

PERSONAL KEYBOARD

X140-D / X150-D

OWNER'S MANUAL

KAWAI

FCC Information

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Canadian Radio Interference Regulations

This instrument has been certified to comply with the limits for a class B digital apparatus, pursuant to the Radio Interference Regulations, C.R.C., c. 1374.

KAWAI X140/150-D Owner's Manual

Thank you for your purchase of a KAWAI X140/150-D Personal Keyboard.

This owner's manual contains valuable information that will help you make full use of this instrument's many capability. Read it carefully and keep it handy for future reference.

Have fun learning to play your X140/150-D!

Important Safety Instructions

- **Read Instructions** – This Owner's Manual contains valuable information that will help you make full use of the instrument's many capabilities. All the safety and operating instructions should be read before the product is operated.
- **Retain Instructions** – The safety and operating instructions should be retained for future reference.
- **Heed Warnings** – All warnings on the product and in the operating instructions should be adhered to.
- **Follow Instructions** – All operating instructions should be followed.



WARNINGS

- The instrument should not be operated with wet hands that could result in electric shock or other hazards.
- **Object and Liquid Entry** – Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product. The product should not be operated or stored near water or other moisture – for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; near a swimming pool, etc.
- This product may be capable of producing sound levels that could cause permanent hearing loss when used in combination with other products like speakers or headphones. Do not operate for a long period of time at a high volume level, especially if you are using headphones or earphones. If you experience any hearing loss or ringing in the ears, you should consult a hearing specialist.

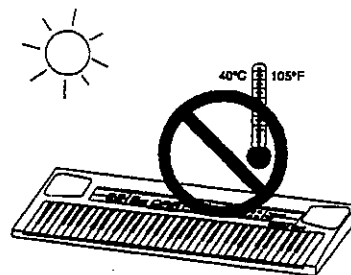


ATTENTION

- Protect the product from direct sunlight, extremes in temperature (such as inside your car on a warm day) or humidity, dusty environment, or vibration (especially during transportation).
- The instrument should be kept away from hot, dry places (such as near a radiator or heater)



- Protect the instrument from physical shocks and impact.
- Always turn down the volume(s) of all instruments (such as guitar or keyboard) before connecting or disconnecting to the instrument.
- Accessories – Do not place this instrument on an unstable or slant cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Besides, the unit may malfunction. Use only with a cart, stand, tripod, bracket, or table recommended by KAWAI, or sold with the product.
- Servicing – Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage. Refer all servicing to qualified service personnel. Do not disassemble or attempt to modify the instrument.
- Damage Requiring Service – Unplug this product and AC adaptor from the wall outlet immediately and refer servicing to qualified service personnel under the following conditions:
 - a) When the AC adaptor's cable or plug is damaged.
 - b) If liquid has been spilled, or objects have been fallen into the product.
 - c) If the product has been exposed to rain or water.
 - d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by this manual as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - e) If the product has been dropped or damaged in any way.
 - f) When the product or AC adaptor exhibit a distinct change in performance - this indicates a need for service.
- Replacement Parts – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitution may result in fire, electric shock, or other hazards.
- Use only a Kawai AC adaptor or equivalent shipped with the instrument and connect it only to a power supply with a voltage within the limits stated on the ratings plate.
- When the product and/or AC adaptor are left unattended and unused for long period of time, unplug it from the wall outlet to prevent damage to them due to lightning and power-line surges.
- Power Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, receptacles, and the point where they exit from the product.
- Do not connect to the same circuit as a heavy load or equipment that generates line noise.
- Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. Clean the instrument with a soft cloth, a mild detergent, and lukewarm water. Never use harsh or abrasive cleansers or organic solvents.



Before Playing The X140/150-D

Connecting the Power Supply

Your keyboard can use either your home AC power outlet or dry cell batteries as a power source.

* To Insert Batteries

1. Turn the unit over and remove the battery cover.
 2. Insert six Size "C" dry cell batteries. Be sure they are aligned in the proper direction.
 3. Replace the battery cover.
- As the batteries begin to run down, the volume of the keyboard will decrease and the sound quality will begin to change or deteriorate, or the unit may begin to malfunction. At that time, you should replace all six batteries.
 - Do not mix battery type (or new batteries with old ones), as this may cause problems such as battery fluid leakage.
 - Remove the batteries when not using the keyboard for long periods of time.

* To Use An AC Power Outlet

Connect a PS-125 or PS-124 adaptor (available separately) to the adaptor terminal on the rear panel of the keyboard. Then, connect the adaptor to a wall socket.

We recommend that you use a KAWAI AC adaptor with the X140/150-D.

If you decide to use a universal adaptor from another manufacturer, please be sure of the following.

1. The voltage selector should be set at 12 volts.
2. The polarity selector must be set to "negative" (–) polarity, otherwise the keyboard will not operate (or will run on batteries until the batteries are drained).
3. The adaptor must be rated at 2 Amp (A).

The contents of the keyboard's internal memory (such as recorder data) will be kept stored for up to five years by a back-up battery built into the unit.

Note that if you turn the power switch ON while holding down keys C and E at the left end of the keyboard, all of the contents of the memory will be erased and the keyboard's factory settings will be restored. (This is known as the "factory reset" procedure.)

You cannot back up the internal memory once the back-up battery has run out of power.

So, we recommend that you save your important data into an external sequencer (see "Using the MIDI Functions" section).

For a replacement back-up battery, contact an authorized KAWAI dealer.

Your keyboard comes equipped with a thin plastic covering over the front panel designed to protect the panel from dust and scratches.

If you want to remove this covering, carefully use a fingernail to lift up one of the corners. Then, slowly peel off the covering and discard it.

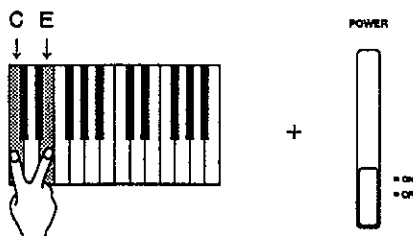
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Returning the Keyboard to Factory Settings

By switching on power to the keyboard while holding down the C and E keys furthest to the left, all of the contents recorded in the keyboard's memory will be erased, and will be reset to the state in which it left the factory.



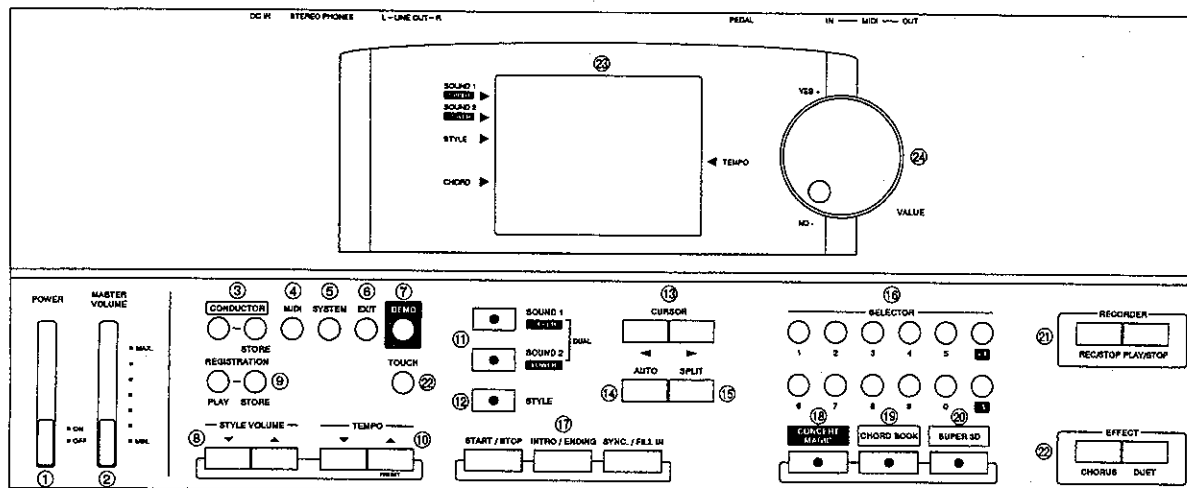
Protective Plastic Covering on Front Panel

Your keyboard comes equipped with a thin plastic covering over the front panel designed to protect the panel from dust and scratches. If you want to remove this covering, carefully use a fingernail to lift up one of the corners. Then, slowly peel off the covering and discard it.

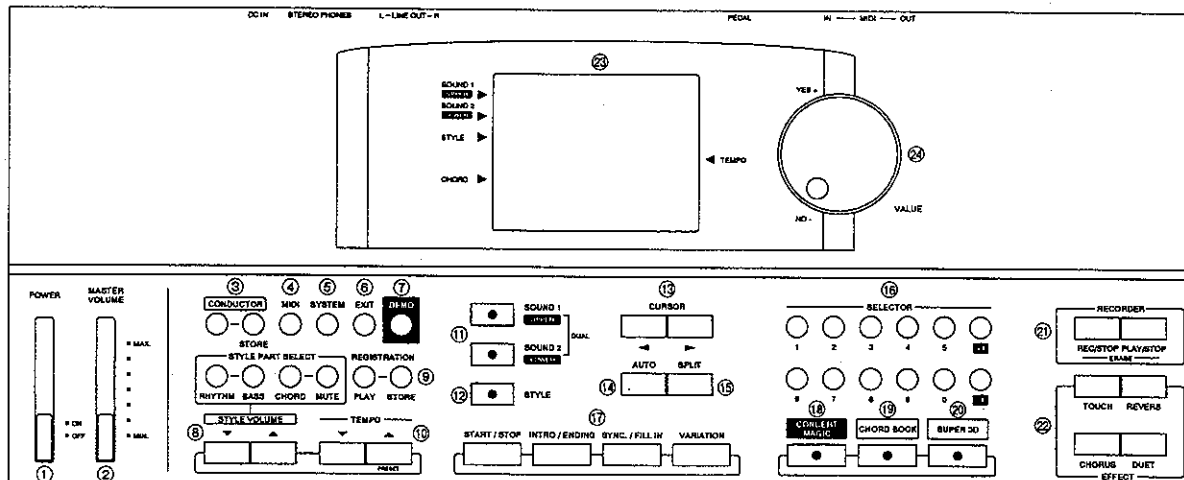
1. Overall Diagram and Explanation

Front Panel

X140-D

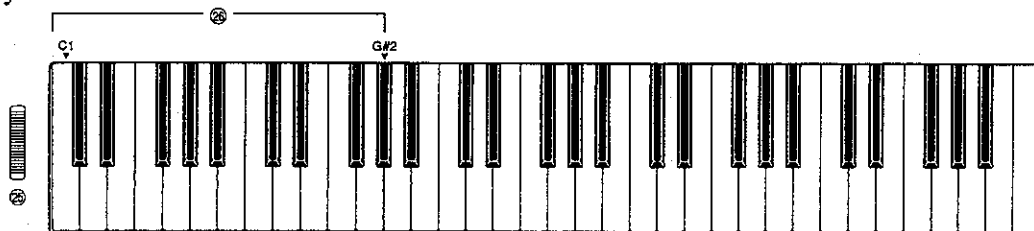


X150-D

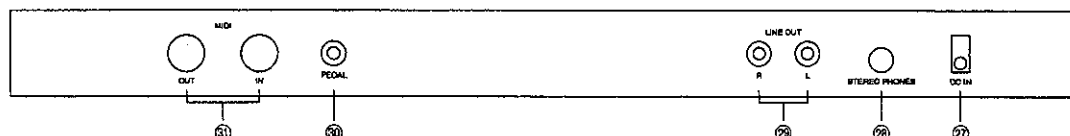


The buttons marked with a black dot (●) in the above illustrations have LEDs which light when the button is pressed. The buttons not marked with a black dot will not light when pressed.

Keyboard



Rear Panel



BASIC CONTROLS

FRONT PANEL

1. **POWER Switch:** Turns power to the keyboard on and off.
2. **MASTER VOLUME Slider:** Adjusts the output volume.
3. **CONDUCTOR Buttons:** Used for setting and saving with the Conductor function.
4. **MIDI Button:** Used for setting MIDI functions.
5. **SYSTEM Button:** Used for making System settings.
6. **EXIT Button:** Used whenever exiting a mode.
7. **DEMO Button:** Use this button to go into Demo Song select mode.
8. **STYLE VOLUME Buttons:** Adjusts the Style volume up and down.
9. **REGISTRATION Buttons:** Used for selecting and recalling panel settings.
10. **TEMPO Buttons:** These buttons adjust the speed of the tempo.
11. **SOUND 1 AND 2 Buttons:** Used when selecting sounds (tones) with the INCREMENTAL DIAL or SELECTOR buttons. Also used to select sounds when using the Split function.
12. **STYLE Button:** Used when selecting accompaniment Styles with the INCREMENTAL DIAL or SELECTOR buttons. Also used when selecting songs in Concert Magic.
13. **CURSOR Buttons:** Used to move the cursor within the display window.
14. **AUTO Button:** Turns the automatic accompaniment on and off.
15. **SPLIT Button:** Turns the SPLIT function on and off.
16. **SELECTOR Buttons:** These buttons are used to select Sound and Style numbers. They are also used to select pages and values when in System Mode (refer to Ch. 10).
17. **PATTERN CONTROL Buttons**
 - START/STOP Button:** Used to start and stop Style patterns.
 - INTRO/ENDING Button:** Inserts intros (introductions) that can be used to start a song, and endings that can finish a song.
 - SYNC./FILL-IN Button:** Inserts fill-ins in Style patterns. Also used to synchronize the start of a style pattern to the start of the user playing the keyboard.
 - VARIATION Button:** Used to select Style variations. (X150-D only)
18. **CONCERT MAGIC Button:** This button turns the Concert Magic function on and off.
19. **CHORD BOOK Button:** This button turns the automatic chord progression function on and off.
20. **SUPER 3D Button:** This button turns Super 3D sound on and off.
21. **RECORDER Buttons:** Used to record and playback your performance on the keyboard.
22. **EFFECT Buttons:** These buttons turn on and off the Chorus and Duet effects on both models, and the Touch and Reverb effects on the X150-D.
23. **DISPLAY:** The display window shows which sound or style number is currently selected. The window is also used to display a wide variety of other information.
24. **INCREMENTAL DIAL:** This dial control is used to select sounds and styles. It is also used to select pages and values when in System Mode (refer to Ch. 10).
25. **PITCH BEND WHEEL (X150-D ONLY):** Moving this wheel up or down changes or "bends" the pitch of the sound.

KEYBOARD

26. **LOWER KEYBOARD:** When using automatic accompaniment or split keyboard functions, the chords or other part(s) are played in this area by the left hand.

REAR PANEL

27. **DC IN Jack:** This jack is used to connect a Power Adapter (Kawai PS-125 or PS-124) available separately.
28. **STEREO PHONES Jack:** Where personal headphones are plugged in. Plugging in this headphones will temporarily disconnect the built-in speakers.
29. **LINE OUT Jacks:** Used to connect the keyboard to external amplification and speakers.
30. **PEDAL Jack:** Optional foot switches (e.g. model F-1) are connected here. Can be used as a sustain pedal and for triggering fill-ins and ending functions.
31. **MIDI Jacks:** These jacks are used for sending and receiving MIDI signals, when other MIDI devices are connected to the keyboard. Use only MIDI cables.

2. Let's Listen to a Demonstration Song

This keyboard's demo songs are divided into the two modes described below:

- 1) Demo mode —15 songs
- 2) Concert Magic Demo mode—X150-D: 100 songs; X140-D: 50 songs

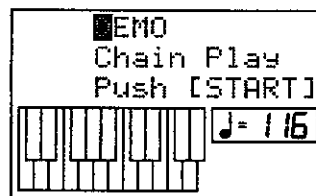
First let's listen to the 15 internal songs in Demo mode.

