

IMPORTANT SAFETY INSTRUCTIONS

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with dry cloth.

Do not block any ventilation openings.
Install in accordance with the
manufacturer's instructions.

Do not install near any heat sources such as
radiators, heat registers, stoves or other
apparatus (including amplifiers) that
produce heat.

Do not defeat the safety purpose of the
polarized or grounding-type plug. A
polarized plug has two blades with one
wider than the other. A grounding type plug
has two blades and a third grounding
prong. The wider blade or third prong is
provided for your safety. If the provided
plug does not fit into your outlet, consult an
electrician for replacement of the obsolete
outlet.

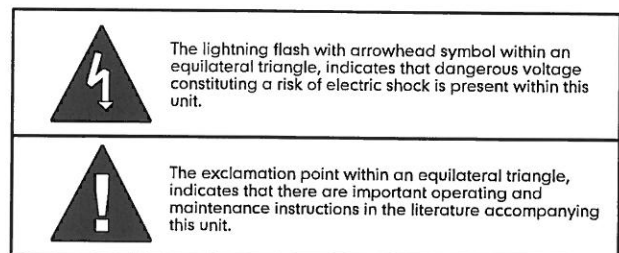
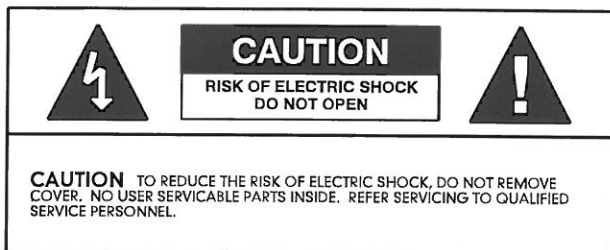
Protect the power cord from being walked
on or pinched, particularly at plugs,
convenience receptacles, and the point
where they exit from the apparatus.

Only use attachments/accessories specified
by the manufacturer.

Use only with the cart, stand, tripod,
bracket, or table specified by the
manufacturer, or sold with the apparatus.
When a cart is used, use caution when
moving the cart/apparatus combination to
avoid injury from tip-over.

Unplug this apparatus during lightning
storms, or when unused for long periods of
time.

Refer all servicing to qualified service
personnel. Servicing is required when the
apparatus has been damaged in any way,
such as power-supply cord or plug is
damaged, liquid has been spilled or objects
have fallen into the apparatus, the
apparatus has been exposed to rain or
moisture, does not operate normally, or has
been dropped.



IMPORTANT - BEFORE YOU BEGIN

Your Hammond XE-1 is designed to give you the true and authentic sound of Hammond Harmonic Drawbars, as well as provide you a large variety of other sounds and features to allow great flexibility in how you want to play. This Guide is designed to explain the operating features of your Hammond XE-1 as simply and graphically as possible.

Because we want to make this keyboard, as well as the keyboard itself, as easy to understand as possible, the explanations in this keyboard are grouped by subject matter, and not in the order in which they necessarily appear in the Information Center Display (the screen in the center of the front panel). For example, all functions pertaining to Drawbars are grouped together, all Percussion features are treated as a group, and so on.

Also, each feature is treated as an explanation unto itself, and does not require you to already have prior working knowledge of some other feature. The explanations are presented such that, if you follow the steps outlined, the message you see in the Information Center Display screen will be identical to that shown in the keyboard at that stage of the explanation.

Do not be daunted by the number of steps required to perform each operation. Each step is simple. Simply bear these things in mind:

1. Read each step carefully.
2. Don't skip any of the steps.
3. Don't perform the steps out of sequence.

With these guidelines, you are well on your way to mastering all of the many sounds and features of your Hammond XE-1.

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INTRODUCTION

♦ Basic Hook-Up

All connections except the Headphone Jack are found on the Accessory Panel on the back of the XE-1. The Headphone Jack is located on the front of the instrument just below the Disk Drive Slot.

A.C. Power

Your Hammond XE-1 is shipped from the factory set for 120 V.A.C. power. To connect the XE-1 to A.C. power:

1. Locate the A.C. Power Cord that came with your XE-1.
2. Plug the female end of the Power Cord into the receptacle on the XE-1 marked, "AC IN."
3. Plug the other end of the Power Cord into an A.C. power outlet.

Audio Connections

Your XE-1 is equipped with a high-quality built-in sound system. However, it may be desired to hear the sounds produced by the XE-1 through external sound sources. You can either:

1. Connect the XE-1 to an amplifier, or;
2. Connect the XE-1 to a Leslie Speaker cabinet.

Connecting to an Amplifier

1. Use two audio cables with $\frac{1}{4}$ " plugs on both ends of each cable.
2. Connect one end of each of the audio cables to the audio output connectors on the back of the XE-1.

NOTE: At this point it is assumed that you are using a keyboard or guitar amplifier that has $\frac{1}{4}$ " phono plug inputs. We assume this since this is the most common type of connector used on these types of amplifiers.

3. Connect the other ends of each cable to the female $\frac{1}{4}$ " audio input connectors of your amplifier.

If your amplifier has only a single (1) female $\frac{1}{4}$ " phono plug audio input, you can connect one end of one cable to the L/MONO audio output connector on the XE-1, and the other end to the female $\frac{1}{4}$ " audio input connector of your amplifier.

Connecting a Leslie Speaker (11-pin)

If you wish to use a Leslie Speaker with your XE-1, the Leslie Speaker should be connected before turning the power "ON". To do this:

1. Locate the Leslie Connector Cable.

2. Plug the female end of the Connector Cable into the receptacle on the back lower left corner of the Leslie Speaker.
3. Plug the male end of the Connector Cable into the 11-pin Leslie socket found on the Accessory Panel of the XE-1.

Both the Leslie connections are "keyed," that is, each connection contains a notch which insures that the pins properly match up.

IMPORTANT NOTE: The 11-pin Leslie socket on your XE-1 allows you to plug directly into many standard 1-, 2- and 3-channel Leslie Speaker cabinets. Some current models: 303, 723, 914. However, it should be noted that when plugging the XE-1 into a single-channel Leslie cabinet such as a 122XB, only the Drawbars will sound through the Leslie. For this reason, we recommend that the XE-1 normally be used with a multi-channel Leslie Speaker.

IMPORTANT NOTE: To connect the XE-1 to a Leslie Speaker having a different pin configuration such as an older 6-pin 122 or 147, or a 9-pin cabinet such as the 900 series, 760 or 770 cabinets, you will require an adapter kit and/or Connector Cable. Contact your Hammond Dealer for more information regarding which adapter kit and/or cable you may need.

Connecting a Foot Switch

You can connect an optional foot switch such as the Hammond model FS-9H foot switch to your XE-1. Simply plug the foot switch plug into the jack marked "FOOT SW" on the back of the XE-1.

NOTE: In order to insure proper operation of the Foot Switch, be sure to connect it when the XE-1 "OFF."

Connecting an EXP-100 Series Expression Pedal

If you wish to use a Hammond EXP-100 Series Expression Pedal, a special DIN-type jack is provided on the Accessory Panel on the back of the XE-1. Simply insert the plug from the EXP-100 into this jack as shown below.

NOTE: ONLY the EXP-100 plug should be inserted into this jack.

Connecting an XPK-100 MIDI Pedalboard

If you wish to use a Hammond XPK-100 MIDI Pedalboard, use a MIDI cable to connect the MIDI OUT port from the XPK-100 to the MIDI IN 1 port of the XE-1.

NOTE: For best results, the XPK-100 Control Channel should be set to "16." Please consult your XPK-100 Quick Features Guide for instructions on how to do this.

Connecting a Power Supply for the XPK-100

Since the XPK-100 requires AC power but has no AC Power Switch, using the DC power receptacle located on the back of the XE-1 allows you to turn it "ON" or "OFF" from the AC Power Switch of the XE-1.

NOTE: Use ONLY the power supply provided with the XPK-100 to plug into the receptacle on the XE-1. If other power supplies with different specifications are used, damage to the unit could result.

Other MIDI Connections

Your XE-1 can interface with a great number of MIDI-compatible devices. See the MIDI section starting on page 54 for more information about MIDI connections and your Hammond XE-1.

Connecting an External Sound Source

You may connect an external sound source such as a Sound Module to the XE-1. In this way, both the XE-1 and the external sound source can be heard through the same speaker system. If you wish to do this:

1. Locate two audio cables with $\frac{1}{4}$ " plugs on both ends of each cable.
2. Connect one end of each of the audio cables to the audio output connectors on the external sound source.
3. Connect the other ends of the same audio cables to the jacks marked "LINE IN" on the back of the XE-1.

Connecting a Microphone to the XE-1

If you plug a microphone into the MICROPHONE IN jack, you can use the XE-1 speakers and amplifiers as a public-address system. You can control the Microphone Volume and add Echo effects by means of the two rotary controls located next to the MICROPHONE jacks. An additional jack marked OUT allows the Microphone signal to be heard through whatever additional amplification you may be using with your XE-1.

Connecting a Computer to the XE-1

You may use a serial cable to connect a computer to your XE-1. Complete instructions on how to do this are found starting on page 116 of this Guide.

⑭ Connecting a Set of Headphones

A stereo headphone jack is provided on the left cheekblock so that you may play or practice in privacy.

♦ Basic Controls

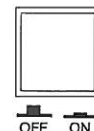
The panel controls on the XE-1 include Drawbars, Touch Tabs, Touch Buttons, Tempo Wheel Control, Master Volume Slider Control and Disk Drive. These controls allow you to make adjustments and changes on the instrument.

ON / OFF Power Switch

The ON / OFF Power Switch is located to the left of the Keyboard.

When this switch is in the "ON" (pushed in) position, the Information Center Display as well as some LED's (Light Emitting Diodes) will light up showing that the instrument is "ON".

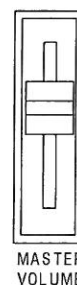
POWER



MASTER VOLUME Slider Control

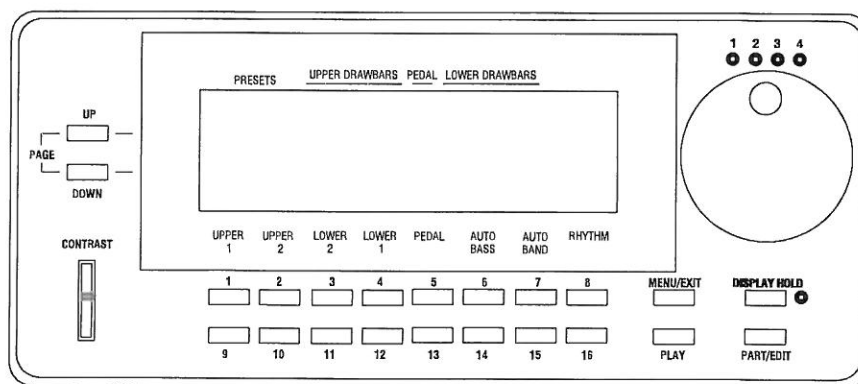
The MASTER VOLUME Slider Control is located on the Control Panel to the right of the PRESET Touch Tab group. With this Slider Control, you can control the total or maximum volume of the entire XE-1. Slide this control up to increase the total volume, and down to decrease the total volume.

NOTE: If you have an Expression Pedal connected to the XE-1, it will express up to the amount determined by the setting of the MASTER VOLUME Slider Control.



Information Center Display

The Information Center Display is located in the upper center of the XE-1.



The Information Center Display has three modes: (1) the PLAY mode, (2) the MIXER Mode, and (3) the MENU MODE. The PLAY Mode allows you to graphically see the Drawbar settings, the Voice settings for the other parts, and the Tempo and Transpose settings. The MIXER Mode allows you to see the Drawbar settings numerically and to set the Volume levels for each of the different sound-producing divisions or Parts. The MENU Mode allows you to change and edit the XE-1's software parameters such as Sustain Length, Drawbar Voicing, MIDI parameters and other advanced functions.

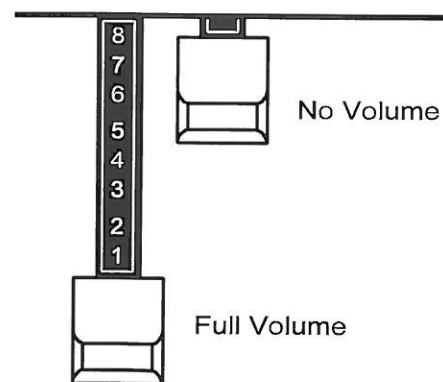
NOTE: The PLAY and MENU Modes are covered in the Information Center Display section of this Owner's Guide starting on page 21.

Drawbars

The Drawbars are the heart and soul of the Hammond Sound. There are two sets of nine Drawbars, sometimes referred to as Tonebars, for Upper and Lower Keyboard functions, and two Drawbars for Pedal tones, located between the Upper and Lower Keyboard Drawbar sets.

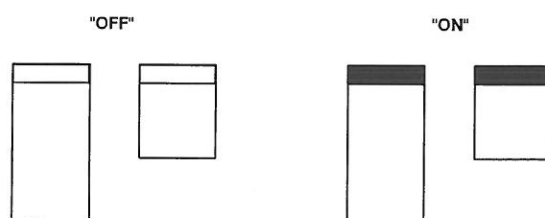
Pulling a Drawbar out (towards you) will increase the volume from 0 (no sound) to 8 (maximum volume). Pushing the Drawbar in (away from you) decreases the volume of that Drawbar.

Please refer to the DRAWBARS & PERCUSSION section of this Owner's Playing Guide for a complete explanation of Hammond Drawbars.



Touch Tabs

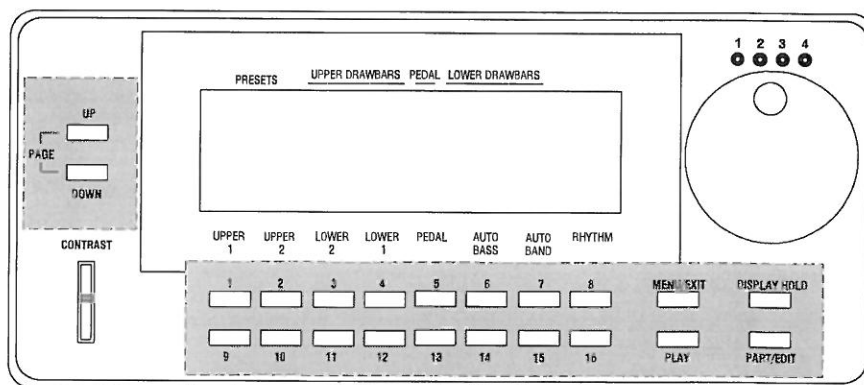
Touch Tabs have red LED's or lights in them that will light up indicating "ON".



NOTE: The Touch Tabs in the RHYTHMS & STYLES, RHYTHM VARIATIONS, VOICE, VOICE SETUP and PRESETS Sections do not all turn off, at least one LED in each of these five Sections will always remain lighted.

Touch Buttons

Touch Buttons are the buttons found in the Information Center Display.



Touch Buttons have three different functions.

1. Select Touch Buttons will allow you to select among multiple functions such as selecting a Menu Page.
2. Touch ON / Touch OFF Touch Buttons turn "ON" or "OFF" specific functions such as SUSTAIN.

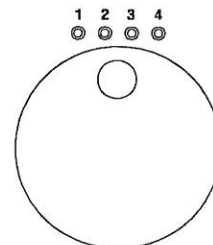
3. Touch and Hold Touch Buttons will increase or decrease their function in incremental steps when they are touched once, or "scroll" through the steps if touched and held. The new value will be shown in the Information Center Display.

NOTE: More detail about each of these sections is covered later in this Owner's Playing Guide. Refer to the Table of Contents for the page numbers.

TEMPO WHEEL CONTROL

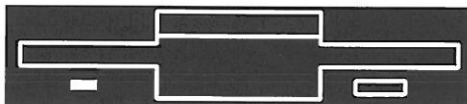
To the right of the LCD screen is the TEMPO WHEEL CONTROL. This large rotary control allows you to control the tempo of the Rhythm.

NOTE: You will also find information about the Tempo Wheel Control in the RHYTHM & EASY PLAY section of this Guide.



◆ Additional Controls

Disk Drive

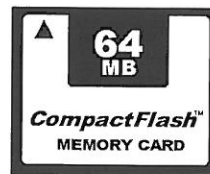
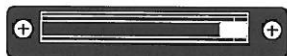


The Disk Drive is located on the extreme left of the keyboard. It allows you to:

1. Record and store Sequences or Songs to Floppy Disks.
2. Play pre-recorded Sequences or Songs on the XE-1.
3. Store banks of Presets to Floppy Disks.
4. Load previously stored Preset Banks into the XE-1.
5. Load additional Styles and Rhythms into the XE-1.

For more information about the Disk Drive, see USING THE DISK DRIVE, SEQUENCER AND CompactFlash starting on page 128.

CompactFlash™ Card Slot



The CompactFlash Card Slot is located on the back of the XE-1 on the right side facing the keyboard. It allows you to:

1. Record and store Sequences or Songs to CompactFlash Cards.
2. Store banks of Presets to CompactFlash Cards.
3. Load previously stored Preset Banks into the XE-1.
4. Store groups of Styles and Rhythms to CompactFlash Cards.
5. Load additional Styles and Rhythms into the XE-1.

For more information about the CompactFlash Card Slot, see USING THE SEQUENCER, DISK DRIVE & CompactFlash starting on page 128.

"CompactFlash" and the CompactFlash symbol are registered trademarks of the CompactFlash Association.

Pitch Bend & Modulation Wheels

These two controls are located on the left end of the keyboard just above the Disk Drive slot.

Pitch Bend

You can adjust the pitch range, plus or minus, up to 12 half steps.

NOTE: Normally, the Pitch Bend Wheel will raise or lower the pitch one whole-step. How to change the Pitch Bend Range is explained on page 108 of this Guide.



Modulation Wheel

The Modulation Wheel is used to control Vibrato or Tremolo effects for the Voices, or to send MIDI Controller data to a connected MIDI device.

Moving either control to the front will increase the intensity of the effect. Moving either control to the rear will decrease the level.

NOTE: You can select whether the Modulation Wheel will modulate the internal voices of the XE-1. How to do this is explained on page 108 of this Guide.



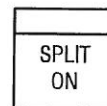
♦ Important - Read This

Although the XE-1 is a single-keyboard instrument, it can be made to function in a manner similar to an instrument with two keyboards and a pedal keyboard, such as an organ. This is the reason for the references to UPPER, LOWER and PEDAL on the instrument.

On an organ, the UPPER Keyboard is usually used for the melody, and is played with the right hand. The LOWER Keyboard is usually used to provide accompaniment, or harmonic support for the melody and is played by the left hand. The PEDAL Keyboard, or clavier, is used to play the bass notes and is most commonly played by the left foot.

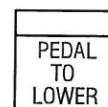
On the XE-1, this playing style is replicated by partitioning or "splitting" the single 61-note keyboard into two parts. The part played by the right hand is referred to as the UPPER Keyboard, while the part played by the left hand is referred to as the LOWER Keyboard.

The SPLIT ON Touch Tab, located on the right of the control panel, is used to divide the keyboard into Upper and Lower Keyboards. When the SPLIT ON Touch Tab is "ON," (LED lit), and you are in the PLAY Mode of the Information Center Display, you will see a portion of the keyboard "highlighted," or displayed in reverse-video and a designation such as "C3." This indicates that the keyboard is split, and that the third "C" key on the keyboard marks the dividing point between the Upper and Lower Keyboard.



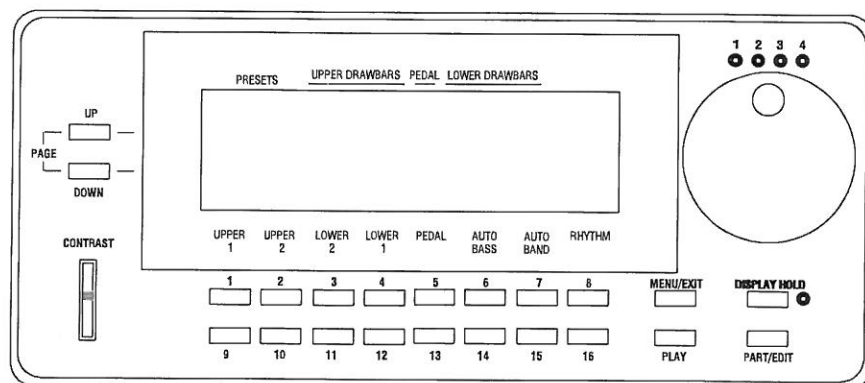
NOTE: "C3" is the default Split point; however, you can relocate the Split point elsewhere on the keyboard. This is explained in the KEYBOARD SPLIT section of this Guide.

