mind that setting the end point to a position earlier than the actual end of the sample does not change the actual length of the sample or delete any of the sample's data — it simply changes how the sample plays back.

FAST ▸▸ ▸TRACK

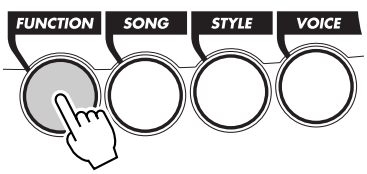
1 ***Enter the Sampling mode.***
2 ***Call up the Sample Editing functions.*** *(Press the FUNCTION button.)*
3 ***Select the desired sample (wave).*** *(Play any key in the sample's range.)*
4 ***Set the sample for "one shot" play.***
5 ***Adjust the end point. Use different editing resolutions if necessary.***
6 ***Exit from the Sampling mode.***

1 Enter the Sampling mode.

Press the RECORD button (DIGITAL SAMPLING).

2 Call up the Sample Editing functions.

Press the FUNCTION button.



The Sample Editing functions include:

- *Wave Select*
- *Loop / One Shot*
- *End Point Coarse (1/16)*
- *End Point Mid (1/256)*
- *End Point Fine (1/4096)*

You can select from among these by using the OVERALL ▲/▼ buttons.

NOTE
The Sample Editing functions cannot be selected if samples have not yet been recorded. (The error message "No Data" appears in the display.)

3 Select the desired sample (wave).

Play any key in the sample's range. Once you've found the desired sample, avoid playing any other keys and go on to step #4.

4 Set the sample for "one shot" play.

The One Shot setting, as its name implies, lets the sample play back just once each time a key is pressed. To set this:

1) Use the OVERALL ▲/▼ buttons to select the Loop / One Shot function.

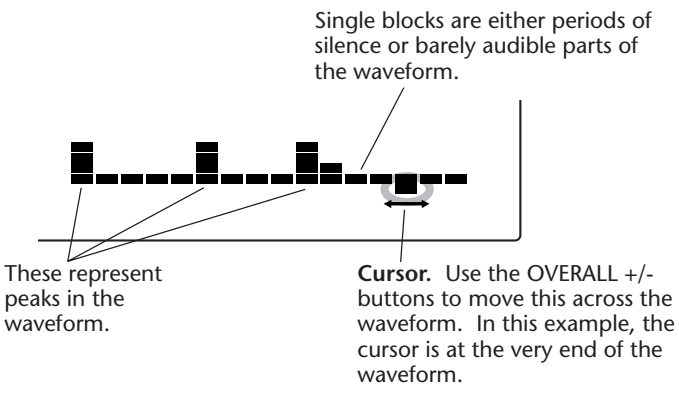
2) Use the OVERALL +/- buttons to change the setting if necessary. (For One Shot, this should be set to "no.")

5 Adjust the end point.

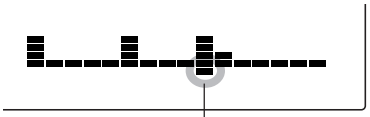
The DJX has three different editing resolutions: Coarse, Mid, and Fine. By using these three together, it is very easy to pinpoint the precise location you want sample playback to stop. To do this:

1) Select the Coarse (1/16) editing resolution (with the OVERALL ▲/▼ buttons.)

A rough picture of the entire sample waveform appears at the bottom right of the display:



2) Move the cursor along the waveform by using the OVERALL +/- buttons.
The cursor position determines the end point — the point at which sample playback stops. Any sound after the cursor is not played.



Cursor is at the third peak in the waveform. (Sample playback stops at this newly selected point.)

3) Play the keyboard and listen to the edited sample.
Repeat this as often as necessary — playing a key, listening, and continuing to move the cursor, adjusting the end point until you're satisfied.

NOTE
Make sure to press and release a key each time you want to audition a new cursor/end point setting.

Generally, it's best to play the lower keys of the sample, since this allows you to hear the sample played back slowly — making it easier to spot the desired end point. If you can't precisely pinpoint the desired location, go on to step 4).

4) Select a more detailed resolution, and repeat steps 2) and 3) above.
The best way to adjust the end point is to use the three resolutions in their given order: 1) Coarse, 2) Mid, 3) Fine. Once you've gotten as close to the desired end point as possible within Coarse, select Mid (by using the OVERALL ▲/▼ buttons), then use the OVERALL +/- buttons to move the cursor.

Here is our example waveform as seen in the Mid resolution:

This display is an enlargement of the block we selected in step 2). It shows only the initial part of the third peak in our sample. (For more details on the Coarse, Mid, and Fine resolutions, see the boxed section "About the resolution settings" on page 79.)

Notice also that the cursor has returned to the right (end) of the waveform. This happens when selecting a different resolution for the first time in an editing session.

6 Exit from the Sampling mode.

Press the RECORD button (DIGITAL SAMPLING) again. Your new end point setting is automatically saved, and is called up each time you select the sampled voice (#284).

To edit other samples in the voice, simply repeat the entire operation above.

Creating Loops

Looping is one of the most exciting and useful applications of Digital Sampling. Creating a loop allows you repeat the sample indefinitely, simply by holding a key.

FAST ▶▶ ▶TRACK

1 ***Enter the Sampling mode.***
2 ***Call up the Sample Editing functions.*** *(Press the FUNCTION button.)*
3 ***Select the desired sample (wave).*** *(Play any key in the sample's range.)*
4 ***Set the sample for "loop" play.***
5 ***Adjust the end point. Use different editing resolutions if necessary.***
6 ***Exit from the Sampling mode.***

1 Enter the Sampling mode.

Press the RECORD button (DIGITAL SAMPLING).

2 Call up the Sample Editing functions.

Press the FUNCTION button.

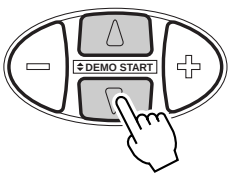
3 Select the desired sample (wave).

Play any key in the sample's range. Once you've found the desired sample, avoid playing any other keys and go on to step #4.

4 Set the sample for "loop" play.

The Loop setting, as its name implies, lets the sample play back repeatedly when a key is held. To set this:

1) Use the OVERALL ▲/▼ buttons to select the Loop / One Shot function.



2) Use the OVERALL +/- buttons to change the setting if necessary. (For Loop, this should be set to "YES.")

5 *Adjust the end point.*

This operation is the same as in step #5 of "Setting the End Point" above.

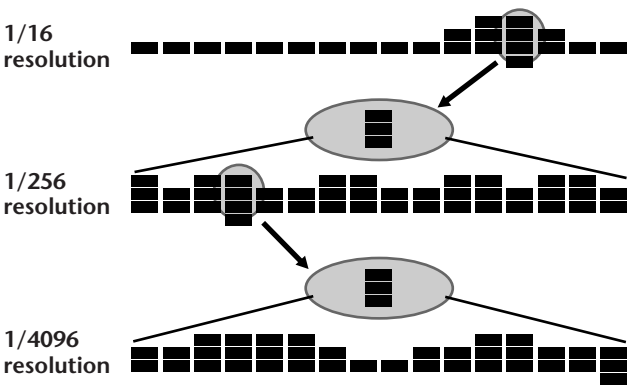
6 *Exit from the Sampling mode.*

Press the RECORD button (DIGITAL SAMPLING) again. Your new loop and end point settings are automatically saved, and are called up each time you select the sampled voice (#284).

To edit other samples in the voice, simply repeat the entire operation above.

About the resolution settings

The Coarse (1/16) setting displays the entire recorded sample. The Mid (1/256) and Fine (1/4096) settings are like successive 16-power microscopes that let you zoom in on a desired block — letting you precisely set the end point.

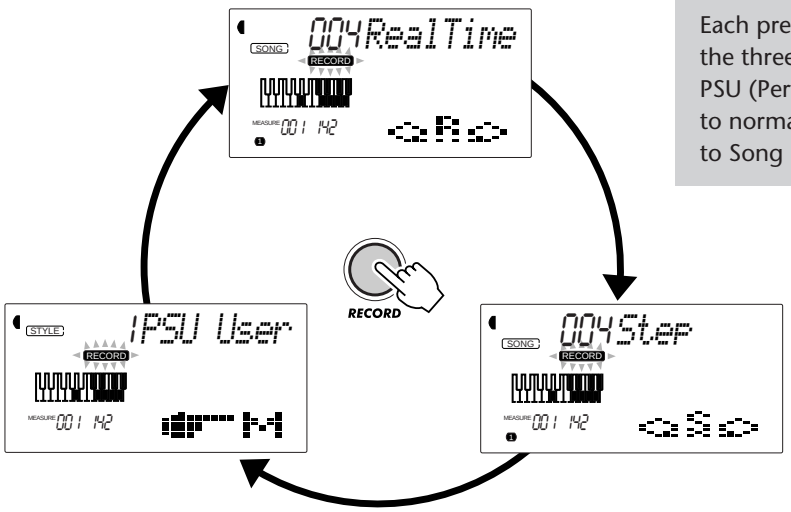


Each block in Coarse is divided up into 16 blocks and displayed as such in Mid resolution.

Likewise, each block in Mid is divided up into 16 blocks and displayed as such in Fine resolution.

SONG RECORDING

The DJX features powerful and easy-to-use song recording features that let you record your keyboard performances — using up to six separate tracks — and create your own complete, fully orchestrated compositions. Up to three User songs can be recorded and saved. There are two record modes: Realtime and Step.



Each press of the RECORD button cycles through the three Record modes — Realtime, Step, and PSU (Performance Setup) — before exiting back to normal operation. (The PSU mode is unrelated to Song recording; it is described on page 56.)

Realtime recording is similar to using a tape recorder; whatever you play on the keyboard is recorded in real time as you play it. Also, when you record subsequent parts to other tracks, you can hear the previously recorded parts as you record new ones.

Step recording allows you to enter notes individually. As such, it is very similar to writing down the notes on a sheet of music paper; each note is entered one at a time.

Each method has its own advantages and uses. Step recording is excellent for precision and for entering notes whose placement, rhythmic value, and velocity are fixed or consistent — such as individual drum parts in a rhythm pattern, or single notes in a syncopated bass part. It also gives you precise control in recording fast or complex passages that would be difficult or impossible to record in real time. Realtime recording on the other hand, is best for capturing the natural "feel" of a performance, since it allows you to record as you are playing and simultaneously hear what you are recording.

Which method you use depends partly on the type of music you wish to create and partly on your own personal preference. You can even use both methods in tandem. For example, you could record a basic song guide to track 1 with Realtime, then use Step to record your "precision" parts to other tracks (and perhaps even re-record track 1, once all the other parts are in place). Or you could program basic riffs and patterns with Step first, then use Realtime to add melodies and embellishments.

NOTE

Keep in mind that all recording operations "replace" the data. In other words, if you record to a track that already has recorded data, all previous data in the track will be erased and replaced by the newly recorded data.

RECORDING A USER SONG – REALTIME RECORDING

FAST ▸▸ ▸TRACK

1 ***Make all desired DJX settings.***
2 ***Select the Realtime Record mode.*** *(Press the RECORD button.)*
3 ***Select a User song for recording*** *(with the numeric keypad).*
4 ***Select a track number*** *(with the SONG MEMORY buttons).*
5 ***Start recording*** *(by playing the keyboard or pressing the START/STOP button).*
6 ***Stop recording.*** *(When finished, press the START/STOP button.)*
7 ***Listen to your new recording*** *(by pressing the START/STOP button).*
8 ***Record to other tracks as desired.*** *(Repeat steps #4 - #7 above.)*
9 ***Exit from the Record mode.*** *(Press the RECORD button.)*

Data that can be recorded to the normal (melody) tracks:

- Note on/off
- Velocity
- Main voice settings (Voice Number*, Volume*, Octave, Pan*, Reverb Send Level, Chorus Send Level, DSP Send Level)
- Dual voice settings (Voice Number*, Volume*, Octave, Pan*, Reverb Send Level, Chorus Send Level, DSP Send Level)
- Reverb on/off, Reverb Type*
- Chorus on/off, Chorus Type*
- DSP on/off, DSP Type*
- Arpeggiator on/off, Arpeggiator Type*, Arpeggiator Speed*
- Sustain on/off
- BPM (Tempo)*, Time Signature* (if there is no such data in the Chord track)

Data that can be recorded to the Chord track:

- Style number*
- Chord changes and timing
- Changing sections (Lead In, Beat A/B, etc.) and timing
- Pattern Volume*
- BPM (Tempo), Time Signature*

** These settings can only be recorded once at the beginning of a song; other settings can be changed in the middle of a song.*

1 *Make all desired DJX settings.*

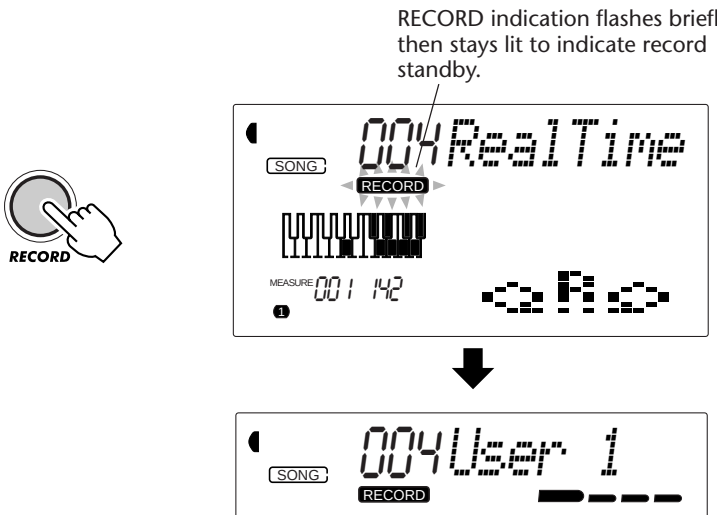
Before you actually start recording, you'll need to make various settings for the song — such as selecting a style, setting the BPM (Tempo), and selecting a voice. (See pages 44, 41, and 24.)

Selecting a style lets you use the sophisticated pattern features as part of your song. In this way, you can simply play the chords, and the DJX automatically creates the appropriate bass and chord backing. (For more information on patterns, see page 44.)

If desired, also make other settings. Refer to the list above for settings that can be recorded to a song.

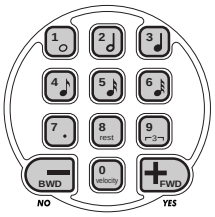
2 Select the Realtime Record mode.

Press the RECORD button, repeatedly if necessary, until "RealTime" appears at the top of the display.



3 Select a User song for recording.

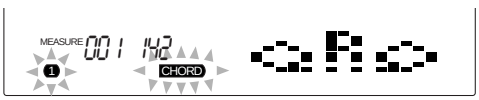
Use the numeric keypad to select the desired song: User 1 (004), User 2 (005), or User 3 (006).