1) Demo Mode

	Chain Play
1	Country
2	Mambo
3	Schlager
4	Italo
5	Bavarian
6	Brass Section
7	Voice-Voxooh

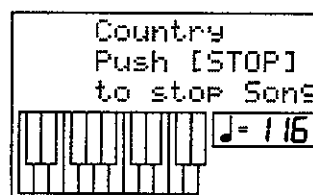
8	Strings
9	Trumpet
10	Steel Guitar
11	Church Organ
12	Blown Bottle
13	Piano
14	Finger Bass
15	Funk Slap Bass

1. Press the DEMO button. DEMO will appear on the first line of the display window, and on the second line the song title will appear. Presently, the keyboard is in Chain Play mode, where the fifteen songs will play one after the other.

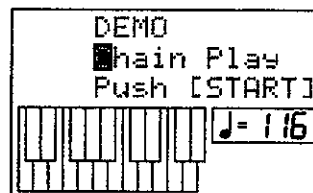
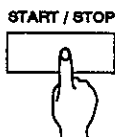


* Below, the tempo of the current selection, set at [116], is shown in the display window. This tempo setting refers only to the demonstration song.

2. Press the START/STOP button. The display window will look like the illustration below, and the demo songs will be played in order, from the first song to the fifteenth.



3. When you want to stop the demo songs, press the START/STOP button once again. The display will return to that shown in Step 1, with the cursor automatically moving to the second line of the display.

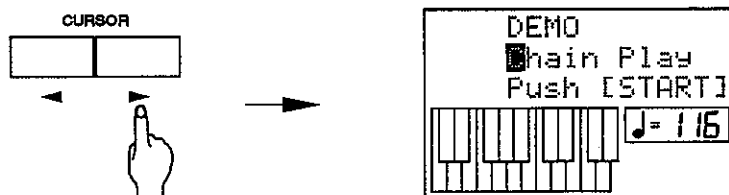


POINT!

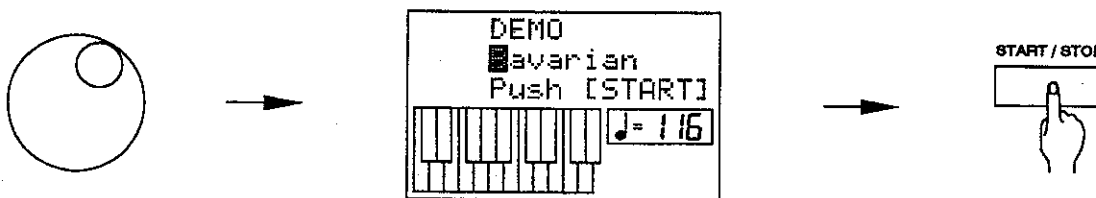
At this time (during a Demo song performance), if you press the EXIT button on the front panel, the keyboard will exit Demo mode entirely.

Let's Change Songs

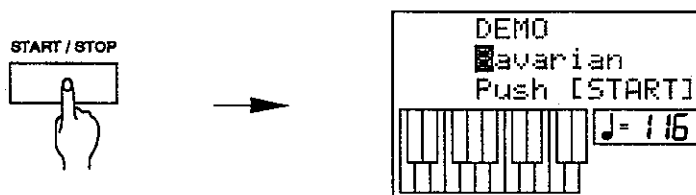
1. Continuing from Step 3, press the CURSOR button, moving the cursor along the second line. (If the cursor is already on the second line, you can use the INCREMENTAL DIAL or the [+1] and [-1] SELECTOR buttons to choose the demo song you like.)



2. Rotate the INCREMENTAL DIAL or press the [+1] SELECTOR button to choose, in this case, song number five, and press the START/STOP button.



3. Press the START/STOP button once again to stop the demo song. The display will return to that shown in Step 2.



POINT!

- * In order to leave Demo mode, press the EXIT button.
- * Use these procedures to listen to other songs as well.

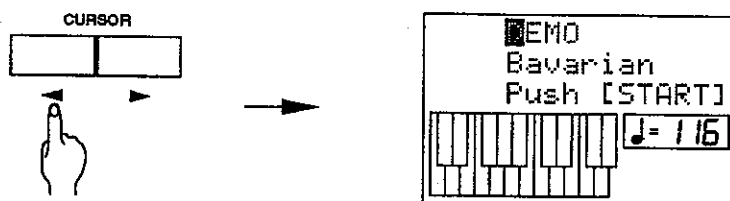
2) Concert Magic Demo Mode

Next, let's listen to the internal songs in Concert Magic Demo mode.

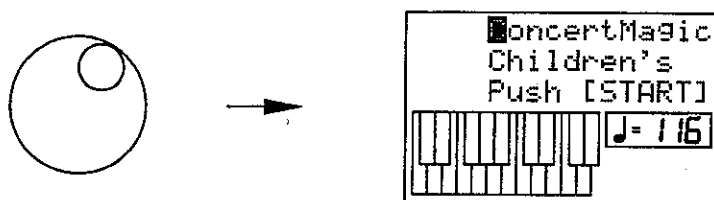
Songs in this mode are divided into eight groups. All of these songs can be played back in succession.

- * CHILDREN'S: A collection of songs for children
- * FOLK SONGS: A collection of traditional American folk songs
- * HYMNS & XMAS: A collection of hymns and Christmas songs and carols
- * OCCASIONS: A collection of songs performed at occasions such as weddings
- * INTL. SONGS: A collection of famous songs from a variety of countries
- * CLASSIC: A collection of classical music
- * ROMANTIC: A collection of romantic music
- * RANDOM PLAY: Replay of internal songs in random order, without regard to classification

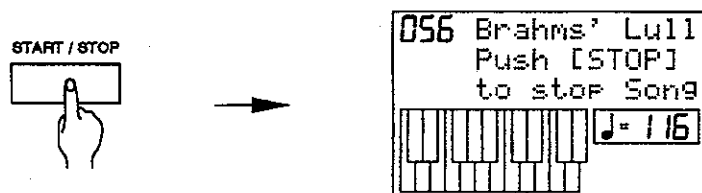
1. At this point, assume that we are at the point where we have finished listening to a demo song in Demo mode. Press the CURSOR button to return the cursor to the first line.



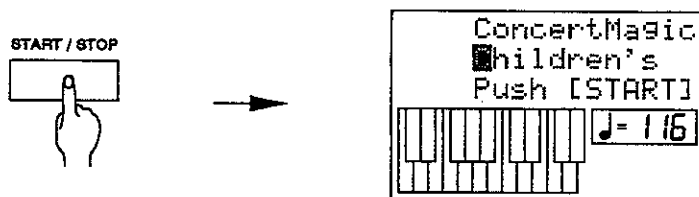
2. Rotate the INCREMENTAL DIAL or press the [+1] SELECTOR button to select Concert Magic mode. At this point, the keyboard is ready to play all the songs of the Children's group in the Concert Magic's internal song bank.



3. Press the START/STOP button. The display window will look like the illustration below, and the songs in the Children's group will be played in succession, starting with the first song. At this time, the current song's tile will be shown in the first line of the display.



4. Press the START/STOP button once more to stop the demo song. The display window will return to the state it was previously in Step 2, and the cursor will automatically move to the second line of the display.



POINT!

- * When you want to leave Demo mode, press the EXIT button.
- * As in "Let's Change Songs" on the previous page, you can use these procedures to listen to other songs in Concert Magic mode as well.

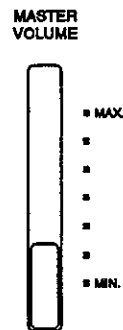
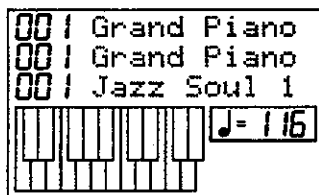
3. Let's Select Our Sounds

1) Selecting the Tone for Sound 1

1. Turn on the power. The sound name and style name will appear in the display window.

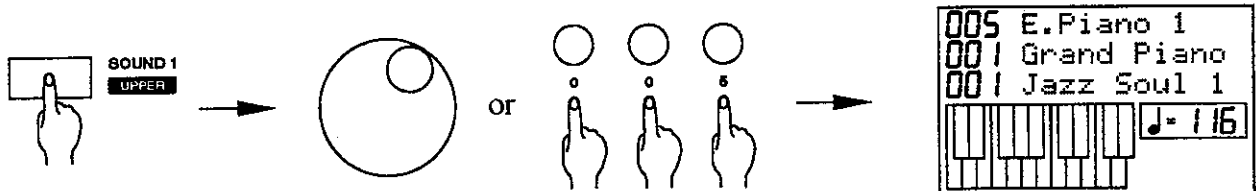
Line 1Sound number and name for Sound 1
Line 2Sound number and name for Sound 2
Line 3Style number and name (explained later)

With the keyboard in its present state, try playing something you like. You will hear Sound 001, Grand Piano. Using the MASTER VOLUME slider, try adjusting the volume of the keyboard.



2. Next, let's select another sound.

Confirm that the Sound 1 button light is on. (If the light is not on, please press the Sound 1 button.) By moving the INCREMENTAL DIAL to the right (clockwise), or by pressing the SELECTOR buttons, choose sound number 005, E. Piano 1. When you play the keyboard, you will be able to hear the E. Piano 1 sound.



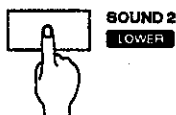
3. Now, select sound number 129, "Drum Set." When you play the keyboard, you will hear the sound of the percussion instrument indicated above the key. Each key has a different percussion symbol above it.

Tips on Entering Numbers with the SELECTOR Buttons

- 1) If the number you are selecting is a single-digit (006) or two digit number (010), you can enter it in two different ways.***
 - 1 - If you enter the number 6 by pressing "6" or 10 by pressing "10", the keyboard will wait a second before changing the display and sound or style to your selection.***
 - 2 - If you enter the number 6 by pressing 0-0-6 or 10 by pressing 0-1-0, the keyboard will change immediately***
- 2) When entering three-digit Sound or Style numbers, just enter the three-digit number as it is.***
- 3) When selecting Sound or Style numbers by the [+1] and [-1] value buttons or the INCREMENTAL DIAL, the change occurs immediately.***

2) Selecting a Tone for Sound 2

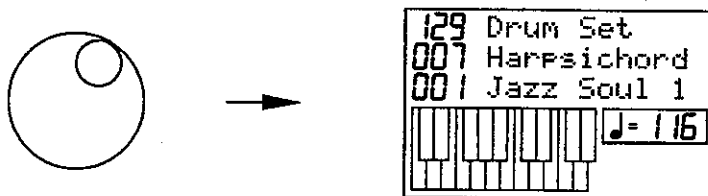
1. Confirm that the Sound 2 button light is on. (If the light is not on, please press the Sound 2 button.)



The second line of the display should be showing "001 Grand Piano".

With the keyboard in its present state, try playing something you like. You will hear Sound 001, Grand Piano.

2. By moving the INCREMENTAL DIAL to the right (clockwise), or by pressing the SELECTOR buttons, choose sound number 007, Harpsichord. When you play the keyboard, you will be able to hear the Harpsichord sound.



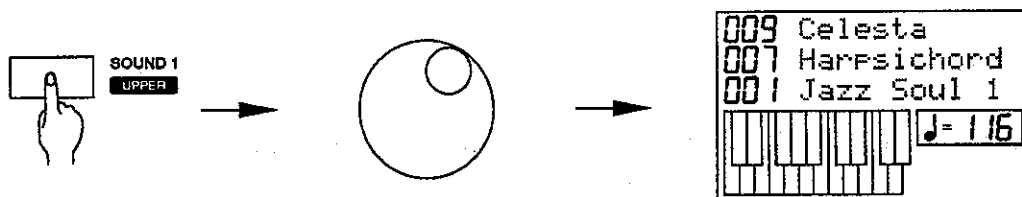
POINT!

When the light on the Sound 1 button is on, you may select sounds for Sound 1 (on the first line of the display), using either the INCREMENTAL DIAL or the SELECTOR buttons. When selecting sounds for Sound 2 (on the second line of the display), be sure to press the Sound 2 button.

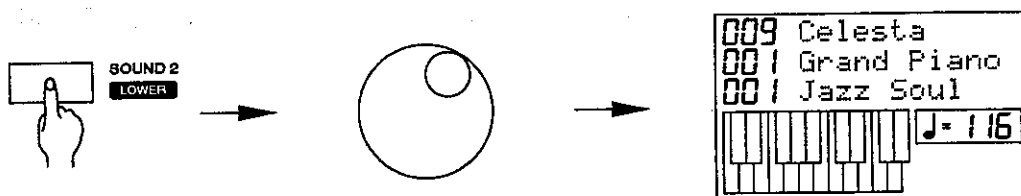
3) Using the Split Function

When using Split mode, you can have one sound in the lower part of the keyboard, and have a completely different sound in the upper part of the keyboard.

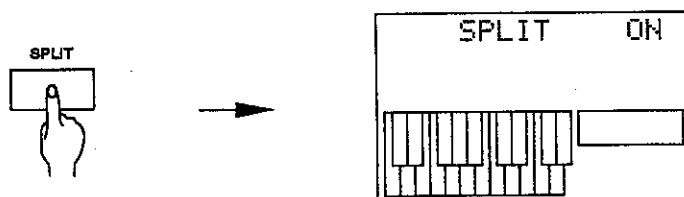
1. Let's choose the sound for the Upper keyboard. Confirm that the UPPER (Sound 1) button light is on. (If the light is not on, please press the Sound 1 button.) By moving the INCREMENTAL DIAL or by pressing the SELECTOR buttons, choose sound number 009, Celesta.



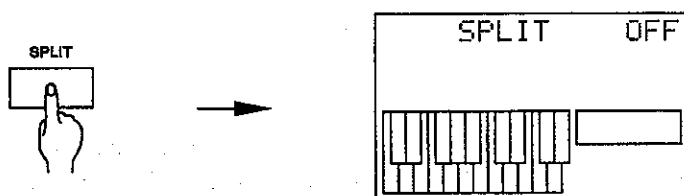
2. Let's choose the sound for the Lower keyboard. Press the LOWER (Sound 2) button. By moving the INCREMENTAL DIAL or by pressing the SELECTOR buttons, choose sound number 001, Grand Piano.



3. Press the SPLIT button. SPLIT ON will appear in the display, and you will be able to hear the Grand Piano tone from the Lower Keyboard, and Celesta from the Upper Keyboard.



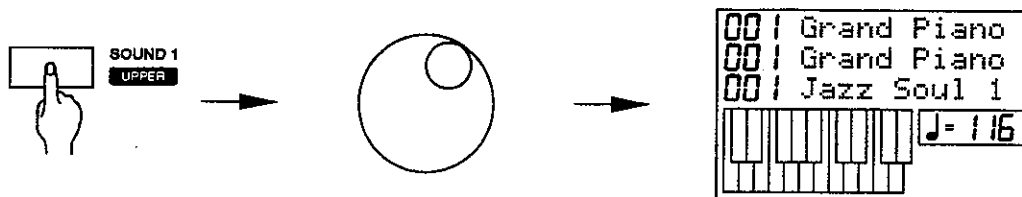
4. Press the SPLIT button again to turn off the Split function.



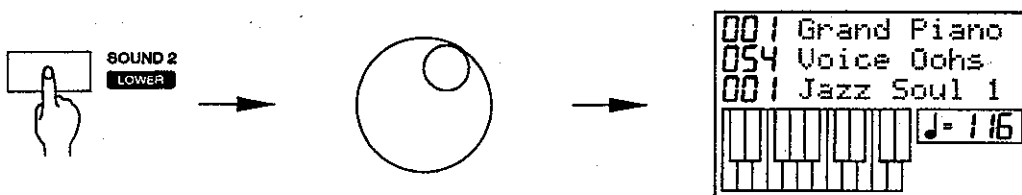
4) Layering Two Sounds (Dual Function)

With the Kawai X140-D and X150-D you can layer or combine two different tones. This is called the "Dual Function".