In addition, if you connect a set of MIDI bass pedals, such as the Hammond XPK-100, you can then make use of the PEDAL division of the XE-1. However, the PEDAL TO LOWER Touch Tab allows you to play the Pedal Drawbars and Voices from the Lower Keyboard.



INFORMATION CENTER DISPLAY

The Touch Tabs, Touch Buttons, Drawbars, etc., used to control the operations necessary for Registration set-ups, settings for each voice, rhythm tempo, as well as MIDI information. The Information Center Display allows you to see and regulate these changes.



◆ Touch Buttons

Numbered Touch Buttons

Below the display window itself are 16 gray Touch Buttons marked from 1 through 16. These buttons have functions that change automatically as different modes and menus are used. These basic functions are:

1. Voice and Editing features selection.
2. Turning something ON or OFF.
3. Confirmation - Yes, No or OK.
4. Modification of parameters - increase or decrease.

There are also the PAGE UP and PAGE DOWN Touch Buttons to the left, and the MENU/EXIT, PLAY, DISPLAY HOLD and PART/EDIT Touch Buttons to the right.

PAGE UP and PAGE DOWN Touch Buttons

These two Touch Buttons allow you to display successive screens for Advanced Features which have multiple screens, such as Animation, Voice Edit, etc. Touch the PAGE UP Touch Button to scroll forward and the PAGE DOWN Touch Button to scroll backward through the screens.

MENU/EXIT, PLAY, DISPLAY HOLD and PART/EDIT Touch Buttons

These 4 Touch Buttons allow you to choose from among the various options for using the Information Center Display. The following is a very brief explanation of each of these Touch Buttons.

MENU/EXIT - This Touch Button allows you to access the Advanced Feature Menu pages.

PLAY - This Touch Button allows you to place the Information Center Display into the PLAY display mode.

DISPLAY HOLD - Normally, the Information Center Display will display one of the PLAY Mode screens. If you touch the MENU/EXIT Touch Button, this Touch Button allows you to "freeze" the screen while you are editing Advanced Features. An LED just underneath this Touch Button will turn "ON" to let you know when DISPLAY HOLD is active.

PART/EDIT - Using this Touch Button will allow you to access certain special features of the instrument. The use of the PART/EDIT Select Touch Button will be explained in greater detail as it pertains to the different Menus.

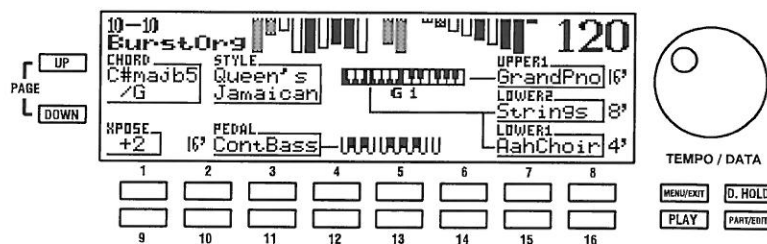
IMPORTANT: It is assumed at this point that you have just turned the XE-1 "ON" and have not touched either the PLAY or MENU/EXIT Touch Button. If you have, please turn the XE-1 "OFF," wait 5 seconds and turn it back "ON." Also the Drawbars should be "OFF" (pushed "in") so no numbers are showing.

◆ Display Modes

As stated in the INTRODUCTION, there are three Display Modes, PLAY Mode, MIXER Mode and MENU Mode.

PLAY Mode

Touching the PLAY Touch Button will show the PLAY Mode screen.



A screen similar to this will display after the XE-1 is first turned "ON." It will show:

1. Drawbar registrations for Upper Keyboard, Lower Keyboard and Pedal represented graphically (i.e., by solid bars of different lengths and colors depending on the position of each Drawbar),
2. The selected Preset Bank and Number,
3. The name of the selected Preset,
4. The selected AutoBand Style,
5. The selected UPPER 1 Voice,
6. The selected LOWER 2 Voice,
7. The selected LOWER 1 Voice,
8. The selected PEDAL Voice,
9. The Parts that are active, shown by a line from the keyboard to the various Parts.
10. The selected Chord root and Chord type,
11. The current Keyboard Mode,
12. The current Split Point,
13. The selected Transpose interval,
14. The current Rhythm Tempo setting.

NOTE: Immediately below the LCD screen, you will notice printed legends for the various Voice groups such as UPPER 1, UPPER 2, etc. These will be explained more fully in the MIXER Mode section.

NOTE: More information about the Voice Section is covered under VOICE SECTION starting on page 35.

MIXER Mode

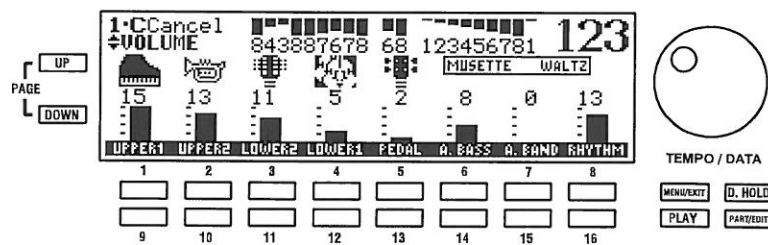
The MIXER Mode of the Information Center Display allows you to control the volumes of the different sound-producing divisions of the XE-1 as well as see various other settings.

These are four (4) pages to the MIXER Mode. All four pages show:

1. Drawbar registrations for Upper Keyboard, Lower Keyboard and Pedal represented graphically (i.e., by solid bars of different lengths depending on the position of each Drawbar) and numerically (i.e., the numerical position of each Drawbar).
2. A graphic picture showing the current Voice selection for whichever voice division is displaying.
3. Volume settings for the current voice or sound divisions.
4. The current Rhythm Tempo setting.
5. The currently selected Rhythm.
6. The currently selected Preset Bank and Name.

The four pages of the MIXER Mode differ from each other in the sound-producing divisions which are displayed, and which you can control. This is explained starting below.

MIXER Mode - Page 1



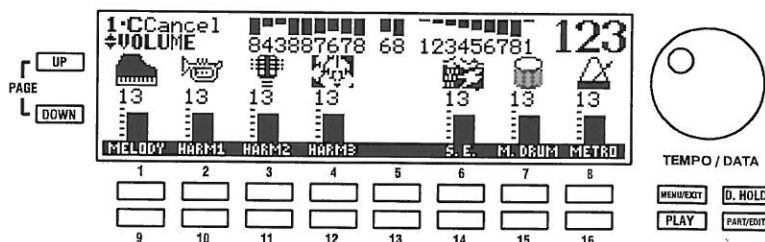
From the PLAY Mode, touch the PLAY Select Touch Button once to display the first page of the MIXER Mode. It will show:

1. A graphic picture showing the current Voice selection for UPPER 1, UPPER 2, LOWER 1, LOWER 2 and PEDAL.
2. Volume settings for the following: UPPER 1, UPPER 2, LOWER 2, LOWER 1, A.BASS (Auto Bass), A.BAND (AutoBand) and RHYTHM.

Use the numbered Touch Buttons to control the volume of the designated Voice group. The top row of numbered Select Touch Buttons (Numbers 1, 2, 3, 4, 5, 6, 7 and 8) will increase the volume, while the bottom row of numbered Select Touch Buttons (Numbers 9, 10, 11, 12, 13, 14, 15 and 16) will decrease the volume. For example, use the Number 1 and Number 2 Touch Buttons to control the volume of the UPPER 1 Voice, the Number 3 and Number 4 Touch Buttons to control the volume of the UPPER 2 Voice, etc.

NOTE: The Voice designations (UPPER 1, UPPER 2, LOWER 2, etc.) are explained in further detail under VOICE SECTION starting on page 35.

MIXER Mode - Page 2



From MIXER Mode Page 1, touch the PART Select Touch Button once to display Page 2 of the MIXER Mode. It will show:

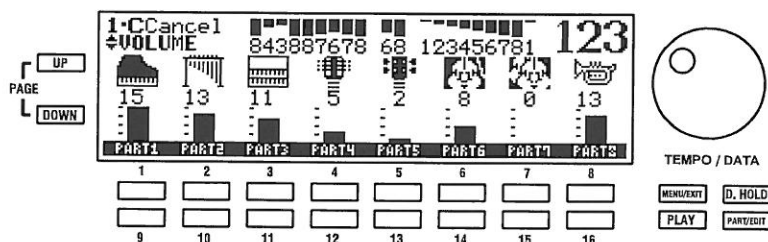
1. A graphic picture showing the current Voice selection for the individual parts of PRO CHORD, SOUND EFFECT, MANUAL DRUM and METRONOME.
2. Volume settings for the following: PRO CHORD Melody and Harmony voices, SOUND EFFECT, MANUAL DRUM and METRONOME.

Use the top row of numbered Select Touch Buttons (Numbers 1, 2, 3, 4, 5, 6, 7 and 8) to increase the volume of the designated Voice group.

Use the bottom row of numbered Select Touch Buttons (Numbers 9, 10, 11, 12, 13, 14, 15 and 16) to decrease the volume of the designated Voice group.

NOTE: PRO CHORD, SOUND EFFECT and MANUAL DRUM are explained in more detail under SPECIAL PERFORMANCE FEATURES starting on page 100.

MIXER Mode - Page 3



From MIXER Mode Page 2, touch the PART Select Touch Button once to display Page 3 of the MIXER Mode. It will show:

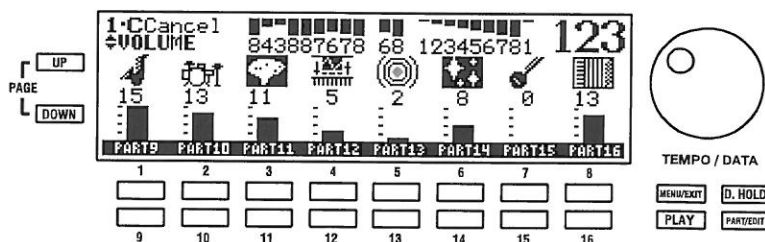
1. A graphic picture showing the current Voice selection for Part 1 through 8.
2. Volume settings for Parts 1 through 8.

Use the top row of numbered Select Touch Buttons (Numbers 1, 2, 3, 4, 5, 6, 7 and 8) to increase the volume of the designated Part.

Use the bottom row of numbered Select Touch Buttons (Numbers 9, 10, 11, 12, 13, 14, 15 and 16) to decrease the volume of the designated Part.

NOTE: "PARTS" are used for playing MIDI song files using the Disk Drive or CompactFlash features of your XE-I. This is explained in more detail starting on page 128.

MIXER Mode - Page 4



From MIXER Mode Page 3, touch the PART Select Touch Button once to display Page 4 of the MIXER Mode. It will show:

1. A graphic picture showing the current Voice selection for Parts 9 through 16.
2. Volume settings for Parts 9 through 16.

Use the top row of numbered Select Touch Buttons (Numbers 1, 2, 3, 4, 5, 6, 7 and 8) to increase the volume of the designated Part.

Use the bottom row of numbered Select Touch Buttons (Numbers 9, 10, 11, 12, 13, 14, 15 and 16) to decrease the volume of the designated Part.

NOTE: It is possible to select additional parameters by using the PAGE UP and PAGE DOWN Select Touch Buttons and control them by using the numbered Touch Buttons. This is covered later in this Guide under SPECIAL ADVANCED FEATURES.

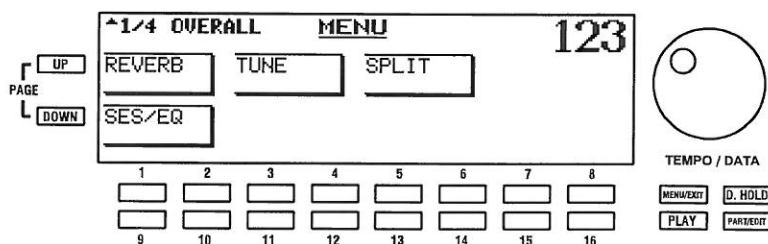
NOTE: It is possible to select whether PLAY Mode or MIXER Mode will be the first to display when the XE-I is first turned "ON." How to do this is covered later in this Guide under SPECIAL UTILITY FEATURES.

MENU Mode

The MENU Mode has 4 Pages. Each of these screens contains Advanced Features which allow you to change parameters, load or save data from or to Floppy Disks, turn something "OFF" or "ON," etc.

MENU Mode - Page 1

If you touch the MENU/EXIT Select Touch Button once from any of the Play Mode screens, the Information Center Display should look like this:



Four (4) choices should now appear in the display window.

Touching a numbered Select Touch Button will enter the Information Center Display into an Advanced Feature selection.

REVERB - Allows you to set the Reverb Level and select from among different Reverb programs. Touch either the Number 1 or Number 2 Select Touch Button to control this Advanced Feature.

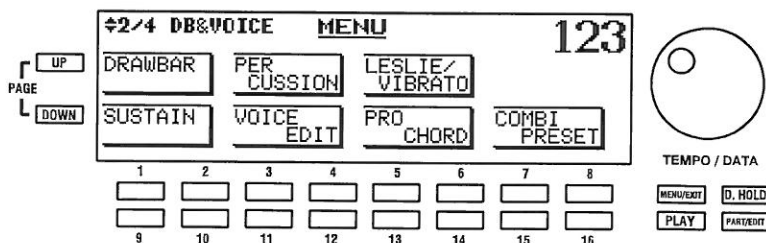
TUNE - Allows you to fine-tune the entire pitch of the XE-1 up or down, and select the tuning temperament for the Drawbars. Touch either the Number 3 or Number 4 Select Touch Button to control this Advanced Feature.

SPLIT - Allows you to set the Split point. Touch either the Number 5 or Number 6 Select Touch Button to control this Advanced Feature.

SES/EQ - Allows you to change the characteristics of the Sound Expansion System (SES) and the overall sound of the XE-1. Touch either the Number 9 or Number 10 Select Touch Button to control this Advanced Feature.

MENU Mode - Page 2

From Page 1 of the Menu Mode, touch the PAGE UP Select Touch Button once. The Information Center Display should look like this for Page 2 of the Menu Mode:



Seven (7) choices should now appear in the display window.

Touching a numbered Select Touch Button will enter the Information Center Display into an Advanced Feature selection.

DRAWBAR - Allows you to modify the characteristics of the Drawbars, and set the amount of Key Click for Upper and Lower Keyboards and Pedal Keyboard, as well as Normal or Slow Attack for Upper and Lower Keyboards and Pedal Keyboard. Touch either the Number 1 or Number 2 Select Touch Button to control this Advanced Feature.

PERCUSSION - Allows you to change the characteristics of the Percussion. Touch either the Number 3 or Number 4 Select Touch Button to control this Advanced Feature.

LESLIE/VIB - Allows you to change the characteristics of the built-in digital Leslie, set the Speed of the Vibrato for Upper and Lower Keyboards and set the amount of Overdrive that you prefer. Touch either the Number 5 or Number 6 Select Touch Button to control this Advanced Feature.

SUSTAIN - Allows you to set the Sustain Length for Upper and Lower Keyboards and Pedal Keyboard. Touch either the Number 9 or Number 10 Select Touch Button to control this Advanced Feature.

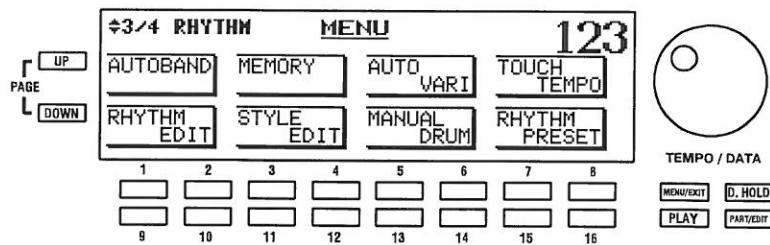
VOICE EDIT - Allows you to program the characteristics of the digital voices. Touch either the Number 11 or Number 12 Select Touch Button to control this Advanced Feature.

PROCHORD - Allows you to change the characteristics of the ProChord feature. Touch either the Number 13 or Number 14 Select Touch Button to control this Advanced Feature.

COMBI PRESET - Allows you to rename the Combination Presets. Touch either the Number 15 or Number 16 Select Touch Button to control this Advanced Feature.

MENU Mode - Page 3

From Page 2 of the Menu Mode, touch the PAGE UP Select Touch Button once. The Information Center Display should look like this for Page 3 of the Menu Mode:



Eight (8) choices should now appear in the display window.

Touching a numbered Select Touch Button will enter the Information Center Display into an Advanced Feature selection.

AUTOBAND - Allows you to program the characteristics of the AutoBand. Touch either the Number 1 or Number 2 Select Touch Button to control this Advanced Feature.

MEMORY - Allows you to program the characteristics of the MEMORY function. Touch either the Number 3 or Number 4 Select Touch Button to control this Advanced Feature.

AUTO VARI - Allows you to program the Auto Vari Rhythms & Styles the way that you prefer. Touch either the Number 5 or Number 6 Select Touch Button to control this Advanced Feature.

TOUCH TEMPO - Allows you to program the TOUCH TEMPO feature in the way that you prefer. Touch either the Number 7 or Number 8 Select Touch Button to control this Advanced Feature.

RHYTHM EDIT - Allows you to program the characteristics of the inbuilt Rhythms. Touch either the Number 9 or Number 10 Select Touch Button to control this Advanced Feature.

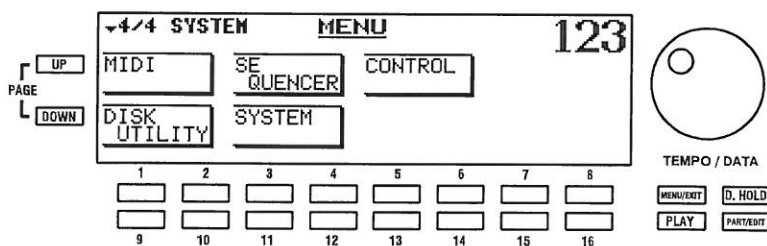
STYLE EDIT - Allows you to program the characteristics of the AutoBand Styles. Touch either the Number 11 or Number 12 Select Touch Button to control this Advanced Feature.

MANUAL DRUM - Allows you to program the MANUAL DRUM feature the way that you prefer. Touch either the Number 13 or Number 14 Select Touch Button to control this Advanced Feature.

RHYTHM PRESET - Allows you to program the characteristics of the RHYTHM PRESET. Touch either the Number 15 or Number 16 Select Touch Button to control this Advanced Feature.

MENU Mode - Page 4

From Page 3 of the Menu Mode, touch the PAGE UP Select Touch Button once. The Information Center Display should look like this for Page 4 of the Menu Mode:



Five (5) choices should now appear in the display window.

Touching a numbered Select Touch Button will enter the Information Center Display into an Advanced Feature selection.

MIDI - Allows you to set the overall MIDI parameters for the instrument, including MIDI Channels information, MIDI Program information and MIDI Controller information, and allows you to perform a MIDI Data Dump to a MIDI data recorder or to another XE-1. Touch either the Number 1 or Number 2 Select Touch Button to control this Advanced Feature.

SEQUENCER - Allows you to program the Sequencer the way that you prefer. Touch either the Number 3 or Number 4 Select Touch Button to control this Advanced Feature.

CONTROL - Allows you to set the Upper and Lower limits of the Pitch Wheel for Upper and Lower Keyboards and Pedal Keyboard, and allows you to set the characteristics for the Modulation Wheel. Touch either the Number 5 or Number 6 Select Touch Button to control this Advanced Feature.

DISK UTILITY - Allows you to perform various operations using the Disk Drive. Touch either the Number 9 or Number 10 Select Touch Button to control this Advanced Feature.

SYSTEM - Allows you to change certain characteristics which affect the entire instrument. Touch either the Number 11 or Number 12 Select Touch Button to control this Advanced Feature.

NOTE: When using the Information Center Display to access Advanced Features, you may notice an arrow and numbers such as "1/2," "1/4," etc., in the upper left-hand corner of the display. This indicates that the selected Advanced Feature Menu has more than one screen. In this case, the different selections are accessed by touching the PAGE UP or PAGE DOWN Select Touch Buttons.