User song numbers can be selected in the same way as with the voices (see page 25). You can use the numeric keypad to directly enter the song number, use the +/- keys to step up and down through the songs, or press the SONG button to advance through the song numbers.

4 Select a track number.

Press the SONG MEMORY button corresponding to the desired track. (This step is optional; the DJX automatically selects the first available track. When there is no song data, track 1 is automatically selected.)

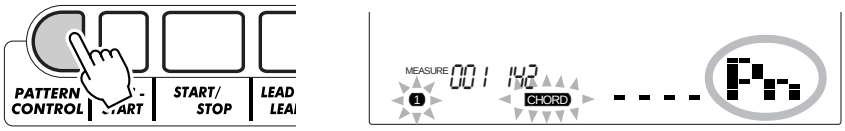


NOTE

Realtime and Step recording methods can be mixed in the same song, but not the same track.

Recording to the Chord Track

A special Chord track is provided for recording pattern data. This is automatically recorded to the Chord track (track 6). To select the Chord track and turn on the Pattern Control, press the PATTERN CONTROL button.



You can also simultaneously record one of the melody tracks (1 - 5) and the Chord track (6).

NOTE

If Pattern Control has already been turned on before entering the Record mode, the Chord track is automatically selected.

5 Start recording.

When the "RECORD" indication stops flashing and the beat bars and track number start flashing, you can start recording simply by playing the keyboard (or by pressing the START/STOP button).

Indicates Record standby. Flashing beat bars indicate Sync-Start is on.

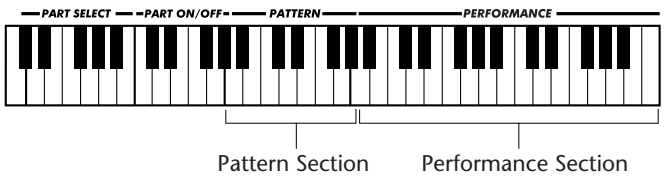
NOTE

This function can also be controlled by using a connected footswitch. (See page 21.)

If you want to rehearse your part before recording, press the SYNC-START button to turn Sync-Start off. After rehearsing, press SYNC-START again to return to the above condition.

When recording the Chord track

With Sync-Start on, play the first chord of the song in the Pattern section of the keyboard. The pattern starts automatically and you can continue recording, playing other chords in time with the pattern.



If you wish to cancel recording at this point, press the RECORD button again.

6 Stop recording.

After you've finished playing the part, press the START/STOP button.

7 Listen to your new recording.

To play back the song from the beginning, simply press the START/STOP button again. Playback stops automatically at the end of the song, or when the START/STOP button is pressed again.

8 Record to other tracks as desired.

To do this, simply repeat steps #4 - #7 above. Make sure that when you press the SONG MEMORY button corresponding to the desired track, the track number in the display flashes.

9 Exit from the Record mode.

Press the RECORD button.

HOT TIPS

Additional Operations

Muting Tracks During Playback

While recording is enabled, you can selectively mute different tracks. This is useful for when you want to clearly hear certain tracks, and not others, during recording. Muting can also be done "on the fly" during playback. To use muting, press the corresponding SONG MEMORY button, repeatedly if necessary, until the desired track number in the display is off.

Each press of a SONG MEMORY button (when playback is stopped) cycles through the following settings:

*Track number flashes — Track will record.**
** Cannot be selected during playback.*

Track number off — Track is muted.

Track number on — Track will play back.

Re-recording a Track

If you've made a mistake and wish to record a track over again:

Press the corresponding SONG MEMORY button, repeatedly if necessary, until the desired track number in the display flashes (indicating record standby for that track). Since doing this turns Sync-Start off, press the SYNC-START button to turn Sync-Start on again, then start recording (as explained in step #5 above). Alternately, simply press the START/STOP button to start recording.

Clearing a Single Track

Use this operation to erase a single melody track without clearing the entire song (in the Song Clear operation, page 91). (This can only be used on a melody track.)

***1)** Press the RECORD button.*
***2)** Select the desired track (with the corresponding SONG MEMORY button).*
***3)** Press the START/STOP button once to start recording, and once again to stop (without playing any keys). This erases previous data, and creates a blank track.*

RECORDING A USER SONG – STEP RECORDING

FAST ▶▶ ▶TRACK

1 ***Make all desired DJX settings.***
2 ***Select the Step Record mode.*** *(Press the RECORD button.)*
3 ***Select a User song for recording*** *(with the numeric keypad).*
4 ***Select a track number*** *(with the SONG MEMORY buttons).*
5 ***Start recording.*** *(Enter notes and rests individually; see page 86.)*
6 ***Listen to your new recording*** *(by pressing the START/STOP button).*
7 ***Record to other tracks as desired.*** *(Repeat steps #4 - #6 above.)*
8 ***Exit from the Record mode.*** *(Press the RECORD button.)*

Data that can be recorded to the normal (melody) tracks:

- Note on/off
- Velocity**
- Main voice settings (Voice Number*, Volume*, Octave, Pan*, Reverb Send Level*, Chorus Send Level*, DSP Send Level*)
- Dual voice settings (Voice Number*, Volume*, Octave, Pan*, Reverb Send Level*, Chorus Send Level*, DSP Send Level*)
- Reverb on/off, Reverb Type*
- Chorus on/off, Chorus Type*
- DSP on/off, DSP Type*
- BPM (Tempo)*, Time Signature* (if there is no such data in the Chord track)

Data that can be recorded to the Chord track:

- Style number*
- Chord changes and timing
- Changing sections (Lead In, Beat A/B, etc.) and timing
- Pattern Volume*
- BPM (Tempo), Time Signature*

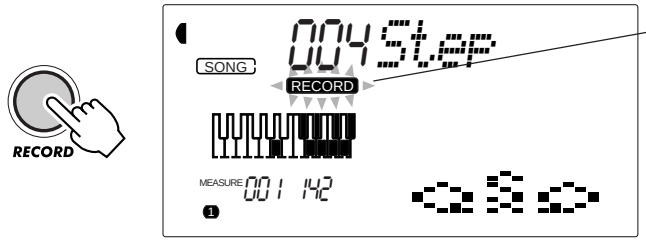
** These settings can only be recorded once at the beginning of a song; other settings can be changed in the middle of a song.*
*** All notes are entered at the same velocity; however, this can be changed in various ways with the Velocity Curve function (page 90).*

1 Make all desired DJX settings.

This operation is the same as that of Realtime recording (page 81).

2 Select the Step Record mode.

Press the RECORD button, repeatedly if necessary, until "Step" appears at the top of the display.



RECORD indication flashes briefly, then stays lit to indicate record standby.

NOTE
Realtime and Step recording methods can be mixed in the same song, but not the same track.

3 Select a User song for recording.

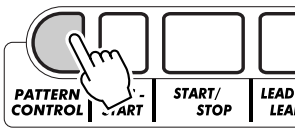
This operation is the same as that of Realtime recording (page 82).

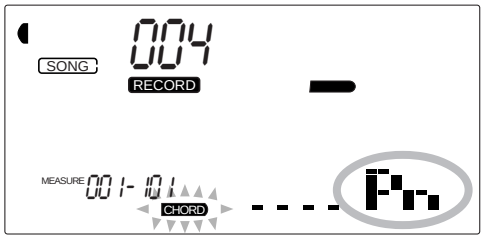
4 Select a track number.

Press the SONG MEMORY button corresponding to the desired track. (This step is optional; the DJX automatically selects the first available track. When there is no song data, track 1 is automatically selected.)

Recording to the Chord Track

A special Chord track is provided for recording pattern data. This is automatically recorded to the Chord track (track 6). To select the Chord track and turn on the Pattern Control, press the PATTERN CONTROL button.





NOTE

• Unlike Realtime Recording, Step Recording only allows you to record one track at a time; the Chord track cannot be recorded simultaneously with another track.

• If Pattern Control has already been turned on before entering the Record mode, the Chord track is automatically selected.

5 Start recording.

When the RECORD indication stops flashing and the track number starts flashing, you can start recording. Record each note (or chord) and rest individually, as described below:

Recording Notes

1) Select the desired position in the song (measure/beat) with the +/- buttons. (Each press of the button moves one beat forward or backward.)

2) Play the desired key or keys. (The note name is shown at the top of display.)

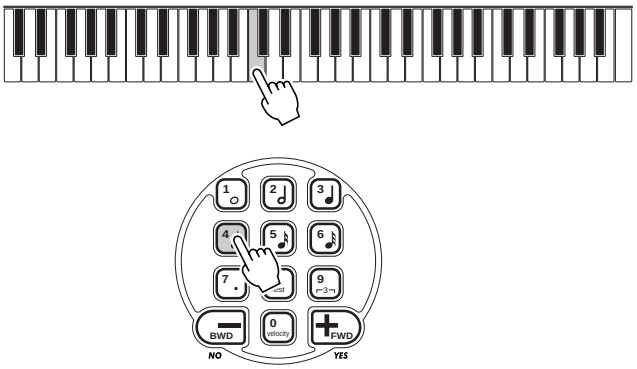
When recording chords to the Chord track, make sure the Pattern Control is on, then play the desired chord in the PATTERN section of the keyboard.

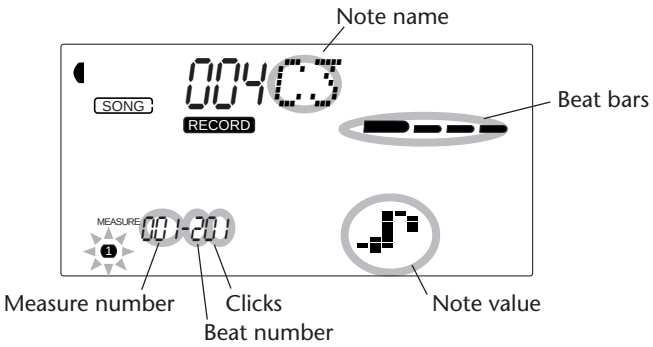
NOTE

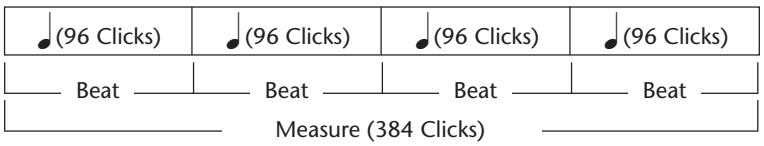
More than one note can be recorded at a time; however, only the last pressed note appears in the display.

3) Select the note (time) value with the numeric keypad. (The note value is shown as an icon in the display.)

For example, play middle C (C3), then press the "4" button (1/8 note).







The beat bars also indicate the current recording position (as the beat of the measure).

The note is automatically entered and Step recording moves to the next available position. For example, if a whole note is entered at the beginning of measure 1, the next position is the beginning of measure 2.

As mentioned above, you can use the +/- keys to move backward and forward in the track. When material has been recorded, this steps through and sounds each note in succession.

HOT TIPS

Additional Operations

Recording Chords and Sections to the Chord Track:

1) *Play a chord in the PATTERN section of the keyboard. (The chord name appears in the display.)*

Enter chords in the normal fashion, as single notes or full chords. (See page 50.)

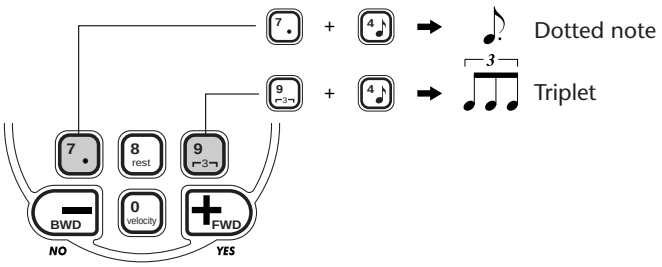
2) *Select a section by pressing the corresponding button.*
When selecting a Lead In or Lead Out section, the length is fixed, and need not be entered in step 3 below.

3) *Select the note (time) value with the numeric keypad.*

4) *Enter additional chords by repeating steps 1 - 3 above. (Selecting a section in step 2 is optional.)*

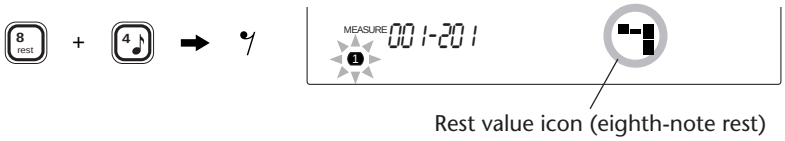
Recording Triplets and Dotted Notes:

1) *At the desired position, press the corresponding numeric keypad button ("7" for dotted or "9" for triplets).*
2) *Press the numeric keypad button for the desired note value.*



Recording Rests:

1) *Select the desired position in the song with the +/- buttons.*
2) *Press the "8" (rest) button in the numeric keypad.*
3) *If you want to record a dotted rest or triplet rest, press the appropriate numeric keypad button ("7" for dotted or "9" for triplets).*
4) *Press the numeric keypad button (1 - 6) corresponding to the desired rest value. (The specified rest value appears as an icon in the display.)*



5) *After recording the desired rest value(s), record the next note.*

NOTE

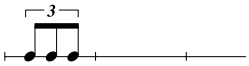
• The Lead In section can only be recorded at the beginning of a song.

• When a Lead Out section is selected, no further notes can be recorded.

NOTE

Triplets are three notes within a single beat — in other words, one beat is divided up into three equal units. Each note (or rest) of a triplet must be entered separately.

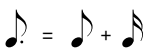
Two eighth notes (within a quarter-note beat).



Three eighth-note triplets (within a quarter-note beat).

NOTE

Dotted notes extend the length of a note by half — in other words, the length of a dotted eighth note is an eighth note plus a sixteenth note.



HINT

If you want to enter two or more consecutive beats of rest, you can simply use the + button to move forward in the track (for as many beats rest as desired). This saves you the trouble of repeatedly entering rests when there are several beats or measures of silence between notes.

6 Listen to your new recording.

You can listen to the entire step recorded track at any time by pressing the START/STOP button. The track you are working on plays back (until stopped), and returns to Step recording at the next position.

Keep in mind that this only plays the selected track. To hear all tracks of the song, exit from Step Rec (press the RECORD button), then press the START/STOP button to start song playback.

7 Record to other tracks as desired.

To do this, simply repeat steps #4 - #6 above. Make sure that when you press the SONG MEMORY button corresponding to the desired track, the track number in the display flashes.

8 Exit from the Record mode.

This operation is the same as step #9 of Realtime recording (page 84).