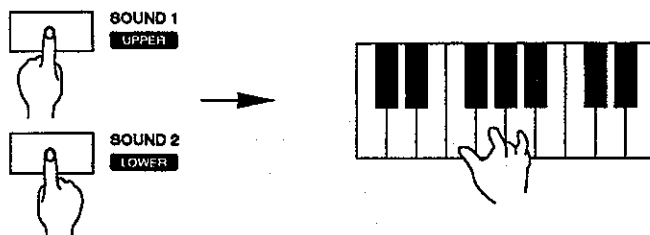
1. First, confirm that the SOUND 1 button light is on. (If the light is not on, please press the SOUND 1 button.) Using the INCREMENTAL DIAL or pressing the SELECTOR buttons, choose sound number 001, Grand Piano.



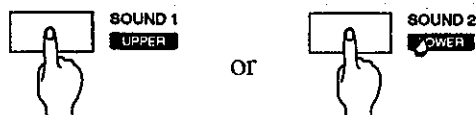
2. Next, press the SOUND 2 button. Again, using the INCREMENTAL DIAL or by pressing 0-5-4 on the SELECTOR buttons, choose sound #054, Voice Oohs.



3. Press both the SOUND 1 and SOUND 2 buttons simultaneously. By doing this, the lights on the two buttons will be on, and when you play the keyboard, you will be able to hear the two sounds, Grand Piano and Voice Oohs, layered.



4. Press either the SOUND 1 or SOUND 2 button to turn off the Dual function.



POINT!

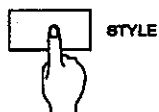
When the Split function is on, the Dual function cannot be used.

4. Let's Select a Style

1) Using Rhythm

1. First, press the STYLE button.

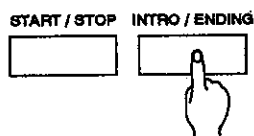
The STYLE button will light up and by using the INCREMENTAL DIAL or by pressing the SELECTOR buttons, you will be able to select a Style. To start with select Style #001.



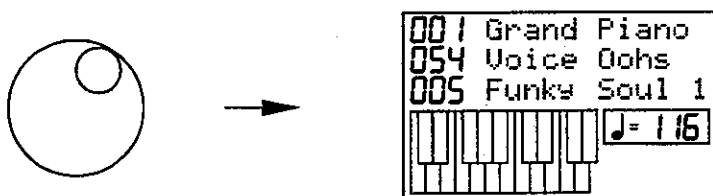
POINT!

The INCREMENTAL DIAL controls several different functions. Be sure that the STYLE light is on when you want to change styles. Similarly, when you want to change sounds be sure the SOUND 1 or 2 is on.

2. By pressing the INTRO/ENDING button, the style #1 will start with an introduction. (To start the rhythm pattern without an introduction just press the START/STOP button.)

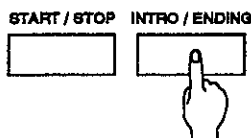


3. Next, just as we did with the Sounds, using the INCREMENTAL DIAL or pressing the SELECTOR buttons, choose Style number 005, Funky Soul 1.



You can listen to all the other Styles by following the same steps.

4. Once again, press the INTRO/ENDING button. The rhythm pattern will play an ending and stop. (If you want the rhythm pattern to stop without the ending just press the START/STOP button.)



2) Let's Change the Tempo

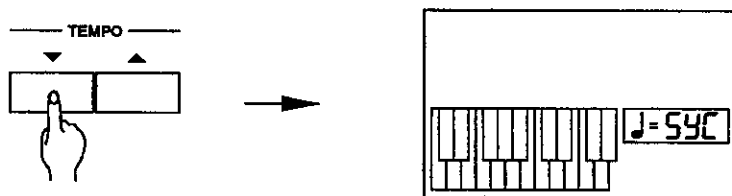
By using the TEMPO buttons, you can change the speed of Style (from 48 to 220). Pressing the UP button increases the tempo, and pressing the DOWN button slows it down. The tempo is always shown in the display window.

POINT!

After determining a Style's number, when you press the START/STOP button, the selected Style will be set with the factory preset tempo.

Additionally, if during the performance of one Style you select a different Style, and within five seconds of setting the number of that new Style you press the TEMPO UP button, the factory preset tempo will be called up.

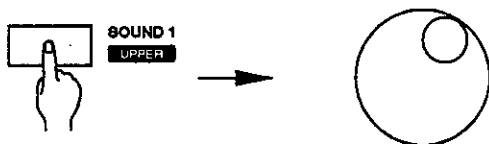
If, while the rhythm is being played, you continue to press the TEMPO DOWN button to the slowest tempo, the display will change to read [SYC]. This is an abbreviation for "SYNC" or synchronization mode. This is a function used in MIDI applications. If the keyboard is connected to a computer or other sequencer, the keyboard will follow the tempo setting of the other MIDI devices. The START/STOP and INTRO/ENDING buttons will not work in this mode. To escape this mode, press the TEMPO UP button.



3) Using the Automatic Accompaniment Function

When using the automatic accompaniment function, you can enjoy realistic ensemble performances simply by playing the chords with the left hand and play the melody with your right-hand. The twenty-one keys on the bottom left, in the area called the "Lower Keyboard" are where the chords are played. This controls the automatic accompaniment.

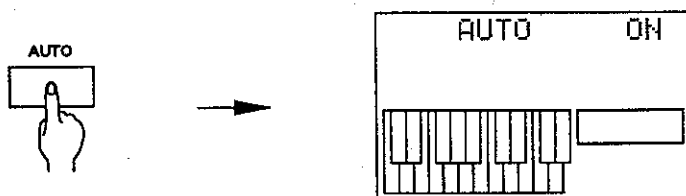
1. By pressing the SOUND 1 button and using the INCREMENTAL DIAL or SELECTOR buttons, select sound number 019, Rock Organ.



2. Next, by pressing the STYLE button and using the INCREMENTAL DIAL or SELECTOR buttons, select Style number 030, Light Rock.



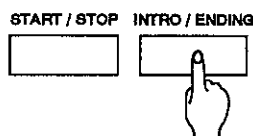
- Now, press the AUTO button. In the display "AUTO ON" will briefly appear. The automatic accompaniment function (auto-accompaniment) will now be turned on.



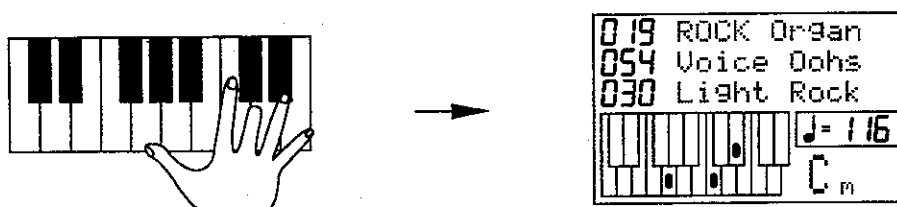
POINT!

When you activate the automatic accompaniment function, the pitch of the normal keyboard section on the right will drop for certain sounds (bass, guitar, etc.). This octave shift helps keep these sounds closer to their normal sound range, even though you're playing upper-range notes on the keyboard.

- Press the INTRO/ENDING button, and the rhythm and auto-accompaniment will begin playing.



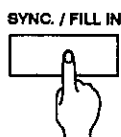
- Try playing chords on the Lower Keyboard. Here, try C minor. When you press the keys, the chord being played appears on the display window, and the auto-accompaniment plays along with the chord. See p. 52 for a chord chart in the key of C.



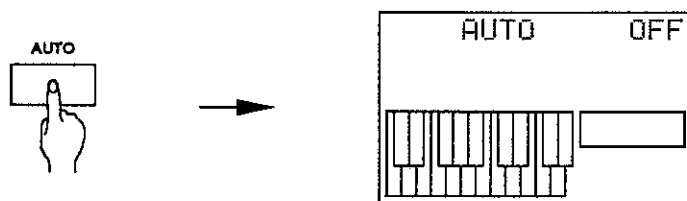
POINT!

Turning on the AUTO button while the Style is stopped causes the keyboard to go into "Single Finger Chord" mode, in which you can play complete chords on the Lower Keyboard with just one finger.

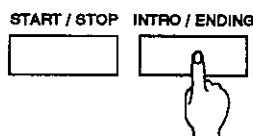
- While the Style is playing, press the SYNC./FILL IN button. Fill-in patterns appropriate to the selected Style will play along.



7. While the Style continues to play, press the AUTO button. The display will briefly read "AUTO OFF" and the auto-accompaniment will be turned off, leaving only the drum pattern playing. Press the AUTO button again, and the auto-accompaniment will once more be turned on.

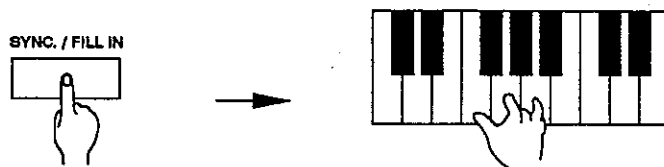


8. Once again, press the INTRO/ENDING button. The rhythm pattern will play an ending and stop. (If you want the auto-accompaniment patterns to end abruptly, simply press the START/STOP button.)

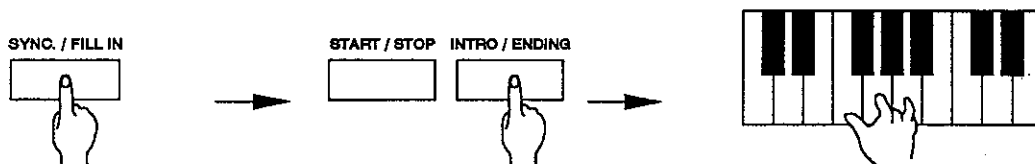


4) Using the Synchro Function

While the Style is stopped, pressing the SYNC./FILL IN button will synchronize the auto-accompaniment to start playing when you are ready. After you have pressed the SYNC./FILL IN button press any key in the Lower Keyboard area, and the Style will start playing.



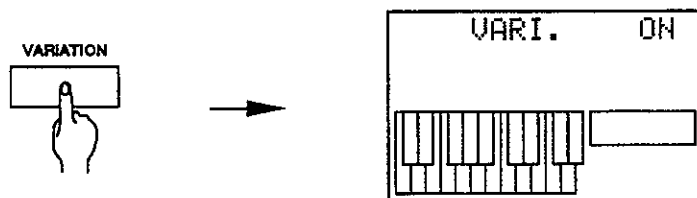
When you want the Style to start playing the moment you begin playing, but you also want an introduction played, press the SYNC./FILL IN button and then the INTRO/ENDING button. Now when you begin to play, the keyboard will play an introduction.



5) Using Variation (X150-D only)

The Variation feature provides an easy way to add variety and excitement to your performances.

1. Press the VARIATION button while the Style is being played. The display will briefly read VARI. ON. The auto-accompaniment will play a fill-in and then you will hear a different variation of the pattern you were listening to.



2. Press the VARIATION button once more, and you will return to the previous Style.

POINT!

On this keyboard, each Style has two fill-ins assigned to it.

Press the SYNC./FILL IN button when the VARIATION button is off, and Fill-In 1 plays.

Press the SYNC./FILL IN button when the VARIATION button is on, and Fill-In 2 plays.

6) Using the Advanced Automatic Accompaniment Function

This keyboard's auto-accompaniment has two modes. Ordinarily the "Auto" mode is utilized, but with System (refer to Ch. 10), the other mode "Whole Keyboard" can be selected.

Having two auto-accompaniment modes allows the keyboard to be enjoyed by anyone - at any level of musical ability, from beginners to true professionals.

So, let's find out how the two kinds of modes operate.

"Auto" Mode

With the "Auto" mode the melody is played with the right hand in the "Upper" portion of the keyboard, and the chords are played by the left hand in the "Lower Keyboard" area.

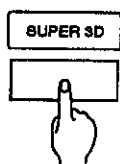
"Whole Keyboard" Mode

"Whole Keyboard" mode allows you to play a bass line with your left hand, while playing the melody and/or the chords with your right hand, similar to how a piano is played. When you want to change the chord the auto-accompaniment is playing, play the bass note of the next chord you want to play with your left hand and play the rest of the notes with your right hand, at the same time. This mode allows the left hand to be more independent of what the auto-accompaniment is playing.

7) Using the Super 3D Function

“Super 3D” is Kawai’s exclusive sound enhancement system which brings a new “third” dimension of sound - depth - to the listener’s ears. The use of four multidirectional speakers produces a deeper, richer, clearer sound that cannot be expressed with ordinary stereo speakers.

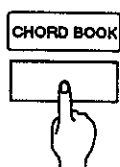
1. The Super 3D function comes on when you turn on the keyboard’s power. To turn it off, press the SUPER 3D button. Try playing an auto-accompaniment Style and turning the Super 3D sound system on and off. You will immediately recognize the deeper, richer and clearer sound quality of the Super 3D sound system.



8) Using the Chord Book Function

The Chord Book function plays a chord progression for every automatic accompaniment pattern that is typical or appropriate for that style of music.

1. Press the CHORD BOOK button while the Style is playing.



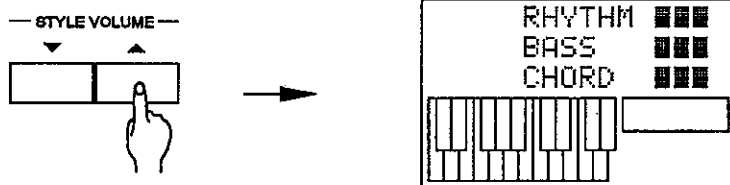
Every several bars, you will hear the chords change automatically.

9) Changing the Style’s Volume

Using the STYLE VOLUME buttons you can adjust the volume of automatic accompaniment.

1) Changing the Style’s Overall Volume

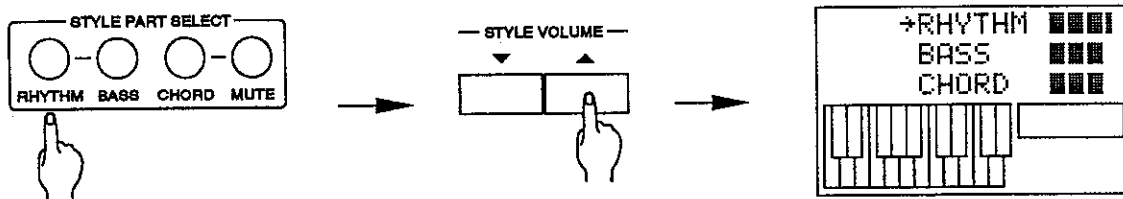
1. Press the STYLE VOLUME button while the Style is playing.



Pressing the right STYLE VOLUME button increases the volume of the entire Style pattern. The display will show all the volume levels of the RHYTHM, BASS, and CHORD increasing. Conversely, pressing the left button decreases the overall Style volume, and the decrease is shown in the display window.

2) Changing the Volume of Each Part (X150-D only)

1. While the Style is playing, press the RHYTHM button in the "STYLE PART SELECT" area on the panel beside the STYLE VOLUME buttons. Now press the right STYLE VOLUME button.



You will hear only the drums increase in volume and see just the RHYTHM volume level increase. Conversely, pressing the left STYLE VOLUME button decreases the drum volume.

POINT!