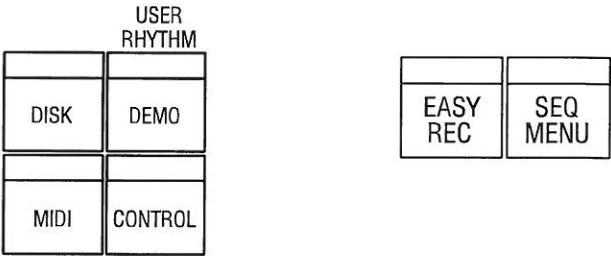
Touch the PAGE UP Select Touch Button again and Page 1 will reappear.

♦ “Shortcuts”

Sometimes it may be desirable to access an Advanced Feature more quickly than can be done by using the Touch Buttons on the Information Center Display. Because of this, your Hammond XE-1 has what are called “Shortcuts” to many Advanced Feature Menus. You can “shortcut” to an Advanced Feature associated with a particular function by pressing and holding a Touch Tab controlling that function.

Many, but not all, of the Advanced Features can be accessed via Shortcuts. In addition, a few Advanced Feature Menus can be accessed only via a Shortcut. The different methods you can use to access a particular Advanced Feature Menu will be explained in each section before explaining the Advanced Feature Menu itself.

“Shortcut” Touch Tabs



In order to make playing the XE-1 even easier, there is a group of four Touch Tabs located to the left of the RHYTHMS & STYLES Touch Tab group which allow you to Shortcut immediately into certain Advanced Feature Menus to which you might want instant access during performance.

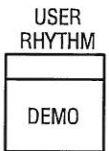
DISK

This Touch Tab allows you to perform operations involving the Disk Drive. Simply touch this Touch Tab, and the DISK Menu will display.



DEMO

This Touch Tab allows you to play the inbuilt Demo Songs, as well as call up User Rhythms, which are rhythms you have programmed. How to select the function of this Touch Tab is covered in the SPECIAL UTILITY FEATURES section of this Guide.



NOTE: How to program User Rhythms is covered in the RHYTHM & EASY PLAY section of this Guide.

MIDI

This Touch Tab allows you to instant access to the MIDI Edit Menu. Simply touch this Touch Tab, and the MIDI Menu will display.



CONTROL

This Touch Tab allows you to instant access to the CONTROL Edit Menu, which allows you to set the parameters for the Pitch Bend and Modulation Wheels, Foot Switches, etc. Simply touch this Touch Tab, and the CONTROL Menu will display.



EASY REC

This Touch Tab allows you to instant access to the EASY RECORD Menu, which allows you to record and save your own songs played on the XE-1.



SEQ MENU

This Touch Tab allows you to instant access to the SEQUENCER Menu, which allows you to select how to record and save your own songs.

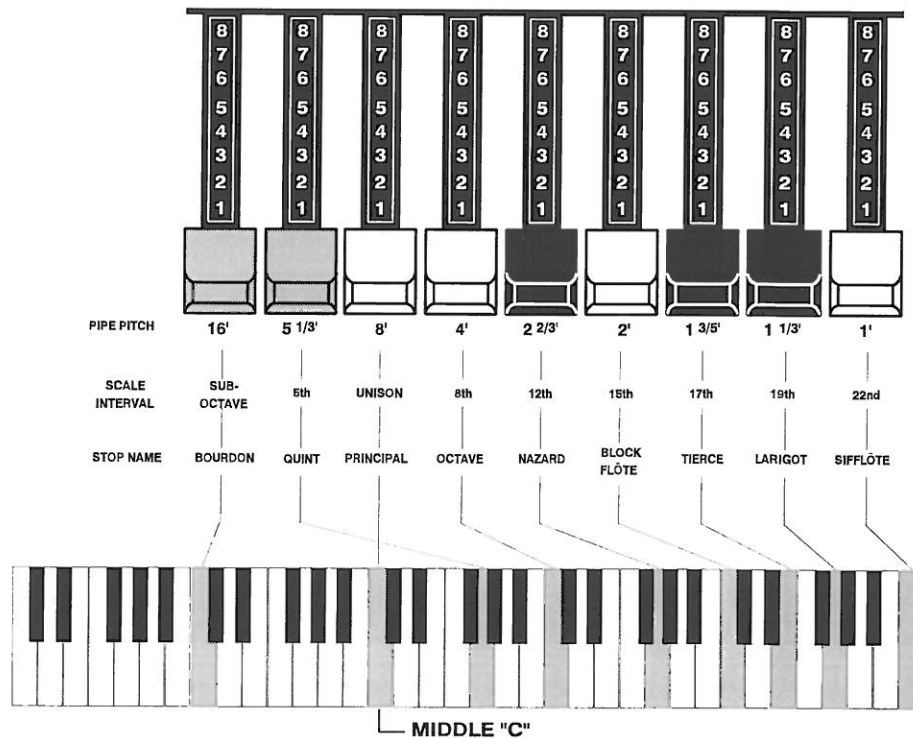


DRAWBARS & PERCUSSION

Manual Drawbars

Your Hammond XE-1 has two sets of nine Drawbars, one for each Manual. Drawbars, often called Tonebars, are the heart and the basis of the renowned Hammond Sound and have been used since the first Hammond Organ Model A introduced in 1935.

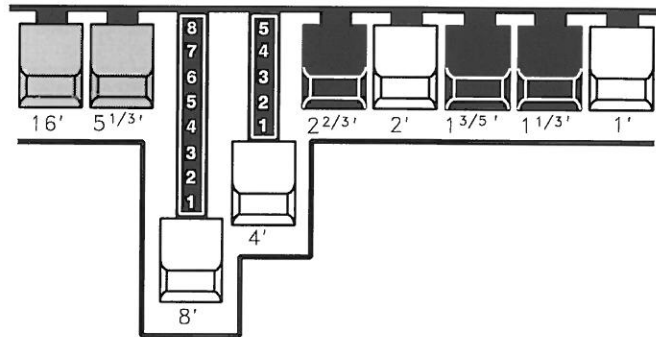
There are approximately 253,000,000 possible sound combinations that can be produced by these Drawbars. Each Drawbar consists of sine waves of different pitches (which means tone depth). The illustration below shows how each Drawbar relates to the keyboard when middle "C" is pressed.



Each Drawbar is marked with a number followed by a footage mark. For example, the first white Drawbar is marked "8'". This is pipe organ terminology indicating that the pipe used to produce the lowest note on the keyboard on a pipe organ is actually eight feet long. The numbers from "1" to "8" on each Drawbar represent degrees of loudness - number 1 being the softest, and number 8 being the loudest.

Typical Drawbar Registration Patterns For The Four Families Of Organ Sound

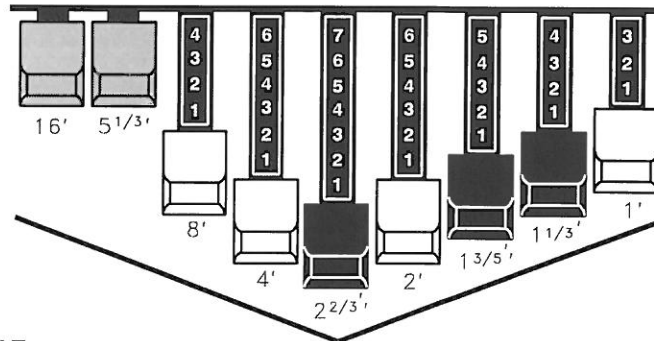
Flute family (2 step pattern)



Flute Tones

Accompaniment Flute 8' I	00 8460 000
Accompaniment Flute 8' II	00 3220 000
Accompaniment Flute 8' III	00 8600 000
Chorus of Flutes 16'	80 8605 002
Orchestral Flute 8'	00 3831 000
Piccolo 2'	00 0006 003
Stopped Flute 8'	00 5020 000
Tibia 8'	00 7030 000
Tibia 4'	00 0700 030
Tibia (Theater) 16'	80 8605 004
Wooden Open Flute 8'	00 8840 000

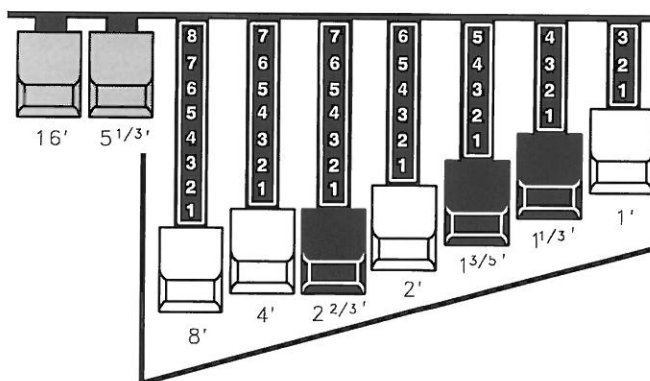
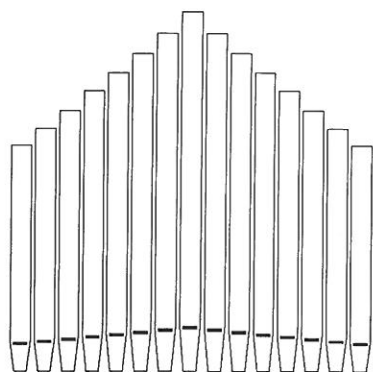
Reed family (triangle pattern)



Reed Tones

Bassoon 16'	44 7000 000
Clarinet 8'	00 6070 540
English Horn 8'	00 3682 210
Flugel Horn 8'	00 5777 530
French Horn	00 7654 321
Kinura 8'	00 0172 786
Oboe 8"	00 4764 210
Trombone 8'	01 8777 530
Trumpet 8'	00 6788 650
Tuba Sonora 8'	02 7788 640
Vox Humana 8'	00 4720 123

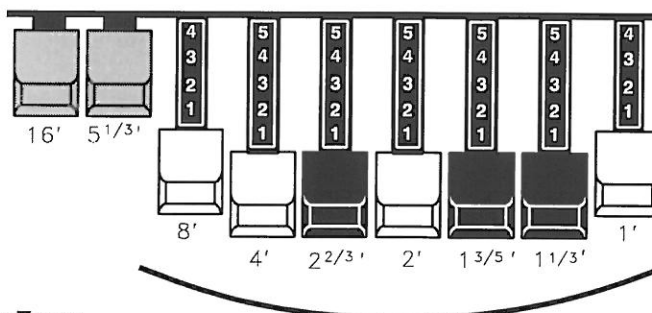
Diapason family (check mark pattern)



Diapason Tones

Accompaniment Diapason 8'	00 8874 210
Chorus Diapason 8'	00 8686 310
Diapason 8'	00 7785 321
Echo Diapason 8'	00 4434 210
Harmonic Diapason 16'	85 8524 100
Harmonic Diapason 8'	00 8877 760
Harmonic Diapason 4'	00 0606 045
Horn Diapason 8'	00 8887 480
Open Diapason 8'	01 8866 430
Solo Diapason	01 8855 331
Wood Diapason 8'	00 7754 321

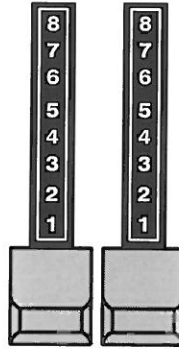
String family (bow pattern)



String Tones

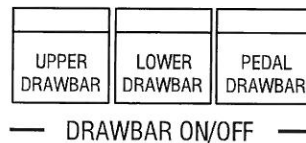
Cello 8'	00 3564 534
Dulciana 8'	00 7770 000
Gamba 8' I	00 3484 443
Gemshorn 8'	00 4741 321
Orchestral String 8'	00 1464 321
Salticrional 8'	00 2453 321
Solo Viola 8'	00 2474 341
Solo Violin 8'	00 3654 324
Viola da Gamba 8'	00 2465 432
Violina 4'	00 0103 064
Violone 16	26 3431 000

♦ Pedal Drawbars



The two brown Drawbars located between the Drawbars for the Upper and Lower Keyboards control the sounds produced by the Pedal Keyboard. The first Pedal Drawbar produces a tone at 16' pitch for a deep foundation bass, while the second Pedal Drawbar produces a tone at 8' pitch, or one octave higher.

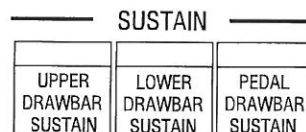
♦ Drawbar ON/OFF Touch Tabs



This group of Touch Tabs located to the right of the Information Center Display allows you to turn the Drawbars “ON” or “OFF” for each Keyboard.

To turn the Drawbars “ON” for each Keyboard, simply touch the Drawbar ON/OFF Touch Tab corresponding to the Keyboard on which you want to hear Drawbars. The red LED will light indicating that Drawbars are active for that keyboard.

♦ Drawbar SUSTAIN Touch Tabs



When these Touch Tabs are “ON” (LED lit), a lingering effect is added to the Drawbar tones.

NOTE: Sustain is covered in more depth in the [EFFECTS](#) section of this Guide starting on page 33.

► DRAWBAR Edit Menu

This Advanced Feature Menu allows you to make various changes to the characteristics of the Drawbars.

Accessing the DRAWBAR Edit Menu Using the MENU/EXIT Touch Button:

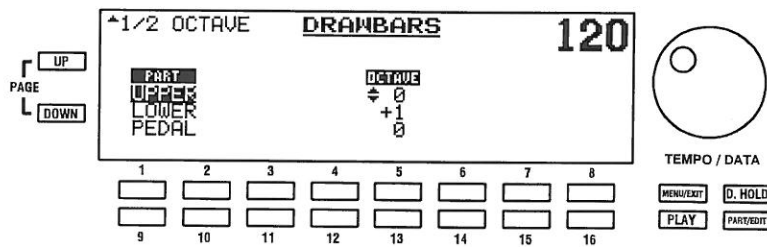
1. Touch the MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
2. Touch the PAGE UP Select Touch Button once. Page 2 of the MENU Mode will now display. You will now see "2/4" in the upper left corner of the Information Center Display.
3. Touch either the Number 1 or Number 2 Select Touch Buttons. The word, "DRAWBARS" will now display at the top of the screen.

Accessing the DRAWBAR Edit Menu Using the Shortcut:

Touch and hold any of the three DRAWBAR ON/OFF Touch Tabs. After approximately 1 second, the words, "DRAWBARS" will display at the top of the screen.

You are now in the first page of the DRAWBAR Edit Menu. You may now use the numbered Select Touch Buttons below the screen to make various changes to the Drawbars. These changes are explained below.

DRAWBAR Edit Menu - Page 1



Keyboard Selection

Use either the Number 1 or Number 2 Select Touch Button to scroll up through the Keyboard choices. You can select "UPPER" "LOWER" or "PEDAL.". The current choice will be "highlighted", or displayed in reverse-video (green lettering against a black background).

Use either the Number 9 or Number 10 Select Touch Button to scroll down through the Keyboard choices.

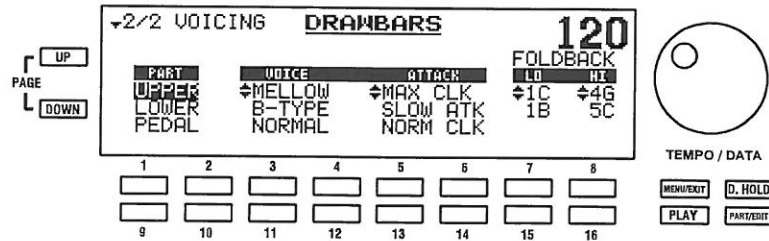
Drawbar Octave Selection

This Advanced Feature allows you to select the octave in which the Drawbars will sound for each keyboard. You can select "-2" (up to two octaves down) through +2" (up to two octaves up).

Use the Number 5 Select Touch Buttons to scroll up through the selections.

Use the Number 13 Select Touch Buttons to scroll down through the selections.

DRAWBAR Edit Menu - Page 2



Keyboard Selection

Use the Number 1 or Number 2 Select Touch Button to scroll up through the Keyboard choices. You can select “UPPER”, “LOWER” or “PEDAL.” The current choice will be “highlighted,” or displayed in reverse-video (green lettering against a black background).

Use the Number 9 or Number 10 Select Touch Button to scroll down through the Keyboard choices.

Drawbar Voice Mode

This Advanced Feature allows you to change the overall sound of the Drawbars. You can select: (1) “B-type,” which reproduces the sound of the B-3 tone-wheel generator, (2) “Mellow,” which produces a very pure sine-wave tone quality, or (3) “Brite,” which adds extra frequencies to the higher-pitched Drawbar tones for a very brilliant sound. The current choice will be “highlighted,” or displayed in reverse-video (green lettering against a black background).

Use either the Number 3 or Number 4 Select Touch Buttons to scroll up through the selections.

Use either the Number 11 or Number 12 Select Touch Buttons to scroll down through the selections.

Attack - Key Click Volume

Each time a key was depressed on a tone-wheel Hammond Organ, a key-pop or click was produced. This Advanced Feature, you can change the type of attack or the personality of the key click. You may select “SLOW ATK,” “NO CLK,” “SOFT CLK,” “NORM CLK” or “MAX CLK”. The default setting is “NORM CLK” The current choice will be “highlighted,” or displayed in reverse-video (green lettering against a black background).

Use either the Number 5 or Number 6 Select Touch Button to scroll up through the selections.

Use either the Number 13 or Number 14 Select Touch Button to scroll down through the selections.

Drawbar Fold Back

On tone-wheel Hammond Organs such as the B-3, the lower and higher-pitched Drawbars “folded back,” or repeated the notes of other keys. This Advanced Feature allows you to set the upper and lower frequency limits of the Drawbars.

Use the Number 7 or Number 15 Select Touch Buttons to set the lower frequency limit.

Use the Number 8 or Number 16 Select Touch Buttons to set the upper frequency limit.

♦ PERCUSSION - Touch-Response Percussion

SECOND HARMONIC	THIRD HARMONIC
FAST DECAY	SOFT

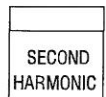
— PERCUSSION —

The PERCUSSION controls consist of four separate Touch Tabs, located immediately to the right of the Drawbars, which control harmonic Percussion tones playable from the Upper Keyboard.

NOTE: To hear the tones produced by the Percussion Voice Touch Tabs, the keys of the Upper Keyboard normally must be played in a detached (non-Legato) manner. If you play a single note and then hold it down while playing other keys, the Percussion voice will not play again until you release all keys and again play detached notes.

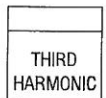
SECOND HARMONIC

The tone for this harmonic is the same as the sound derived from the 4' Drawbar. Combining this Percussion tone with the Drawbars will produce bright and clear sounds.



THIRD HARMONIC

This harmonic tone is the same one produced by the 2 2/3' Drawbar. Combining this Percussion tone with the Drawbars will produce powerful and heavy sounds.



FAST DECAY

When this Touch Tab is in its normal state (LED not lighted), the Percussion tone will decay (die away) slowly like a chime. When FAST DECAY is "ON" (LED lighted), the Percussion effect will decay rapidly like a xylophone or glockenspiel.

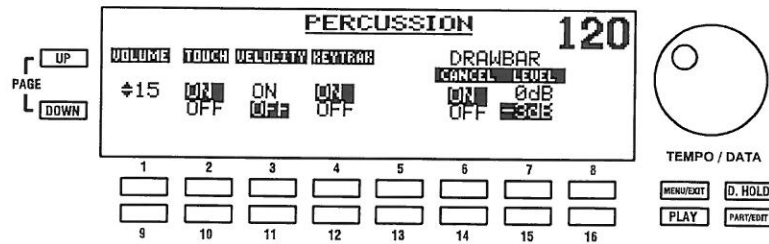


SOFT

This control regulates the volume of the Percussion tone. When it is in its normal state (LED not lighted), the Percussion effect will be very prominent compared to the tones produced by the Drawbars. When this Touch Tab is "ON" (LED lighted) the Percussion effect is lower in volume or much less prominent.



► PERCUSSION Edit Page



This Advanced Feature Menu Page allows you to make various changes to the characteristics of the Percussion.

Accessing the PERCUSSION Edit Page Using the MENU/EXIT Touch Button:

1. From the PLAY Screen, touch the gray MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
2. Touch the PAGE UP Select Touch Button once. Page 2 of the MENU Mode will now display. You will now see "2/4" in the upper left corner of the Information Center Display.
3. Touch either the Number 3 or Number 4 Select Touch Buttons. The word, "PERCUSSION" will now display at the top of the screen.

Accessing the PERCUSSION Edit Page Using the Shortcut:

Touch and hold any of the four PERCUSSION Touch Tabs. After approximately 1 second, the word, "PERCUSSION" will display at the top of the screen.