Replacing a Note or Rest

If you want to change a note or rest you've just recorded, you can easily replace it with a new one. To do this:

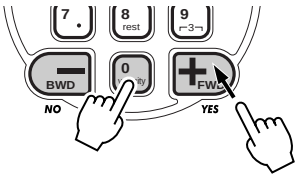
1) Select the desired position in the song with the +/- buttons.
2) Press the new note on the keyboard (or the appropriate rest value button on the numeric keypad).
3) Enter the new note value on the numeric keypad. (Enter dotted note or triplet first, if desired.)
4) At the "Delete?" prompt press the + button. To cancel, press the - button.

CAUTION
This operation deletes all previously recorded notes that follow the note to be replaced. Make sure you wish to delete any subsequent notes before actually replacing the selected note or rest.

Entering Velocity Curves

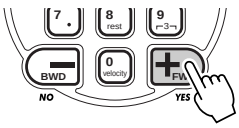
In Step recording, all notes are recorded at the same velocity or volume. To make a Step-recorded track sound more natural or to create some dynamic changes in the track, use the Velocity Curve function.

1) Select the first note to be affected by the Velocity Curve (by using the +/- buttons of the numeric keypad). All subsequent notes will be velocity-transformed.
2) Simultaneously hold down the VELOCITY button ("0" in the numeric keypad) and press + or - to select the desired Velocity Curve.



Selected Velocity Curve appears as icon in the display.

3) At the "Change?" prompt, press the + button ("YES") to actually enter the selected Velocity Curve, or press the - button to cancel the operation.



HOT TIPS

You can specify a Velocity Curve in the middle of a track BEFORE recording the notes that the curve will affect. To do this, select the last note of the track (by using the +/- buttons), then enter the desired Velocity Curve. In this case, the Velocity Curve is NOT applied to that last note, but affects all subsequently entered notes.

Velocity Curve Chart

Display	Type/Description
	Mezzoforte This sets all subsequent notes to a velocity value of 80.
	Forte This sets all subsequent notes to a velocity value of 100.
	Fortissimo This sets all subsequent notes to a velocity value of 120.
	Mezzopiano This sets all subsequent notes to a velocity value of 60.
	Piano This sets all subsequent notes to a velocity value of 40.
	Pianissimo This sets all subsequent notes to a velocity value of 20.
	Crescendo 1 This creates a two-measure crescendo, starting with the current velocity at the selected note and ending with a velocity increase of 40.
	Crescendo 2 This creates a two-measure crescendo, starting with the current velocity at the selected note and ending with a velocity increase of 20.
	Crescendo 3 This creates a two-measure crescendo, starting with the current velocity at the selected note and ending with a velocity increase of 10.

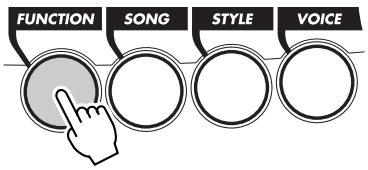
Display	Type/Description
	Diminuendo 1 This creates a two-measure diminuendo, starting with the current velocity at the selected note and ending with a velocity decrease of 40.
	Diminuendo 2 This creates a two-measure diminuendo, starting with the current velocity at the selected note and ending with a velocity decrease of 20.
	Diminuendo 3 This creates a two-measure diminuendo, starting with the current velocity at the selected note and ending with a velocity decrease of 10.
	Accent 1 This increases the velocity of notes at the top (1st beat) of all measures by 30. (Display icon represents two measures.)
	Accent 2 This increases the velocity of notes at the top and halfway points of all measures by 30. (Display icon represents two measures.)
	Triangle wave This alternately and gradually increases and decreases the velocity by 30 in the pattern of a triangle wave. The wave repeats every two measures throughout the track. (Display icon represents two measures.)
	Square wave This alternately and abruptly increases and decreases the velocity by 30 in the pattern of a square wave. The wave repeats every two measures throughout the track. (Display icon represents two measures.)

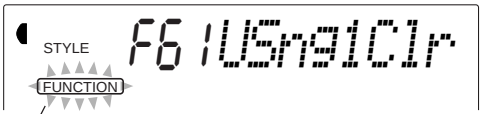
CLEARING A SONG

The Song Clear operation (of the Function parameters) completely erases all recorded data on all tracks of a selected User song. Use this operation only when you're sure you want to erase a song and record a new one.

1 Select the Function mode.

Press the FUNCTION button.





Flashes to indicate Function parameter can be selected.

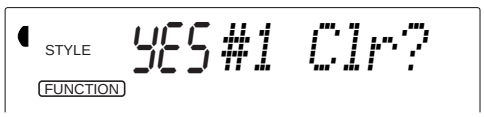
2 Select the Function parameter (61 - 63) corresponding to the song you wish to clear.

While the "FUNCTION" indication is flashing, use the numeric keypad to select the desired Function parameter number:

- *61 — Clear song #1 ("F61 USng1Clr")*
- *62 — Clear song #2 ("F62 USng2Clr")*
- *63 — Clear song #3 ("F63 USng3Clr")*

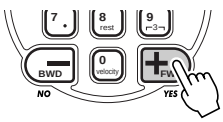
3 Start the Song Clear operation.

After the "FUNCTION" indication stops flashing and the "Clr?" prompt appears, press the + button to start the Song Clear operation.



4 At the "Sure?" prompt, clear the selected song.

Press + to actually clear the corresponding song, or press - to cancel the operation and return to step 3.



To exit from the Song Clear operation, press one of the other mode buttons: SONG, STYLE, or VOICE.

NOTE

These parameter numbers can be selected in the same way as with the voices (see page 25). You can use the numeric keypad to directly enter the number, use the +/- keys to step up and down through the parameters, or press the FUNCTION button to advance through the parameter numbers.

IMPORTANT

Since the "FUNCTION" indication flashes for only a couple of seconds, make sure to select the parameter quickly after step 1 above.

MIDI FUNCTIONS

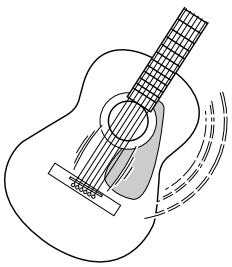
Even though the DJX is enormously versatile and powerful on its own, it can also be used effectively in any MIDI setup.
The DJX is MIDI-compatible, featuring MIDI IN and MIDI OUT terminals and providing a variety of MIDI-related controls. By using the MIDI functions you can expand your musical possibilities. This section explains what MIDI is, and what it can do, as well as how you can use MIDI on your DJX.

> **IMPORTANT** *The MIDI functions cannot be used in the Song mode.*

WHAT IS MIDI?

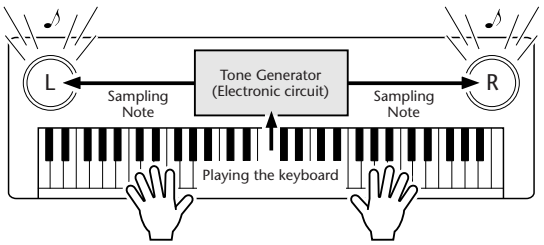
No doubt you have heard the terms "acoustic instrument" and "digital instrument." In the world today, these are the two main categories of instruments. Let's consider an acoustic piano and a classical guitar as representative acoustic instruments. They are easy to understand. With the piano, you strike a key, and a hammer inside hits some strings and plays a note. With the guitar, you directly pluck a string and the note sounds. But how does a digital instrument go about playing a note?

Acoustic guitar note production



Pluck a string and the body resonates the sound.

Digital instrument note production



Based on playing information from the keyboard, a sampling note stored in the tone generator is played through the speakers.

As shown in the illustration above, in an electronic instrument the sampling note (previously recorded note) stored in the tone generator section (electronic circuit) is played based on information received from the keyboard. So then what is the information from the keyboard that becomes the basis for note production?

For example, let's say you play a "C" quarter note using the grand piano sound on the DJX keyboard. Unlike an acoustic instrument that puts out a resonated note, the electronic instrument puts out information from the keyboard such as "with what voice," "with which key," "about how strong," "when was it pressed," and "when was it released." Then each piece of information is changed into a number value and sent to the tone generator. Using these numbers as a basis, the tone generator plays the stored sampling note.

Example of Keyboard Information

Voice number (with what voice)	156 (grand piano)
Note number (with which key)	60 (C3)
Note on (when was it pressed) and note off (when was it released)	Timing expressed numerically (quarter note)
Velocity (about how strong)	120 (strong)

MIDI is an acronym that stands for Musical Instrument Digital Interface, which allows electronic musical instruments to communicate with each other, by sending and receiving compatible Note, Control Change, Program Change and various other types of MIDI data, or messages.
The DJX can control a MIDI device by transmitting note related data and various types of controller data. The DJX can be controlled by the incoming MIDI messages which automatically determine tone generator mode, select MIDI channels, voices and effects, change parameter values and of course play the voices specified for the various parts.

MIDI messages can be divided into two groups: Channel messages and System messages. Below is an explanation of the various types of MIDI messages which the DJX can receive/transmit.

● Channel Messages

The DJX is an electronic instrument that can handle 16 channels. This is usually expressed as "it can play 16 instruments at the same time." Channel messages transmit information such as Note ON/OFF, Program Change, for each of the 16 channels.

Message Name	DJX Operation/Panel Setting
Note ON/OFF	Messages which are generated when the keyboard is played. Each message includes a specific note number which corresponds to the key which is pressed, plus a velocity value based on how hard the key is stuck.
Program Change	Voice number (along with corresponding bank select MSB/LSB settings, if necessary).
Control Change	Messages that are used to change some aspect of the sound (modulation, volume, pan, etc.).

● System Messages

This is data that is used in common by the entire MIDI system. System messages include messages like Exclusive Messages that transmit data unique to each instrument manufacturer and Realtime Messages that control the MIDI device.

Message Name	DJX Operation/Panel Setting
Exclusive Message	Reverb/chorus/DSP settings, etc.
Realtime Messages	Clock setting Start/stop operation

The messages transmitted/received by the DJX are shown in the MIDI Implementation Chart on page 112.

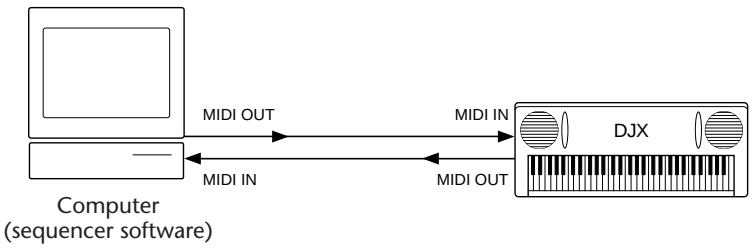
CONNECTING TO A PERSONAL COMPUTER

By connecting your DJX's MIDI terminals to a personal computer, you can have access to a wide variety of music software.

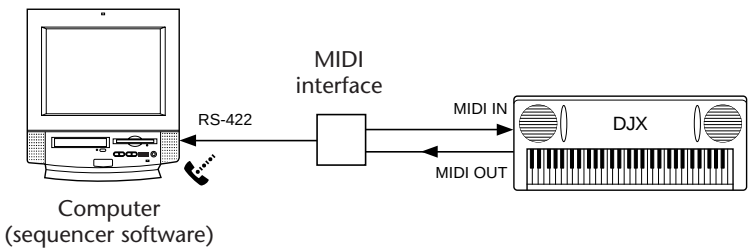
When using a MIDI interface device installed in the personal computer, connect the MIDI terminals of the personal computer and the DJX.

Use only special MIDI cables when connecting MIDI devices.

● Connect the MIDI terminals of the DJX to the MIDI terminals of the personal computer.



● When using a MIDI interface with a Macintosh series computer, connect the RS-422 terminal of the computer (modem or printer terminal) to the MIDI interface, as shown in the diagram below.

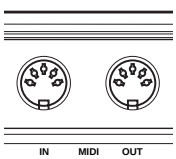


NOTE

When using a Macintosh series computer, set the MIDI interface clock setting in the application software to match the setting of the MIDI interface you are using. For details, carefully read the owner's manual for the software you are using.

MIDI Terminals

In order to exchange MIDI data between multiple devices, each device must be connected by a cable.
The MIDI terminals of the DJX are located on the rear panel.



MIDI IN ..... Receives MIDI data from another MIDI device.

MIDI OUT ..... Transmits the DJX's keyboard information as MIDI data to another MIDI device.

NOTE

- *Special MIDI cables (sold separately) must be used for connecting to MIDI devices. They can be bought at music stores, etc.*
- *Never use MIDI cables longer than about 15 meters. Cables longer than this can pick up noise which can cause data errors.*

FUNCTION PARAMETERS – MIDI

The Function parameters provide additional, more detailed MIDI settings for the DJX. These settings include:

- *Remote Channel*
- *Keyboard Out*
- *Pattern Out*
- *Local Control*
- *External Clock*
- *Bulk Dump Send*
- *Initial Setup Send*
- *Sampling Send*

Selecting and changing the Function parameters:
Press the FUNCTION button, then use the numeric keypad to select the parameter number. After "FUNCTION" stops flashing, use the numeric keypad or +/- buttons to change the setting. (For details, see page 18.)

NOTE
The MIDI settings below are saved even when the power is turned off. However, MIDI settings are NOT included in the data saved to the User banks in the Performance Setup feature (page 56).

Function Parameters

No.	Parameter Name	Display Name	Range/Settings
81	Remote Channel	RemoteCh	off, 01 - 16

This determines how the DJX is controlled by a "remote" (external) MIDI keyboard.
Set this to one of the 16 channels (01 - 16) for using an external keyboard to remotely control the DJX functions over the selected channel. (The remaining 15 channels can be used for multi-timbral operation.)
When this is set to "off," the DJX can be used as a full 16-channel multi-timbral sound source. The default setting is "off."

---

82 Keyboard Out — KbdOut — on, off

This determines whether the keyboard performance data of the DJX is transmitted or not.
When this is set to "off," notes played on the DJX will not affect (not be transmitted to) the connected MIDI device. When this is set to "on," the following keyboard data is transmitted: Main voice part over channel 1, Split voice part over channel 2, and Dual voice part over channel 11. The default setting is "on."

NOTE
If both Keyboard Out and Local Control (#84 below) are set to "off," neither the connected MIDI device nor the DJX voices will sound when playing the keyboard.

---

83 Pattern Out — PtrnOut — on, off

This determines whether pattern data is transmitted via MIDI OUT or not.
When set to "on," pattern data is transmitted over channels 3 - 10 (as listed below). The default setting is "off."

Pattern Transmit Channels:

- Channel 3 — Hi-hat
- Channel 4 — Percussion
- Channel 5 — Bass
- Channel 6 — Phrase 1
- Channel 7 — Phrase 2
- Channel 8 — Phrase 3
- Channel 9 — Kick
- Channel 10 — Snare

HINT
You can use Pattern Out in several ways. One useful application would be to play all or selected parts on a connected MIDI tone generator. In this way you could reinforce the DJX sounds by layering (or substituting) with the sounds of the tone generator. In a different application, you could record the individual parts from each channel to a sequencer, and use the comprehensive editing features of the sequencer to re-arrange the pattern parts.