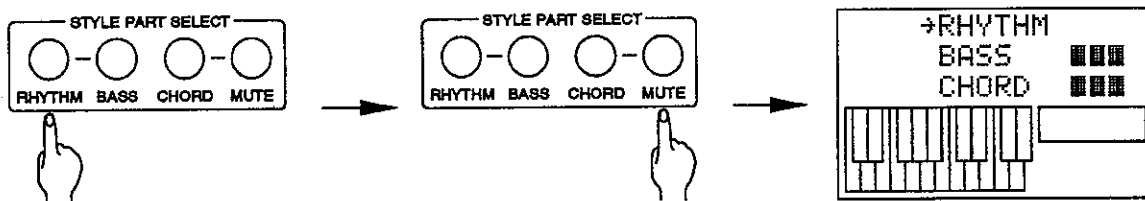
When changing the volume of individual parts, after designating the part you have about two seconds to press the STYLE VOLUME button to change that part's volume. If after designating a part more than approximately two seconds passes, the display returns to the previous screen, and even if you press the STYLE VOLUME button, you will only be adjusting the volume of the entire automatic accompaniment.

Adjust the other elements, bass and chords, in the same manner.

3) Muting Individual Parts (X150-D only)

You can also turn off (mute) any of the individual parts. First, let's mute the rhythm.

1. While the Style is playing, press the RHYTHM button in the "STYLE PART SELECT" area of the keyboard. Now press the MUTE button just to the right of it.



The rhythm part will then be muted.

POINT!

At this point, if after pressing the RHYTHM button too much time passes, the display returns to the previous screen, and the you will be unable to mute the rhythm part. If this happens, press the RHYTHM button again.

2. If you once again press the RHYTHM button, then the MUTE button, the rhythm part will return to its original volume.



Try adjusting the other elements, bass and chords, in the same manner.

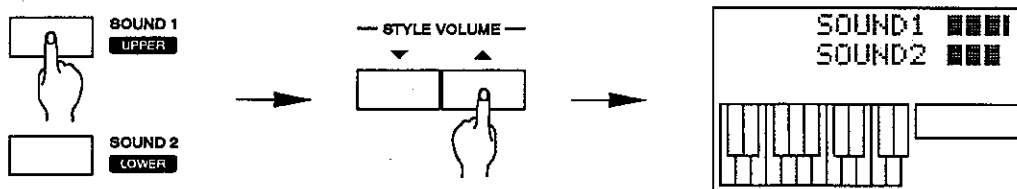
4) Changing the Volume of Sound 1 and Sound 2

On this keyboard, you can individually change the volume of Sound 1 and Sound 2.

This is convenient when you want to combine or layer one sound that might be quiet or soft, such as flute, with another sound that might be louder in nature such as Tremolo Strings.

First, let's change the volume of Sound 1.

1. While holding down the SOUND 1 button, press the right STYLE VOLUME button.



The volume level will be shown on the display window.

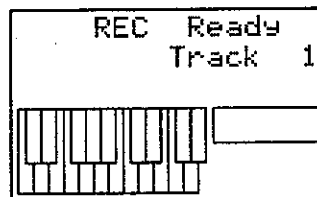
Adjust the volume of Sound 2 in the same manner (i.e. while holding down the SOUND 2 button, press the right STYLE VOLUME button).

5. Let's Record

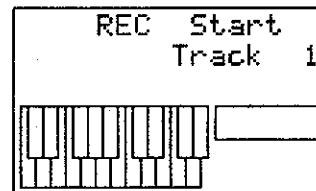
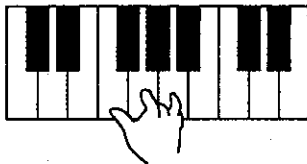
Now, let's see how to record and play back songs using the Recorder function.

1) Simple Recording: Recording Only the Keyboard

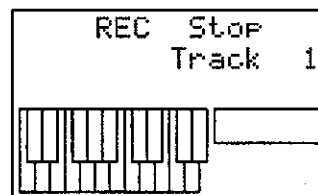
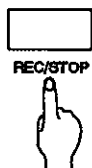
1. When you have decided what sounds you want to record, press the REC/STOP button. "REC Ready" will immediately appear in the display window, and you will be able to hear the metronome clicking in time.



2. Playing the keyboard will automatically start the recording. At this time, "REC Start" will immediately appear in the display window.



3. When you have finished playing, press the REC/STOP button. "REC Stop" will immediately appear in the display window, and recording will stop.



4. Next, let's listen to what you have just recorded. Press the PLAY/STOP button. The recorded song will be played back. If you decided to stop the song before it has finished playing, press the PLAY/STOP button once more.



POINT!

- * On the X140-D, making another recording will delete the song you have previously recorded.
- * On the X150-D, you must first erase the previously recorded song before you can record another. Press the REC/STOP and PLAY/STOP buttons simultaneously to delete the song.
- * Tempo information is not recorded by the Recorder. Therefore, you'll find it convenient to record more difficult songs at a slower tempo, and then increase the tempo when playing them back.
- * The Recorder automatically stops recording when its memory reaches capacity.
- * Concert Magic cannot be used when the Recorder is in use.

2) Recording a Song While Playing Along With a Style

The procedures below are to be used at Step 2 of the process outlined on the last page.

* Recording a Song with a Style pattern.

After pressing the REC/STOP button, press the START/STOP button. The Style will begin to play and you can start your performance.

* When you want to record a song with a Style pattern, but don't want the style to start until you are ready.

After pressing the REC/STOP button and then pressing the SYNC./FILL IN button, press any one key in the Lower Keyboard. The selected Style will begin playing at the same time you start playing the keyboard.

3) Using the Overdubbing Function (X150-D only)

Overdubbing is a term meaning the overlaying of separately recorded tracks, resulting in multi-track recording. The X150-D has five separate tracks. In other words, you can layer five separate recordings.

POINT!

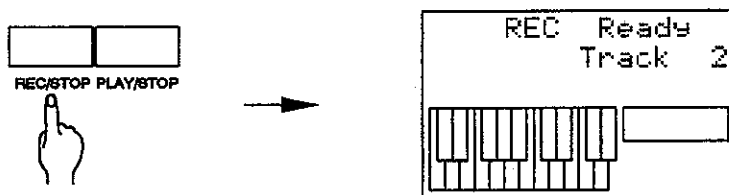
When recording Style, Dual, Split, and Duet, you must record these on Track 1.

Referring to "Recording a Song While Playing Along With a Style" mentioned above, after recording a Style on Track 1, let's overdub some melodies you'd like on tracks 2-5, recording them all the same way.

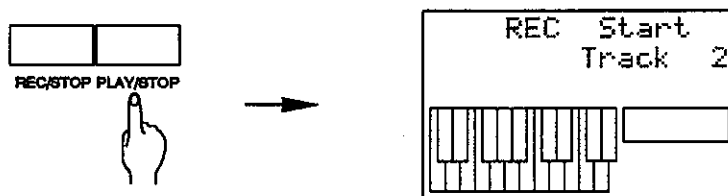
Now, assume that we are at the point where, following the instructions on the last page, we had just finished recording a Style.

Next, let's record a melody on Track 2.

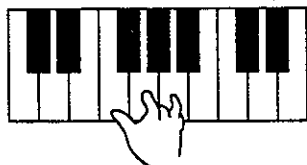
1. After pressing the SOUND 1 button and using either the INCREMENTAL DIAL or the SELECTOR buttons to select a sound you want to record, press the REC/STOP button. "REC Ready Track 2" will appear in the display window, and you will be able to hear the metronome clicking.



2. Press the PLAY/STOP button. "REC Start Track 2" will appear in the display window, and you will hear the Style previously recorded on Track 1 as you record the Track 2.

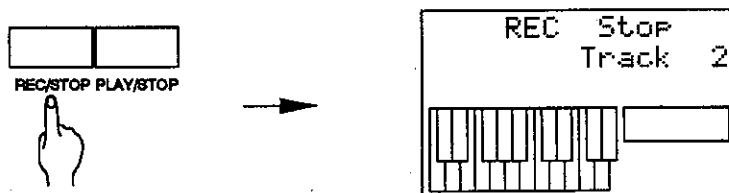


3. Play a melody that will compliment the Style being played back from track 1. (You can begin the recording without pressing the PLAY/STOP button, by simply playing the keyboard.)

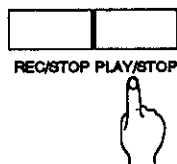


In instances where you will play the keyboard while simultaneously starting to record, omit Step 2 above.

4. When you are finished playing, press the REC/STOP button. "REC Stop Track 2" will appear in the display window, and recording will end.



5. Press the PLAY/STOP button, and the recorded song will be replayed.
The Style recorded before on Track 1 and the performance just recorded on Track 2 will be played back together.



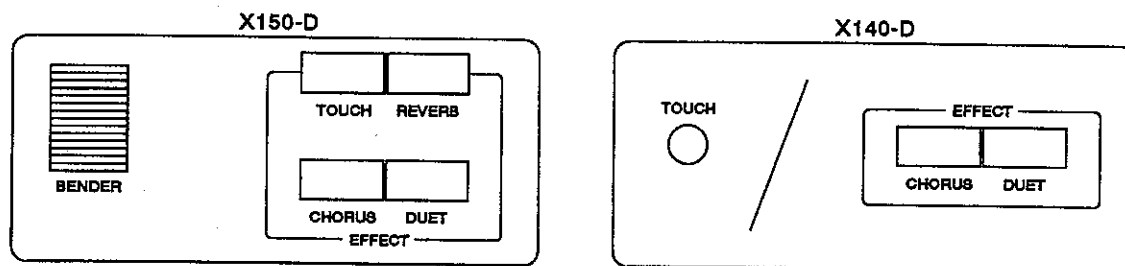
Repeating Step 1 through Step 4 above, record and layer Tracks 3-5.

POINT!

- * *If you want to erase only the last track recorded (but keep the previously recorded tracks), press the REC/STOP button and the PLAY/Stop button simultaneously.*
- * *To erase the entire song, press the REC/STOP button and the PLAY/Stop button two times simultaneously.*

6. Let's Add Effects

Your keyboard has a variety of effects to provide you with even more sound variations.



Pitch Bend Wheel (X150-D Only)

Pitch Bend is an effect which bends the pitch of a sound smoothly up or down.

Try rotating the Pitch Bend Wheel while holding down one of the keys on the keyboard. The pitch will bend smoothly up when you push the wheel away from you (up) or down when you pull the wheel toward you (down).

Touch Response

When you press the TOUCH button, "TOUCH OFF" will be displayed and the Touch Response feature will be deactivated. When the Touch Response is deactivated, each key will play at the same volume level no matter how hard you strike the key. Press the TOUCH button again and "TOUCH ON" will be displayed and the Touch Response feature will be restored. You'll notice that the harder you strike keys, the louder they will sound.

Stereo Chorus

Pressing the STEREO CHORUS button adds a broad richness to the selected sound.

Duet

When the DUET button is pressed, the keyboard will add a harmonizing note to each melody note that is played on the keyboard, so you can enjoy a duet performance while playing only one melody note at a time.

Reverb (X150-D Only)

Pressing the REVERB button adds a reverberation (echo) effect to the performance.

You can select between two types of reverb. Setting procedures are described later on.

When you choose HALL, you get a deep reverb effect. When you choose ROOM, you get a more intimate reverb effect.

Hold

Connect the optional foot pedal (Kawai F-1) to the Pedal Jack in the keyboard's rear panel.

When you step on the foot pedal, sounds you play on the keyboard sustain, just as with an actual piano's damper pedal.

7. Let's Try Concert Magic

With Concert Magic, anyone -even those who have never played a keyboard before - can enjoy making music.

You can play any of the internal Concert Magic songs yourself. You control the timing and expression. Experience the Magic!

POINT!

With Kawai's Concert Magic function, you can select between two modes of performance, "Auto" and "Legato". These modes are explained later in Ch. 10 under "System". At the factory the keyboard is preset to "Auto".

Auto: *With Auto, Concert Magic requires you to play smoothly when playing to blend each note into the next. Not doing this will provide a broken or "staccato" feel to the performance.*

Legato: *If you play with a sustain pedal (such as the F-1) pressed, each note will blend into the next one, providing a smooth "legato" feel. This can also be obtained by pressing and holding one key on the keyboard while you play on another. If you do not press the sustain pedal you will have a broken or "staccato" feel.*

1) Concert Magic Song List

X140-D (50 Songs)

1	BEAUTIFUL DREAMER
2	DANNY BOY
3	FLEDERMAUS
4	FOR HE'S A JOLLY GOOD FELLOW
5	HICKORY DICKORY DUCK
6	HOME SWEET HOME
7	I'VE BEEN WORKING ON THE RAILROAD
8	MAZEL TOV
9	MY WILD IRISH ROSE
10	O HOLY NIGHT
11	RED RIVER VALLEY
12	ROCK-A-BYE BABY
13	SHE WORE A YELLOW RIBBON
14	VOICES OF SPRING
15	WHEN IRISH EYES ARE SMILING
16	AN DIE FREUDE
17	AULD LANG SYNE
18	BATTLE HYMN OF THE REPUBLIC
19	BLUE BELLS OF SCOTLAND
20	BRIDAL CHORUS
21	DECK THE HALLS
22	FRERE JACQUES
23	GREENSLEEVES
24	JINGLE BELLS
25	LONDON BRIDGE

26	MARY HAD A LITTLE LAMB
27	MY COUNTRY 'TIS OF THEE
28	OLD MacDONALD HAD A FARM
29	SANTA LUCIA
30	TWELVE DAYS OF CHRISTMAS
31	TWINKLE, TWINKLE, LITTLE STAR
32	WHEN THE SAINTS GO MARCHING IN
33	AVE MARIA
34	BLUE DANUBE WALTZ
35	BRAHM'S LULLABY
36	CAN CAN
37	CHIAPENECAS
38	CLAIRE DE LUNE
39	FUNICULI FUNICULA
40	GRANDFATHER'S CLOCK
41	JOY TO THE WORLD
42	MY BONNIE LIES OVER THE OCEAN
43	OH SUSANNA
44	ROMEO AND JULIET
45	SKATER'S WALTZ
46	SLEEPING BEAUTY WALTZ
47	THE ENTERTAINER
48	WALTZ OF THE FLOWERS
49	WE WISH YOU A MERRY CHRISTMAS
50	WEDDING MARCH

X150-D (100 Songs)

1	BEAUTIFUL DREAMER
2	DANNY BOY
3	FLEDERMAUS
4	FOR HE'S A JOLLY GOOD FELLOW
5	HAVA NAGILAH
6	HICKORY DICKORY DUCK
7	HOME SWEET HOME
8	I'VE BEEN WORKING ON THE RAILROAD
9	MAZEL TOV
10	MY WILD IRISH ROSE
11	O HOLY NIGHT
12	RED RIVER VALLEY
13	ROCK-A-BYE BABY
14	SHE WORE A YELLOW RIBBON
15	VOICES OF SPRING
16	WHEN IRISH EYES ARE SMILING
17	AN DIE FREUDE
18	"SURPRISE" SYMPHONY No. 94
19	AULD LANG SYNE
20	BATTLE HYMN OF THE REPUBLIC
21	BLUE BELLS OF SCOTLAND
22	BRIDAL CHORUS
23	DECK THE HALLS
24	FIRST NOEL
25	FRERE JACQUES
26	GREENSLEEVES
27	HAIL TO THE CHIEF
28	HARK ! THE HERALD ANGELS SING
29	HOME OF THE RANGE
30	IT CAME UPON A MIDNIGHT CLEAR
31	JINGLE BELLS
32	LITTLE BROWN JUG
33	LONDON BRIDGE
34	MARY HAD A LITTLE LAMB
35	MICHAEL, ROW THE BOAT ASHORE
36	HERE WE GO ROUND THE MULBERRY BUSH
37	MY COUNTRY 'TIS OF THEE
38	O LITTLE TOWN OF BETHLEHEM
39	OLD MacDONALD HAD A FARM
40	PRELUDE IN A
41	ROCK OF AGES
42	ROW, ROW, ROW YOUR BOAT
43	SANTA LUCIA
44	SILENT NIGHT
45	TEN LITTLE INDIANS
46	TWELVE DAYS OF CHRISTMAS
47	TWINKLE, TWINKLE, LITTLE STAR
48	WE THREE KINGS OF ORIENT ARE
49	WHEN THE SAINTS GO MARCHING IN
50	"UNFINISHED" SYMPHONY No. 8
51	AMAZING GRACE
52	ANGELS WE HAVE HEARD ON HIGH

53	ANNIE LAURIE
54	AVE MARIA
55	BLUE DANUBE WALTZ
56	BRAHM'S LULLABY
57	CAMPTON RACES
58	CAN CAN
59	CHIAPENECAS
60	CLAIRE DE LUNE
61	CLEMENTINE
62	DIXIE
63	DOWN BY THE RIVERSIDE
64	EMPEROR WALTZ
65	FUNICULI FUNICULA
66	GRAND MARCH
67	GRAND FATHER'S CLOCK
68	GYPSI CHORUS
69	HABANERA
70	JOY TO THE WORLD
71	LA BAMBA
72	LA PALOMA
73	"NEW WORLD" SYMPHONY No. 9
74	MAPLE LEAF RAGHU
75	MARCH MILITAIRE
76	MY BONNIE LIES OVER THE OCEAN
77	NORWEGIAN DANCE
78	O COME ALL YE FAITHFUL
79	OH SUSANNA
80	OLD FOLKS AT HOME
81	OLD KENTUCKY HOME
82	PETER AND THE WOLF
83	PIZZICATO POLKA
84	ROMEO AND JULIET
85	RONDEAU
86	SKATER'S WALTZ
87	SLEEPING BEAUTY WALTZ
88	THE ENTERTAINER
89	THUNDER AND BLAZES
90	TOREADOR SONG
91	TROIS GYMNOPEDIE, No. 1
92	TURKEY IN THE STRAW
93	WABASH CANNONBALL
94	WALTZ OF THE FLOWERS
95	WE WISH YOU A MERRY CHRISTMAS
96	WEDDING MARCH
97	WHISTLER AND HIS DOG
98	WILLIAM TELL OVERTURE
99	YANKEE DOODLE
100	YELLOW ROSE OF TEXAS

2) About Concert Magic Mode

Concert Magic is divided into two main modes, "Performance Mode" and "Melody Mode".