You are now in the PERCUSSION Edit Page. You may now use the numbered Select Touch Buttons below the screen to make various changes to the Percussion. These changes are explained below.

Percussion Level

This Advanced Feature allows you to set the overall volume level of the Percussion tones. This will allow you to balance the amount of "normal" and "soft" Percussion sound (the choices provided by the Touch Tabs) with the sound produced by the Drawbars.

Use the Number 1 Select Touch Button to scroll up through the numbers.

Use the Number 9 Select Touch Button to scroll down through the numbers.

Percussion Touch

This Advanced Feature allows you to turn "ON" or "OFF" the Percussion Touch-Response. When turned "ON" Percussion tones will sound only if you play the keys in a detached manner (non-legato). Any degree of detachment is sufficient. This replicates the Touch-Response Percussion function on the original models B-3, C-3, RT-3 or A-100. When turned "OFF," each key will sound when played regardless of whether other keys are being held. This replicates the Percussion function on the X-66, Concorde and later model Hammond Organs.

Use the Number 2 Select Touch Button to turn Percussion Touch "ON".

Use the Number 10 Select Touch Button to turn Percussion Touch "OFF".

Percussion Velocity Sensitivity

When turned "ON," the volume of the Percussion tone is controlled by how fast keys are played. The faster keys are played, the louder the Percussion sounds. The more slowly keys are played, the softer the Percussion sounds. When turned "OFF," each key will sound at the same volume level when played.

Use the Number 3 Select Touch Button to turn Percussion Velocity "ON".

Use the Number 11 Select Touch Button to turn Percussion Velocity "OFF".

Percussion Key Tracking

On the original Hammond Organs with Touch-Response Percussion Control, such as the B-3, C-3, RT-3 and A-100, the Percussion sounds would taper off slightly at higher frequencies. This Advanced Feature is designed to replicate this characteristic of the Percussion.

Use the Number 4 Select Touch Button to turn Percussion Key Tracking "ON".

Use the Number 12 Select Touch Button to turn Percussion Key Tracking "OFF".

Percussion Drawbar Cancel

When Percussion Drawbar Cancel is turned "ON," the 8th harmonic Drawbar will be canceled when Percussion is "ON". This replicates the original Hammond Organs with Touch-Response Percussion Control, such as the B-3, C-3, RT-3 and A-100 series. When this feature is turned "OFF," the 8th harmonic Drawbar (1') will continue to sound while Percussion is "ON". This replicates later Hammond Organs with Percussion.

Use the Number 6 Select Touch Button to turn Percussion Drawbar Cancel "ON".

Use the Number 14 Select Touch Button to turn Percussion Drawbar Cancel "OFF".

Percussion Drawbar Level

This Advanced Feature allows you to set the Drawbar Level when Percussion is "ON" at normal volume (SOFT Touch Tab "OFF"). When "-3db" is chosen, the Drawbars will be reduced by -3db (-3 decibels) in loudness when Percussion is "ON" at normal volume. This replicates the original Hammond Organs with Touch-Response Percussion Control. When "0db" is chosen, the volume of the Drawbars will stay at the same level, or "0db," when Percussion is "ON" at normal volume.

Use the Number 7 Select Touch Button to select "0db".

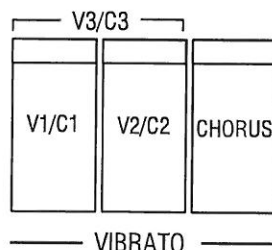
Use the Number 15 Select Touch Button to select "-3db".

NOTE: A "decibel" is a unit of measurement for the loudness of sound waves.

♦ DRAWBAR EFFECTS

You can add Vibrato/Chorus, Leslie, Sustain and Overdrive to the Drawbar sounds of your XE-1. In the following section, each effect is explained in detail.

VIBRATO & CHORUS



Your Hammond XE-1 has five Touch Tabs which control the degrees of Vibrato and Chorus for the Drawbars.

Vibrato/Chorus ON / OFF

To turn the Vibrato or Chorus effect "ON," touch the appropriate Touch Tab "ON" (LED lit).

V1 - (Small Vibrato) - This produces the vibrato equivalent of most orchestral solo instruments.

V2 - (Wide Vibrato) - This is the standard depth vibrato to produce the effect of a theater organ.

V3 - (Full Vibrato) - By pressing both the V1/C1 and the V2/C2 Touch Tabs at the same time, you turn "ON" Vibrato 3. Vibrato 3 gives the fullest amount of vibrato, adding much warmth and enhancing your music.

Chorus

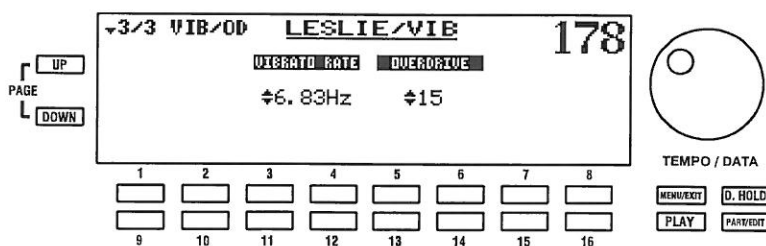
When the CHORUS Touch Tab is used, *half* of the tone is heard without Vibrato, and *half* contains the vibrato amount selected by the first two Touch Tabs.

C1 - (Small Chorus) - This produces the light chorus effect.

C2 - (Wide Chorus) - This is the standard depth of the chorus effect.

C3 - (Full Chorus) - By pressing both the V1/C1 and the V2/C2 Touch Tabs at the same time along with the CHORUS Touch Tab, you get the fullest amount of Chorus, adding warmth that enhances your Drawbar settings.

► VIBRATO Edit Page (LESLIE/VIBRATO Menu)



This Advanced Feature Menu Page allows you to select the Vibrato/Chorus Rate that you prefer.

Accessing the VIBRATO Edit Page using the MENU/EXIT Touch Button:

1. From any of the PLAY Mode Pages, touch the gray MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
2. Touch the PAGE UP Select Touch Button once. Page 2 of the MENU Mode will now display. You will now see "2/4" in the upper left corner of the Information Center Display.
3. Touch either the Number 5 or Number 6 Select Touch Buttons. The words, "LESLIE/VIB," will now display at the top of the screen. This menu has 3 pages, so you will see "1/3" in the upper left corner of the Information Center Display.
4. Touch the PAGE UP Select Touch Button two times. You will now see "3/3" in the upper left corner of the Information Center Display and the words, "VIB/OD," on the left side of the display.

Accessing the VIBRATO Edit Page using the Shortcut:

Touch and hold any of the three Vibrato/Chorus Touch Tabs. After approximately 1 second, you will see "4/4" in the upper left corner of the Information Center Display and the words, "VIB/OD," on the left side of the display.

You are now in the VIBRATO Edit Page.

Vibrato/Chorus Rate

This Advanced Feature allows you to set the rate of the Vibrato/Chorus.

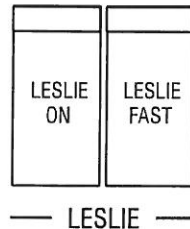
Use the Number 3 or Number 4 Select Touch Button to increase the rate.

Use the Number 11 or Number 12 Select Touch Buttons to decrease the rate.

LESLIE®

Your Hammond XE-1 has a built-in digital Leslie effect that replicates the sound of a twin-rotor Leslie Speaker cabinet. In addition, the XE-1 can also be used with a variety of different Leslie Speaker cabinets. There is a full explanation of how to use the XE-1 with a Leslie Speaker cabinet starting on page 33. The following paragraphs explain how the internal digital Leslie of your Hammond XE-1 works.

LESLIE Touch Tabs



These two Touch Tabs allow you to control either the internal digital Leslie or the rotors of a connected Leslie Speaker cabinet.

LESLIE ON

When this Touch Tab is "OFF" (LED not lit), the Drawbars will sound through the normal stationary channels of the organ. Touching the LESLIE ON Touch Tab "ON" (LED lit) will change the sounds produced by the Drawbars from the main speaker channel to the internal Leslie channel. The speed of the internal electronic Leslie depends upon the position of the LESLIE FAST Touch Tab.

LESLIE FAST

When this Touch Tab is "OFF" (LED not lit), the Leslie effect is that of an acoustic Leslie Speaker Cabinet with the rotors turning slowly (Chorale). Touching the LESLIE FAST Touch Tab "ON" (LED lit) will cause the Leslie effect to speed up and rotate fast (Tremolo) to produce a rich, full sound.

NOTE: The LESLIE FAST Touch Tab will function only if the LESLIE ON Touch Tab is "ON" (LED lit).

► LESLIE Edit Pages (LESLIE/VIBRATO Menu)

These Advanced Feature Menu Pages allow you to make various changes to the characteristics of the inbuilt digital Leslie.

Accessing the LESLIE Edit Pages using the MENU/EXIT Touch Button:

1. From the PLAY Screen, touch the gray MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 pages and that page 1 is displaying.
2. Touch the PAGE UP Select Touch Button once. Page 2 of the MENU Mode will now display. You will now see "2/4" in the upper left corner of the Information Center Display.

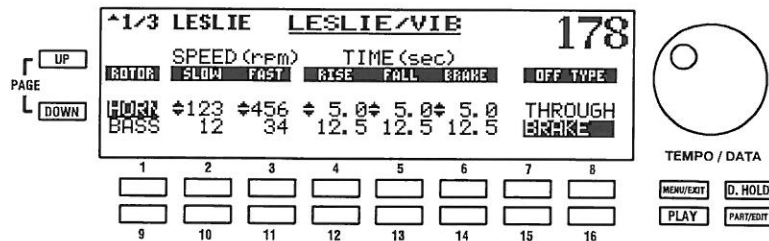
3. Touch either the Number 7 or Number 8 Select Touch Buttons. The words, "LESLIE/VIB," will now display at the top of the screen. This menu has 3 pages, so you will see "1/3" in the upper left corner of the Information Center Display.

Accessing the LESLIE Edit Pages using the Shortcut:

Touch and hold either of the two Leslie Touch Tabs. After approximately 1 second, the words, "LESLIE/VIB," will display at the top of the screen.

You are now in the LESLIE Edit Pages. You may now use the numbered Select Touch Buttons below the screen to make various changes to the digital Leslie.

LESLIE Edit Page 1



Leslie Speed

This Advanced Feature allows you to select the speed settings for the digital Leslie Slow & Fast Speeds that you prefer. You can adjust the speeds for the Horn Rotor (high frequencies) and Bass Rotor (low frequencies) separately.

Use the Number 1 or Number 9 Select Touch Button to select HORN or BASS.

Use the Number 2 Select Touch Button to increase the number setting for the Slow Speed.

Use the Number 10 Select Touch Buttons to decrease the number setting.

Use the Number 3 Select Touch Button to increase the number setting for the FAST Speed.

Use the Number 11 Select Touch Buttons to decrease the number setting.

NOTE: This Advanced Feature DOES NOT affect a connected external Leslie Speaker cabinet.

Leslie Time - Rise & Fall Times

Because the animation produced by a Leslie Speaker Cabinet is created mechanically, a certain time is required for the rotors to come up to the Tremolo (fast) speed from either a dead stop or from the Chorale (slow) speed as well as to slow down from Tremolo to Chorale. These are referred to as the Rise & Fall Times. Although each Leslie Speaker is carefully calibrated at the factory, several factors such as motor age and placement of the belts on the pulleys can affect time required for the rotors to speed up and slow down. This Advanced Feature allows you to select the settings for the Rise & Fall Times of the digital Leslie that you prefer. You can adjust the settings for the Horn Rotor (high frequencies) and Bass Rotor (low frequencies) separately.

Use the Number 4 Select Touch Button to increase the Rise Time.

Use the Number 12 Select Touch Buttons to decrease the Rise Time.

Use the Number 5 Select Touch Button to increase the Fall Time.

Use the Number 13 Select Touch Buttons to decrease the Fall Time.

NOTE: This Advanced Feature DOES NOT affect a connected external Leslie Speaker cabinet.

NOTE: The setting of "0" for the Slow and Fast Speeds enables you to prevent a rotor from turning when the Leslie is switched back and forth from "SLOW" to "FAST". For example, if you want only the Horn Rotor to respond to SLOW/FAST speed selection, set both the Slow and Fast Speeds for the Bass Rotor to "0". With this setting, only the Horn Rotor will run either SLOW or FAST and the Bass Rotor will remain stationary.

Leslie Brake Time

Many Leslie Speakers, in addition to having one or more speeds, also allow the rotors to stop completely or "brake". The time required for the rotors to stop turning is referred to as the Brake Time. Although Leslies are carefully calibrated at the factory, several factors such as motor age and placement of the belts on the pulleys can affect the speeds of the rotors, as well as time required for the rotors to slow down to a dead stop. This Advanced Feature allows you to change the Brake Times for the "rotors" of the inbuilt digital Leslie. You may select Brake Time settings for the Horn and Bass Rotors separately.

Use the Number 6 Select Touch Button to increase the Brake Time.

Use the Number 14 Select Touch Button to decrease the Brake Time.

NOTE: This Advanced Feature DOES NOT affect a connected external Leslie Speaker cabinet.

Leslie Off Mode

This Advanced Feature affects how the Drawbar tones and the inbuilt digital Leslie simulation perform when both Leslie Touch Tabs are "OFF" (LEDs not lit). When "THROUGH" Mode is selected, the sound quality changes to simulate the effect of the Drawbar tones speaking through the Stationary channel of a multi-channel Leslie Speaker such as models 723, 750 or 914. When "BRAKE" Mode is selected, the digital Leslie effect is "stopped" and the sound quality remains unchanged. This simulates the effect produced by a single-channel Leslie Speaker which has the capability of stopping the rotors, such as a model 122XB.

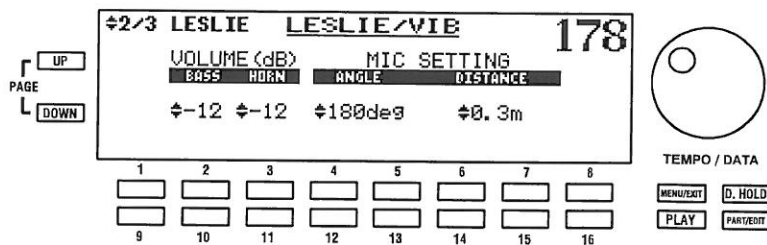
Use the Number 7 or Number 8 Select Touch Button to select THROUGH Mode.

Use the Number 15 or Number 16 Select Touch Button to select BRAKE Mode.

NOTE: This Advanced Feature DOES NOT affect a connected external Leslie Speaker cabinet.

LESIE Edit Page 2

From Page 1, touch the PAGE UP Touch Button. You will now see the Leslie Volume Balance & Microphone Setting Menu Page.



Leslie Volume Balance

This Advanced Feature allows you to adjust the balance between the Horn and Bass Rotors of the digital Leslie.

Use the Number 2 Select Touch Button to increase the volume of the Bass Rotor.

Use the Number 10 Select Touch Button to decrease the volume of the Bass Rotor.

Use the Number 3 Select Touch Button to increase the volume of the Horn Rotor.

Use the Number 11 Select Touch Button to decrease the volume of the Horn Rotor.

NOTE: This Advanced Feature DOES NOT affect a connected external Leslie Speaker cabinet.

Leslie Microphone Setting

When a Leslie Speaker cabinet or combination of cabinets is used in a large facility such as an auditorium or outdoor arena, the Leslie(s) are frequently "miked" to insure that the sound carries adequately. Sound technicians have discovered that the placement of the microphones greatly affects the character of the sound heard by the audience from the Leslie Speaker(s). This Advanced Feature allows you to simulate various microphone settings using the built-in digital Leslie effect. The two settings you can adjust are "ANGLE" and "DISTANCE".

The ANGLE setting recreates the effect of two microphones - one for the Horn rotor and one for the Bass rotor. "0" setting is monaural, or both microphones placed in the center. Each higher number has the effect of moving the microphones further apart from each other.

Use the Number 4 or Number 5 Select Touch Button to increase the number setting.

Use the Number 12 or Number 13 Select Touch Button to decrease the number setting.

The DISTANCE setting recreates the effect of setting the microphones at different distances from a Leslie Speaker cabinet, since distance has an effect on how the Leslie Speaker reproduces through a sound system.

Use the Number 6 or Number 7 Select Touch Button to increase the number setting.

Use the Number 14 or Number 15 Select Touch Button to decrease the number setting.

NOTE: This Advanced Feature DOES NOT affect a connected external Leslie Speaker cabinet.

NOTE: Both the ANGLE and DISTANCE settings are subtle effects and may require careful listening to detect the differences among the various settings.

Using a Leslie Speaker Cabinet

Your Hammond XE-1 is designed to directly interface with a Leslie Speaker Cabinet. A Leslie Speaker cabinet, in addition to amplifying the basic sound, also uses mechanical rotors which turn at different speeds to add different animation effects. The data chart below shows the options available.

LESLIE ROTOR SPEED OPTIONS	
Description	Function
SLOW (Chorale)	Rotors will turn slowly, producing an effect suitable for use with hymns, classical style music and some slower songs.
OFF	Rotors do not turn. Animation can be provided by using Vibrato and Chorus.
FAST (Tremolo)	Rotors will speed up and rotate fast to produce a rich full sound.

NOTE: The above table shows the options which can be selected for either a single- or multi-channel Leslie Speaker cabinet using an I I-pin interface.

SUSTAIN

SUSTAIN		
UPPER DRAWBAR SUSTAIN	LOWER DRAWBAR SUSTAIN	PEDAL DRAWBAR SUSTAIN

The SUSTAIN controls, located to the right of the Information Center Display, are used with the Drawbars to produce a lingering tone when keys are released. It is suited for producing sounds like harps, chimes or bells.

The Sustain controls are divided into three control groups - Upper, Lower and Pedal.

UPPER DRAWBAR SUSTAIN

When this Touch Tab is "ON" (LED lit), Sustain is added to the Upper Manual Drawbar tones.



LOWER DRAWBAR SUSTAIN

When this Touch Tab is "ON" (LED lit), Sustain is added to the Lower Manual Drawbar tones.



PEDAL DRAWBAR SUSTAIN

When this Touch Tab is "ON" (LED lit), Sustain is added to the Pedal tones.



OVERDRIVE

Overdrive adds the fuzzy, raspy, "dirty" sound created by the vacuum tubes of a tube-style Leslie Speaker when its volume is pushed past its sound limit.

► OVERDRIVE Edit Page



This Advanced Feature Menu Page allows you to adjust the amount of Overdrive that you prefer.

Accessing the OVERDRIVE Edit Page using the MENU/EXIT Touch Button:

1. From any of the PLAY Mode Pages, touch the gray MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
1. Touch the PAGE UP Select Touch Button once. Page 2 of the MENU Mode will now display. You will now see "2/3" in the upper left corner of the Information Center Display.
1. Touch either the Number 5 or Number 6 Select Touch Buttons. The words, "LESLIE/VIB," will now display at the top of the screen. This menu has 3 pages, so you will see "1/3" in the upper left corner of the Information Center Display.
1. Touch the PAGE UP Select Touch Button two times. You will now see "3/3" in the upper left corner of the Information Center Display and the words, "VIB/OD," on the left side of the display.

Accessing the OVERDRIVE Edit Page using the Shortcut:

Touch and hold any of the three Vibrato/Chorus Touch Tabs. After approximately 1 second, you will see "4/4" in the upper left corner of the Information Center Display and the words, "VIB/OD," on the left side of the display.

You may now use the numbered Select Touch Buttons below the screen to change the amount of Overdrive.

Use the Number 5 or Number 6 Select Touch Button to scroll up through the numbers. You can select a value from "0" (no Overdrive) to "15" (maximum Overdrive).

Use the Number 13 or Number 14 Select Touch Buttons to scroll down through the numbers.

VOICE SECTION

Your XE-1 contains high-quality digital voices which are accessible using the VOICE Touch Tabs.

◆ VOICE Touch Tab group

The VOICE Touch Tab group is located to the right side of the Information Center Display. These voices can be used Solo or in combination with the Drawbars.

VOICE						
PIANO	E.PIANO	VIBRA MALLET	GUITAR	ACCOR- DION	ORGAN REED	ETHNIC CUSTOM 1
STRINGS CHOIR	BRASS	SAX	FLUTE	SYNTH	BASS	DRUM SET CUSTOM 2

To activate one of the voices, simply touch the single Touch Tab of the voice that you wish to use.