No.	Parameter Name	Display Name	Range/Settings
84	Local Control	Local	on, off

This determines whether the keyboard is "connected" to the internal Voices of the DJX.
When set to "on," the Voices respond to notes played from the keyboard. When set to "off," the Voices respond only to incoming MIDI data (via MIDI IN). The default setting is "on." If you are routing the MIDI OUT on the DJX to a sequencer and back to the MIDI IN, you may want to set this to "off" to avoid MIDI "feedback."

---

85 External Clock ExtClock on, off

This determines whether the style and song playback functions are controlled by the DJX's internal clock (off) or by MIDI clock data from an external sequencer or computer (on).
This should be set to "on" when you want to have style or song playback follow the external device (such as a rhythm machine or a sequencer). The default setting is "off."

NOTE

• When this is set to "on," style playback CANNOT be controlled from the DJX panel controls.

• External Clock is automatically set to "off" when the Song mode is selected.

---

86 Bulk Dump Send BulkSend

This lets you save important DJX data and settings to another device (such as a sequencer, computer, or MIDI data filer).
The saved settings are: User Performance Setup banks 1 - 4 and User Songs 1 - 3, which you can then reload any time you need. For example, you can save data to floppy disk on a computer or a MIDI data filer (such as the Yamaha MDF3), and have unlimited storage capability for your valuable DJX data. (For detailed instructions, see the section "USING BULK DUMP SEND/SAMPLING SEND TO SAVE DATA" on page 97.)

---

87 Initial Setup Send InitSend

This function lets you transmit the initial setup settings of the DJX to a sequencer and record them as part of a song.
This ensures that when you playback the song, the DJX is instantly and automatically reconfigured to the proper settings for the song. (For detailed instructions, see the section "USING INITIAL SETUP SEND WITH A SEQUENCER" on page 100.)

---

88 Sampling Send SmplSend

This lets you save all user-sampled data of the "Sampled" voice (#284) to another device (such as a sequencer, computer, or MIDI data filer).
This is similar to the Bulk Dump Send operation above, except it saves only sampled data. (For detailed instructions, see the section "USING BULK DUMP SEND/SAMPLING SEND TO SAVE DATA" on page 97.)

USING BULK DUMP SEND/SAMPLING SEND TO SAVE DATA

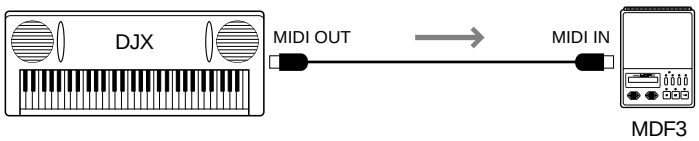
The actual operation steps for these two functions are identical. The Bulk Dump Send function saves User Performance Setup and User Song. The Sampling Send function saves only user-sampled data ("Sampled" voice, #284).

Saving Bulk Data/Sampling Data

1 First, set up the connected MIDI device for recording the data.

The actual procedure may differ depending on your particular equipment and software. For example, if you are using the Yamaha MDF3 MIDI Data Filer:

1) Make the appropriate MIDI connections.



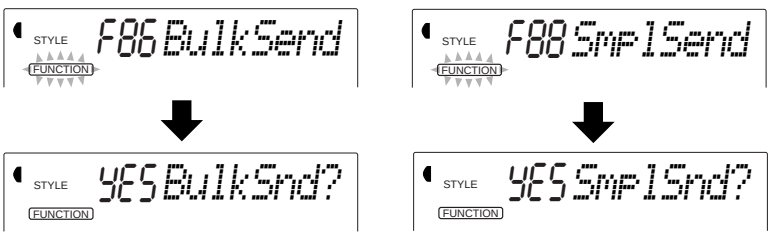
2) Set up the MDF3 for recording MIDI data. (Refer to the MDF3 Owner's Manual.)

2 On the DJX, select the Bulk Dump Send/Sampling Send function.

Do this in the normal way:

1) Press the FUNCTION button.

2) Select the desired Function parameter with the numeric keypad: #86 for Bulk Dump Send, or #88 for Sampling Send.



3 At the "BulkSnd?"/"SmplSnd?" prompt above, set the operation to standby.

Press the + button to start the operation.

NOTE

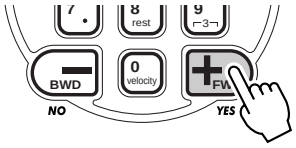
The Bulk Dump Send/Sampling Send functions cannot be used in the following conditions:

- *While playing a pattern*
- *In the Song mode*
- *In one of the Recording modes*
- *While calling up a Performance Setup*
- *While receiving bulk/sampling data*

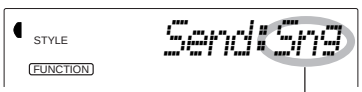
If you attempt the function while in one of the above conditions, "- - -" appears in the display and the data is not transmitted.

4 At the "Sure?" prompt, start sending the data.

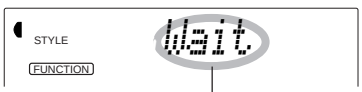
Press the + button to actually start transmitting the data, or press the - button to cancel the operation and return to step 3. Keep in mind that this operation could take several minutes to complete.



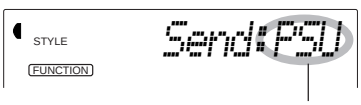
As the data is being sent, the display indicates the various stages of data transmission until the operation is complete:



Indicates User Song data is being sent.

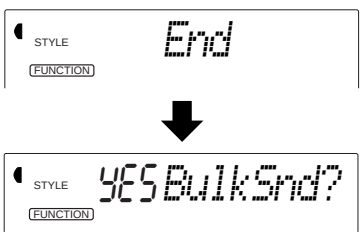


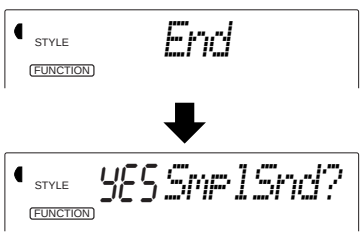
Indicates Sampling data is being sent.



Indicates Performance Setup User data is being sent.

When the operation is completed, the following displays appear:





5 Exit from the Bulk Dump Send/Sampling Send operation.

To exit from Bulk Dump Send/Sampling Send, press one of the other mode buttons: SONG, STYLE, or VOICE.

NOTE

Bulk Dump Send/Sampling Send can be cancelled in mid-operation by pressing the - button.

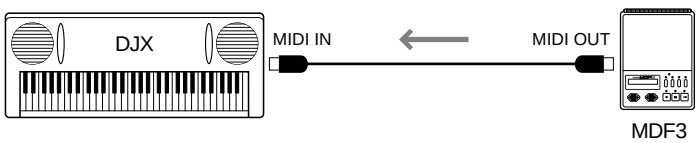
Loading Bulk Data/Sampling Data

Once you've saved DJX data as described above, you can easily reload the data back to the DJX.

1 Set up the connected MIDI device for sending the appropriate data.

The actual procedure may differ depending on your particular equipment and software. For example, if you are using the Yamaha MDF3 MIDI Data Filer:

1) Make the appropriate MIDI connections.



2) Insert the appropriate floppy disk (containing the desired data) into the MIDI Data Filer.

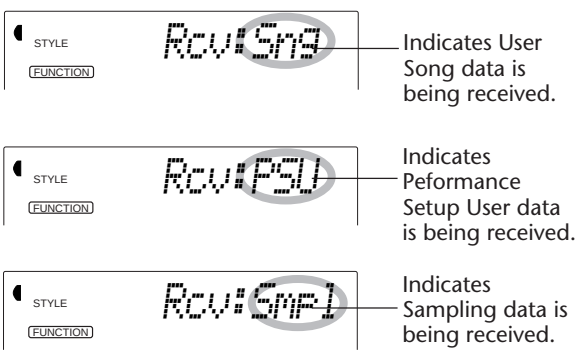
2 Make sure that the DJX is set to the Style mode.

Make sure that the DJX is NOT set to the Song mode, and that it is not in the middle of an operation, such as song recording or playback, pattern playback, Bulk Dump Send, etc.

3 Start sending the data from the connected MIDI device.

Send the data from the connected device. (Refer to the owner's manual of the device for details.)

The DJX automatically receives the data. As the data is being received, the DJX display indicates the various stages of data reception until the operation is complete:



NOTE

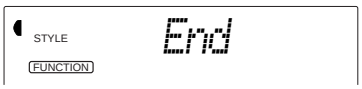
• When the DJX is receiving bulk data/sampling data, none of the panel controls can be used.

• Bulk data and sampling data cannot be loaded in the following conditions:

- *While playing a pattern*
- *In the Song mode*
- *In one of the Recording modes*
- *While calling up a Performance Setup*
- *While sending bulk/sampling data*

If you attempt the function while in one of the above conditions, "- - -" appears in the display and the data is not received.

When the operation is completed, the following display briefly appears (before returning to the original operation).



USING INITIAL SETUP SEND WITH A SEQUENCER

The most common use for the Initial Setup Send function is in recording a song on a sequencer that is intended for playback with the DJX. Essentially, this takes a "snapshot" of the DJX settings and sends that data to the sequencer. By recording this "snapshot" at the start of the song (before any actual performance data), you can instantly restore the necessary settings on the DJX. Provided there is a pause in the song, you could also do this in the middle of a song — for example, completely changing the DJX settings for the next section of the song.

Sending Initial Setup Data

1 First, set up the sequencer for recording.

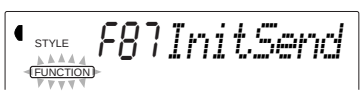
The actual procedure may differ depending on your particular equipment and software.

Ideally, you should leave two or more measures of silence (no performance data) before the song begins. The Initial Setup data should then be recorded to this space in the song.

2 On the DJX, select the Initial Setup Send function.

Do this in the normal way:

1) Press the FUNCTION button.
2) Select parameter #87 (with the numeric keypad).



NOTE

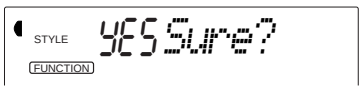
The Initial Setup Send function cannot be used in the following conditions:

- *While playing a pattern*
- *In the Song mode*
- *In one of the Recording modes*
- *While receiving bulk/sampling data*

If you attempt the function while in one of the above conditions, "- - -" appears in the display and the data is not transmitted.

3 At the "InitSnd?" prompt above, set the operation to standby.

Press the + button.



4 Start recording on the sequencer, then send the Initial Setup data.

Start recording on the sequencer in the normal way, then — with as little delay as possible — press the + button to actually start transmitting the data.

An "End" message briefly appears in the display when the operation is complete, followed by the "InitSnd?" prompt.

5 Stop recording on the sequencer.

Stop recording on the sequencer in the normal way. Make sure that any subsequently recorded performance data is recorded at least one measure following the Initial Setup data.

6 Exit from the Initial Setup Send operation.

To exit from Initial Setup Send, press one of the other mode buttons: SONG, STYLE, or VOICE.

TROUBLESHOOTING

Problem	Possible Cause and Solution
When the DJX is turned on or off, a popping sound is temporarily produced.	This is normal and indicates that the DJX is receiving electrical power.
There is a persistent "humming" or "buzzing" sound.	Make sure that the power adaptor is not close to or resting on the DJX panel.
There is no sound even when the keyboard is played or when a song is being played back.	Check that nothing is connected to the PHONES/AUX OUT jack on the rear panel. When a set of headphones is plugged into this jack, no sound is output.
The selected voice does not sound properly, or is too low in volume.	Make sure that the following settings are appropriate: Main Voice Volume (#01, page 27), Dual Voice Volume (#11, page 30), and Split Voice Volume (#21, page 32).
There is no sound when playing the keyboard.	When setting the Split Point, the keyboard is used only to change the value and does not produce any sound.
The sound of the voices or rhythms seems unusual or strange.	The battery power is too low. Replace the batteries. (See page 8.)
The pattern does not play back even when pressing the START/STOP button.	When External Clock (page 96) is set to "on," style playback CANNOT be controlled from the DJX panel controls.
There is no sound on either the DJX or the connected MIDI device.	• If Local Control (Function #84, page 96) is set to "off," the DJX voices will not sound even when playing the keyboard. • If Keyboard Out (Function #82, page 95) is set to "off," the connected MIDI device will not sound when playing the DJX keyboard.
The pattern does not sound properly.	• Make sure that the Pattern Volume (page 49) is set to an appropriate level. • Make sure that the Pattern Split Point (#51, page 54) is set to an appropriate value.
Some Parts do not seem to sound.	Make sure that none of the Parts have been inadvertently turned off with Part Control. (All of the relevant keys in the display should be dark.)
The Reverb/Chorus/DSP cannot be heard properly.	• Make sure that the Send Level parameter for the effect (and the intended voice: Main, Dual, of Split) is set to an appropriate value. (See pages 27, 30, 32) • Make sure that the corresponding effect is turned on. (See pages 34, 35, 36)
Not all of the voices seem to sound, or the sound seems to be cut off.	The DJX is polyphonic up to a maximum of 32 notes. If a the Dual voice or Split voice mode is being used and a style or song is playing back at the same time, some notes/sounds of the Pad may be omitted (or "stolen") from the pattern or song. (See the note on page 104.)
A strange "flanging" or "doubling" sound occurs when using the DJX with a sequencer. (This may also sound like a "dual" layered sound of two voices, even when Dual is turned off.)	• If you are routing the MIDI OUT on the DJX to a sequencer and back to the MIDI IN, you may want to set Local Control (page 96) to "off" to avoid MIDI "feedback." • When using the pattern with a sequencer, set MIDI Echo (or the relevant control) to "off." (Refer to the owner's manual of your particular device and/or software for details.)
The sound is distorted or noisy.	• Many of the DJX sounds have been deliberately processed or created with a "lo-rez" or "grunge" sound to suit certain styles of music. • Using the CUTOFF and RESONANCE knobs at or near the maximum settings (especially when the MASTER VOLUME dial is also at maximum) may result in distortion. • If this applies to the "Sampled" voice (#284), you may have recorded the sample(s) at too high a level. (See page 70.)

Problem	Possible Cause and Solution
The ASSIGN knob and/or RIBBON CONTROLLER do not seem to affect the selected Part.	The sound of certain Parts may change very little or not at all, depending on the sound itself and the effect or parameter used.
GROOVE or Dynamics do not have any effect on the Drum Loop voices.	This is normal. The Drum Loop voices are sampled rhythms; GROOVE and Dynamics only affect pattern data.
The footswitch seems to produce the opposite effect. For example, when using the footswitch for sustain, pressing the footswitch cuts off the sound and releasing it sustains the sounds.	The polarity of the footswitch is reversed. Make sure that the footswitch plug is properly connected to the FOOT SWITCH jack before turning on the power.
Sample recording doesn't work.	Make sure the input cable is properly connected to the MIC or LINE IN jack. (See page 70.)
Sample recording begins too soon or too late.	Make sure that the trigger level is set appropriately. (See page 71.)
The sound of the voice changes from note to note.	The AWM tone generation method uses multiple recordings (samples) of an instrument across the range of the keyboard; thus, the actual sound of the voice may be slightly different from note to note.