- Performance Mode
 - 1) Automatically plays back songs
 - 2) You can have the song progress by playing the keyboard.
- Melody Mode
 - 1) While the song continues to play as you use the Lower Keyboard (the left-hand side), in the Upper Keyboard you can freely play melodies to match the song being played.

So, let's play around with Concert Magic.

POINT!

- * *You cannot use the Recorder while Concert Magic is in use.*
- * *When Accompaniment MIDI (described later) is on, the Concert Magic MIDI Transmit channel is arranged as follows:*

Melody played on the keyboard..... Channel 1

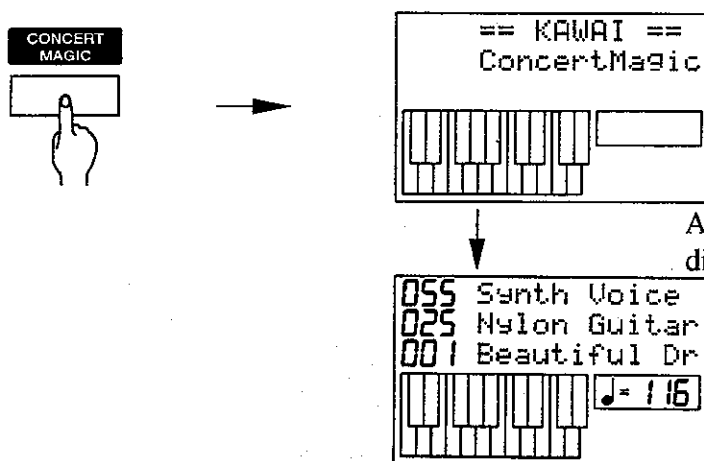
Dual Melody..... Channel 2

Accompaniment Channel 3

3) Performance Mode

1) Automatic Playback of Songs

1. Press the CONCERT MAGIC button on the front panel. This will put the keyboard in Concert Magic mode.

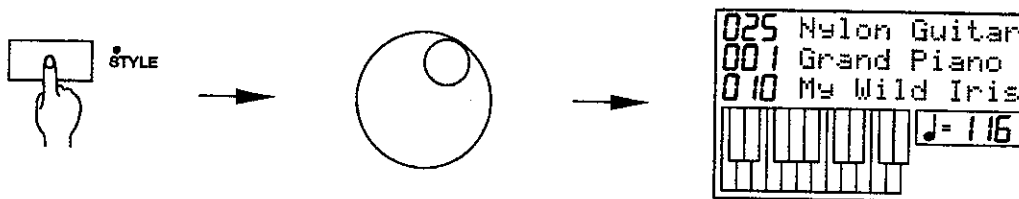


After approximately two seconds the display screen will appear as below:

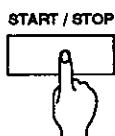
The sound selected for the melody part is shown on Line 1.
The sound selected for the accompaniment is shown on Line 2. The name of the Concert Magic song selected is shown on Line 3.

2. Choose a song from the songs listed on the pp. 28 - 29.

After confirming that the STYLE button is lit, use the INCREMENTAL DIAL or SELECTOR buttons to make your choice.



3. Press the START/STOP button, and the selected tune will begin to play.



4. Press the START/STOP button again to stop the music.

POINT!

* *You can listen to the other songs by using the same procedure.*

* *If a song is stopped during play, it will automatically return to the beginning of that song.*

Changing the Tempo

You can change the tempo of a song during playback. Try adjusting the tempo to your liking. Please see p.17 for instructions on how to change the tempo.

Changing the Tone of the Melody

You can change the tone of the melody during playback of a song. After confirming that the SOUND 1 button on the front panel is lit, use the INCREMENTAL DIAL or SELECTOR buttons to select the tone you like. (See p.12)

Changing the Tone of the Accompaniment

You can change the tone of the accompaniment during playback of a song. After confirming that the SOUND 2 button on the front panel is lit, use the INCREMENTAL DIAL or SELECTOR buttons to select the tone you like. (See p.13)

POINT!

If you press the START/STOP button to play back a song, Melody and Accompaniment will revert to their preset tones.

2) Performing Concert Magic Songs

After you have listened to the "Automatic Playback" of Concert Magic song, play the keyboard yourself and try to imitate what you just heard.

1. Pick up any key(s) and continually tap the key(s) in the same tempo you heard the song played in "Automatic Playback". You will notice that every time you play a note the next note(s) of the song is played.



This way you are performing a similar role Conductor in an orchestra. You are controlling the speed or tempo of the song and the expression or volume of the song. Try playing very slowly, or very fast. You can also try playing very quietly by lightly playing the keys, or very loud by hitting the keys very hard. You're in control!

POINT!

- * *You can play back other songs by using the same procedure.*
- * *If during a song you stop playing the keyboard for one minute, you will be returned to the beginning of that song.*
- * *If you want to return to the beginning of the song, press the SYNC./FILL IN button.*
- * *You can change the sound of the melody and accompaniment by using the same procedure outlined in "1) Automatic Playback of Songs".*

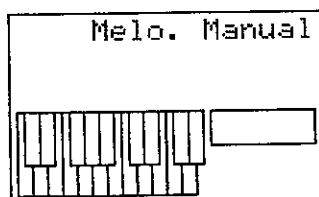
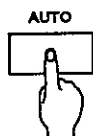
4) Melody Mode

In addition to what you can do in Performance Mode, in Melody Mode you can also play the melody on your own.

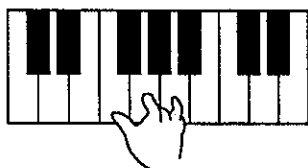
- 1) Playing the Melody with your Right Hand While Keeping the Accompaniment going with your Left Hand
1. Confirm that the CONCERT MAGIC button on the front panel is lit. (If it is not lit, press the CONCERT MAGIC button.)



2. Now, press the AUTO button. The display window will briefly read "Melo. Manual". This sets the "Melody Mode" function.



3. In the Lower Keyboard (left hand part), continue playing in the same manner as in Performance Mode.



You will notice that the melody has been muted and you can only hear the accompaniment being played. Now you can manually play the melody in the Upper Keyboard area.

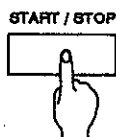
This makes for an excellent way to learn to play the left hand and right hand parts of a song separately, and then try to play them together. In Concert Magic Mode, the AUTO button acts as a switch to turn the Melody on and off.

POINT!

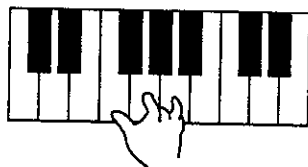
- * *You can play other songs by using the same procedure.*
- * *If you want to return to the beginning of the song, press the SYNC./FILL IN button.*
- * *If during a song you stop playing the keyboard for one minute, you will be returned to the beginning of that song.*
- * *You can change the sound of the melody and accompaniment in the same manner as in Performance Mode.*

2) Playing the Melody While Playing Back Prerecorded Accompaniment

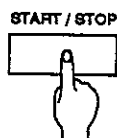
1. After confirming that the CONCERT MAGIC and AUTO buttons have been pressed, also press the START/STOP button. As before, the song will automatically begin playback, with the Melody muted.



2. Play the melody manually while the accompaniment is being played automatically.



3. Press the START/STOP button to stop the song.



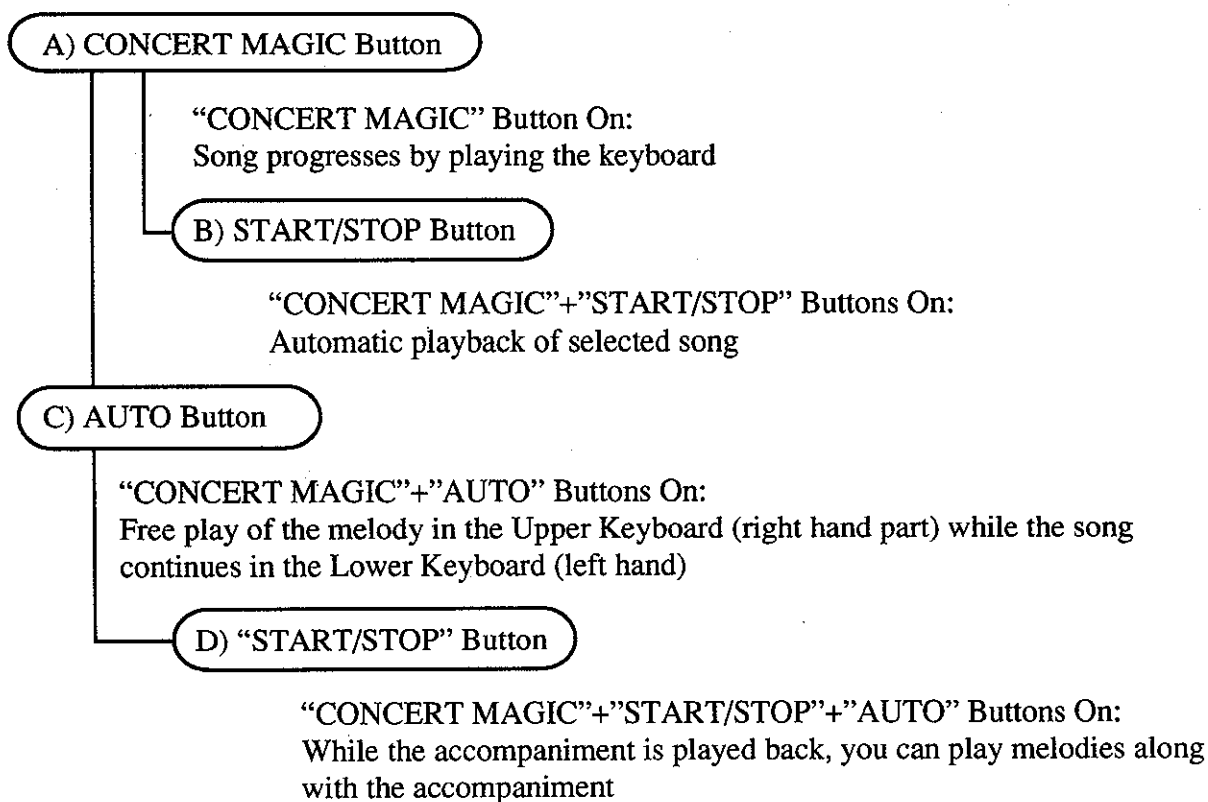
4. Press the CONCERT MAGIC button, and you will exit this mode.



POINT!

- * *You can play other songs by using the same procedure.*
- * *If you stop while a song is playing, you will be returned to the beginning of that song.*
- * *You can change the sound of the melody and accompaniment in the same manner as in Performance Mode.*

5) Summary of Concert Magic Operations



TEMPO Button	Tempo can be adjusted during automatic playback of a song <Used in cases B) and D) above>
SYNC./FILL IN Button	Returns to the beginning of the song <Used in cases A) and C) above>
SOUND 1 Button	Used when selecting Melody Sounds <Used in all cases>
SOUND 2 Button	Used when selecting Accompaniment Sounds <Used in all cases>
STYLE Button	Used when selecting internally stored songs <Used in all cases>
INCREMENTAL DIAL	Used when selecting Sounds and Songs <Used in all cases>
SELECTOR	Used when selecting Sounds and Songs <Used in all cases>

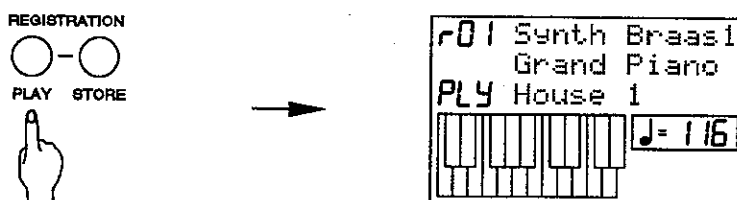
8. Let's Try the Registration Function

Suppose you are playing a song that requires the first 16 bars to be played softly and quietly, and then build to a climax that calls for an aggressive, rock'n'roll sound. There will also be instances where, you might want to change the instrument sounds during a song. A medley of a number of songs for example could require not only changes in the sound of the melody, but changes in tempo and rhythms too. The ability to make these changes quickly and easily during a performance is of course important and desirable. This is the purpose of the Registration function. You can program all of the changes you desire into a single button.

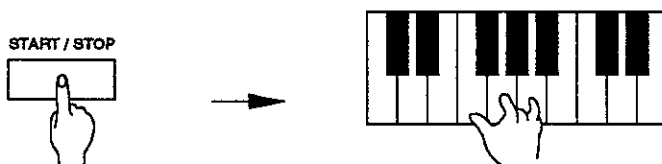
The X150-D contains twenty internal Registrations, with ten in the X140-D.

1) Listening to a Registration

1. Press the REGISTRATION PLAY button. The Registration screen will appear in the display window.

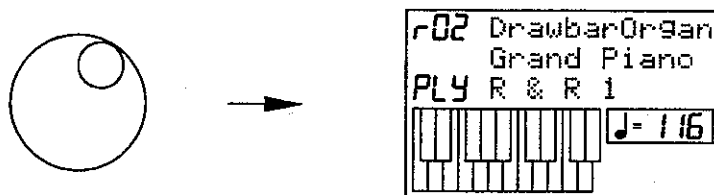


2. Press the START/STOP button, and then start playing.



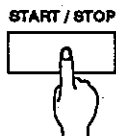
The Registration, with Style, tone, and panel settings preset, will start playing.

3. While this is playing, use the INCREMENTAL DIAL or the [+1] SELECTOR button to select Registration number 2.



The presets for Style, tone, and panel settings will instantly be switched to those for Registration number 2.

4. Stop the Registration pattern by pressing the START/STOP button.



The above shows you how to change settings on the keyboard instantly. Let's go ahead and actually make a Registration.

POINT!