NOTE: The two VOICE Touch Tabs marked CUSTOM 1 and CUSTOM 2 can be reprogrammed to recall Custom Voices which you create using the CUSTOM VOICE Menu. How to do this is covered starting on page 45 of this Guide.

The VOICE Touch Tab names represent categories of voices. This means that the voices have been arranged into groups combining instruments of similar characteristics, such as PIANO, ACCORDION, etc., to make voice selection easier.

Touching any of the VOICE SELECT Touch Tabs will show the different Voice selections in each category in the Information Center Display.

NOTE: The number of Voices listed will vary from category to category.

Notice that in the extreme upper left corner of the Information Center, you will see a message such as, "1/4," "1/3" or "1/2". This is to let you know that there is more than one page for that Voice Category. Touch the PAGE UP Select Touch Button to see the next Page. Use the Page UP and PAGE DOWN Select Touch Buttons to move back and forth between or among Pages.

Use the PAGE UP Select Touch Button to scroll up through the Voice Pages.

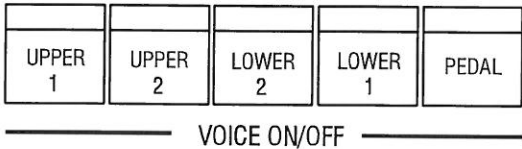
Use the PAGE DOWN Select Touch Button to scroll down through the Voice Pages.

NOTE: The message, "1/1," indicates only one page for that particular Voice category. In the case of Voice categories having only one Page, touching the PAGE UP or PAGE DOWN Touch Buttons will have no effect.

Use any of the numbered Touch Buttons to make your Voice selection. The currently selected voice will be "highlighted," or shown in reverse-video (green lettering against a black background).

NOTE: Voice selection is best done utilizing the VOICE SETUP Touch Tabs. This is so that you are changing the Voice for the correct Part or division. For more information, please consult the VOICE SETUP Touch Tabs section of this Guide starting on page 36.

◆ VOICE ON/OFF Touch Tabs



These allow you to control which division of the instrument will play the Voice you select.

UPPER 1

This Touch Tab allows the selected Voice to be played from the Upper Manual.



UPPER 2

This Touch Tab allows a second selected Voice to be played from the Upper Manual.



LOWER 1

This Touch Tab allows the selected Voice to be played from the Lower Manual (left of split).



LOWER 2

This Touch Tab allows a second selected Voice to be played from the Lower Manual.



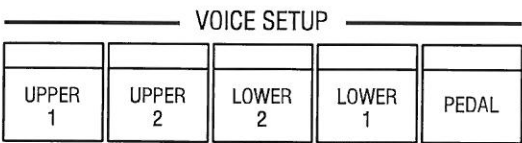
PEDAL

This Touch Tab allows the selected Voice to be played from the Pedals.



NOTE: Normally, the VOICE ON/OFF and DRAWBAR ON/OFF Touch Tabs will cancel each other in order to allow quick registration changes. However, in some cases it may be desirable to add the two groups together. This can be done via the PART ON MODE Advanced Feature, which is explained on page 163.

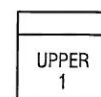
◆ VOICE SETUP Touch Tabs



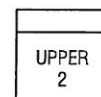
These allow you to control which division of the instrument you want to select Voices for.

UPPER 1

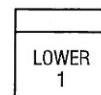
This Touch Tab allows a Voice to be selected for the Upper Manual.

**UPPER 2**

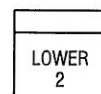
This Touch Tab allows a second Voice to be selected for the Upper Manual.

**LOWER 1**

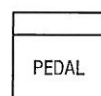
This Touch Tab allows a Voice to be selected for the Lower Manual (left of split).

**LOWER 2**

This Touch Tab allows a second Voice to be selected for the Lower Manual.

**PEDAL**

This Touch Tab allows a Voice to be selected for the Lower Manual.

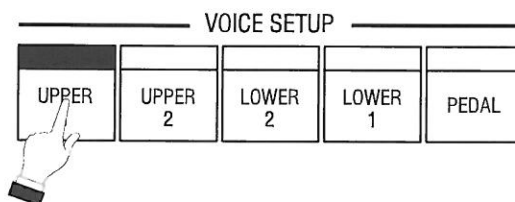


◆ Using the VOICE SETUP Touch Tabs

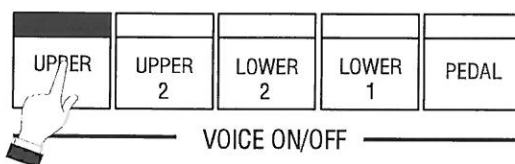
You can use the VOICE SETUP Touch Tabs to assign Voices to the different divisions, and use the VOICE ON/OFF Touch Tabs to turn “ON” the Voices that you want. In this way, you can assign a Voice to one division while playing from another.

TRY THIS:

1. Turn the XE-1 “ON.”
2. Touch the DISPLAY HOLD Touch Button on the right of the Information Center Display. The red LED will light “ON.” This is so that the screen will continue to display the current screen while you are doing this exercise.
3. If the UPPER 1 Touch Tab in the VOICE SETUP Touch Tab group is not “ON,” (red LED lit), touch it to turn it on.



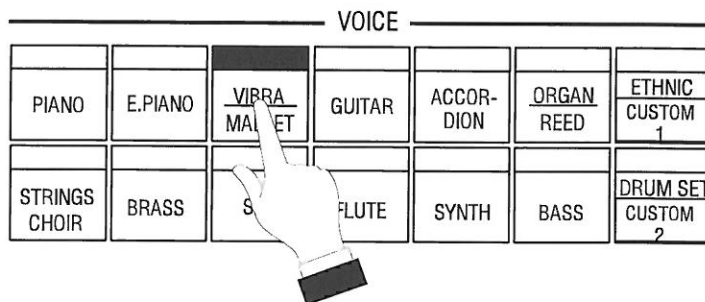
4. If the UPPER 1 Touch Tab in the VOICE ON/OFF Touch Tab group is not “ON,” (red LED lit), touch it to turn it on.



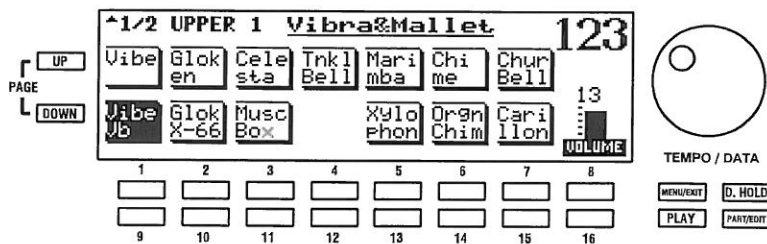
With this registration, any changes to the sound using the VOICE Touch Tabs will be made to the UPPER 1 section, since that is the section selected by the VOICE SETUP Touch Tabs. Since the UPPER 1 Touch Tab in the VOICE ON/OFF section is also selected, you will be able to hear changes instantly just by playing keys on the keyboard.

NOTE: For this example, make sure the SPLIT ON Touch Tab is “OFF” (LED not lit).

5. Touch and hold the VIBRA/MALLET Touch Tab in the VOICE Section for approximately 2 seconds:

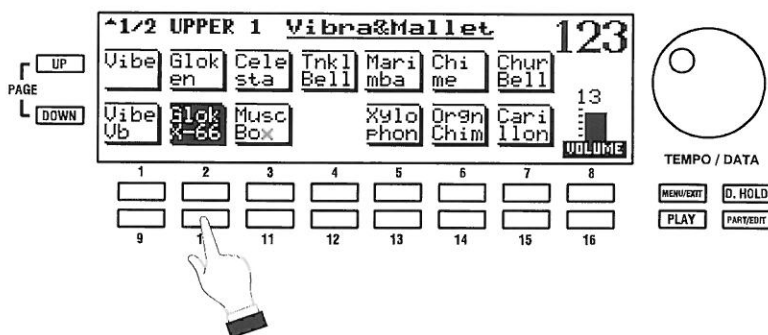


This will call up the Vibra&Mallet screen. The Information Center Display should now look similar to this:



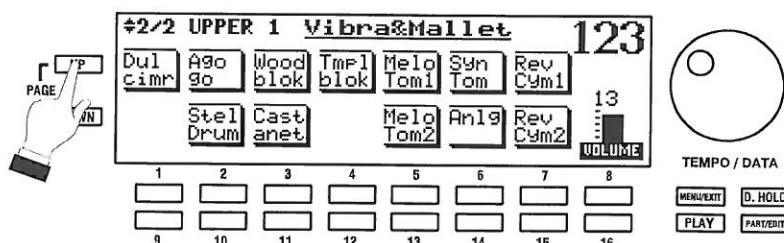
Notice that one Voice Name is “highlighted,” or displayed in reverse-video (green lettering against a black background). This is the voice that will play from the manual. You will also see “UPPER 1” displayed in the upper left-hand corner of the screen. This lets you know that you are currently setting the UPPER 1 Voice.

6. The voices on the screen are arranged in a pattern corresponding to that of the numbered Touch Buttons. For example, suppose you want to select Glock X-66 as the voice that will play when the VIBRA/MALLET Touch Tab is turned “ON.” To select Glock X-66 as your UPPER 1 Voice, touch the Number 10 Select Touch Button. The box containing the words, “Glock X-66” will change to a black background and the words, “Glock X-66” will change to green lettering.



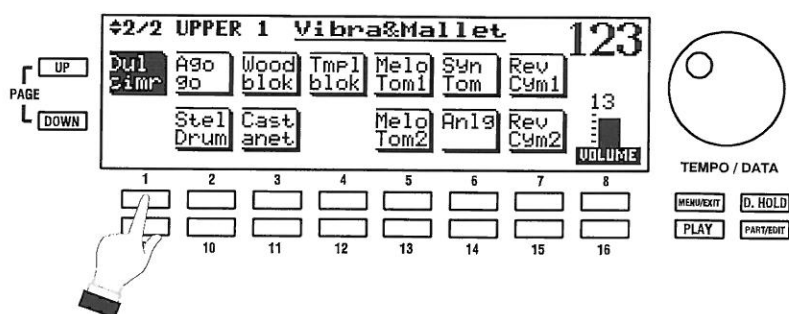
7. Play some notes on the manual and you will hear the new voice.

8. Notice that the Information Center Display shows, "1/2" in the upper left-hand corner. This indicates that this particular screen has more than one page. To see the second page of the VIBRA/MALLET Voice Menu, touch the PAGE UP Select Touch Button once.



You will now see "2/2" shown in the upper left-hand corner of the Information Center Display, and a different list of Voice names. Notice, however, that none of them are selected. This is because the Voice selected to play from the VIBRA/MALLET group is on the first page.

9. To select a Voice from this page, touch the numbered Touch Button which corresponds to the voice you want. Suppose, for example, you want to select Dulcimer. You would touch the number 1 Touch Button.



By noticing the pattern in which the Voices are arranged relative to the numbered Touch Buttons, you can select any Voice from the Voice Menus for each group.

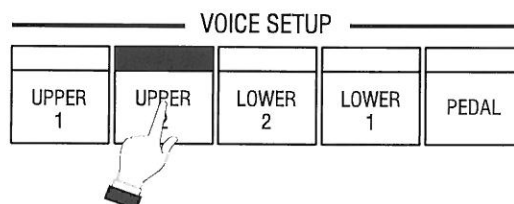
If you want to change the volume of the selected Voice,

Use the Number 8 Touch Button to increase the volume.

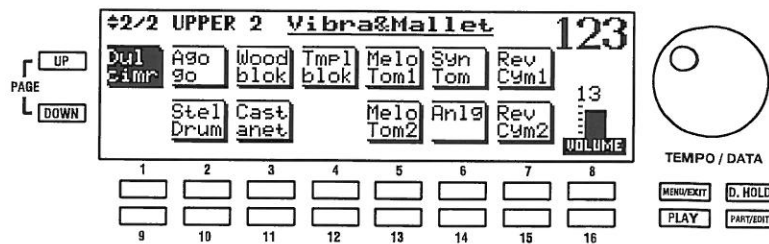
Use the Number 16 Touch Button to decrease the volume.

As you adjust the volume using these Touch Buttons, you will see the graph bar in the Information Center Display lengthen or shorten, and the number just above the bar increase or decrease in value.

10. Now, suppose you want to select a voice for UPPER 2. You can do so while playing or listening to the UPPER 1 Voice. Touch the UPPER 2 Select Touch Button in the VOICE SETUP Touch Tab group.

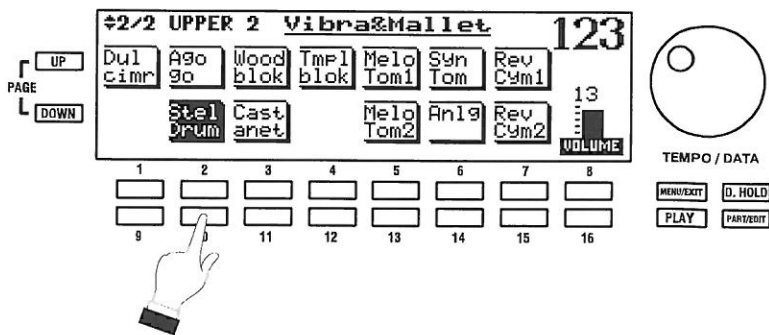


11. Now touch the VIBRA/MALLET Touch Tab in the VOICE Section. The Information Center Display should now look similar to this:



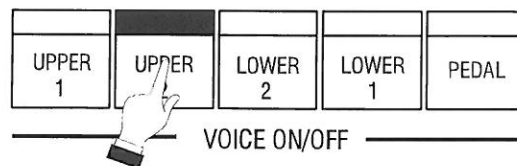
Notice that the Information Center Display now shows “UPPER 2.” This indicates that you may now select the Voice for the UPPER 2 division.

12. For this example, select Steel Drum by touching the Number 10 Select Touch Button:



You have now selected Steel Drum for the UPPER 2 division. However, if you play notes on the manual, you will still hear the voice you selected for the UPPER 1 division.

13. To hear the voice you just selected for UPPER 2, touch the UPPER 2 Touch Tab in the VOICE ON/OFF group.



Notice that the UPPER 1 Touch Tab turns “OFF” while the UPPER 2 Touch Tab turns “ON.” This is done on purpose so you can make tone changes quickly.

14. Now play some notes on the manual, and you will hear the UPPER 2 Voice.

NOTE: If you want to play two or more Voice groups together, you can do so by touching the ON/OFF Touch Tabs together of the groups you want to hear. However, you CANNOT use the UPPER 2 and LOWER 2 divisions together. If you touch either of these two, if the other is “ON” it will cancel.

♦ SETUP Touch Tabs

— SETUP —	
OCTAVE UP	VELOCITY TOUCH
OCTAVE DOWN	SUSTAIN

Located to the right of the VOICE SELECT Touch Tabs are 4 Touch Tabs. These allow you to control several options such as Octave selection, and turning Sustain and Velocity "ON" or "OFF".

OCTAVE UP



This Touch Tab causes the selected Voice to play higher in pitch. Touching it once will cause the selected Voice to play one octave higher and the red LED will glow continuously. Touching it two times will cause the selected Voice to play two octaves higher and the red LED will flash "ON" and "OFF" repeatedly.

OCTAVE DOWN



This Touch Tab causes the selected Voice to play lower in pitch. Touching it once will cause the selected Voice to play one octave lower and the red LED will glow continuously. Touching it two times will cause the selected Voice to play two octaves lower and the red LED will flash "ON" and "OFF" repeatedly.

VELOCITY TOUCH



This Touch Tab causes the selected Voice to play with Velocity sensitivity.

NOTE: You can control the level of Velocity Touch added by the VELOCITY TOUCH Touch Tab. How to do this is covered in the SPECIAL ADVANCED FEATURES section of this Guide under, "Velocity Touch."

SUSTAIN



This Touch Tab adds a lingering effect to the selected Voice.

NOTE: You can control the amount of Sustain added to the Voices by the SUSTAIN Touch Tab. How to do this is covered in the EFFECTS Section of this Guide under, "Sustain."

► VOICE EDIT Menu

This Advanced Feature Menu allows you to modify the characteristics of the voices in the Voice Section according to your preference.

Accessing the VOICE EDIT Menu using the MENU/EXIT Touch Button:

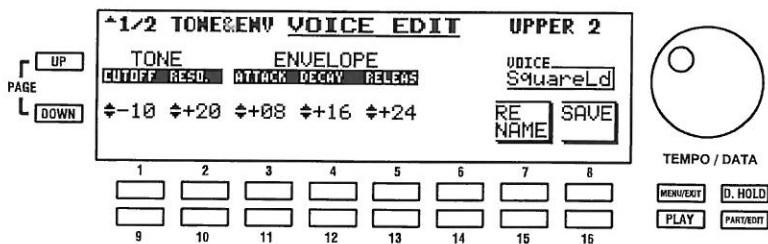
1. From the PLAY Screen, touch the gray MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
2. Touch the PAGE UP Select Touch Button once. Page 2 of the MENU Mode will now display. You will now see "2/4" in the upper left corner of the Information Center Display.
3. Touch either the Number 11 or Number 12 Select Touch Buttons. The words, "VOICE EDIT," will now display at the top of the screen.

Accessing the VOICE EDIT Menu using the Shortcut:

4. Touch any of the VOICE Touch Tabs. The Information Center Display should now display the menu of Voices for that group.
5. Touch the PART/EDIT Touch Button once. The words, "VOICE EDIT," will now display at the top of the screen.

You are now in the VOICE EDIT Menu. You may now use the numbered Select Touch Buttons below the screen to make various changes to the Voices. These changes are explained below.

VOICE EDIT Menu - Page 1



On the right portion of the display, you will see the currently selected voice and the division it will play from.

TONE Edit - Cutoff

This Advanced Feature allows you to set the overall brightness of the selected voice.

Use the Number 1 Select Touch Button to scroll up through the numbers.

Use the Number 9 Select Touch Button to scroll down through the numbers.

TONE Edit - Resonance

This Advanced Feature allows you to set the “formant” of the selected voice. A higher number means that the sound will have an audible “peak”. A lower number means a mellower, more nondescript sound.

Use the Number 2 Select Touch Button to scroll up through the numbers.

Use the Number 10 Select Touch Button to scroll down through the numbers.

ENVELOPE - Attack

This Advanced Feature allows you to set the rate at which the tone starts after you press a note.

Use the Number 3 Select Touch Button to make the Attack slower.

Use the Number 11 Select Touch Button to make the Attack faster.

ENVELOPE - Decay

This Advanced Feature allows you to set the rate at which the sound decays, or fades away, while a note is pressed and held.

Use the Number 4 Select Touch Button to make the Decay slower.

Use the Number 12 Select Touch Button to make the Decay faster.

ENVELOPE - Release

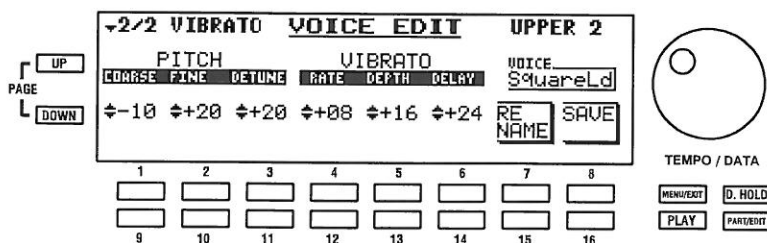
This Advanced Feature allows you to set the rate at which the sound fades away after a note is released.

Use the Number 5 Select Touch Button to increase the Release time.

Use the Number 13 Select Touch Button to decrease the Release time.

VOICE EDIT Menu - Page 2

From Page 1 of the VOICE EDIT Menu, touch the PAGE UP Select Touch Button once to display Page 2.



You may now use the numbered Select Touch Buttons below the screen to add various effects to the selected voice. These changes are explained below.

PITCH - Coarse Tune

This Advanced Feature allows you to raise or lower the pitch of the selected voice.

Use the Number 1 Select Touch Button to raise the pitch of the selected voice.

Use the Number 9 Select Touch Button to lower the pitch of the selected voice.

PITCH - Fine Tune

This Advanced Feature allows you to raise or lower the pitch of the selected voice by small amounts.

Use the Number 2 Select Touch Button to raise the pitch of the selected voice.

Use the Number 10 Select Touch Button to lower the pitch of the selected voice.

PITCH - Detune

Some of the Voices consist of “stereo samples,” or two digital channels per note. This Advanced Feature allows you to detune the second channel to produce Chorusing or “out-of-tune” effects.

Use the Number 3 Select Touch Button to raise the pitch of the second channel.