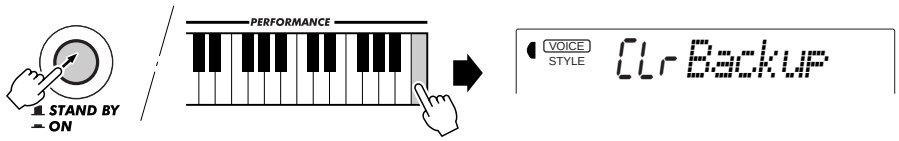
DATA BACKUP & INITIALIZATION

Except for the data listed below, all DJX panel settings are reset to their initial settings whenever the power is turned on. The data listed below are backed up — i.e. retained in memory — as long as an AC adaptor is connected or a set of batteries is installed.

- User Song Data
- User Performance Setup Data
- Performance Setup Bank Number
- Touch Sensitivity
- Split Point
- Pattern Split Point
- Footswitch Assign Function
- Sampling Voice Data

Data Initialization

All data can be initialized and restored to the factory preset condition by turning on the power while holding the highest (rightmost) white key on the keyboard. "CLr Backup" will appear briefly on the display.



CAUTION

• This function completely erases and replaces all User Performance Setup data, User Song data, and user-sampled data ("Sampled" voice, #284).

• If the DJX "crashes," hangs up or acts erratically and no operations seem to work, this function will usually restore normal operation.

■ Maximum Polyphony

The DJX has 32-note maximum polyphony. This means that it can play a maximum of up to 32 notes at once, regardless of what functions are used. The patterns use a number of the available notes, so when a pattern is played the total number of available notes for playing on the keyboard is correspondingly reduced. The same applies to the Dual Voice, Split Voice, and Song functions.

NOTE

• The Voice List includes MIDI program change numbers for each voice. Use these program change numbers when playing the DJX via MIDI from an external device.

• Some voices may sound continuously or have a long decay after the notes have been released while the sustain pedal (footswitch) is held.

Panel Voice List

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
0	0	123	48	DJX
SYNTH LEAD				
1	0	115	84	Fuzzline
2	0	113	84	Talkbox
3	0	114	84	Acid Sync
4	0	113	83	Universe
5	0	112	84	Adrenaline
6	0	112	85	Fragile
7	0	112	83	Cut Glass
BASS LEAD				
8	0	112	87	Killer S
9	0	118	87	Reso-X
10	0	117	87	Choppy
11	0	113	87	PhatMan
12	0	114	87	Organese
13	0	115	87	Happy Vibes
14	0	116	87	TriTouch
15	0	119	87	Sync
SQUARE LEAD				
16	0	117	80	MC-Line
17	0	116	80	Alien
18	0	115	80	Psyche
19	0	114	80	Clanger
20	0	112	80	Square Lead 1
21	0	113	80	Square Lead 2
SAW LEAD				
22	0	122	81	Break It
23	0	117	81	Scary
24	0	120	81	Move It
25	0	119	81	Robot Lead
26	0	116	81	Fat
27	0	115	81	Seq Ana
28	0	118	81	Stab
29	0	114	81	Pulse Saw
30	0	112	81	Sawtooth Lead 1
31	0	113	81	Sawtooth Lead 2
32	0	121	81	Bedtime
SYNTH PAD				
33	0	112	90	Sequenza
34	0	112	94	Insomnia
35	0	112	95	Wave2001
36	0	113	91	Amber
37	0	112	89	Eerie
38	0	112	91	Trance Pad

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
RESONANCE BASS				
39	0	113	38	Techno Bass
40	0	116	38	Kickin'B
41	0	114	38	Bassline
42	0	117	38	Nu Floor
43	0	115	38	Fish303
44	0	118	38	No.No.No
45	0	119	38	Nu Swing
46	0	112	38	Synth Bass
ANALOG BASS				
47	0	112	39	Analog Bass
48	0	113	39	Dance Bass
49	0	114	39	Snap Bass
50	0	115	39	Old Mini
51	0	116	39	Power Bass
52	0	117	39	Dub Bass
53	0	118	39	Factory
54	0	119	39	Hyper
55	0	120	39	Kidz Bass
56	0	121	39	Techno
BASS				
57	0	112	32	Acoustic Bass
58	0	112	33	Finger Bass
59	0	112	34	Pick Bass
60	0	112	35	Fretless Bass
61	0	112	36	Slap Bass
SCRATCH				
62	0	112	120	Scratch
63	0	113	120	Killer DJ
SFX				
64	0	123	16	FMTB 1
65	0	123	17	BLJ Trill
66	0	123	18	Omen-FX
67	0	123	19	Rave Pipe 1
68	0	123	20	Rave Pipe 2
69	0	123	21	FMTB 2
70	0	123	22	GtrChord
71	0	123	23	HiquiTB
72	0	123	24	Reverse
73	0	123	25	Signal
74	0	123	26	Aah
75	0	112	126	Turntable

Voice Number	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
HIT				
76	0	114	55	Metal Hit
77	0	113	55	Sharp Hit
78	0	112	55	Mild Hit
HUMAN VOICE				
79	0	123	0	Come On 1
80	0	123	1	Come On 2
81	0	123	2	GetUp!
82	0	123	3	Go!!
83	0	123	4	Huea
84	0	123	5	Hiuhu
85	0	123	6	Yo-Kurt
86	0	123	7	Oh Babe
87	0	123	8	Ohh 1
88	0	123	9	Ohh 2
89	0	123	10	One More Time
90	0	123	11	Uhh
91	0	123	12	Uhh+Hit
92	0	123	13	Yeah...
DRUM LOOP				
93	0	123	32	091bpmC4
94	0	123	33	095bpmC4
95	0	123	34	096bpmC4
96	0	123	35	102bpmC4
97	0	123	36	103bpmC4
98	0	123	37	106bpmC4
99	0	123	38	110bpmC4
100	0	123	39	114bpmC4
101	0	123	40	134bpmC4
102	0	123	41	135bpmC4
103	0	123	42	137bpmC4
104	0	123	43	138bpmC4
105	0	123	44	144bpmC4
106	0	123	45	160bpmC4
107	0	123	46	Samba137
PIANO				
108	0	112	4	Funky Electric Piano
109	0	112	5	DX Electric Piano
110	0	113	2	CP 80
111	0	114	5	Bell Electric Piano
112	0	112	7	Clavi
ORGAN				
113	0	112	16	Jazz Organ 1
114	0	112	17	Jazz Organ 2
115	0	112	18	Rock Organ
116	0	113	16	Cheez Organ
117	0	118	16	16'+2' Organ
118	0	113	17	Dance Organ
119	0	114	17	MissU
120	0	115	17	R&B Organ

Voice Number	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
GUITAR				
121	0	113	26	Octave Guitar
122	0	112	27	Clean Guitar
123	0	112	28	Muted Guitar
124	0	112	29	Overdriven Guitar
STRINGS				
125	0	112	48	Strings
126	0	112	49	Marcato Strings
127	0	112	50	Synth Strings
128	0	113	50	StringPad
129	0	112	45	Pizzicato
BRASS				
130	0	114	62	Techno Brass
131	0	113	62	Jump Brass
132	0	116	62	Brass Phase
133	0	112	62	Synth Brass
134	0	112	61	Bright Brass
135	0	115	62	Brass Tek
FLUTE				
136	0	113	73	Ethnic Flute
137	0	112	73	Coco Flute
PERCUSSIVE				
138	0	113	115	Claps-X
139	0	112	115	Rim-X
140	0	112	117	Tom-X
DRUM KITS				
141	127	0	0	Standard Kit 1
142	127	0	1	Standard Kit 2
143	127	0	8	Room Kit
144	127	0	16	Rock Kit
145	127	0	24	Electronic Kit 1
146	127	0	25	Analog Kit 1
147	127	0	27	Dance Kit
148	127	0	32	Jazz Kit
149	127	0	40	Brush Kit
150	127	0	48	Symphony Kit
SPECIAL KITS				
151	126	0	19	Analog Kit 2
152	126	0	20	Analog Kit 3
153	126	0	21	Electronic Kit 2
154	126	0	22	B900 Kit
155	126	0	23	DJX Kit

GM Voice List

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
PIANO				
156	0	0	0	Acoustic Grand Piano
157	0	0	1	Bright Acoustic Piano
158	0	0	2	Electric Grand Piano
159	0	0	3	Honky-tonk Piano
160	0	0	4	Electric Piano 1
161	0	0	5	Electric Piano 2
162	0	0	6	Harpsichord
163	0	0	7	Clavi
CHROMATIC PERCUSSION				
164	0	0	8	Celesta
165	0	0	9	Glockenspiel
166	0	0	10	Music Box
167	0	0	11	Vibraphone
168	0	0	12	Marimba
169	0	0	13	Xylophone
170	0	0	14	Tubular Bells
171	0	0	15	Dulcimer
ORGAN				
172	0	0	16	Drawbar Organ
173	0	0	17	Percussive Organ
174	0	0	18	Rock Organ
175	0	0	19	Church Organ
176	0	0	20	Reed Organ
177	0	0	21	Accordion
178	0	0	22	Harmonica
179	0	0	23	Bandoneon
GUITAR				
180	0	0	24	Acoustic Guitar (nylon)
181	0	0	25	Acoustic Guitar (steel)
182	0	0	26	Electric Guitar (jazz)
183	0	0	27	Electric Guitar (clean)
184	0	0	28	Electric Guitar (muted)
185	0	0	29	Overdriven Guitar
186	0	0	30	Distortion Guitar
187	0	0	31	Guitar Harmonics
BASS				
188	0	0	32	Acoustic Bass
189	0	0	33	Electric Bass (finger)
190	0	0	34	Electric Bass (pick)
191	0	0	35	Fretless Bass
192	0	0	36	Slap Bass 1
193	0	0	37	Slap Bass 2
194	0	0	38	Synth Bass 1
195	0	0	39	Synth Bass 2

Voice Number	Bank Select MSB	Bank Select LSB	MIDI Program Change#	Voice Name
STRINGS				
196	0	0	40	Violin
197	0	0	41	Viola
198	0	0	42	Cello
199	0	0	43	Contrabass
200	0	0	44	Tremolo Strings
201	0	0	45	Pizzicato Strings
202	0	0	46	Orchestral Harp
203	0	0	47	Timpani
ENSEMBLE				
204	0	0	48	Strings Ensemble 1
205	0	0	49	Strings Ensemble 2
206	0	0	50	Synth Strings 1
207	0	0	51	Synth Strings 2
208	0	0	52	Choir Aahs
209	0	0	53	Voice Oohs
210	0	0	54	Synth Voice
211	0	0	55	Orchestra Hit
BRASS				
212	0	0	56	Trumpet
213	0	0	57	Trombone
214	0	0	58	Tuba
215	0	0	59	Muted Trumpet
216	0	0	60	French Horn
217	0	0	61	Brass Section
218	0	0	62	Synth Brass 1
219	0	0	63	Synth Brass 2
REED				
220	0	0	64	Soprano Sax
221	0	0	65	Alto Sax
222	0	0	66	Tenor Sax
223	0	0	67	Baritone Sax
224	0	0	68	Oboe
225	0	0	69	English Horn
226	0	0	70	Bassoon
227	0	0	71	Clarinet
PIPE				
228	0	0	72	Piccolo
229	0	0	73	Flute
230	0	0	74	Recorder
231	0	0	75	Pan Flute
232	0	0	76	Blown Bottle
233	0	0	77	Shakuhachi
234	0	0	78	Whistle
235	0	0	79	Ocarina

Voice Number	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
SYNTH LEAD				
236	0	0	80	Lead 1 (square)
237	0	0	81	Lead 2 (sawtooth)
238	0	0	82	Lead 3 (calliope)
239	0	0	83	Lead 4 (chiff)
240	0	0	84	Lead 5 (charang)
241	0	0	85	Lead 6 (voice)
242	0	0	86	Lead 7 (fifth)
243	0	0	87	Lead 8 (bass+lead)
SYNTH PAD				
244	0	0	88	Pad 1 (new age)
245	0	0	89	Pad 2 (warm)
246	0	0	90	Pad 3 (polysynth)
247	0	0	91	Pad 4 (choir)
248	0	0	92	Pad 5 (bowed)
249	0	0	93	Pad 6 (metallic)
250	0	0	94	Pad 7 (halo)
251	0	0	95	Pad 8 (sweep)
SYNTH EFFECTS				
252	0	0	96	FX 1 (rain)
253	0	0	97	FX 2 (soundtrack)
254	0	0	98	FX 3 (crystal)
255	0	0	99	FX 4 (atmosphere)
256	0	0	100	FX 5 (brightness)
257	0	0	101	FX 6 (goblins)
258	0	0	102	FX 7 (echoes)
259	0	0	103	FX 8 (sci-fi)

Voice Number	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
ETHNIC				
260	0	0	104	Sitar
261	0	0	105	Banjo
262	0	0	106	Shamisen
263	0	0	107	Koto
264	0	0	108	Kalimba
265	0	0	109	Bagpipe
266	0	0	110	Fiddle
267	0	0	111	Shanai
PERCUSSIVE				
268	0	0	112	Tinkle Bell
269	0	0	113	Agogo
270	0	0	114	Steel Drums
271	0	0	115	Woodblock
272	0	0	116	Taiko Drum
273	0	0	117	Melodic Tom
274	0	0	118	Synth Drum
275	0	0	119	Reverse Cymbal
SOUND EFFECTS				
276	0	0	120	Guitar Fret Noise
277	0	0	121	Breath Noise
278	0	0	122	Seashore
279	0	0	123	Bird Tweet
280	0	0	124	Telephone Ring
281	0	0	125	Helicopter
282	0	0	126	Applause
283	0	0	127	Gunshot

Sampled Voice

Voice Number	Bank Select		MIDI Program Change#	Voice Name
	MSB	LSB		
284	111	0	0	Sampled

DRUM KIT LIST

- "<——" indicates that the drum sound is the same as "Standard Kit 1".
- Each percussion voice uses one note.
- The MIDI Note # and Note are actually one octave lower than listed. For example, in "141: Standard Kit 1", the "Seq Click H" (Note# 36/Note C1) corresponds to (Note# 24/Note C0).
- Key Off: Keys marked "○" stop sounding the instant they are released.
- Voices with the same Alternate Note Number (*1 … 4) cannot be played simultaneously. (They are designed to be played alternately with each other.)