- * If you want to exit the Registration mode, press the EXIT button.

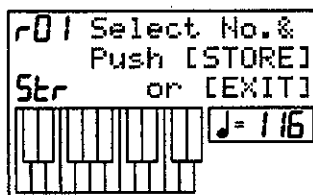
2) Creating and Saving a Registration

With the Registration function, you can record the following settings. (Even if power is cut or turned off, your Registration will not be erased.)

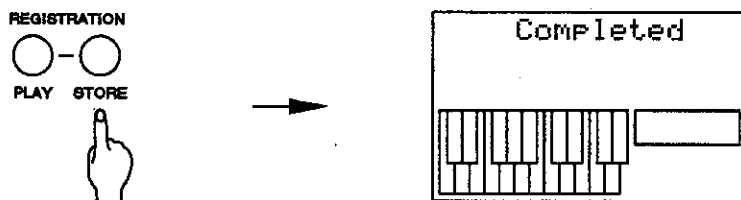
<p><Panel></p> <p>*Style Settings</p> <p>Style Number</p> <p>Tempo Setting</p> <p>Auto On/Off</p> <p>*Sound Settings</p> <p>Sound 1 Number</p> <p>Sound 2 Number</p> <p>*Volume Settings</p> <p>Individual Style Part Volume (X150-D Only)</p> <p>Sound 1 and Sound 2 Volume</p>	<p>*Effect Settings</p> <p>Dual Settings</p> <p>Split Settings</p> <p>Touch Response On/Off</p> <p>Super 3D On/Off</p> <p>Chord Book On/Off</p> <p>Chorus On/Off</p> <p>Duet On/Off</p> <p>Reverb On/Off (X150-D Only)</p> <p>Variation On/Off (X150-D Only)</p>
--	--

*System settings are explained later.

1. Using the methods you have thus far learned in this manual, make the settings you like for Style, sound (tone), and panel settings.
2. Let's save the settings you have made. You can save twenty Registrations in the X150-D, and ten in the X140-D.
Press the REGISTRATION STORE button.
The screen in the display window will ask for the number of the Registration you wish to save.



3. Now, "r 01" is shown in the display. This means that Registration number 1 is to be saved. (For example, if instead you want to save Registration number 2, rotate the INCREMENTAL DIAL clockwise or press the [+1] SELECTOR button. The display will then show "r 0 2".) At this point, press the STORE button one more time. All the settings you have made of sounds, styles, tempo, effects and so on, have now been saved as Registration 1.



Newly saved Registrations are called up in the same manner as described in "Listening to a Registration".

POINT!

- * *If you press the EXIT button at Step 3, you will exit Registration without having saved any settings.*
- * *When saving newly-created Registrations in the keyboard itself, factory preset Registrations are erased. However, by following the procedure described in "Returning the Keyboard to Factory Settings" in the Table of Contents, you can recover those presets anytime, so go ahead and try making a lot of new Registrations.*

9. Let's Try the Conductor Function

This keyboard features a function that allows you to create your own auto-accompaniment Styles, by combining elements of rhythm, bass, and chords of specified types of music. After creating and saving the Styles you like, you can then recall these Styles from memory in the same way you do with the internal factory Styles. You can save up to twenty Styles on the X150-D, and ten on the X140-D.

With the "Conductor" function, you can select from the ten types of music listed below:

*16 Beat Normal
*16 Beat Swing
*8 Beat Normal
*8 Beat Shuffle

*4 Beat Jazz
*Latin 8 Beat
*Latin 16 Beat
*Trad. (Waltz)

*Trad. (2/4)
*Trad. (Swing)

This process follows three stages:

[Select the type of music] → [Select the Parts] → [Save]

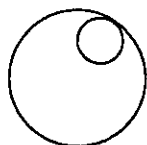
Let's create a Style.

1) Selecting the Type of Music and Rhythm

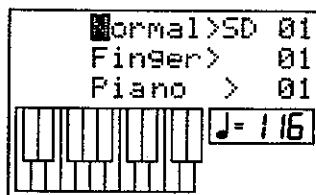
1. Press the CONDUCTOR button. The display will ask you which Type of Music you wish to select.



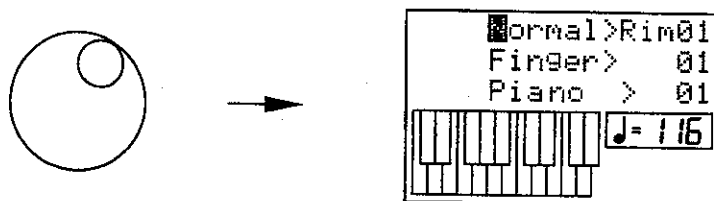
2. Using the INCREMENTAL DIAL or the SELECTOR [+1] and [-1] buttons, choose the Type of Music you want. For example, let's select "8 Beat Normal".



3. When you have finished selecting the Type of Music, press the START/STOP button. The preset Style will begin to play, and the display window will change to the selection of the drums, bass, and chord parts. The first line indicates the drum part, presently set at "Normal SD 01". On the second line the bass part is set to "Fingered Bass 01". The chord part appears on line 3 and shows "Piano 01".



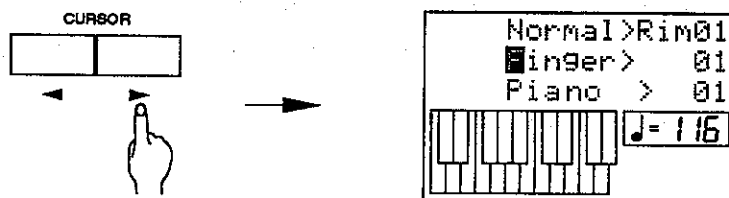
- At the moment, the cursor is on the drum part (on the first line).
Using the INCREMENTAL DIAL or SELECTOR [+1] and [-1] buttons, choose the rhythm you want.
Here, let's select "Rim 01".



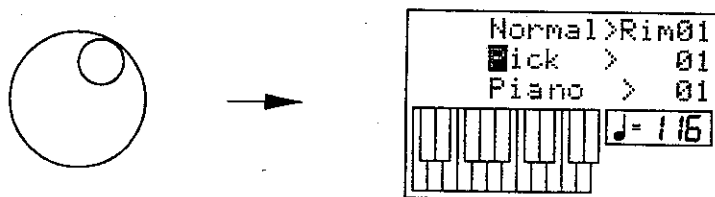
2) Selecting the Bass Part

Next, let's choose the bass part.

- After you have finished selecting the rhythm, the cursor automatically moves to the bass part on the second line.



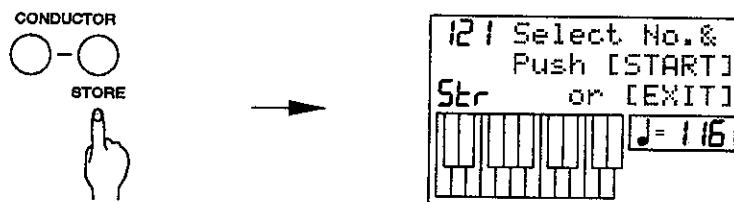
- Just as we did when selecting the rhythm, use the INCREMENTAL DIAL or SELECTOR [+1] and [-1] buttons to choose the bass part you want. Here, let's select "Pick 01".



- * Use the same procedure to select the chord part.*
- * After you are done remember to SAVE YOUR SETTINGS!*

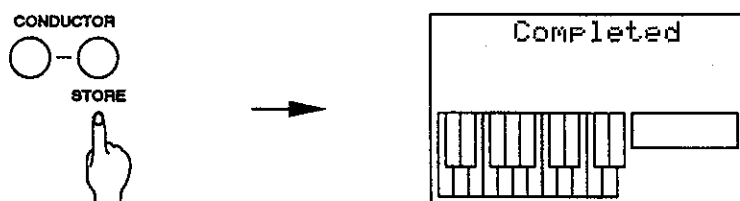
3) Saving Styles

- We have just finished selecting the rhythm, bass, and chord parts. At this point, press the STORE button. The display will ask you what number you would like to save your Style as.



The "121" displayed in the upper left portion of the screen is the Conductor save number. The "Str" shown in the lower left stands for "STORE" (Save). On the X150-D you can save twenty Styles to numbers 121-140, and on the X140-D you can save ten Styles to numbers 121-130.

- Here, let's save number 121. (You can save to any of the numbers 122 or above, by using the INCREMENTAL DIAL or SELECTOR [+1] and [-1] buttons to choose the number to which you want the Style saved.) Once again, press the STORE button.



POINT!

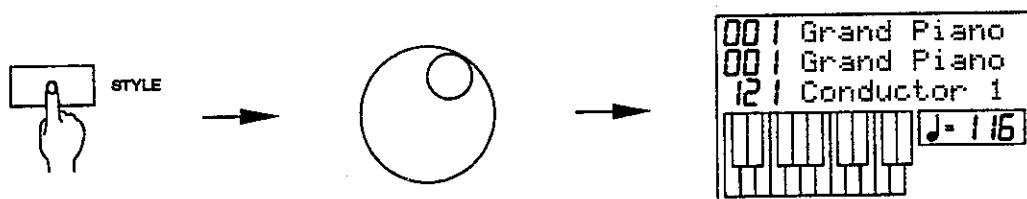
- * You can save tempo settings with Conductor, so be sure to adjust the tempo to your liking before the saving operation.
- * If you press the EXIT button at Step 2, you will exit the Conductor function without any of the settings being saved.
- * When saving a newly-created Style internally, the factory preset Styles already located in that number will be erased. However, by following the procedure described in "Returning the Keyboard to Factory Settings" in the Table of Contents, you can recall the factory presets anytime.

So go ahead and try your hand at making a lot of new Styles.

4) Listening to a Saved Style

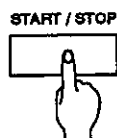
After pressing the STYLE button, just as you did in "3. Let's Select a Style", rotate the INCREMENTAL DIAL or press the SELECTOR [+1] and [-1] buttons to call up the Style you want to work on using the Conductor function. Let's call up the Style you saved to number 121.

- After pressing the STYLE button, rotate the INCREMENTAL DIAL or SELECTOR [+1] and [-1] buttons to call up the Style.



The number 121 should appear on the screen.

- Press the START/STOP button, and listen to the Style.



POINT!

When playing back Styles created with the Conductor function, the VARIATION button is disabled.

Using the procedures you have learned up to now, try experimenting. The Conductor Function can be a lot of fun!

10. About the System

This section explains the System settings for this keyboard. System contains the following modes:

Page 1) GM Reset
Page 2) Tuning (Pitch Adjustment)
Page 3) Transposing
Page 4) Setting Autotype*
Page 5) Setting Touch Response*

Page 6) Pedal Function Settings*
Page 7) Setting the Split Point*
Page 8) Setting the Reverb (X150-D only)*
Page 9) Concert Magic Settings*

POINT!

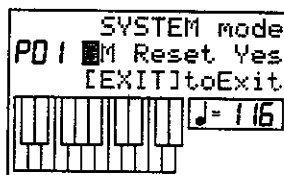
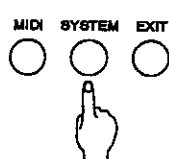
In the list of pages above, the settings contained on those pages marked with an asterisk () are saved, even when the power is turned off or lost.*

1) How to Make Settings

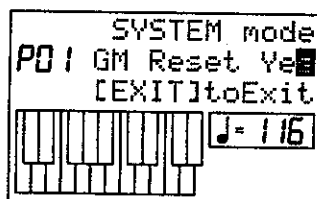
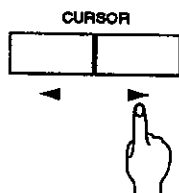
1. With the Style stopped (not playing), press the SYSTEM button. Page 1, GM Reset, will appear in the display window. The "PO1" in the left of the screen indicates that Page 1 has been selected. To change to other pages move the cursor to the GM Reset and use the INCREMENTAL DIAL or the SELECTOR buttons.

POINT!

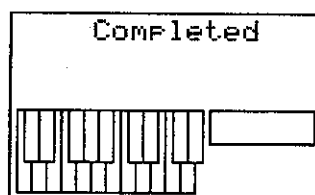
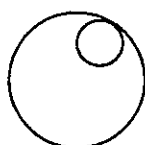
When you are changing parameters, be sure that the cursor is on the parameter you wish to adjust.



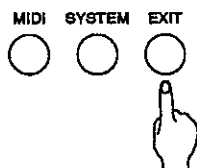
2. In order to set the values for each page, using the CURSOR button, move the cursor all the way to the right of line 2. In the case of Page 1, GM Reset, move the cursor from the "G" to the "Yes" on the extreme right.



3. Rotating the INCREMENTAL DIAL or pressing the SELECTOR [+1] and [-1] buttons, set the values. (This is explained later on in the manual, but for this page, by rotating the INCREMENTAL DIAL all the way to the right (clockwise) or continuing to press the SELECTOR [+1] button "Completed" appears in the display window, whereas conversely, rotating the INCREMENTAL DIAL all the way to the left (counterclockwise) or continuing to press the SELECTOR [-1] button causes "Canceled" to appear in the screen.



4. By pressing the EXIT button, you will exit System Mode.



2) Explanations of Each Page

Page 1) GM Reset

GM Reset initializes the keyboard's GM function.

If, as described in Step 3 of "How to Make Settings" above, you rotate the INCREMENTAL DIAL all the way to the right (clockwise) or continue to press the SELECTOR [+1] button, and "Completed" appears in the display window, this initializes the keyboard.

Conversely, if you rotate the INCREMENTAL DIAL all the way to the left (counterclockwise) or continue to press the SELECTOR [-1] button, and "Canceled" appears in the screen, then the process is cancelled.

Page 2) Tuning (Pitch Adjustment)

By using the Tuning function, you can make subtle adjustments to the keyboard's pitch (from -8 to +7).

As described in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button, and when "+1" shows on the screen, the keyboard's pitch will rise slightly.

Conversely, if you rotate the INCREMENTAL DIAL to the left or press the SELECTOR [-1] button until "-1" shows on the screen, the keyboard's pitch will be lowered slightly.

POINT!

Even if you change the settings while the keyboard is being played, the pitch of the sound being played at the moment will not change. If you press the key again, the keyboard will shift to the new pitch.

Page 3) Transposing

With the Transposing function, you can raise or lower the key by half-steps, up or down a maximum of one octave (from -12 to +12).

As described in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button, and when "+1" shows on the screen, the key will be raised a half-step.

Conversely, if you rotate the INCREMENTAL DIAL to the left or press the SELECTOR [-1] button until "-1" shows on the screen, the key will be lowered a half-step.

POINT!

You cannot change settings while the keyboard is being played.

Page 4) Setting Autotype

From the two kinds of Autotype, "Auto" and "Whole Keyboard", choose the Autotype you like. (For more detailed explanations of each Autotype, please see p.20)

This keyboard is set to "Auto" at the factory.

As described in Step 3 of "How to Make Settings", rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button. The keyboard will go into "Whole Keyboard" mode.

Page 5) Setting Touch Response

When it left the factory, this keyboard's Touch Response function was preset to Narrow Dynamic Range.

<Types of Touch Response>

*Narrow Dynamic Range (little difference - range - between the highest and lowest volume levels)

*Wide Dynamic Range (great difference - range - between the highest and lowest volume levels)

As described in Step 3 of "How to Make Settings" above, when you rotate the INCREMENTAL DIAL or press the SELECTOR [+1] button to change to "Wide", Wide Dynamic Range, with the bigger difference between the highest and lowest volume levels, will be selected.

Page 6) Pedal Function Settings

The Pedal function was preset at the factory to "Hold".

Under this condition, if you connect the optional foot pedal (such as the model F-1) to the Pedal Jack in the keyboard's rear panel, the pedal will act as a hold pedal.

<Pedal Functions>

*Hold—gives the same kind of feeling as with stepping on a piano damper pedal.