Use the Number 11 Select Touch Button to lower the pitch of the second channel.

VIBRATO - Rate

This Advanced Feature allows you to set the rate of the Vibrato for the selected voice.

Use the Number 4 Select Touch Button to increase the Vibrato rate.

Use the Number 12 Select Touch Button to decrease the Vibrato rate.

VIBRATO - Depth

This Advanced Feature allows you to set the depth or intensity of the Vibrato.

Use the Number 5 Select Touch Button to increase the depth.

Use the Number 13 Select Touch Button to decrease the depth.

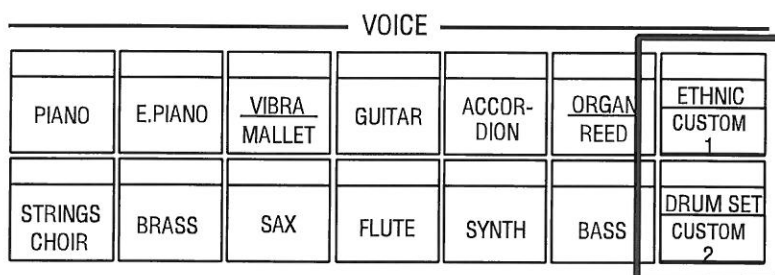
VIBRATO - Delay

This Advanced Feature allows you to set the delay time of the Vibrato.

Use the Number 6 Select Touch Button to increase the delay time.

Use the Number 14 Select Touch Button to decrease the delay time.

♦ CUSTOM VOICE

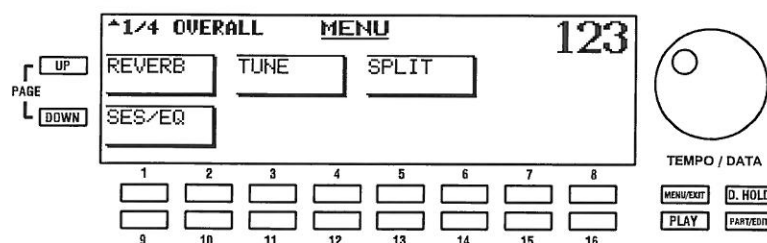


The CUSTOM VOICE feature of your XE-1 allows you to create your own Custom Voices by using the parameters described on the previous pages to edit the voices in the voice library. After you have made your edits, you can save the result as a Custom Voice.

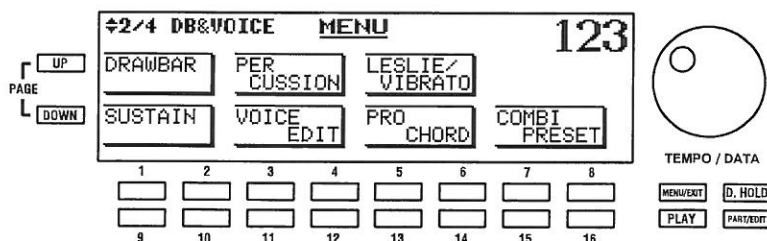
Creating a Custom Voice

TRY THIS:

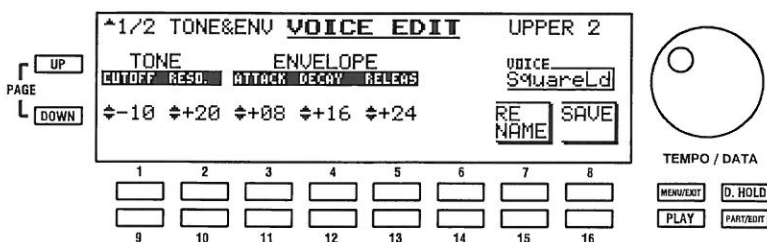
1. Select a voice you want to edit from among the different groups.
2. Touch the MENU/EXIT Touch Button. The Information Center Display should look like this:



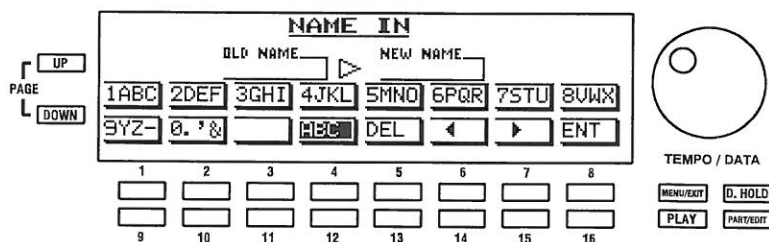
3. Touch the PAGE UP Touch Button once. The Information Center Display should now look like this:



4. Touch either the Number 11 or Number 12 Select Touch Button. The Information Center Display should now look like this:



5. You have now selected the VOICE EDIT Menu. Make whatever changes you want to the Voice you have selected using the parameters on Page 1 and Page 2 of the VOICE EDIT Menu.
6. At this point, it is suggested you give your edited Voice a new name. To do this, touch either the Number 7 or Number 15 (RENAME) Select Touch Button. The Information Center Display will now look like this:



7. Use the numbered Touch Buttons to rename the Custom Voice. The current name will display in a box in the left part of the screen called "OLD NAME," while the new name will display in a box in the right part of the screen called "NEW NAME." The way the letters are displayed in the screen determines which numbered Touch Button you would use to make your choice. For example, use the Number 1 Touch Button to enter the characters, "1ABC," use the Number 2 Touch Button to enter the characters, "2DEF," etc.

Use the Number 11 Select Touch Button to enter a space.

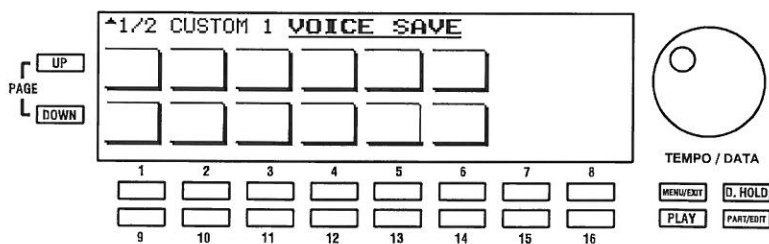
Use the Number 12 Select Touch Button to select upper- or lower-case letters. The letter boxes in the Information Center Display will show which type has been selected - "1ABC," or "1abc," for example.

Use the Number 13 Select Touch Button to delete a character.

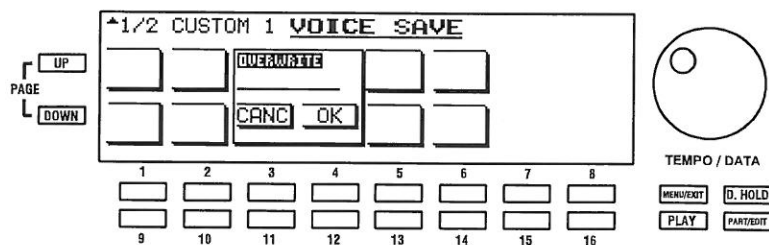
Use the Number 14 and Number 15 Select Touch Buttons to scroll backward and forward through the characters.

Use the Number 16 Select Touch Buttons to enter characters after you have selected them using the other numbered Touch Buttons.

8. After you have entered your name (up to 8 characters), touch the ENT (Number 16 Select Touch Button). A box, "Saving Name. Please wait," will show in the Information Center Display for approximately 1 second. When this box disappears, your new Voice name is saved. The VOICE EDIT Menu will now reappear.
9. To save your Custom Voice, touch the Number 16 Select Touch Button. The Information Center Display should now look similar to this:



10. Touch one of the numbered Touch Buttons to select the location to which you want to save your Custom Voice. The boxes on the screen are arranged in a pattern corresponding to that of the numbered Touch Buttons similar to the VOICE SELECT Pages described earlier. For this example, touch the Number 1 Select Touch Button. You will now see a screen similar to this:



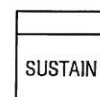
11. If you DO NOT wish to overwrite any of the Custom Voices, touch either the Number 3 or Number 11 Select Touch Button. The VOICE EDIT Menu will reappear and your Custom Voice will not be saved. If you want to save your Custom Voice, touch either the Number 4 or Number 12 Select Touch Button. A box, "Please wait," will show in the Information Center Display for approximately 1 second. When this box disappears, your Custom Voice is saved.

◆ VOICE EFFECTS

You can add Sustain and Chorus to the Voices of your XE-1. In the following section, each effect is explained in detail.

SUSTAIN

This Touch Tab, located in the SETUP Touch Tab group in the VOICES section, adds a lingering effect to the selected Voice.



► SUSTAIN Edit Menu

This Advanced Feature Menu allows you to control the characteristics of Sustain for Upper Manual, Lower Manual and Pedals.

Accessing the SUSTAIN Edit Menu using the MENU/EXIT Touch Button:

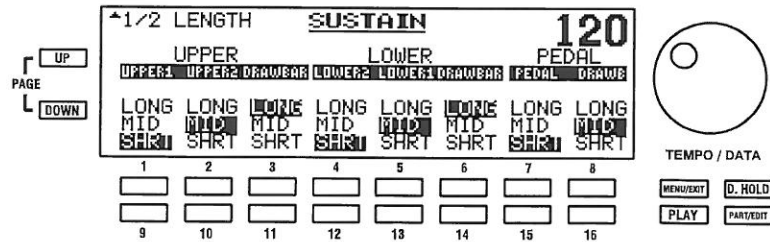
1. Touch the gray MENU/EXIT Select Touch Button to see the various Menu choices.
2. Touch either the Number 9 or Number 10 Select Touch Buttons. The word, "SUSTAIN," will now display at the top of the screen.

Accessing the SUSTAIN Edit Menu using the Shortcut:

Touch and hold the SUSTAIN Touch Tab in the SETUP group. After approximately 1 second, the word, "SUSTAIN," will display at the top of the screen.

You are now in the SUSTAIN Edit Menu. You may now use the numbered Select Touch Buttons below the screen to make various changes to the Sustain. These changes are explained below.

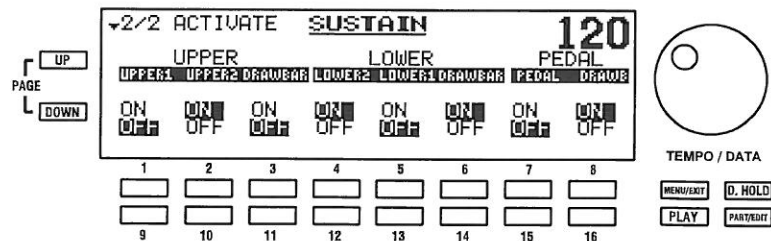
SUSTAIN Edit Menu Page 1 - Sustain Length



This Menu Page allows you to select the amount of Sustain that will be added when you touch any of the Sustain Touch Tabs "ON". You may select different settings for Upper Manul, Lower Manual and Pedal.

SUSTAIN Edit Menu Page 2 - Sustain Activate

From Page 1, touch the PAGE UP Touch Button. You will now see the Sustain Activate page.



This Menu Page allows you to select the particular Voices to which you want to add Sustain.

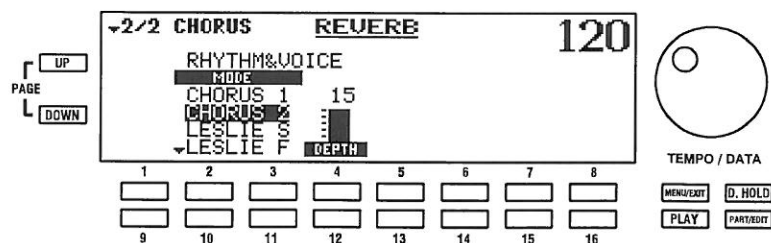
Use the top row of numbered Select Touch Buttons (Numbers 1, 2, 3, 4, 5, 6, 7 and 8) to turn Sustain "ON" for the selected Voice.

Use the bottom row of numbered Select Touch Buttons (Numbers 9, 10, 11, 12, 13, 14, 15 and 16) to turn Sustain "OFF" for the selected Voice.

CHORUS

The Chorus effect produces rich sound expansion with natural depth by dividing the Orchestral Voice into two subtly different pitches through two different channels, as if you were playing two instruments simultaneously. (This effect is called "acoustic mix".)

► CHORUS Edit Menu



This Advanced Feature Menu Page allows you to adjust the type and amount of Chorus that you prefer.

Accessing the CHORUS Edit Page using the MENU/EXIT Touch Button:

1. From any of the PLAY Mode pages, touch the gray MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
2. Touch either the Number 1 or Number 2 Select Touch Button. The word, "REVERB," will now display at the top of the screen. This menu has 2 pages, so you will see "1/2" in the upper left corner of the Information Center Display.
3. Touch the PAGE UP Select Touch Button once. You will now see "2/2" in the upper left corner of the Information Center Display and the word, "CHORUS," on the left side of the display.

Accessing the CHORUS Edit Page using the Shortcut:

1. Touch and hold the REVERB Touch Tab. After approximately 1 second, you will see "1/2 REVERB" in the upper left corner of the Information Center Display and the word, "REVERB," at the top of the screen.
2. Touch the PAGE UP Select Touch Button once. You will now see "2/2" in the upper left corner of the Information Center Display and the word, "CHORUS," on the left side of the display.

You may now use the numbered Select Touch Buttons below the screen to change the type and amount of Chorus.

Chorus Rhythm & Voice Type

This Advanced Feature allows you to select the type of Chorus that you prefer for the Rhythms and Voices.

Use the Number 2 or Number 3 Select Touch Buttons to scroll up through the choices.

Use the Number 10 or Number 11 Select Touch Buttons to scroll down through the choices.

Chorus Rhythm & Voice Level

This Advanced Feature allows you to select the amount of Chorus that you prefer for the Rhythms and Voices.

Use the Number 4 Select Touch Button to increase the amount of Chorus.

Use the Number 12 Select Touch Button to decrease the amount of Chorus.

► CHORUS MIXER Menu

This Advanced Feature Menu allows you to select the amount of Chorus you want for the individual Parts of the different Voice Sections of the instrument.

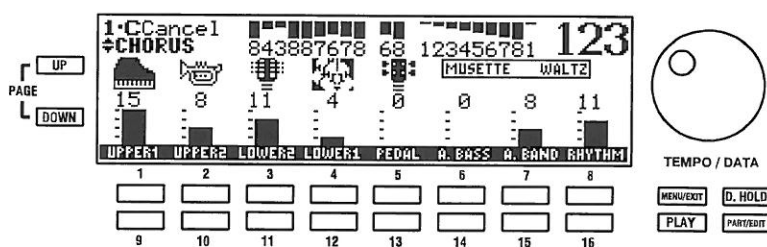
NOTE: This Advanced Feature Menu has no Shortcut. It is accessible only via the PLAY and PART Touch Buttons.

Accessing the CHORUS MIXER Menu:

1. Touch the PLAY Select Touch Button repeatedly until Page 1 of the MIXER Mode displays. Refer to the INFORMATION CENTER DISPLAY section of this Guide for more information about MIXER Mode.
2. Touch the PAGE UP Select Touch Button three times. Page 1 of the CHORUS MIXER Menu will now display.

You are now in the CHORUS MIXER Menu. You may now use the numbered Select Touch Buttons below the screen to control the Chorus of different divisions. These changes are explained below.

CHORUS MIXER Menu - Page 1



Use the numbered Touch Buttons to control the Chorus of the designated Voice group. The top row of numbered Select Touch Buttons (Numbers 1, 2, 3, 4, 5, 6, 7 and 8) will increase the amount, while the bottom row of numbered Select Touch Buttons (Numbers 9, 10, 11, 12, 13, 14, 15 and 16) will decrease the amount. For example, use the Number 1 and Number 9 Touch Buttons to control the Chorus of the UPPER 1 Voice, the Number 2 and Number 10 Touch Buttons to control the Chorus of the UPPER 2 Voice, etc.

NOTE: The Voice designations (UPPER 1, UPPER 2, LOWER 2, etc.) are explained in further detail under VOICE SECTION starting on page 35.

Use the PART Select Touch Button to select different divisions for which you can control the Chorus. Touching the PART Select Touch Button once from Page 1 will advance you to Page 2. Touching it again will show Page 3, and touching it again will show Page 4. Touching the PART Touch Button while Page 4 is displaying will cause Page 1 to display again.

KEYBOARD SPLIT

Although the XE-1 has a single keyboard, the keyboard can be Split so that one sound can be played on one part of the keyboard and a different sound can be played on another part of the keyboard.

◆ Upper and Lower Manuals on the XE-1

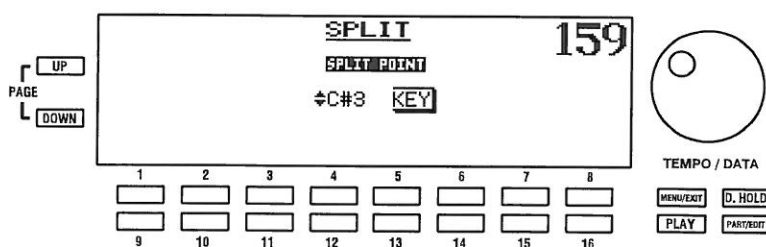
When the keyboard is split, the effect is that of a conventional two-keyboard organ on which the Upper Manual would be played by the right hand and the Lower Manual would be played by the left hand. Therefore, when Split is “ON,” the area to the right of the Split Point is referred to on the XE-1 as the Upper Manual and is abbreviated, “UM.” The area to the left of the Split Point is designated as the Lower Manual and bears the abbreviation, “LM.” You will notice both of these abbreviations in the Information Center Display. This is important to keep in mind because if you are making any changes to parameters affecting the Lower Manual, such as Drawbar Registration, you will not hear any change unless Split is “ON.”

◆ SPLIT ON Touch Tab

Touch this Touch Tab “ON” (LED lit) to activate the Split Point. Touch it “OFF” (LED not lit) to play the XE-1 as a single-keyboard instrument.



► SPLIT Edit Menu



This Advanced Feature allows you to select the Split Point.

NOTE: The SPLIT ON Touch Tab must be “ON” (red LED lit) in order to hear the effect of this feature.

Accessing the SPLIT Edit Menu using the MENU/EXIT Touch Button:

1. From any of the PLAY Mode Pages, touch the gray MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see “1/4” displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
1. Touch either the Number 5 or Number 6 Select Touch Buttons. The word, “SPLIT,” will now display at the top of the screen.

Accessing the SPLIT Edit Page using the Shortcut:

Touch and hold the SPLIT ON Touch Tab. After approximately 1 second, you will see the word, “SPLIT,” at the top of the screen.

You may now use the numbered Select Touch Buttons below the screen to change the Split point.

Changing the Split Point using the Touch Buttons:

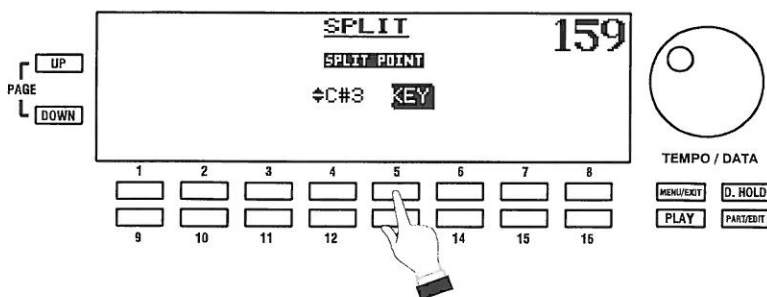
Use the Number 4 Select Touch Button to move the Split Point up. The upper limit is “6C” (the highest note on the keyboard).

Use the Number 12 Select Touch Button to move the Split Point down. The lower limit is “1C” (the lowest note on the keyboard).

Changing the Split Point by Key Input:

TRY THIS:

1. Touch and hold either the Number 5 or Number 13 Select Touch Button.

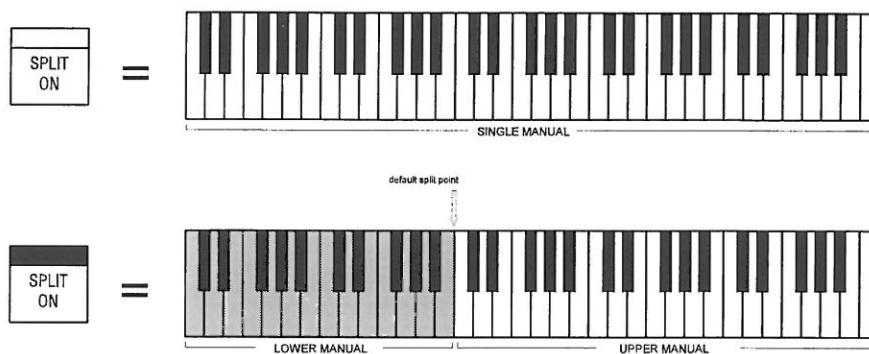


Notice that the “KEY” box is now highlighted.