Drum Kit List

Voice#							141	142	143	144	145
Bank MSB#							127	127	127	127	127
Bank LSB#							0	0	0	0	0
Program Change#							0	1	8	16	24
Keyboard		MIDI		Key off	Alternate Assign		Standard Kit 1	Standard Kit 2	Room Kit	Rock Kit	Electronic Kit 1
Note#	Note	Note#	Note								
25	C# 0	13	C# -1		3		Surdo Mute	<——	<——	<——	<——
26	D 0	14	D -1		3		Surdo Open	<——	<——	<——	<——
27	D# 0	15	D# -1				Hi-Q	<——	<——	<——	<——
28	E 0	16	E -1				Whip	<——	<——	<——	<——
29	F 0	17	F -1		4		Scratch H	<——	<——	<——	<——
30	F# 0	18	F# -1		4		Scratch L	<——	<——	<——	<——
31	G 0	19	G -1				Finger Snap	<——	<——	<——	<——
32	G# 0	20	G# -1				Click	<——	<——	<——	<——
33	A 0	21	A -1				Metronome Click	<——	<——	<——	<——
34	A# 0	22	A# -1				Metronome Bell	<——	<——	<——	<——
35	B 0	23	B -1				Seq Click L	<——	<——	<——	<——
36	C 1	24	C 0				Seq Click H	<——	<——	<——	<——
37	C# 1	25	C# 0				Brush Tap	<——	<——	<——	<——
38	D 1	26	D 0	○			Brush Swirl	<——	<——	<——	<——
39	D# 1	27	D# 0				Brush Slap	<——	<——	<——	<——
40	E 1	28	E 0	○			Brush Swirl W/Attack	<——	<——	<——	Reverse Cymbal
41	F 1	29	F 0	○			Snare Roll	<——	<——	<——	<——
42	F# 1	30	F# 0				Castanet	<——	<——	<——	Hi Q
43	G 1	31	G 0				Snare H Soft	Snare H Soft2	<——	SD Elec M	Snare L
44	G# 1	32	G# 0				Sticks	<——	<——	<——	<——
45	A 1	33	A 0				Bass Drum L	Bass Drum L2	<——	<——	Bass Drum H
46	A# 1	34	A# 0				Open Rim Shot	Open Rim Shot2	<——	<——	<——
47	B 1	35	B 0				Bass Drum M	<——	<——	Bass Drum H3	BD Rock
48	C 2	36	C 1				Bass Drum H	Bass Drum H 2	<——	BD Rock	BD Rock 2
49	C# 2	37	C# 1				Side Stick	<——	<——	<——	<——
50	D 2	38	D 1				Snare L	Snare L2	SD Room L	SD Rock	SD Elec M
51	D# 2	39	D# 1				Hand Clap	<——	<——	<——	<——
52	E 2	40	E 1				Snare H Hard	Snare H Hard2	SD Room H	SD Rock Rim	SD Elec H
53	F 2	41	F 1				Floor Tom L	<——	Room Tom 1	Rock Tom 1	E Tom 1
54	F# 2	42	F# 1		1		Hi-Hat Closed	<——	<——	<——	<——
55	G 2	43	G 1				Floor Tom H	<——	Room Tom 2	Rock Tom 2	E Tom 2
56	G# 2	44	G# 1		1		Hi-Hat Pedal	<——	<——	<——	<——
57	A 2	45	A 1				Low Tom	<——	Room Tom 3	Rock Tom 3	E Tom 3
58	A# 2	46	A# 1		1		Hi-Hat Open	<——	<——	<——	<——
59	B 2	47	B 1				Mid Tom L	<——	Room Tom 4	Rock Tom 4	E Tom 4
60	C 3	48	C 2				Mid Tom H	<——	Room Tom 5	Rock Tom 5	E Tom 5
61	C# 3	49	C# 2				Crash Cymbal 1	<——	<——	<——	<——
62	D 3	50	D 2				High Tom	<——	Room Tom 6	Rock Tom 6	E Tom 6
63	D# 3	51	D# 2				Ride Cymbal 1	<——	<——	<——	<——
64	E 3	52	E 2				Chinese Cymbal	<——	<——	<——	<——
65	F 3	53	F 2				Ride Cymbal Cup	<——	<——	<——	<——
66	F# 3	54	F# 2				Tambourine	<——	<——	<——	<——
67	G 3	55	G 2				Splash Cymbal	<——	<——	<——	<——
68	G# 3	56	G# 2				Cowbell	<——	<——	<——	<——
69	A 3	57	A 2				Crash Cymbal 2	<——	<——	<——	<——
70	A# 3	58	A# 2				Vibraslap	<——	<——	<——	<——
71	B 3	59	B 2				Ride Cymbal 2	<——	<——	<——	<——
72	C 4	60	C 3				Bongo H	<——	<——	<——	<——
73	C# 4	61	C# 3				Bongo L	<——	<——	<——	<——
74	D 4	62	D 3				Conga H Mute	<——	<——	<——	<——
75	D# 4	63	D# 3				Conga H Open	<——	<——	<——	<——
76	E 4	64	E 3				Conga L	<——	<——	<——	<——
77	F 4	65	F 3				Timbale H	<——	<——	<——	<——
78	F# 4	66	F# 3				Timbale L	<——	<——	<——	<——
79	G 4	67	G 3				Agogo H	<——	<——	<——	<——
80	G# 4	68	G# 3				Agogo L	<——	<——	<——	<——
81	A 4	69	A 3				Cabasa	<——	<——	<——	<——
82	A# 4	70	A# 3				Maracas	<——	<——	<——	<——
83	B 4	71	B 3	○			Samba Whistle H	<——	<——	<——	<——
84	C 5	72	C 4	○			Samba Whistle L	<——	<——	<——	<——
85	C# 5	73	C# 4				Guiro Short	<——	<——	<——	<——
86	D 5	74	D 4	○			Guiro Long	<——	<——	<——	<——
87	D# 5	75	D# 4				Claves	<——	<——	<——	<——
88	E 5	76	E 4				Wood Block H	<——	<——	<——	<——
89	F 5	77	F 4				Wood Block L	<——	<——	<——	<——
90	F# 5	78	F# 4				Cuica Mute	<——	<——	<——	Scratch Push
91	G 5	79	G 4				Cuica Open	<——	<——	<——	Scratch Pull
92	G# 5	80	G# 4		2		Triangle Mute	<——	<——	<——	<——
93	A 5	81	A 4		2		Triangle Open	<——	<——	<——	<——
94	A# 5	82	A# 4				Shaker	<——	<——	<——	<——
95	B 5	83	B 4				Jingle Bell	<——	<——	<——	<——
96	C 6	84	C 5				Bell Tree 1	<——	<——	<——	<——

Voice#							146	147	148	149	150
Bank MSB#							127	127	127	127	127
Bank LSB#							0	0	0	0	0
Program Change#							25	27	32	40	48
Keyboard		MIDI		Key off	Alternate Assign		Analog Kit 1	Dance Kit	Jazz Kit	Brush Kit	Symphony Kit
Note#	Note	Note#	Note								
25	C# 0	13	C# -1		3		<——	<——	<——	<——	<——
26	D 0	14	D -1		3		<——	<——	<——	<——	<——
27	D# 0	15	D# -1				<——	<——	<——	<——	<——
28	E 0	16	E -1				<——	<——	<——	<——	<——
29	F 0	17	F -1		4		<——	<——	<——	<——	<——
30	F# 0	18	F# -1		4		<——	<——	<——	<——	<——
31	G 0	19	G -1				<——	<——	<——	<——	<——
32	G# 0	20	G# -1				<——	<——	<——	<——	<——
33	A 0	21	A -1				<——	<——	<——	<——	<——
34	A# 0	22	A# -1				<——	<——	<——	<——	<——
35	B 0	23	B -1				<——	<——	<——	<——	<——
36	C 1	24	C 0				<——	<——	<——	<——	<——
37	C# 1	25	C# 0				<——	<——	<——	<——	<——
38	D 1	26	D 0	○			<——	<——	<——	<——	<——
39	D# 1	27	D# 0				<——	<——	<——	<——	<——
40	E 1	28	E 0	○			Reverse Cymbal	Reverse Cymbal	<——	<——	<——
41	F 1	29	F 0	○			<——	<——	<——	<——	<——
42	F# 1	30	F# 0				Hi Q	Hi Q	<——	<——	<——
43	G 1	31	G 0				SD Elec H2	SD Analog 2	<——	Brush Slap L	<——
44	G# 1	32	G# 0				<——	<——	<——	<——	<——
45	A 1	33	A 0				Bass Drum H	BD Analog 2	<——	<——	Bass Drum L3
46	A# 1	34	A# 0				<——	SD Analog Open Rim	<——	<——	<——
47	B 1	35	B 0				BD Analog 1L	BD Analog 3	<——	<——	Gran Casa
48	C 2	36	C 1				BD Analog 1H	BD Analog 4	BD Jazz	BD Jazz	Gran Casa Mute
49	C# 2	37	C# 1				Analog Side Stick 1	Analog Side Stick 1	<——	<——	<——
50	D 2	38	D 1				SD Analog 1H	SD Analog 3	SD Jazz L	Brush Slap H	Marching SD M
51	D# 2	39	D# 1				<——	<——	<——	<——	<——
52	E 2	40	E 1				SD Analog 1L	SD Analog 4	SD Jazz H	Brush Tap	Marching SD H
53	F 2	41	F 1				Analog Tom 1	Analog Tom 1	Jazz Tom 1	Brush Tom 1	Jazz Tom 1
54	F# 2	42	F# 1		1		Analog HH Closed1	Dance HH Closed1	<——	<——	<——
55	G 2	43	G 1				Analog Tom 2	Analog Tom 2	Jazz Tom 2	Brush Tom 2	Jazz Tom 2
56	G# 2	44	G# 1		1		Analog HH Closed2	Dance HH Closed2	<——	<——	<——
57	A 2	45	A 1				Analog Tom 3	Analog Tom 3	Jazz Tom 3	Brush Tom 3	Jazz Tom 3
58	A# 2	46	A# 1		1		Analog HH 1 Open	HH Open2	<——	<——	<——
59	B 2	47	B 1				Analog Tom 4	Analog Tom 4	Jazz Tom 4	Brush Tom 4	Jazz Tom 4
60	C 3	48	C 2				Analog Tom 5	Analog Tom 5	Jazz Tom 5	Brush Tom 5	Jazz Tom 5
61	C# 3	49	C# 2				Analog Cymbal	Analog Cymbal	<——	<——	Hand Cym.L Open
62	D 3	50	D 2				Analog Tom 6	Analog Tom 6	Jazz Tom 6	Brush Tom 6	Jazz Tom 6
63	D# 3	51	D# 2				<——	<——	<——	<——	Hand Cym. L Closed
64	E 3	52	E 2				<——	<——	<——	<——	<——
65	F 3	53	F 2				<——	<——	<——	<——	<——
66	F# 3	54	F# 2				<——	<——	<——	<——	<——
67	G 3	55	G 2				<——	<——	<——	<——	<——
68	G# 3	56	G# 2				Analog Cowbell	Analog Cowbell	<——	<——	<——
69	A 3	57	A 2				<——	<——	<——	<——	Hand Cym. H Open
70	A# 3	58	A# 2				<——	<——	<——	<——	<——
71	B 3	59	B 2				<——	<——	<——	<——	Hand Cym. H Closed
72	C 4	60	C 3				<——	<——	<——	<——	<——
73	C# 4	61	C# 3				<——	<——	<——	<——	<——
74	D 4	62	D 3				Analog Conga H	Analog Conga H	<——	<——	<——
75	D# 4	63	D# 3				Analog Conga M	Analog Conga M	<——	<——	<——
76	E 4	64	E 3				Analog Conga L	Analog Conga L	<——	<——	<——
77	F 4	65	F 3				<——	<——	<——	<——	<——
78	F# 4	66	F# 3				<——	<——	<——	<——	<——
79	G 4	67	G 3				<——	<——	<——	<——	<——
80	G# 4	68	G# 3				<——	<——	<——	<——	<——
81	A 4	69	A 3				<——	<——	<——	<——	<——
82	A# 4	70	A# 3				Analog Maracas	Analog Maracas	<——	<——	<——
83	B 4	71	B 3	○			<——	<——	<——	<——	<——
84	C 5	72	C 4	○			<——	<——	<——	<——	<——
85	C# 5	73	C# 4				<——	<——	<——	<——	<——
86	D 5	74	D 4	○			<——	<——	<——	<——	<——
87	D# 5	75	D# 4				Analog Claves	Analog Claves	<——	<——	<——
88	E 5	76	E 4				<——	<——	<——	<——	<——
89	F 5	77	F 4				<——	<——	<——	<——	<——
90	F# 5	78	F# 4				Scratch Push	Scratch Push	<——	<——	<——
91	G 5	79	G 4				Scratch Pull	Scratch Pull	<——	<——	<——
92	G# 5	80	G# 4		2		<——	<——	<——	<——	<——
93	A 5	81	A 4		2		<——	<——	<——	<——	<——
94	A# 5	82	A# 4				<——	<——	<——	<——	<——
95	B 5	83	B 4				<——	<——	<——	<——	<——
96	C 6	84	C 5				<——	<——	<——	<——	<——