*Fill—functions as the SYNC./FILL IN button on the front panel.

*Vari (X150-D only)—functions as the VARIATION button on the front panel.

As described in Step 3 of "How to Make Settings" above, when you rotate the INCREMENTAL DIAL or press the SELECTOR [+1] button to change to "Fill", the Fill In function will be assigned to the pedal. With the X150-D, by rotating the INCREMENTAL DIAL once more, the Variation function will be assigned to the pedal.

Page 7) Setting the Split Point

With this Page, you can change the placement of the Split Point (the border between the Upper Keyboard and Lower Keyboard), when you are using the Split function.

The factory preset Split Point is between G#2 and A2. This means the Lower Keyboard goes up to G#2, and the Upper Keyboard extends upward from A2.

As described in Step 3 of "How to Make Settings" above, when you rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button, setting the Split Point to the point between the B2 and the C3 keys, the border which up to now had been between G#2 and A2 will change to B2/C3. Again, by rotating the INCREMENTAL DIAL or pressing the SELECTOR [+1] button once more, the Split Point will be set at G#3/A3. (You can select one of three different Split Points.)

Page 8) Setting the Reverb (X150-D only)

With this keyboard you can make settings on two kinds of Reverb. The Reverb function was preset to "HALL" at the factory.

As described in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button to select the "ROOM" setting.

Page 9) Concert Magic Settings

With this Page you can set the method of play in Concert Magic.

The factory preset for this function is "Auto".

As described in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button, and set the keyboard to "Legato". Using Legato, if you step on the pedal while playing a song, notes are played smoothly, flowing from one to the next. Conversely, when you play without stepping on the pedal, the song is played staccato.

11. About MIDI

MIDI is an acronym for Musical Instrument Digital Interface. Think of MIDI as a language that most electronic musical instruments and a lot of computers understand. It allows one instrument to "talk" to another through the MIDI cables that connect them.

1) What Kind of Things Can One Do Using MIDI?

For example, with two keyboards connected by means of a MIDI cable, playing one of the keyboards - producing music, changing sounds, or whatever - causes the other keyboard to play the same music and make the same sound changes. In other words, you can use one keyboard to control other instruments that are connected to it with MIDI cables.

2) How Do the MIDI Terminals Work?

MIDI IN — receives MIDI signals (such as performance data) from external equipment.

MIDI OUT — sends MIDI signals (such as performance data) from your keyboard.

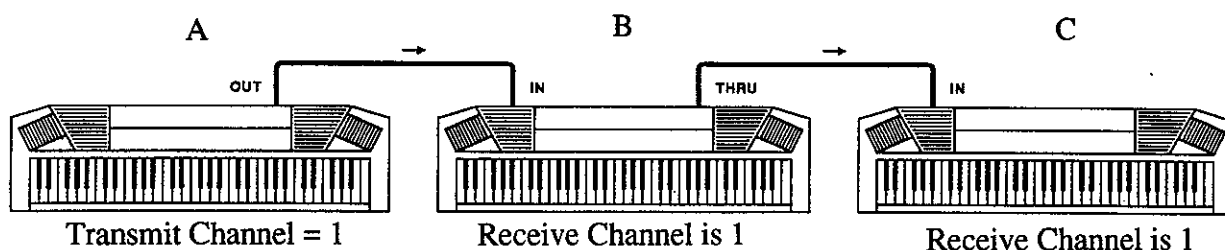
MIDI THRU (the THRU function is not featured with this keyboard) — used when data received from external equipment is to be sent to other instruments unchanged.

Connecting and Distinguishing Multiple Connected Instruments

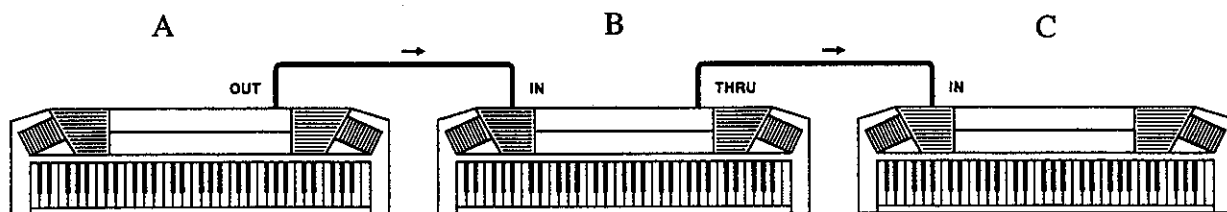
MIDI operates over multiple channels, each one capable of carrying information about a musical performance.

Just as with a television, when the transmission channel number matches that of the receiving channel, the exchange of information can be carried out. These channels are numbered from 1 to 16, and by assigning a separate channel to each of a number of different instruments or devices, you can designate the particular instruments you want to have exchange data.

For example, if three instruments are connected as shown in the figure below, you can control Instruments B and C with Instrument A.



Next, in the arrangement shown below, if the receive channel for Instrument C only is changed to [2], with Instruments A and B on the same channel, you will then be able to control B with A, but because Instruments A and C are now on different channels, control is not possible. With channels in such an arrangement, it becomes necessary to set things up in order to control a designated instrument. With this keyboard, all channels can be used to receive signals.



Connecting the Keyboard to Another MIDI Instrument

To send MIDI data from your keyboard to another MIDI device, first attach the MIDI cable to the MIDI OUT jack on your keyboard. Next connect the other end of the MIDI cable to the MIDI IN jack of the other device. Take care to ensure that the cable is inserted properly. At this time make sure that the keyboard's MIDI Transmit channel matches the other device's receive channel. (The procedure for setting the MIDI Transmit channel is explained later.)

Conversely, when having the keyboard receive MIDI data from another device, connect the other device's MIDI OUT terminal with the keyboard's MIDI IN terminal. At this time, make sure that the other device's MIDI Transmit channel matches the keyboard's MIDI receive channel.

The following chart shows the settings for the keyboard's MIDI functions.

Page 1) MIDI Transmit Channel Setting*	Page 5) Registration Data Send
Page 2) Local Control On/Off	Page 6) Conductor Data Send
Page 3) Accompaniment MIDI OUT Setting*	Page 7) Recorder Data Send
Page 4) Wheel Assign Setting (X150-D only)	

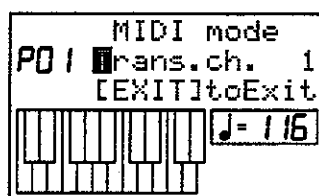
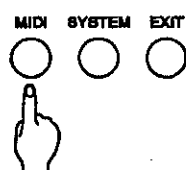
POINT!

In the list of pages above, contents of the settings for those pages marked with an asterisk () are saved, even if the power is cut or turned off.*

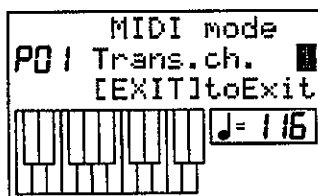
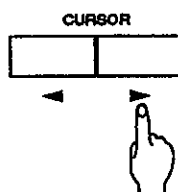
3) How to Make Settings

1. With the Style stopped, press the MIDI button. The MIDI Transmit Channel Setting screen from Page 1 will appear in the display window. The "P01" appearing in the left of the screen stands for Page 1.

Here, after confirming that the cursor is at the "T" of "Trans. Ch. 1", rotate the INCREMENT DIAL or press the SELECTOR [+1] or [-1] buttons to select the MIDI Page you want.

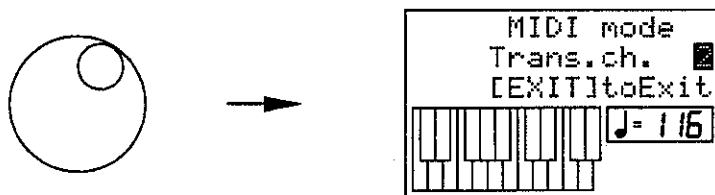


2. In order to make settings for values on each Page, move the cursor to the extreme right of line 2 of the display. In this case, on Page 1, move the cursor from the "T" in "Trans. Ch. 1" to the "1" at the very right of the same line.

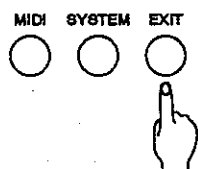


3. Rotate the INCREMENTAL DIAL or press the SELECTOR [+1] and [-1] buttons to select the values.

Here, select 2 for MIDI Transmit Channel 2.



4. Press the EXIT button to exit MIDI mode.



Changing the settings to the other Pages are made in the same manner.

4) Explanations of Each Page

Page 1) MIDI Transmit Channel Setting

With this keyboard, you can select channels 1-16 through which to Transmit keyboard performance data. The MIDI Transmit channel preset at the factory is Channel 1.

As mentioned in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button and select the MIDI Transmit Channel you want.

POINT!

When "All" or "Note" appear in the Accompaniment MIDI OUT (explained later) settings screen, it is possible to designate multiple channels through which to Transmit data.

Page 2) Local Control On/Off

Using Local Control, you can determine whether or not the keyboard produces sound when the keys are played.

With Local Control on, you can hear the sounds from the keyboard during performance. With Local Control off, the data from the performance being played is still sent via MIDI, but no sound will be heard from the speakers.

The factory preset for Local Control is "On".

As mentioned in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button, and try changing the setting to "Off".

POINT!

When Local Control is off, Accompaniment MIDI OUT "Note" and "All" cannot be set.

Page 3) Accompaniment MIDI OUT Setting

With Accompaniment MIDI OUT the keyboard can transmit the Auto-Accompaniment Style patterns via MIDI.

The factory preset for Accompaniment MIDI OUT is "Off".

As mentioned in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button and change the setting to "All". With the keyboard set to "All", all of the keyboard's Style data will be transmitted.

Once more, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button and change the setting to "Note". With the keyboard set to "Note", only note data and Pitch Bend data will be sent.

When used for receiving MIDI data, this keyboard functions as the sound source for 16 Parts (where different instruments or devices are each played through one of sixteen separate channels). The Transmit channels for each Part are shown below. (With the Style set to "All" or "Note", the Page 1) MIDI Transmit Channel is disabled.)

Sound 1——Channel 1	Bass——Channel 3	Rhythm (Drums)——Channel 10
Sound 2——Channel 2	Chord——Channel 4-6	

POINT!

- * *When sending Style data containing large amounts of data and depending on the type of sequencer, the sequencer or keyboard may not be able to process this data adequately, sometimes resulting in delayed timing during recording of the data. In such cases, after setting the above-mentioned System to "Note", transmit the Style data via MIDI.*
- * *If the data is still delayed, even after setting the Accompaniment MIDI OUT to "Note", slow the tempo on the keyboard, synchronize the sequencer with the keyboard, and then transmit the data via MIDI.*
- * *When Local Control is off, you cannot set Accompaniment MIDI OUT to "Note" or "All".*

Page 4) Wheel Assign Setting (X150-D only)

The keyboard's Control Wheel can be assigned to control any one of nine MIDI messages. Note that these messages (except for Pitch Bend) are transmitted as MIDI control change data only when the Local Control of the keyboard is set to "Off". The following is a summary of the MIDI control messages which can be sent.

Pitch Bend	Expression	Data Entry
Aftertouch	Pan Pot	Effect Depth
Volume	Modulation	Chorus Depth

POINT!

Before selecting the Page for Wheel Assign, please confirm that the Local Control is set to "Off". The Wheel Assign function has been preset to "Pitch Bend".

As mentioned in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button to assign other functions you may wish to use.

Page 5) Registration Data Send (Page 4 for the X140-D)

You can use this function to Transmit data from Registrations you have made on your own to external devices.

As mentioned in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button. Your Registration data will be transmitted and "Completed" appears in the display window.

Conversely, if you rotate the INCREMENTAL DIAL to the left or press the SELECTOR [-1] button until "Cancelled" appears in the display, then the operation will be cancelled.

Page 6) Conductor Data Send (Page 5 for the X140-D)

You can use this function to Transmit your own Conductor data out to external devices.

As mentioned in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button. Your Conductor data will be transmitted and "Completed" appears in the display window.

Conversely, if you rotate the INCREMENTAL DIAL to the left or press the SELECTOR [-1] button until "Cancelled" appears in the display, then the operation will be cancelled.

Page 7) Recorder Data Send (Page 6 for the X140-D)

You can use this function to send your own Recorder data out to external devices.

As mentioned in Step 3 of "How to Make Settings" above, rotate the INCREMENTAL DIAL to the right or press the SELECTOR [+1] button. Your Recorder data will be transmitted and "Completed" appears in the display window.

Conversely, if you rotate the INCREMENTAL DIAL to the left or press the SELECTOR [-1] button until "Cancelled" appears in the display, then the operation will be cancelled.

Selecting the Drum Kit

When receiving data via MIDI in "Program Change", the tenth channel assigned to the rhythm ("Drum Kit"), is set according to the chart below.

Kit	DR 1	DR 1	DR 1	DR 2	DR 3	DR 4	DR 5
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	--	28
	--	--	--	--	27	--	--
	29	30	31	32	--	34	35
	--	--	33	--	--	--	--
	36	37	38	39	40	41	42
	43	44	45	46	47	48	49
	⋮	⋮	⋮	⋮	⋮	⋮	⋮

*DR1—STANDARD SET
*DR2—ELECTRIC SET
*DR3—BOB SET (TECHNO)
*DR4—BRUSH SET (JAZZ)
*DR5—ORCHESTRA

POINT!

Beyond number 50, the series of numbers 43-49 is repeated all the way up to 128.