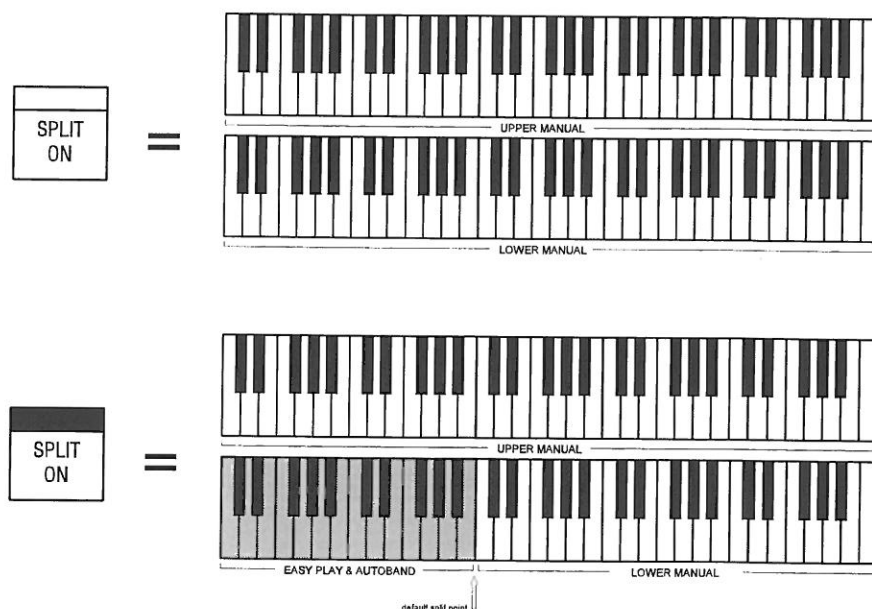
2. Touch the note on the keyboard that represents the Split Point you wish. The note you touch will become the top note of the Lower Manual. All notes to the right of the note you touch will be assigned to the Upper Manual.

♦ SINGLE and DOUBLE Mode

Normally, the XE-1 operates in what is called, “SINGLE Mode,” meaning a single 61-note keyboard, as shown below:



However, if you want to connect another keyboard to use as a Lower Manual, the SPLIT Touch Button will function as shown below:



Notice that whatever you are using as a Lower Manual now receives the split when the SPLIT Touch Tab is "ON." In this way, you can have "three-manual" operation - a melody registration on the XE-1 manual, a separate melody setting for the top portion of the Lower Manual (provided by the Lower Drawbars and the LOWER 1 and LOWER 2 Touch Tabs) and the AUTOBAND providing accompanimental support from the lower portion of the Lower Manual.

RHYTHM & EASY PLAY

♦ AUTO VARI RHYTHMS & STYLES

Hammond's AUTO VARI is an exciting feature which complements a wide variety of musical styles and adds realism and fun to your playing. All of the sounds and rhythms are created from digital sound sources, thereby giving authenticity to the rhythm patterns.

There are 100 AUTO VARI Rhythms & Styles arranged in 16 rhythm categories controlled by two rows of eight Touch Tabs.

To activate one of the 16 Rhythm categories, simply touch the single Touch Tab of the rhythm that you wish to use.

RHYTHMS & STYLES							
WALTZ	COUNTRY	JAZZ	BALLAD	8 BEAT	DANCE	BOSSA NOVA	RHUMBA DISK STYLE 1
MARCH POLKA	TRAD.	SWING	ROCK	16 BEAT	SAMBA	LATINS	TANGO DISK STYLE 2

NOTE: One of these Touch Tabs is always "ON" (red LED lit).

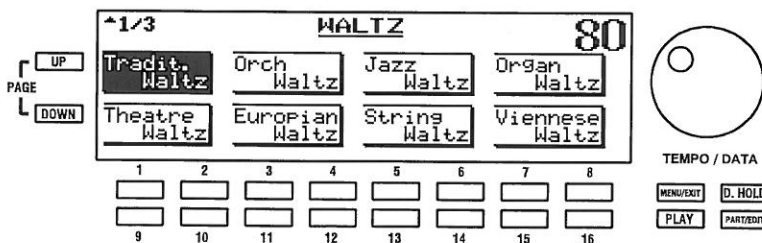
If you press another basic pattern after starting the Rhythm, first the remaining section of the previous basic pattern will be played, and then the newly selected pattern will play.

Rhythm Categories

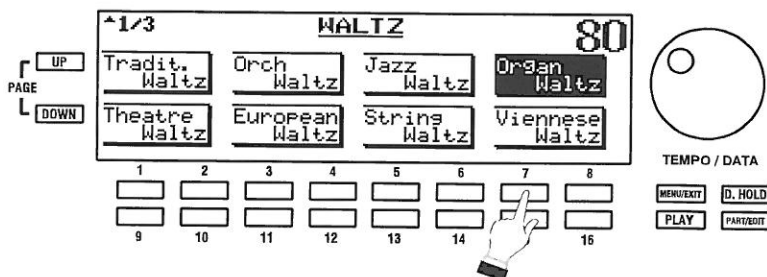
Each of the 16 Rhythm Touch Tabs controls several different Rhythms & Styles. These Rhythms & Styles represent different types of music within a general musical classification such as Country, Traditional, etc. You can use the Information Center Display to choose the specific rhythm you want within each category.

Accessing the Rhythm Styles

1. Touch and hold the Touch Tab which represents the rhythm category you want (SWING, LATINS, etc.). The Information Center Display will show the selected category at the top of the screen. Below the Rhythm Category name, the Information Center Display will show a number of different rhythm names. For example, if you touch and hold the WALTZ Touch Tab, you would see 8 rhythm styles listed:



2. Use the numbered Touch Buttons to choose which rhythm you want. The rhythms on the screen are arranged in a pattern corresponding to that of the numbered Touch Buttons. For example, in the WALTZ category, "TRADIT. WALTZ" is listed in the upper left corner of the display, so you would use the upper left Touch Buttons (Number 1 or Number 2) to select that rhythm. The rhythm, "ORGAN WALTZ" is in the upper right corner, so you would use the Number 7 or Number 8 Touch Buttons to select ORGAN WALTZ. The same principle applies to all other rhythm selections.



NOTE: The number of rhythms listed will vary from category to category.

In the extreme upper left corner of the Information Center, you will see a message such as, "1/4," "1/3" or "1/2". This is to let you know that there is more than one page for that Rhythm Category. Use the Page UP and PAGE DOWN Select Touch Buttons to move back and forth between or among Pages.

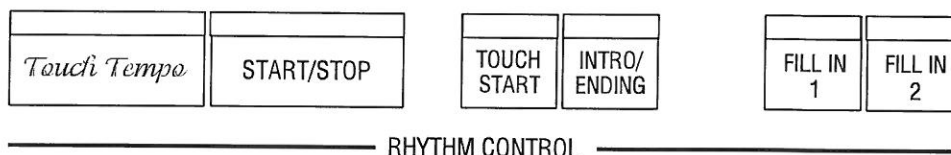
Use the PAGE UP Select Touch Button to scroll up through the Rhythm Pages.

Use the PAGE DOWN Select Touch Button to scroll down through the Rhythm Pages.

NOTE: The message, "1/1," indicates only one page for that particular Rhythm category. In the case of Rhythm categories having only one Page, touching the PAGE UP or PAGE DOWN Touch Buttons will have no effect.

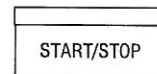
♦ RHYTHM CONTROL

The RHYTHM CONTROL Touch Tab group allows you to control the AUTO VARI Rhythms.



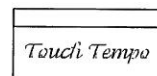
START / STOP

Touch to Start the rhythm and the LED will light, touch again to Stop a rhythm.



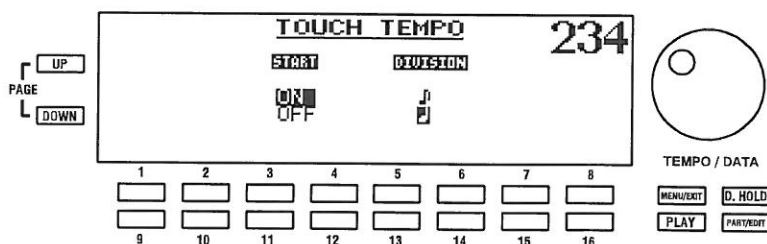
TOUCH TEMPO

You may select your own Rhythm Tempo by touching this Touch Tab four (4) times at the desired tempo, counting "1, 2, 3, 4." The rhythm will then be programmed to that tempo, not the tempo set by the Tempo Wheel Control. However, you may still use the Tempo Wheel Control to further adjust the rhythm tempo if you wish. When the Information Center Display is in PLAY or MIXER Mode, the Rhythm Tempo will be shown in the upper right corner and is displayed in "beats per minute".



NOTE: When the Rhythm is sounding, you may adjust the Tempo by touching the TOUCH TEMPO Touch Tab only two times.

► TOUCH TEMPO Edit Menu



This Advanced Feature allows you to set how you want the TOUCH TEMPO feature to work

Accessing the TOUCH TEMPO Edit Menu using the MENU/EXIT Touch Button:

1. Touch the gray MENU Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
1. Touch the PAGE UP Select Touch Button two times. Page 3 of the MENU Mode will now display. You will now see "3/4" in the upper left corner of the Information Center Display.
1. Touch either the Number 7 or Number 8 Select Touch Buttons. The words, "TOUCH TEMPO" will now display at the top of the screen.

Accessing the TOUCH TEMPO Edit Menu using the Shortcut:

Touch and hold the TOUCH TEMPO Touch Tab. After approximately 1 second, the words, "TOUCH TEMPO" will display at the top of the screen.

You are now in the TOUCH TEMPO Edit Menu. You may now use the numbered Select Touch Buttons below the screen to make various changes to the TOUCH TEMPO feature. These changes are explained below.

Rhythm Start

This Advanced Feature allows you to select whether you want the selected Rhythm to start playing as soon as you have finished entering the Tempo by touching the TOUCH TEMPO button four times. When this feature is "ON," the Rhythm will start at the Tempo you set. When this feature is "OFF," the Tempo will be set but the Rhythm will not start until turned "ON" by the STOP/START or TOUCH START features.

Use the Number 3 or Number 4 Select Touch Button to select "ON."

Use the Number 11 or Number 12 Select Touch Button to select "OFF."

Division

This Advanced Feature allows you to select what note value the TOUCH TEMPO feature will give to the button presses made while programming the Tempo. You can select "♩" (eighth notes) or "♩" (quarter notes).

Use the Number 5 or Number 6 Select Touch Button to select Eighth Notes.

Use the Number 13 or Number 14 Select Touch Button to select Quarter Notes.

TOUCH START

When this Touch Button is selected, the Start / Stop Touch Tab is also turned "ON" (both LED's will light), and the rhythm starts automatically on beat 1 as soon as any key is pressed on the Lower Manual. The rhythm will continue to sound until turned "OFF".

TOUCH START

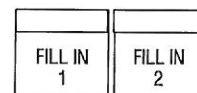
INTRO/ENDING

The INTRO/ENDING Touch Tab adds an introduction before the actual Rhythm Pattern starts. You may also add an Ending to complete a song by simply touching the INTRO/ENDING Touch Tab while the Rhythm Pattern is playing.

INTRO/ ENDING

FILL IN 1 and FILL IN 2

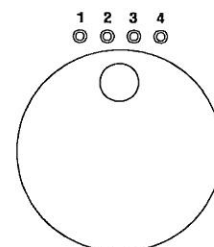
These Touch Tabs are located immediately above the Stop / Start Touch Tab. The Rhythm Patterns basically play two- or four-measure patterns repeatedly, but the Fill In 1 and Fill In 2 Touch Tabs produce different one-bar patterns to add variety and the realism of a professional drummer to the rhythm patterns. Use the Fill Ins at your own discretion and according to your own musical tastes.



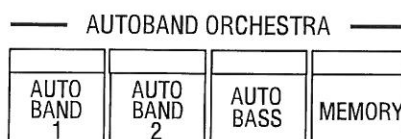
♦ TEMPO WHEEL CONTROL

To the right of the LCD screen is the TEMPO WHEEL CONTROL. This large rotary control allows you to easily control the tempo of the selected Rhythm. The total range of the Rhythm Tempo is from 40 to 300 bpm (beats per minute).

When the Information Center Display in either of the PLAY Modes, the Rhythm Tempo will be shown in the upper right corner and is displayed in 'beats per minute'.



♦ AUTOBAND ORCHESTRA



The AUTOBAND ORCHESTRA feature provides professionally scored instrumental accompaniments along with the rhythm pattern. AUTOBAND Orchestra works with both Easy Play System (EPS) or your own Multi-Finger Chords played on the Lower Manual.

AUTOBAND 1 Touch Tab

This Touch Tab provides an appropriate musical accompaniment for the selected rhythm pattern.



AUTOBAND 2 Touch Tab

This Touch Tab provides an alternate musical accompaniment for the selected rhythm pattern.



Using the AUTOBAND 1 and AUTOBAND 2 Touch Tabs together will provide the maximum musical accompaniment. The parts are written to complement each other.

You may also use other Voice Groups and the Lower Drawbars for sustained chord effects along with the AUTOBAND feature.

AUTO BASS Touch Tab

This feature enables bass notes automatically. However, it may be turned off, allowing the player to play the Pedals along with the AUTOBAND accompaniments.

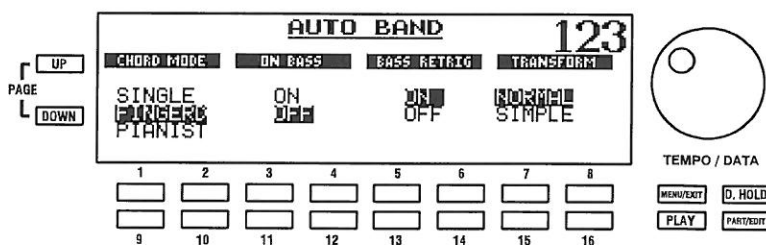


MEMORY Touch Tab

When Memory is selected the sounds produced on the Lower Manual will be sustained. This makes your chord changes sound smoother when you move from one chord to the next. If Memory is not "ON," when an EPS or Multi-Fingered Chord is released, the sounds stop until you play the next chord.



► AUTOBAND Edit Menu



This Advanced Feature Menu allows you to select how the AUTOBAND will perform.

Accessing the AUTO BAND Edit Menu using the MENU/EXIT Touch Button:

1. Touch the gray MENU Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
1. Touch the PAGE UP Select Touch Button two times. Page 3 of the MENU Mode will now display. You will now see "3/4" in the upper left corner of the Information Center Display.
1. Touch either the Number 1 or Number 2 Select Touch Button. The words, "AUTO BAND," will now display at the top of the screen.

Accessing the AUTO BAND Edit Menu using the Shortcut:

Touch and hold either the AUTO BAND 1 or AUTO BAND 2 Touch Tab. After approximately 1 second, the words, "AUTO BAND" will display at the top of the screen.

You are now in the AUTO BAND Edit Menu. You may now use the numbered Select Touch Buttons below the screen to make various changes to the AUTO BAND feature. These changes are explained below.

Chord Mode

This Advanced Feature allows you to select how chords are played when AUTOBAND is "ON." You can select "SINGLE" (EASY PLAY SYSTEM chords which require the fewest number of keys), "FINGERED" (3 or more notes for each chord) or "PIANIST" (you can play AUTOBAND chord changes the entire length of the keyboard using 3 or more notes).

NOTE: This feature, as well as the ON BASS Advanced Feature described below, works with Lower Manual chords keyed using both AUTOBAND and EASY PLAY SYSTEM. However, the EASY PLAY SYSTEM Touch Tab is designed to allow you to play EASY PLAY SYSTEM chords using the Lower Manual Drawbars and Voices, and DOES NOT affect the AUTOBAND section. For this reason, both EASY PLAY SYSTEM and the EASY PLAY SYSTEM Touch Tab are described in more detail starting on page 84.

Use the Number 1 or Number 2 Select Touch Button to scroll up through the choices.

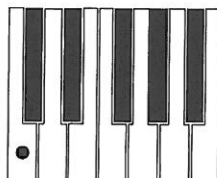
Use the Number 9 or Number 10 Select Touch Button to scroll down through the choices.

EASY PLAY SYSTEM Chords - SINGLE Mode

Major Chords

To play a Major chord, play the key that is the name of the chord you are playing.

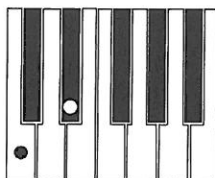
EXAMPLE: C Major chord: Play a "C" key on the Lower Manual.



Minor Chords

Minor Chords are formed by touching and holding two keys. To play a "C" Minor Chord, first touch and hold the key that is the NAME of the chord. Second, determine the note which is a minor third above the key you are holding by counting three (3) keys to the right not including the key you are holding. For a C Minor Chord, this note is "E^b".

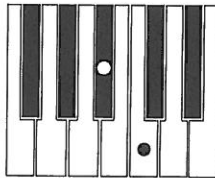
1. C
2. E^b



Seventh Chords

Forming a Seventh Chord requires touching and holding two keys. To play a "C" Seventh Chord, play the key that is the NAME of the chord. To determine the second key, count two (2) keys to the left of the first key (B^b if you are playing a C Seventh Chord). Do not include the first key in your count.

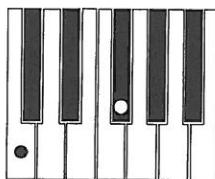
1. C
2. B^b



Diminished Chords

Forming a Diminished Chord requires touching and holding two keys. To play a "C" Diminished Chord, play the key that is the NAME of the chord. To determine the second key, count six (6) keys either to the left or the right of the first key (G^b if you are playing a C Diminished Chord). Do not include the first key in your count.

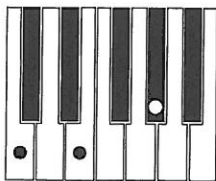
1. C
2. G^b



Augmented Chords

Forming an Augmented Chord requires touching and holding three keys. To play a "C" Augmented Chord, play the key that is the NAME of the chord. Next, count three (3) keys to the right of the key that is the name of the chord. Finally, count three (3) notes to the right of the key you just added. Remember, do not include the note that is the name of the chord when counting. For a C Augmented Chord, these three notes are:

1. C
2. E
3. G^\sharp



NOTE: The examples given are for the five basic chord types common to all harmony. To see a complete list of all chords recognized by the EASY PLAY SYSTEM, consult the APPENDIX located at the back of this Guide.

On Bass

This Advanced Feature allows you to select how you want the AUTO BASS to work while a Style is active. You can select "ON" (the AUTO BASS will play the lowest note of the chord you are playing in time with the Style) or "OFF" (the AUTO BASS will play the scored bass line for the selected Style).

Use the Number 3 or Number 4 Select Touch Button to turn this feature "ON."

Use the Number 11 or Number 12 Select Touch Button turn this feature "OFF."

NOTE: If you have a MIDI Pedalboard, such as the Hammond XPK-100, connected to the XE-1, the ON BASS Advanced Feature will be in the "ON" position regardless of the setting in this page of the Advanced Feature Menu.

Bass Retrigger

This Advanced Feature allows you to select how you want the AUTO BASS to respond when you change chords between beats. You can select "ON" (the AUTO BASS will interpolate the root note of the chord you change to) or "OFF" (the AUTO BASS will not insert the root note of your new chord, but will continue to play the scored bass line for the selected Style).

Use the Number 5 or Number 6 Select Touch Button to turn this feature "ON."

Use the Number 13 or Number 14 Select Touch Button turn this feature "OFF."

Chord Transform

Many of the Styles, particularly the Jazz and Big Band-type Styles, are written using major 6th's 7th, 9ths and other complex chord voicings appropriate to that particular musical genre. However, you may wish on occasion to hear these Styles played using more basic chords - only "C" "E" and "G" for a C Major chord, for example. This Advanced Feature allows you to select how you want to hear these Styles. You can select "NORMAL" (the Styles will play as they are scored) or "SIMPLE" (the Styles will play using only basic chord types).

Use the Number 7 or Number 8 Select Touch Button to select NORMAL.

Use the Number 15 or Number 16 Select Touch Button to select SIMPLE.