DJX Special Drum Kit List

Voice#					141	151	152	153	154	155
Bank MSB#					127	126	126	126	126	126
Bank LSB#					0	0	0	0	0	0
Program Change#					0	19	20	21	22	23
Keyboard		MIDI			Standard Kit 1	Analog Kit 2	Analog Kit 3	Electronic Kit 2	B900 Kit	DJX Kit
Note#	Note	Note#	Note							
25	C# 0	13	C# -1		Surdo Mute	<——	<——	<——		
26	D 0	14	D -1		Surdo Open	<——	<——	<——		
27	D# 0	15	D# -1		Hi-Q	<——	<——	<——		
28	E 0	16	E -1		Whip	<——	<——	<——		
29	F 0	17	F -1		Scratch H	<——	<——	<——		
30	F# 0	18	F# -1		Scratch L	<——	<——	<——		
31	G 0	19	G -1		Finger Snap	<——	<——	<——		
32	G# 0	20	G# -1		Click	<——	<——	<——		
33	A 0	21	A -1		Metronome Click	<——	<——	<——		
34	A# 0	22	A# -1		Metronome Bell	<——	<——	<——		
35	B 0	23	B -1		Seq Click L	<——	<——	<——		
36	C 1	24	C 0		Seq Click H	<——	<——	<——		
37	C# 1	25	C# 0		Brush Tap	<——	<——	<——		
38	D 1	26	D 0		Brush Swirl	<——	<——	<——		
39	D# 1	27	D# 0		Brush Slap	<——	<——	<——		
40	E 1	28	E 0		Brush Swirl W/Attack	<——	<——	<——		
41	F 1	29	F 0		Snare Roll	<——	<——	<——		
42	F# 1	30	F# 0		Castanet	<——	<——	<——		
43	G 1	31	G 0		Snare H Soft	SD T8 1	SD T9 1	<——		
44	G# 1	32	G# 0		Sticks	<——	<——	<——		
45	A 1	33	A 0		Bass Drum L	BD Analog	BD Analog	<——		
46	A# 1	34	A# 0		Open Rim Shot	<——	<——	<——		
47	B 1	35	B 0		Bass Drum M	BD T8 2	BD Jungle 4	<——		
48	C 2	36	C 1		Bass Drum H	BD T8 3	BD T9 1	BD T8 2	BD Jungle 4	BD T9 Distortion
49	C# 2	37	C# 1		Side Stick	T8 Side Stick	T9 Side Stick	BD T8 2Long	BD T8 2Long	BD T9 4
50	D 2	38	D 1		Snare L	SD T8 3L	SD T9 4L	BD T8 3	BD Jungle 1	BD T8 Low Long
51	D# 2	39	D# 1		Hand Clap	<——	<——	SD T8 1	BD Jungle 2	BD T8 4
52	E 2	40	E 1		Snare H Hard	SD T8 3M	SD T9 4H	SD T8 3M	BD T8 2Cont	BD Hard Distortion
53	F 2	41	F 1		Floor Tom L	T8 Tom 1	T9 Tom 1	SD T8 4	BD Jungle 5	BD Jungle 6
54	F# 2	42	F# 1		Hi-Hat Closed	T8 HH 1 Closed1	T9 HH 1 Closed1	SD T8 5	BD HipHop1	SD T8 6
55	G 2	43	G 1		Floor Tom H	T8 Tom 2	T9 Tom 2	T8 Conga 1	BD HipHop2	SD Snap Hi
56	G# 2	44	G# 1		Hi-Hat Pedal	T8 HH 1 Closed2	T9 HH 1 Closed2	T8 Cowbell	SD Jungle 1	SD T9 4
57	A 2	45	A 1		Low Tom	T8 Tom 3	T9 Tom 3	T8 Conga 2	SD Jungle 2	SD brutal
58	A# 2	46	A# 1		Hi-Hat Open	T8 HH 1 Open 1	T9 HH 1 Open 2	T8 Maracas	SD Jungle 3	SD Snap Lo
59	B 2	47	B 1		Mid Tom L	T8 Tom 4	T9 Tom 4	T8 Conga 3	SD Jungle 4	SD Elect.2
60	C 3	48	C 2		Mid Tom H	T8 Tom 5	T9 Tom 5	T8 Conga 4	SD HipHop1	SD T9 4
61	C# 3	49	C# 2		Crash Cymbal 1	<——	<——	T8 Side Stick	SD HipHop2	SD noisy scratch
62	D 3	50	D 2		High Tom	T8 Tom 6	T9 Tom 6	T8 Clave	SD HipHop3	SD T8 3
63	D# 3	51	D# 2		Ride Cymbal 1	<——	<——	T8 Clap	SD Elect.1	HH MS Closed
64	E 3	52	E 2		Chinese Cymbal	<——	<——	<——	SD Elect.2	HH MS Open
65	F 3	53	F 2		Ride Cymbal Cup	<——	<——	T8 Tom 1	SD Elect.3	T9 HH 2 Hard Closed
66	F# 3	54	F# 2		Tambourine	<——	<——	T8 HH 1 Closed1	SD Elect.4	T9 HH 2 Hard Open
67	G 3	55	G 2		Splash Cymbal	<——	<——	T8 Tom 2	SD T8 3M	T8 HH 2 Closed
68	G# 3	56	G# 2		Cowbell	<——	<——	T8 HH 1 Closed2	SD 78	T8 HH 2 Open
69	A 3	57	A 2		Crash Cymbal 2	<——	<——	T8 Tom 3	HH 1 Closed	HH FX1
70	A# 3	58	A# 2		Vibraslap	<——	<——	T8 HH 1 Open	HH 2 Closed	HH FX2
71	B 3	59	B 2		Ride Cymbal 2	<——	<——	T8 Tom 4	HH 2 Open	T9 HH 3 Closed
72	C 4	60	C 3		Bongo H	<——	<——	Analog Cymbal	HH 3 Closed	T9 HH 3 Open
73	C# 4	61	C# 3		Bongo L	<——	<——	<——	HH 78 Open	T6 HH Closed
74	D 4	62	D 3		Conga H Mute	<——	<——	<——	HH 4 Closed	T6 HH Open
75	D# 4	63	D# 3		Conga H Open	<——	<——	BD T9 1	HH 4 Open	HH Nat Closed
76	E 4	64	E 3		Conga L	<——	<——	BD T9 3n	PC Snap	HH Nat Open
77	F 4	65	F 3		Timbale H	<——	<——	BD Jungle 4	PC Tamb2	HH FX3
78	F# 4	66	F# 3		Timbale L	<——	<——	T9 HH 1 Open 2	BD Jungle 4Long	HH FX4
79	G 4	67	G 3		Agogo H	<——	<——	SD T9 1L	BD Analog	HH T9Low Closed
80	G# 4	68	G# 3		Agogo L	<——	<——	SD T9 2	Hit 1L	HH T9Low Open
81	A 4	69	A 3		Cabasa	<——	<——	SD T9 1M	Hit 1M	HH Metal Closed
82	A# 4	70	A# 3		Maracas	<——	<——	SD T9 3	Hit 1H	HH Metal Open
83	B 4	71	B 3		Samba Whistle H	<——	<——	SD T9 1H	Hit 2L	CBD
84	C 5	72	C 4		Samba Whistle L	<——	<——	SD T9 4L	Hit 2M	CSD
85	C# 5	73	C# 4		Guiro Short	<——	<——	T9 Side Stick	Hit 2H	Analog Claves
86	D 5	74	D 4		Guiro Long	<——	<——	SD T9 4M	Hit Brass 1	Pulse L
87	D# 5	75	D# 4		Claves	<——	<——	T9 Clap	SCR 1L	Pulse M
88	E 5	76	E 4		Wood Block H	<——	<——	SD T9 4H	SCR 1M	Pulse H
89	F 5	77	F 4		Wood Block L	<——	<——	T9 Tom 1	SCR 1H	Analog BD
90	F# 5	78	F# 4		Cuica Mute	<——	<——	T9 HH 1 Closed1	SCR 2L	Analog Tom
91	G 5	79	G 4		Cuica Open	<——	<——	T9 Tom 2	SCR 2M	Analog SD
92	G# 5	80	G# 4		Triangle Mute	<——	<——	T9 HH 1 Closed2	SCR 2H	Pulse&Noise
93	A 5	81	A 4		Triangle Open	<——	<——	T9 Tom 3	SCR 3L	Reverse Pulse&Noise
94	A# 5	82	A# 4		Shaker	<——	<——	T9 HH 1 Open 2	SCR 3M	Analog Snaps 1
95	B 5	83	B 4		Jingle Bell	<——	<——	T9 Tom 4	SCR 3H	Noise Echo
96	C 6	84	C 5		Bell Tree 1	<——	<——	T9 Crash 1	SCR 4L	Reverse BD
97	C# 6	85	C# 5			Bell Tree 2	Bell Tree 2	T9 Ride	SCR 4M	Reverse Percussion
98	D 6	86	D 5			Bell Tree 3	Bell Tree 3	T9 Crash 2	SCR 4H	Analog Snaps 2
99	D# 6	87	D# 5			BD T8 2	BD T8 2	BD T8 2	SCR 6L	Analog Claps
100	E 6	88	E 5			SD T8 4	SD T8 4	SD T8 4	SCR 6ML	Reverse Claps
101	F 6	89	F 5			SD T8 3H	SD T8 3H	SD T8 3H	SCR 6MH	
102	F# 6	90	F# 5			T8 HH 2 Closed1	T8 HH 2 Closed1	T8 HH 2 Closed1	SCR 6H	
103	G 6	91	G 5			T8 Cowbell	T8 Cowbell	T8 Cowbell	SCR 7L	
104	G# 6	92	G# 5			T8 HH 2 Closed2	T8 HH 2 Closed2	T8 HH 2 Closed2	SCR 7ML	
105	A 6	93	A 5			T8 Tambourine	T8 Tambourine	T8 Tambourine	SCR 7MH	
106	A# 6	94	A# 5			T8 HH 2 Open	T8 HH 2 Open	T8 HH 2 Open	SCR 7H	
107	B 6	95	B 5			T8 Guiro	T8 Guiro	T8 Guiro	Hit Brass 2	
108	C 7	96	C 6			Metal	Metal	Metal	Analog Cymbal	

- Rows shaded in black "▭" (for kits #141, #154, and #155) indicate that no percussion sounds have been assigned to the corresponding notes; hence, no sound results when playing those notes.
- In this list, the Keyboard Note# and Note values shown are applicable when the Main Voice Octave setting (Function #02) is set to "-1." This is the default setting for voices #141 (Standard Kit 1) through #152 (Analog Kit 3). However, the Main Voice Octave setting for voices #153 (Electronic Kit 2), #154 (B900 Kit), and #155 (DJX Kit) is "0"; to hear these voices properly, play the keys one octave lower than they are listed in this chart. For example, to hear "Reverse BD" in voice #155, play C5 (and not C6 as listed).

STYLE LIST

Style Number	Style Name
INTRODUCTION	
1	Pop Techno
2	Trip Hop
3	Electro Beat
4	Goa
5	Hard Step 8th
6	Handbag 1
7	Romantic House
8	Ambient
9	Acid Jazz
10	Treach
11	Steppa
12	Struttin'
13	All That
14	Soulful
TECHNO	
15	Tribal Techno
16	Gabba
17	Soft Gabba
18	Euro Techno
19	Modern Detroit Techno
20	Vintage Detroit Techno
21	Modern Berlin Techno
22	Minimal Techno
23	Speed Garage
24	Acid Techno
25	Samba Techno
TRIP HOP	
26	Funky Trip Hop

Style Number	Style Name
27	Pop Trip Hop
28	Vintage Trip Hop
ELECTRO	
29	Plastic Electro
30	Cosmic Beat
31	Body Rock
32	Compilation
TRANCE	
33	Trance
34	Psychodelic Trance
35	Relaxx
36	Hypnotic
37	Dark Trance
DRUM'N'BASS	
38	Drum'n'Bass
39	Hard Jungle
40	Soul 2001
DANCE FLOOR	
41	Euro Dance
42	Euro Latin
43	Pop Reggae
44	Handbag 2
HOUSE	
45	House
46	Acid House
47	Deep House
48	Progressive House
49	Tribal House
50	Vintage Chicago

Style Number	Style Name
51	Hard Floor
52	Hip House
53	Club House
54	Dub House
ABSTRACT BEATS	
55	Digital Rock
56	Underground
57	Chill Out
RAP	
58	Bomb
59	Dance Hall
60	Hype
61	Money
62	Ragga
63	Shakin'
64	Tip
HARDCORE	
65	Buggin'
66	Diesel
67	Hi Rolla
68	Homies
69	SuckaMC
70	SupaBad
71	WestSide
OLD SKOOL	
72	Beatbox
73	Delight
74	Flares
75	Funked Up

Style Number	Style Name
76	Jack
77	Old Skool
78	Party
79	Theque
FRESH	
80	Chillin'
81	Dreamin'
82	EastSide
83	Grind
84	Hezee
85	Loc
R & B	
86	Bouncy
87	Do it up
88	Hump
89	Plush
90	Pow!
91	Skippin'
92	Solid
SLO JAMS	
93	1stLuv
94	Cool
95	DaLadies
96	Daydream
97	Loverz
98	On Hit
99	Pushin'
100	Sultry

MIDI IMPLEMENTATION CHART

YAMAHA [Portable Keyboard]
Model: DJX(PSR-D1)

MIDI Implementation Chart

Date:15-APR-1998
Version: 1.0

Function		Transmitted	Recognized	Remarks
Basic	Default	1 - 16	1 - 16 *1	
Channel	Changed	1 - 16	1 - 16 *1	
	Default	3	3	
Mode	Messages	X	X	
	Altered	**********	X	
Note		0 - 127	0 - 127	
Number	: True voice	**********	0 - 127	
Velocity	Note ON	O 9nH, v=1 - 127	O 9nH, v=1 - 127	
	Note OFF	O 9nH, v=0	O 9nH, v=0 or 8nH	
After	Key's	X	X	
Touch	Ch's	X	X	
Pitch Bender		O	O	
Control Change	0, 32	O	O	Bank Select
	1	O	O	Modulation
	7, 10	O	O	
	11	X *2	O	Expression
	6, 38	O *2	O	Data Entry
	64	O	O	Sustain
	71 - 74	O	O	Sound Controller
	84	X *2	O	Portamento Control
	91, 93, 94	O	O	Effect Depth
	96, 97	X	O	Data Inc, Dec
	100, 101	X *2	O	RPN LSB, MSB
	120	X	O	All Sound Off
	121	X	O	Reset All Controllers
Program Change	: True #	O 0 - 127 **********	O 0 - 127	
System Exclusive		O *3	O *3	
System	: Song Position	X	X	
	: Song Select	X	X	
Common	: Tune	X	X	
System	: Clock	O	O *4	
Real Time	: Commands	O *5	O *5	
Aux	: Local ON/OFF	X	X	
	: All Notes OFF	X	O (123 - 127)	
Messages	: Active Sense	O	O	
	: Reset	X	X	

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

NOTE:

**1 By default (factory settings) the DJX ordinarily functions as a 16-channel multi-timbral tone generator, and incoming data does not affect the panel voices or panel settings. However, the MIDI messages listed below do affect the panel voices, pattern, and songs.*

- *MIDI Master Tuning*
- *System exclusive messages for changing the Reverb Type, Chorus Type, and DSP Type.*

The Remote Channel can be designated by using Function parameter #81. The messages received over the set channel are handled in the same way as key data received from the DJX itself. The following messages can be received over the designated channel set in this Function parameter; all other messages will be ignored.