12. Drum Assignments

KEY NO.	#129 Drum Set / STANDARD SET	ELECTRIC SET	BOB SET	BRUSH SET	ORCHESTRA SET
27 (D#)					Orch. Closed Hi-Hat
28 (E)					Orch. Pedal Hi-Hat
29 (F)					Orch. Open Hi-Hat
30 (F#)					Orch. Ride Cymbal
31 (G)					
32 (G#)					
33 (A)					
34 (A#)					
35 (B)	Bass Drum 1	E. Bass Drum 1	BOB Bass Drum 1	Brush Bass Drum 1	Orch. Bass Drum 1
36 C	Bass Drum 2	E. Bass Drum 2	BOB Bass Drum 2	Brush Bass Drum 2	Orch. Bass Drum 2
37 C#	Rim	Rim	BOB Rim	Jazz Rim	Rim
38 D	Snare Drum 1	E. Snare Drum 1	BOB Snare Drum 1	Brush Tap	Orch. Snare Drum 1
39 D#	Hand Clap	Hand Clap	Hand Clap	Brush Slap	Castanets
40 E	Snare Drum 2	E. Snare Drum 2	BOB Snare Drum 2	Brush Swirl	Orch. Snare Drum 2
41 F	Low Tom 2	E. Low Tom 2	BOB Low Tom 2	Brush Low Tom 2	Timpani F
42 F#	Closed Hi-Hat	E. Closed Hi-Hat	BOB Closed Hi-Hat	Brush Closed Hi-Hat	Timpani F#
43 G	Low Tom 1	E. Low Tom 1	BOB Low Tom 1	Brush Low Tom 1	Timpani G
44 G#	Pedal Hi-Hat	E. Pedal Hi-Hat	BOB Pedal Hi-Hat	Brush Pedal Hi-Hat	Timpani G#
45 A	Mid Tom 2	E. Mid Tom 2	BOB Mid Tom 2	Brush Mid Tom 2	Timpani A
46 A#	Open Hi-Hat	E. Open Hi-Hat	BOB Open Hi-Hat	Brush Open Hi-Hat	Timpani A#
47 B	Mid Tom 1	E. Mid Tom 1	BOB Mid Tom 1	Brush Mid Tom 1	Timpani B
48 C	High Tom 2	E. High Tom 2	BOB High Tom 2	Brush High Tom 2	Timpani C
49 C#	Crash Cymbal 1	E. Crash Cymbal 1	BOB Crash Cymbal 1	Brush Crash Cymbal 1	Timpani C#
50 D	High Tom 1	E. High Tom 1	BOB High Tom 1	Brush High Tom 1	Timpani D
51 D#	Ride Cymbal 1	E. Ride Cymbal 1	BOB Ride Cymbal 1	Brush Ride Cymbal 1	Timpani D#
52 E	Chinese Cymbal	Reverse Cymbal	Chinese Cymbal	Chinese Cymbal	Timpani E
53 F	Cup Cymbal	Cup Cymbal	Cup Cymbal	Jazz Cup Cymbal 1	Timpani F
54 F#	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine
55 G	Splash Cymbal	Splash Cymbal	Splash Cymbal	Jazz Splash Cymbal	Splash Cymbal
56 G#	Cowbell	Cowbell	BOB Cowbell	Cowbell	Cowbell
57 A	Crash Cymbal 2	Crash Cymbal 2	Crash Cymbal 2	Jazz Crash Cymbal 2	Orch. Cymbal 2
58 A#	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
59 B	Ride Cymbal 2	Ride Cymbal 2	Ride Cymbal 2	Jazz Ride Cymbal 2	Orch. Cymbal 1
60 C	High Bongo	High Bongo	High Bongo	High Bongo	High Bongo
61 C#	Low Bongo	Low Bongo	Low Bongo	Low Bongo	Low Bongo
62 D	Mute High Conga	Mute High Conga	BOB High Conga	Mute High Conga	Mute High Conga
63 D#	Open High Conga	Open High Conga	BOB Mid Conga	Open High Conga	Open High Conga
64 E	Low Conga	Low Conga	BOB Low Conga	Low Conga	Low Conga
65 F	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale
66 F#	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale
67 G	High Agogo	High Agogo	High Agogo	High Agogo	High Agogo
68 G#	Low Agogo	Low Agogo	Low Agogo	Low Agogo	Low Agogo
69 A	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
70 A#	Maracas	Maracas	BOB Maracas	Maracas	Maracas
71 B	Short Whistle	Short Whistle	Short Whistle	Short Whistle	Short Whistle
72 C	Long Whistle	Long Whistle	Long Whistle	Long Whistle	Long Whistle
73 C#	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro
74 D	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro
75 D#	Claves	Claves	BOB Claves	Claves	Claves
76 E	High Wood Block	High Wood Block	High Wood Block	High Wood Block	High Wood Block
77 F	Low Wood Block	Low Wood Block	Low Wood Block	Low Wood Block	Low Wood Block
78 F#	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica
79 G	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica
80 G#	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle
81 A	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Open Triangle
82 A#	BOB Bass Drum 2				
83 B	BOB Snare Drum 1				
84 C	Electric Bass Drum 2				
85 C#	BOB Rim				
86 D	Electric Snare Drum 1				
87 D#	BOB Cowbell				
88 E	Electric Snare Drum 2				
89 F	Electric Low Tom 2				
90 F#	BOB Closed Hi-Hat				
91 G	Electric Low Tom 1				
92 G#	BOB Pedal Hi-Hat				
93 A	Electric Mid Tom 2				
94 A#	BOB Open Hi-Hat				
95 B	Electric Mid Tom 1				
96 C	Electric High Tom 2				

13. Sound List

PIANO

001	GRAND PIANO
002	BRIGHT PIANO
003	E. GRAND PIANO
004	HONKY - TONK
005	E. PIANO 1
006	E. PIANO 2
007	HARPSICHORD
008	CLAVI

CHROMATIC PERCUS

009	CELESTA
010	GLOCKENSPIEL
011	MUSIC BOX
012	VIBRAPHONE
013	MARIMBA
014	XYLOPHONE
015	TUBULAR BELLS
016	DULCIMER

ORGAN

017	DRAWBAR ORGAN
018	PERCUS ORGAN
019	ROCK ORGAN
020	CHURCH ORGAN
021	REED ORGAN
022	ACCORDION
023	HARMONICA
024	TANGO ACCORDION

GUITAR

025	NYLON GUITAR
026	STEEL GUITAR
027	JAZZ GUITAR
028	CLEAN GUITAR
029	MUTED GUITAR
030	OVERDRIVEN
031	DISTORTION
032	HARMONICS

BASS

033	ACOUSTIC
034	FINGER BASS
035	PICK BASS
036	FRETLESS
037	SLAP BASS 1
038	SLAP BASS 2
039	SYNTH BASS 1
040	SYNTH BASS 2

STRINGS

041	VIOLIN
042	VIOLA
043	CELLO
044	CONTRABASS
045	TREMOLO
046	PIZZICATO
047	ORCH. HARP
048	TIMPANI

ENSEMBLE

049	ENSEMBLE 1
050	ENSEMBLE 2
051	SYNTH STRINGS 1
052	SYNTH STRINGS 2
053	CHOIR AAHS
054	VOICE OOHS
055	SYNTH VOICE
056	ORCH. HIT

BRASS

057	TRUMPET
058	TROMBONE
059	TUBA
060	MUTED TRUMPET
061	FRENCH HORN
062	BRASS SECTION
063	SYNTH BRASS 1
064	SYNTH BRASS 2

REED

065	SOPRANO SAX
066	ALTO SAX
067	TENOR SAX
068	BARITONE SAX
069	OBOE
070	ENGLISH HORN
071	BASSOON
072	CLARINET

PIPE

073	PICCOLO
074	FLUTE
075	RECORDER
076	PAN FLUTE
077	BLOWN BOTTLE
078	SHAKUHACHI
079	WHISTLE
080	OCARINA

SYNTH LEAD

081	SQUARE
082	SAWTOOTH
083	CALLIOPE
084	CHIFF
085	CHARANG
086	VOICE
087	FIFTHS
088	BASS + LEAD

SYNTH PAD

089	NEW AGE
090	WARM
091	POLYSYNTH
092	CHOIR
093	BOWED
094	METALLIC
095	HALO
096	SWEEP

SYNTH EFFECTS

097	RAIN
098	SOUNDTRACK
099	CRYSTAL
100	ATMOSPHERE
101	BRIGHTNESS
102	GOBLINS
103	ECHOES
104	SCI - FI

ETHNIC

105	SITAR
106	BANJO
107	SHAMISEN
108	KOTO
109	KALIMBA
110	BAG PIPE
111	FIDDLE
112	SHANAI

PERCUSSIVE

113	TINKLE BELL
114	AGOGO
115	STEEL DRUMS
116	WOODBLOCK
117	TAIKO DRUM
118	MELODIC TOM
119	SYNTH DRUM
120	REVERSE CYM.

SOUND EFFECTS

121	FRET NOISE
122	BREATH
123	SEASHORE
124	BIRD TWEET
125	TELEPHONE
126	HELICOPTER
127	APPLAUSE
128	GUNSHOT
129	DRUM SET

14. Style List

SOUL

001	JAZZ SOUL 1
002	JAZZ SOUL 2
003	SOUL 1
004	SOUL 2
005	FUNKY SOUL 1
006	FUNKY SOUL 2
007	DANCE 1
008	DANCE 2
009	EURO SOUL

DANCE

010	HOUSE 1
011	HOUSE 2
012	EURO BEAT 1
013	EURO BEAT 2
014	SWING BEAT 1
015	SWING BEAT 2
016	SOUL DANCE
017	LOVE BALLAD 1
018	LOVE BALLAD 2

POPS / ROCK 1

019	16 AOR 1
020	16 AOR 2
021	16 SHUFFLE 1
022	16 SHUFFLE 2
023	FUSION
024	EURO POP
025	POP DANCE 1
026	POP DANCE 2
027	16 BALLAD

POPS / ROCK 2

028	POP ROCK 1
029	POP ROCK 2
030	LIGHT ROCK
031	MID ROCK
032	8 SHUFFLE 1
033	8 SHUFFLE 2
034	POP CLASSIC 1
035	POP CLASSIC 2
036	BALLAD 1
037	BALLAD 2

R&B

038	R&R 1
039	R&R 2
040	SHUFFLE 1
041	SHUFFLE 2
042	SLOW ROCK 1
043	SLOW ROCK 2
044	BLUES 1
045	BLUES 2

JAZZ

046	STANDARD 1
047	STANDARD 2
048	COMBO 1

049	COMBO 2
050	BIG BAND 1
051	BIG BAND 2
052	DIXIELAND 1
053	DIXIELAND 2
054	JAZZ WALTZ 1
055	JAZZ WALTZ 2
056	LATIN JAZZ 1
057	LATIN JAZZ 2

LATIN 1

058	LATIN BOLERO
059	MAMBO
060	BOLERO MAMBO
061	CHA CHA
062	PUNTA
063	CUMBIA
064	VALLENATO
065	JOROPO
066	SAMBA 1
067	SAMBA 2
068	POP SAMBA
069	BOSSANOVA 1
070	BOSSANOVA 2
071	JAZZ BOSSANOVA

LATIN 2

072	RHUMBA 1
073	RHUMBA 2
074	LAMBADA
075	TANGO 1
076	TANGO 2
077	MERENGUE 1
078	MERENGUE 2
079	SALSA
080	BACHATA
081	SOCCA
082	REGGAE 1
083	REGGAE 2
084	SWING REGGAE

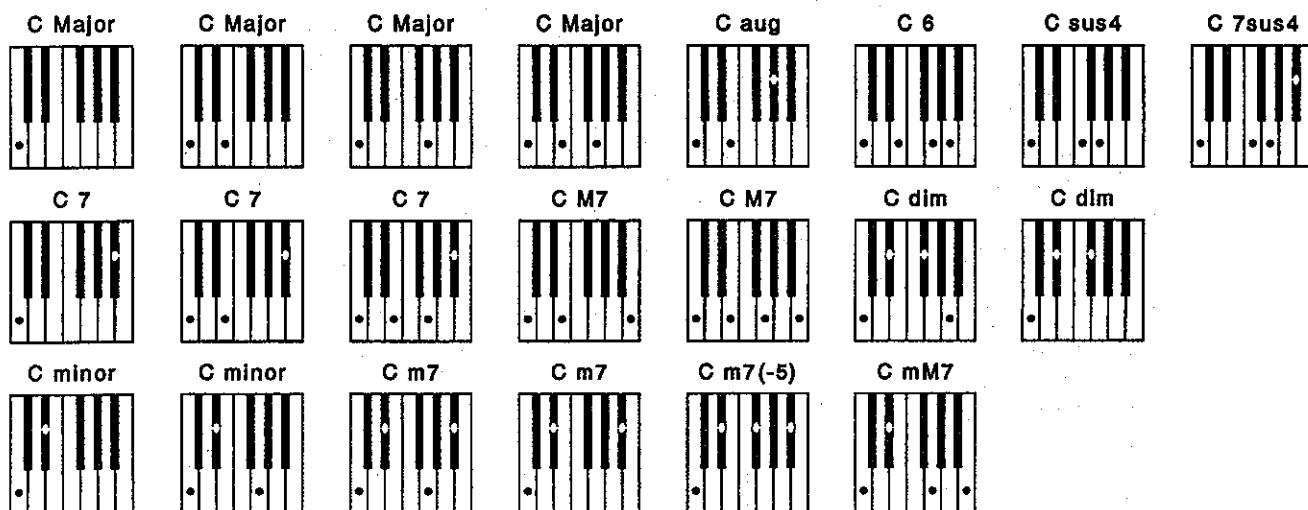
AMERICAN TRADITIONAL

085	GOSPEL 1
086	GOSPEL 2
087	R&B GOSPEL
088	NEW ORLEANS
089	COUNTRY POP 1
090	COUNTRY POP 2
091	C&W 1
092	C&W 2
093	BLUEGRASS 1
094	BLUEGRASS 2
095	HAWAIIAN 1
096	HAWAIIAN 2
097	4/4 MARCH 1
098	4/4 MARCH 2
099	12/8 MARCH 1

100	12/8 MARCH 2
EUROPEAN TRADITIONAL	
101	POLONESE
102	BAVARIAN
103	KRAINER POLKA
104	TRADITIONAL POLKA
105	SCHLAGER 1
106	SCHLAGER 2
107	SCHLAGER 3
108	SCHLAGER 4
109	SCHLAGER 5
110	ENGLISH WALTZ
111	VIENNA WALTZ
112	FRENCH WALTZ
113	FLAMENCO
114	GYPSI
115	ORIENTAL
116	SIRTAKI
117	ITALO 1
118	ITALO 2
119	ITALO 3
120	ITALO 4

15. Appendix

Below is a chart that displays how to play various chord forms using the single fingered chord feature. They are shown in "C". They are called "forms" because they can easily be transposed into any key by following the same basic pattern as shown below, just keep the root note on the bottom.



16. Specifications

X140-D/X150-D

KEYBOARD:	61 Keys, Velocity Sensitive
SOUNDS:	128 + 5 Drum Sets
STYLES:	120
POLYPHONY:	Maximum 28 Notes
EFFECTS:	Pitch Bend Wheel (X150-D only), Touch Response, Stereo Chorus, Duet, Reverb (X150-D only)
STYLE CONTROLS:	Tempo, Intro/Ending, Start/Stop, Synchro/Fill-In, Variation (X150-D only)
RECORDER:	Record/Playback (Overdub function on the X150-D only)
VOLUME CONTROLS:	Master Volume, Style Volume, Part Volume/Mute (X150-D only), Sound 1 and 2 Volume
OTHER CONTROLS:	Concert Magic Function, Conductor Function, Registration Function, Auto On/Off, Demo Mode, Dual Mode, Split Mode
SPEAKERS:	12 cm X 2, 8 cm X 2
POWER SOURCE:	Works with six size C dry cell batteries, or AC power adapter (12V, 2A)
JACKS:	Power Cord Jack, Headphone Jack, Line Out Jacks, Pedal Jack, MIDI In/Out Jacks
ACCESSORIES:	Music Stand, Manual

17. X140-D/X150-D MIDI IMPLEMENTATION CHART

Date : June 1995
Version : 1.0

Function...		TRANSMITTED	RECOGNIZED	REMARKS
Basic Channel	Default	1	1-16	
	Changed	1-16		
Mode	Default	x	Mode 3	
	Message	x	x	
	Altered	*****		
Note Number	True Voice	○ 24-108	0-127 0-127	
Velocity	Note On	○ 1-127	○	
	Note Off	x 9n V=00	x	
After Touch	Key's Ch's	x x	x ○	
Pitch Bend		x	○	Except Drum channel
Control Change	1	○	○	Modulation *1)
	6	○	○	Data entry
	7	○	○	Volume
	10	○	○	Panpot *1)
	11	○	○	Expression
	64	○	○	Hold *1)
	91	○	○	Effect depth
	93	○	x	Stereo Chorus
	98, 99	x	○	NRPN LSB, MSB *2)
	100, 101	x	○	RPN LSB, MSB *1), *3)
	120	x	○	All sounds off
	121	x	○	Reset all controllers
Prog Change	True #	○ 0-127	○ 0-127	Except Drum channel
System Exclusive		○	○	
Common	: Song Pos	x	x	
	: Song Sel	x	x	
	: Tune	x	x	
System Realtime	: Clock : Command	○ *4) Start, Stop	○ *5) Start, Stop *6)	
Aux Messages	: Local	○	○	
	: All note off	x	○	
	: Active sense	○	○	
	: Reset	x	x	
Notes	Notes: 1) Does not apply to drum channels 2) NRPN #1 = Drum Pan Pot Select 3) RPN #0 = Pitch Bend Sensitivity RPN #1 = Master Fine Tuning RPN #2 = Master Coarse Tuning 4) When you start Rhythm Style 5) When you set tempo to "SYC" (Sync) 6) When you set tempo to "SYC" and press the START/STOP Button			

Mode 1 : OMNI ON, POLY
Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO
Mode 4 : OMNI OFF, MONO

○ : YES
x : NO