- *Note ON*
- *Note OFF*
- *Control change : Bank select MSB, LSB (Main Voice Only), Modulation, Volume, Expression, Sustain, All sound off, All note off*
- *Program Change (Main Voice Only)*
- *Pitch Bend*

**2 Messages for these control change numbers cannot be transmitted from the DJX itself. However, they may be transmitted when playing the pattern or using the Arpeggiator.*

**3 Exclusive*

<GM System ON> F0H, 7EH, 7FH, 09H, 01H, F7H

- *This message automatically restores all default settings for the instrument, with the exception of MIDI Master Tuning.*

<MIDI Master Volume> F0H, 7FH, 7FH, 04H, 01H, llH, mmH, F7H

- *This message allows the volume of all channels to be changed simultaneously (Universal System Exclusive).*
- *The values of "mm" is used for MIDI Master Tuning. (Values for "ll" are ignored.)*

<MIDI Master Tuning> F0H, 43H, 1nH, 27H, 30H, 00H, 00H, mmH, llH, ccH, F7H

- *This message simultaneously changes the tuning value of all channels.*
- *The values of "mm" and "ll" are used for MIDI Master Tuning.*
- *The default value of "mm" and "ll" are 08H and 00H, respectively. Any values can be used for "n" and "cc."*

<Bulk Dump>

- *This is used for saving (recording) User data (User songs, User Performance Setup, and Sampling data).*

<Internal Clock, External Clock> (Receive Only)
F0H, 43H, 73H, 01H, 02H, F7H (Internal Clock)
F0H, 43H, 73H, 01H, 03H, F7H (External Clock)

- *These messages control the clock setting for the pattern.*

<Reverb Type> F0H, 43H, 1nH, 4CH, 02H, 01H, 00H, mmH, llH, F7H

- *mm : Reverb Type MSB*
- *ll : Reverb Type LSB*

Refer to the Effect Map (page 114) for details.

<Chorus Type> F0H, 43H, 1nH, 4CH, 02H, 01H, 20H, mmH, llH, F7H

- *mm : Chorus Type MSB*
- *ll : Chorus Type LSB*

Refer to the Effect Map (page 114) for details.

<DSP Type> F0H, 43H, 1nH, 4CH, 02H, 01H, 40H, mmH, llH, F7H

- *mm : DSP Type MSB*
- *ll : DSP Type LSB*

Refer to the Effect Map (page 114) for details.

<DRY Level> F0H, 43H, 1nH, 4CH, 08H, 0mH, 11H, llH, F7H

- *ll : Dry Level*
- *0m : Channel Number*

**4 It is possible to switch between External and Internal Clock.*

**5 When the pattern is started, an FAH message is transmitted. When pattern is stopped, an FCH message is transmitted. When the clock is set to External, both FAH (pattern start) and FCH (pattern stop) are recognized.*

No MIDI messages can be received or transmitted in the Song mode.

■ Effect map

* If the received value does not contain an effect type in the TYPE LSB, the LSB will be directed to TYPE 0.
* Panel Effects are based on the "(Number) Effect Name".
* By using an external sequencer, which is capable of editing and transmitting the system exclusive messages and parameter changes, you can select the Reverb, Chorus and DSP effect types which are not accessible from the DJX panel itself. When one of the effects is selected by the external sequencer, " - " will be shown on the display.

REVERB

TYPE	TYPE LSB								
MSB	00	01	02	08	16	17	18	19	20
000	NO EFFECT								
001	(1)HALL1					(2)HALL2			
002	ROOM					(3)ROOM1		(4)ROOM2	
003	STAGE				(5)STAGE1	(6)STAGE2			
004	PLATE				(7)PLATE1	(8)PLATE2			
005...127	NO EFFECT								

CHORUS

TYPE	TYPE LSB								
MSB	00	01	02	08	16	17	18	19	20
000...064	NO EFFECT								
065	CHORUS		(2)CHORUS2						
066	CELESTE					(1)CHORUS1			
067	FLANGER			(3)FLANGER1		(4)FLANGER2			
068...127	NO EFFECT								

DSP

TYPE	TYPE LSB								
MSB	00	01	02	08	16	17	18	19	20
000	NO EFFECT								
001	(1)HALL1					(2)HALL2			
002	ROOM					(3)ROOM1		(4)ROOM2	
003	STAGE				(5)STAGE1	(6)STAGE2			
004	PLATE				(7)PLATE1	(8)PLATE2			
005	DELAY L,C,R				(26)DELAY L,C,R				
006	(27)DELAY L,R								
007	(28)ECHO								
008	(29)CROSS DELAY								
009	(9)EARLY REFLECTION1	(10)EARLY REFLECTION2							
010	(11)GATE REVERB								
011	(12)REVERSE GATE								
012...019	NO EFFECT								
020	KARAOKE								
021...063	NO EFFECT								
064	THRU								
065	CHORUS		(14)CHORUS2						
066	CELESTE					(13)CHORUS1			
067	FLANGER			(15)FLANGER1		(16)FLANGER2			
068	SYMPHONIC				(17)SYMPHONIC				
069	ROTARY SPEAKER				(19)ROTARY SPEAKER1				
070	TREMOLO				(21)TREMOLO1				
071	AUTO PAN				(24)AUTO PAN		(20)ROTARY SPEAKER2	(22)TREMOLO2	(23)GUITAR TREMOLO
072	(18)PHASER								
073	DISTORTION								
074	OVERDRIVE								
075	AMP SIMULATION				(30)DISTORTION HARD	(31)DISTORTION SOFT			
076	3BAND EQ				(32)EQ DISCO	(33)EQ TEL			
077	2BAND EQ								
078	AUTO WAH				(25)AUTO WAH				
079...127	THRU								

SPECIFICATIONS

Keyboards
- 61 standard-size keys (C1 - C6), with Touch Response

Display
- Large multi-function LCD display

Setup
- Stand by/ON
- Master Volume : MIN - MAX

Panel Controls
- OVERALL (▲▼ , +,-), FUNCTION, SONG, VOICE, STYLE, [0]-[9], [+](YES/FF), [-](NO/BWD)

Demo Song
- 3 songs

Voice
- 140 panel voices + 15 Drum Kits + 128 GM Voices + Special DJX Demo Voice + Sampled Voice
- Polyphony : 32
- Voice Set
- Dual Voice Mode
- Split Voice Mode

Pattern
- 100 styles
- Pattern Control : PATTERN CONTROL, SYNC-START, START/STOP, LEAD IN/LEAD OUT, BEAT A/B (BREAK OUT)
- Beat Indicator
- Pattern Volume

Part Control
- Beat Reverse
- Part Select
  Style Mode : Bass, Kick, Phrase 1, Snare, Hi-hat, Phrase 2, Percussion, Phrase 3, Main Voice, Split Voice, Dual Voice
  Song Mode : Track 1, 2, 3, 4, 5, 6, Main Voice, Split Voice, Dual Voice
- Part On/Off
  Bass, Kick, Phrase 1, Snare, Hi-hat, Phrase 2, Percussion, Phrase 3

Realtime Controls
- Knobs : CUTOFF, RESONANCE, GROOVE, ASSIGN, BASS BOOST
- RIBBON CONTROLLER
- PITCH BEND wheel

Performance Setup
- Preset A and B
- User (4 setups x 4 banks)

Overall controls
- BPM (Tempo)
- Transpose
- Tuning
- Pattern/Song Volume
- Ribbon Controller Assign
- Knob Assign

Effects
- Reverb : 8 types
- Chorus : 4 types
- DSP : 33 types
- Arpeggiator : 16 types

Song
- 3 Preset Demo Songs + 3 User Songs
- Song Clear

Recording
- Song
  User Song : 3 Songs
  Real Time Recording/Step Recording
  Recording Tracks : SONG MEMORY 1, 2, 3, 4, 5, 6/CHORD
- PSU (Performance Setup)
  User : 4 setups x 4 banks

Digital Sampling
- 12 Samples
- Memory : 128 Kbyte (about 6 seconds)
- Editing : Loop, End Point

MIDI
- Transmit Settings
- Receive Settings
- Local Control
- Clock
- Bulk Send/Receive
- Sampling Send/Receive
- Initial Send

Auxiliary jacks
- PHONES/AUX OUT, DC IN 10-12V, MIDI IN/OUT, FOOT SWITCH, MIC, LINE IN

Amplifier
- 6.0 W + 6.0 W

Speakers
- 12 cm x 2

Power Consumption
- 20 W (when using PA-5C power adaptor)

Power Supply
- Adaptor : Yamaha PA-5B/5C AC power adaptor
- Batteries : Six "D" size, SUM-1, R-20 or equivalent batteries

Dimensions (W x D x H)
- 933 x 370 x 138 mm
  (36- 3/4" x 14-9/16" x 5-7/16")

Weight
- 6.8 kg (15 lbs.)

Supplied Accessories
- Owner's Manual

Optional Accessories
- Headphones : HPE-150, HPE-3
- AC power adaptor : PA-5B/5C
- Footswitch : FC4, FC5
- Keyboard stand : L-2L, L-2C

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* Specifications and appearance subject to change without notice.

INDEX

Misc.

+/- keys 25

A

AC adaptor 8
accessory jacks 9
amplifier/stereo system, using an external ... 9
ARPEGGIATOR button 37
Arpeggiator 37
Arpeggiator Hold 21
Arpeggiator Speed 64, 67
Arpeggiator types 38
ASSIGN Knob 63
Attack 64, 67

B

BASS BOOST knob 61
Bass (Part) 52, 60
batteries 8
BEAT A/B 48
beat display 42
beat indicators 23
Beat Reverse key 52
BPM (Tempo) 41
Break Out 48
Bulk Dump Send 97

C

Chord Name 51
chord track 83, 88
Chorus 35
Chorus types 39
clearing, song 91
clock 96
cutoff 61, 62
CUTOFF knob 61

D

Demo songs 14
DEMO START buttons 14
Digital Sampling 69
display indications 22
dotted notes 88
Drum Kit Voice Chart 26
Drum Kit voices 108
DSP 36
DSP types 39
DUAL button 29
Dual voice 29
Dual Voice (Part) 60
Dynamics 64, 67
Dynamics Strength 64, 67

E

effects 34
End point 75

F

footswitch 21
FUNCTION button 18
Function parameters 18

G

GM (General MIDI) voices 26, 106
Groove 61
GROOVE knob 61

H

headphones 9
Hi-hat (Part) 52, 60

I

Initial Setup Send 96, 100
Initialization 103
INPUT LEVEL knob 70

K

Keyboard out 95
Kick (Part) 52, 60
knob 59
KNOB ASSIGN 63

L

Lead In, Lead Out 46, 47
LINE IN jack 7
loading bulk data 99
Local control 96
Loop 78

M

Main voice 25
Main Voice (Part) 60
MIC jack 7
MIDI 92
MIDI channels 95
MIDI Implementation Chart 112
MIDI terminals 94
MIDI, about 92
mode indicator 22
Modulation 64, 67

N

numeric keypad 25

O

OVERALL buttons 6, 22
Overall indicator 22

P

pan 27, 30, 32
PART CONTROL button 59
Part On/Off 52
PART ON/OFF keys 52
part select 60
PART SELECT keys 60
pattern 44
pattern control 45, 47
PATTERN CONTROL button 45
PATTERN keys 50
Pattern Out 95
pattern sections 48
Pattern Split Point 54
Pattern Volume 49
pattern, playing 44
Percussion (Part) 52, 60
PERFORMANCE keys 12
Performance Setup 56
Performance Setup, Preset 58
Performance Setup, User 56
PHONES / AUX OUT jack 9
Phrase 1 (Part) 52, 60
Phrase 2 (Part) 52, 60
Phrase 3 (Part) 52, 60
Pitch Bend 7
Pitch Bend Range 33
Preset Performance Setup 58
PSU (Performance Setup) 56

Q

Quick Guide 10

R

RECORD button 80
RECORD button (DIGITAL SAMPLING) .. 70
recording 80
recording, Performance Setup 56
recording, Realtime 81
recording, song 80
recording, Step 85
Release 64, 67
RESONANCE knob 61, 62
rests 88
Reverb 34
REVERB button 34
Reverb types 39
RIBBON CONTROLLER 66
RIBBON CONTROLLER ASSIGN 66

S

Sampling 69
Sampling Send 97
saving bulk data 97
saving data 97
sections (pattern) 48
Snare (Part) 52, 60
Song Clear 91
SONG MEMORY buttons 82, 86
song recording 80
Song Volume 43
songs, recording 80
songs, selecting and playing 40
Specifications 115
Split Point 32
Split voice 31
Split Voice (Part) 60
STAND BY/ON switch 8
START/STOP button 41, 45, 47
Style List 15
styles, selecting 44
sustain 21
Sync-Start 46

T

tap 21
Tempo (BPM) 41
Touch Sensitivity 33
track 40, 84
tracks, muting 40, 84
tracks, re-recording 84
Transpose 28
triplets 88
Troubleshooting 102
Tuning 29
turntable 64, 67

U

User Performance Setup 56
User songs 81

V

velocity curves 90
Voice List 104
Voice Set 33
voices, Drum Kit 108
voices, GM 106
voices, panel 104
voices, selecting and playing 25
volume 27, 30, 32

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90 DAYS LABOR **1 YEAR PARTS**

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PSR SERIES OF PORTATONE ELECTRONIC KEYBOARDS

If during the first 90 days that immediately follows the purchase date, your new Yamaha product covered by this warranty is found to have a defect in material and/or workmanship, Yamaha and/or its authorized representative will repair such defect without charge for parts or labor.

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If warranty service should be required, it is necessary that the consumer assume certain responsibilities:

1. Contact the Customer Service Department of the retailer selling the product, or any retail outlet authorized by Yamaha to sell the product for assistance. You may also contact Yamaha directly at the address provided below.
2. Deliver the unit to be serviced under warranty to: the retailer selling the product, an authorized service center, or to Yamaha with an explanation of the problem. Please be prepared to provide proof purchase date (sales receipt, credit card copy, etc.) when requesting service and/or parts under warranty.
3. Shipping and/or insurance costs are the consumers responsibility.* Units shipped for service should be packed securely.

   *Repaired units will be returned PREPAID if warranty service is required within the first 90 days.

   IMPORTANT: Do NOT ship anything to ANY location without prior authorization. A Return Authorization (RA) will be issued that has a tracking number assigned that will expedite the servicing of your unit and provide a tracking system if needed.
4. Your owners manual contains important safety and operating instructions. It is your responsibility to be aware of the contents of this manual and to follow all safety precautions.

EXCLUSIONS

This warranty does not apply to units whose trade name, trademark, and/or ID numbers have been altered, defaced, exchanged removed, or to failures and/or damages that may occur as a result of:

1. Neglect, abuse, abnormal strain, modification or exposure to extremes in temperature or humidity.
2. Improper repair or maintenance by any person who is not a service representative of a retail outlet authorized by Yamaha to sell the product, an authorized service center, or an authorized service representative of Yamaha.
3. This warranty is applicable only to units sold by retailers authorized by Yamaha to sell these products in the U.S.A., the District of Columbia, and Puerto Rico. This warranty is not applicable in other possessions or territories of the U.S.A. or in any other country.

Please record the model and serial number of the product you have purchased in the spaces provided below.

Model_____ Serial #_____ Sales Slip #_____

Purchased from_____ Date_____
(Retailer)

YAMAHA CORPORATION OF AMERICA
Electronic Service Division
6600 Orangethorpe Avenue
Buena Park, CA 90620

KEEP THIS DOCUMENT FOR YOUR RECORDS. DO NOT MAIL!

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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

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