NOTE: This Advanced Feature DOES NOT affect all styles - only those which are written using complex harmony, such as the jazz and Big Band and certain of the Contemporary and Latin Styles.

► STYLE EDIT Menu

This Advanced Feature Menu allows you to program the characteristics of the Styles to your liking.

Accessing the STYLE EDIT Menu using the MENU/EXIT Touch Button:

1. Touch the MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.

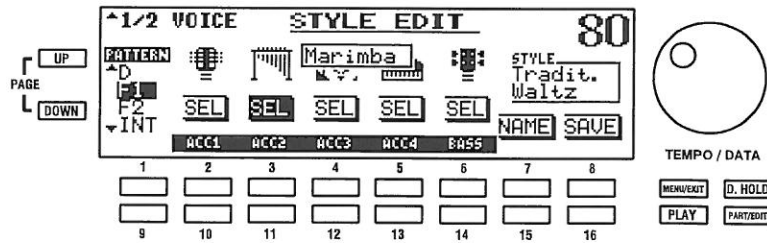
2. Touch the PAGE UP Select Touch Button two times. Page 3 of the MENU Mode will now display. You will now see "3/4" in the upper left corner of the Information Center Display.
3. Touch either the Number 11 or Number 12 Select Touch Buttons. The words, "STYLE EDIT" will now display at the top of the screen.

Accessing the STYLE EDIT Menu using the Shortcut:

1. Touch any of the RHYTHMS & STYLES Touch Tabs. The Information Center Display should now display the menu of Rhythms and Styles for that group.
2. Touch the PART/EDIT Touch Button once. The words, "STYLE EDIT," will now display at the top of the screen.

You are now in the STYLE EDIT Menu. You may now use the numbered Select Touch Buttons below the screen to make various changes to the Styles. These changes are explained starting on the next page.

STYLE EDIT Menu - Page 1



Style Voice

This Advanced Feature Menu Page allows you to control the volume of the individual parts of each AUTOBAND Orchestra Style. The selected Style will be displayed in the box on the extreme right of the screen.

Use the Number 1 and Number 9 Select Touch Buttons to select the portion of the Style you want to edit. You can select "I" (Intro), Main Style "A" "B" "C" "D," "F1" (Fill 1), "F2" (Fill 2), and "E" (Ending).

Use the Number 2 or Number 10 Select Touch Buttons to select ACC1 (Accompaniment track 1).

Use the Number 3 or Number 11 Select Touch Buttons to select ACC2 (Accompaniment track 2).

Use the Number 4 or Number 12 Select Touch Buttons to select ACC3 (Accompaniment track 3).

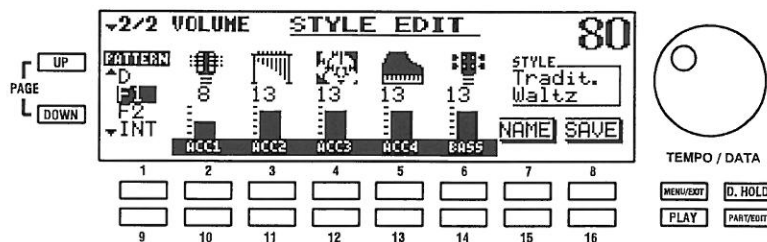
Use the Number 5 or Number 13 Select Touch Buttons to select ACC4 (Accompaniment track 4).

Use the Number 6 or Number 14 Select Touch Buttons to select BASS (the Bass track).

Now, use the VOICE Touch Tabs to select the Voice for each Part. As you select different Voices, you will see the icon above each track change in accordance with which Voice group is selected - a piano for Piano voices, the tuning pegs of a guitar for Guitar voices, etc. The actual voice name will be shown in a small box in the center of the screen. The currently selected part will be highlighted.

STYLE EDIT Menu - Page 2

From Page 1 of the STYLE EDIT Menu, touch the PAGE UP Select Touch Button once to display Page 2.



Style Volume

This Advanced Feature Menu Page allows you to control the volume of the individual parts of each AUTOBAND Orchestra Style. The selected Style will be displayed in the box on the extreme right of the screen.

Use the Number 1 and Number 9 Select Touch Buttons to select the portion of the Style you want to edit. You can select "I" (Intro), Main Style "A" "B" "C" "D," "F1" (Fill 1), "F2" (Fill 2), and "E" (Ending).

Use the Number 2 and Number 10 Select Touch Buttons to raise or lower the volume of ACC1 (Accompaniment track 1).

Use the Number 3 and Number 11 Select Touch Buttons to raise or lower the volume of ACC2 (Accompaniment track 2).

Use the Number 4 and Number 12 Select Touch Buttons to raise or lower the volume of ACC3 (Accompaniment track 3).

Use the Number 5 and Number 13 Select Touch Buttons to raise or lower the volume of ACC4 (Accompaniment track 4).

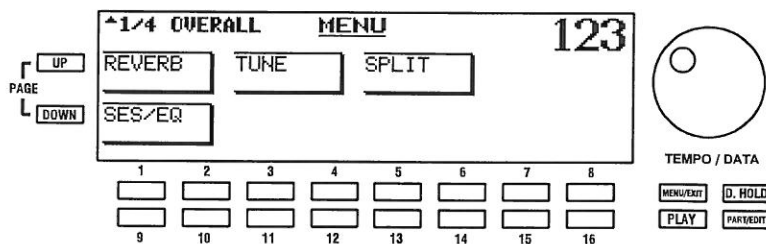
Use the Number 6 and Number 14 Select Touch Buttons to raise or lower the volume of the BASS track.

The voice name of each track will be shown in a small box in the center of the screen. The currently selected track will be highlighted.

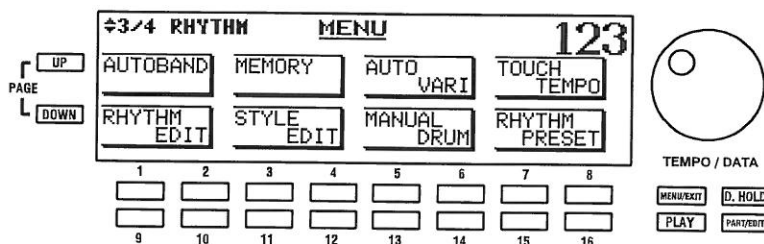
Creating a Custom Style

TRY THIS:

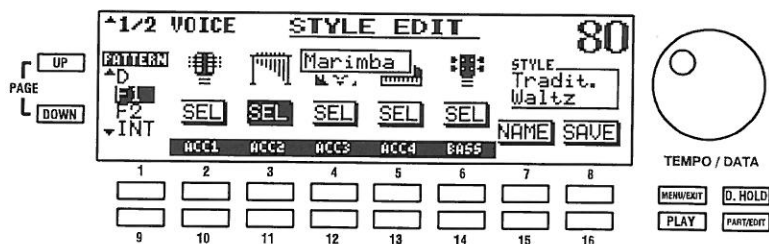
1. Select a Style you want to edit using the RHYTHMS & STYLES Touch Tabs.
2. Touch the MENU/EXIT Touch Button. The Information Center Display should look like this:



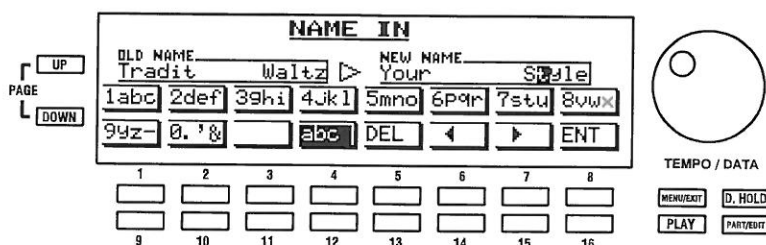
3. Touch the PAGE UP Touch Button two times. The Information Center Display should now look like this:



4. Touch either the Number 11 or Number 12 Select Touch Button. The Information Center Display should now look like this:



5. You have now selected the STYLE EDIT Menu. Make whatever changes you want to the Style you have selected using the parameters on Page 1 and Page 2 of the STYLE EDIT Menu.
6. At this point, it is suggested you give your edited Style a new name. To do this, touch either the Number 7 or Number 15 (RENAME) Select Touch Button. The Information Center Display will now look like this:



7. Use the numbered Touch Buttons to rename the Custom Style. The current name will display in a box in the left part of the screen called "OLD NAME," while the new name will display in a box in the right part of the screen called "NEW NAME." The way the letters are displayed in the screen determines which numbered Touch Button you would use to make your choice. For example, use the Number 1 Touch Button to enter the characters, "1ABC," use the Number 2 Touch Button to enter the characters, "2DEF," etc.

Use the Number 11 Select Touch Button to enter a space.

Use the Number 12 Select Touch Button to select upper- or lower-case letters. The letter boxes in the Information Center Display will show which type has been selected - "1ABC," or "1abc," for example.

Use the Number 13 Select Touch Button to delete a character.

Use the Number 14 and Number 15 Select Touch Buttons to scroll backward and forward through the characters.

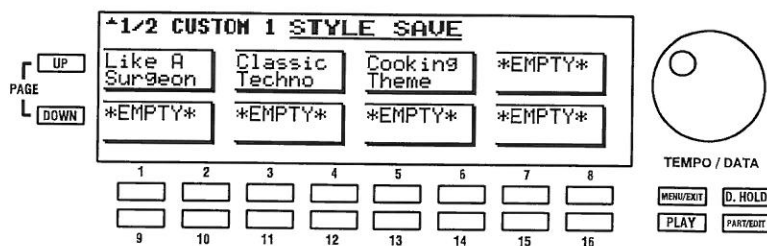
Use the Number 16 Select Touch Buttons to enter characters after you have selected them using the other numbered Touch Buttons.

- After you have entered your name (up to 8 characters), touch the ENT (Number 16 Select Touch Button). A box, "Saving Name. Please wait," will show in the Information Center Display for approximately 1 second. When this box disappears, your new Style name is saved. The STYLE EDIT Menu will now reappear.

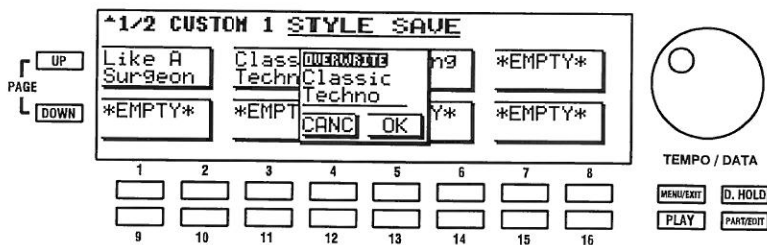
Saving a Custom Style

To save your Custom Style:

- From the STYLE EDIT Menu, touch the Number 16 Select Touch Button. The Information Center Display should now look similar to this:



- Use the PAGE UP and PAGE DOWN Touch Buttons to select whether you want to save your Custom Style under Page 1 ("C.STYLE1") or Page 2 ("C.STYLE 2"). If you select C.STYLE 1, you will be able to retrieve your Custom Style by select the RHUMBA/DISK STYLE 1 Rhythm Touch Button. If you select C.STYLE 2, you will be able to retrieve your Custom Style by select the TANGO/DISK STYLE 2 Rhythm Touch Button.
- Touch one of the numbered Touch Buttons to select the location to which you want to save your Custom Style. The boxes on the screen are arranged in a pattern corresponding to that of the numbered Touch Buttons similar to the STYLE SELECT Pages described earlier. For this example, touch the Number 1 Select Touch Button. You will now see a screen similar to this:

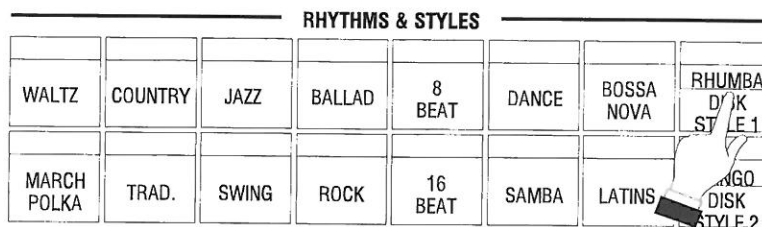


- If you DO NOT wish to overwrite any of the Custom Styles, touch either the Number 3 or Number 11 Select Touch Button. The STYLE EDIT Menu will reappear and your Custom Style will not be saved. If you want to save your Custom Style, touch either the Number 4 or Number 12 Select Touch Button. A box, "Please wait," will show in the Information Center Display for approximately 1 second. When this box disappears, your Custom Style is saved. Your new Style name will display in the location where you saved it.

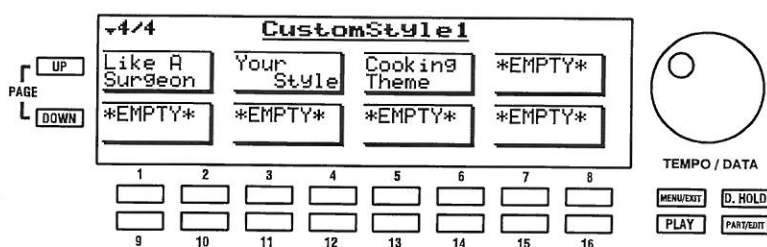
Retrieving a Custom Style

If you want to retrieve a Custom Style you have previously saved, do the following:

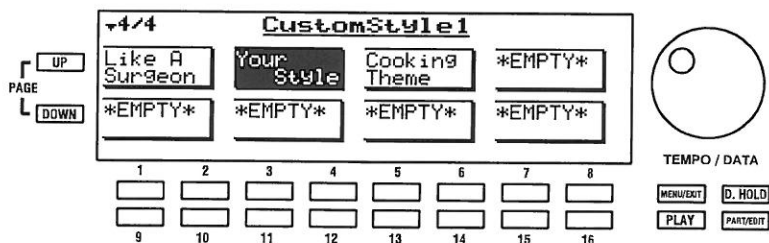
1. Touch and hold either the RHUMBA/DISK STYLE 1 or the TANGO/DISK STYLE 2 Rhythm Touch Button, depending on where you saved your Custom Style.



The Information Center Display will look similar to this:

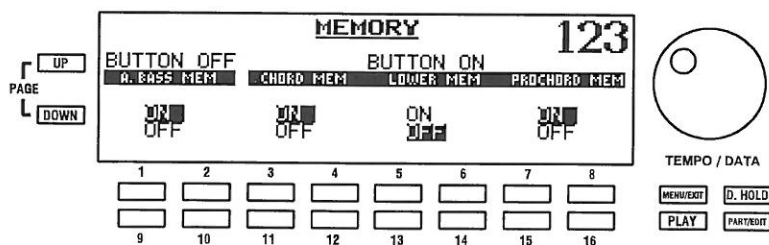


2. Touch the numbered Touch Button which represents the Custom Style you want to select. The selected Style Name will now be highlighted.



You are now ready to play using your Custom Style. Use the AUTOBAND ORCHESTRA, RHYTHM VARIATIONS and RHYTHM CONTROL Touch Tabs just as you would with any of the other Rhythms and Styles.

► MEMORY Edit Menu



This Advanced Feature allows you to program how you want the MEMORY Touch Tab to work.

Accessing the MEMORY Edit Menu using the MENU/EXIT Touch Button:

1. Touch the MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
2. Touch the PAGE UP Select Touch Button once. Page 2 of the MENU Mode will now display. You will now see "2/4" in the upper left corner of the Information Center Display.
3. Touch either the Number 3 or Number 4 Select Touch Buttons. The word, "MEMORY" will now display at the top of the screen.

Accessing the MEMORY Edit Menu using the Shortcut:

Touch and hold the MEMORY Touch Tab. After approximately 1 second, the word, "MEMORY" will display at the top of the screen.

You are now in the MEMORY Edit Menu. You may now use the numbered Select Touch Buttons below the screen to make various changes to the MEMORY function. These changes are explained starting below.

BUTTON OFF Mode

This Advanced Feature allows you to select whether or not AUTO BASS will continue to be memorized or "latched" when the MEMORY Touch Tab is "OFF." This is useful when you want to bring the left-hand accompaniment in or out while the bass line continues to play.

Use the Number 2 Select Touch Button to turn Auto Bass Memory "ON."

Use the Number 10 Select Touch Button to turn Auto Bass Memory "OFF."

BUTTON ON Mode

This Advanced Feature allows you to select which portions of the Lower Manual (left of split) accompaniment, as well as PROCHORD patterns, are "latched" by the MEMORY Touch Tab. You can select "CHORD" (the AUTOBAND accompaniment), "LOWER" (Lower Drawbars & Voices) or "PROCHORD" (the PROCHORD harmony arrangements) separately.

Use the Number 4 Select Touch Button to turn CHORD Memory "ON."

Use the Number 12 Select Touch Button to turn CHORD Memory "OFF."

Use the Number 6 Select Touch Button to turn LOWER Memory "ON."

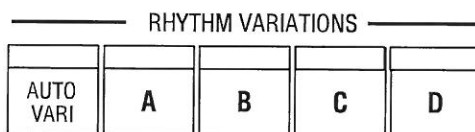
Use the Number 14 Select Touch Button to turn LOWER Memory "OFF."

Use the Number 8 Select Touch Button to turn PROCHORD Memory "ON."

Use the Number 16 Select Touch Button to turn PROCHORD Memory "OFF."

♦ RHYTHM VARIATIONS

There are five Touch Tabs which look like this:



Each AUTO VARI Rhythm Variation is a different variation to the basic Rhythm pattern while remaining consistent with the basic rhythm style, the "A" pattern being the simplest version of the rhythm and gradually increasing in complexity to the "D" pattern, which is the most elaborate. To hear any of the AUTO VARI Variations, simply touch the Touch Button associated with the variation you want to hear.

When you select among various AUTO VARI rhythm variations, you will hear the rhythm pattern change. If any of the AUTOBAND Touch Buttons are "ON," you may also hear the musical arrangement change. Each change will represent whatever is most appropriate for each rhythm. Some changes may be subtle, while others may be more dramatic.

AUTO VARI Touch Tab



When this Touch Tab is "ON" (red LED lit), it works in conjunction with the selected rhythm to continuously change the rhythm variation. The LED of each AUTO VARI Variation Touch Button ("A," "B," "C" or "D") will light to show which one is sounding. Only one variation will play at a time. Also, the Information Center Display will display the measure number that is currently playing ("M=1," "M=6," etc.)

► AUTO VARI Edit Menu

This Advanced Feature Menu allows you to program the AUTO VARI Rhythms to your liking.

Accessing the AUTO VARI Edit Menu using the MENU/EXIT Touch Button:

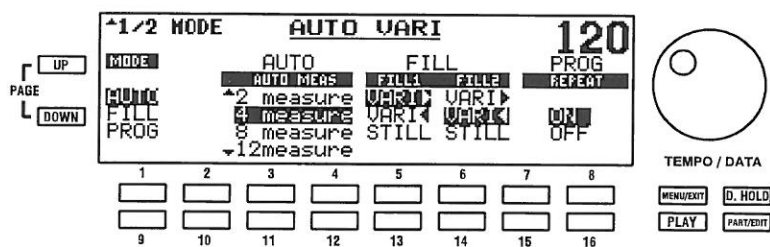
1. Touch the MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
2. Touch the PAGE UP Select Touch Button once. Page 2 of the MENU Mode will now display. You will now see "2/4" in the upper left corner of the Information Center Display.
3. Touch either the Number 9 or Number 10 Select Touch Buttons. The words, "AUTO VARI" will now display at the top of the screen.

Accessing the AUTO VARI Edit Menu using the Shortcut:

Touch and hold the AUTO VARI Touch Tab. After approximately 1 second, the words, "AUTO VARI" will display at the top of the screen.

You are now in the AUTO VARI Edit Menu. You may now use the numbered Select Touch Buttons below the screen to make various changes to the AUTO VARI Rhythms & Styles. These changes are explained below.

AUTO VARI Edit Menu - Page 1



Mode

This Advanced Feature allows you to select the way the AUTO VARI feature works with the rhythm. You can select, “AUTO” (the variations will always move from left to right from “A” through “D”), “FILL” (you can have the variations move either to the right or to the left depending on which Fill Touch Tab is used) or “PROG” meaning that you can program your own AUTO VARI Variations. The current choice will be highlighted.

Use the Number 1 Select Touch Button to scroll up through the selections.

Use the Number 9 Select Touch Button to scroll down through the selections.

AUTO Mode

This Advanced Feature Mode allows you to select the number of measures each variation will play. You can select “2” “4” “8” “12” or “16” measures.

Use the Number 3 or Number 4 Select Touch Button to scroll up through the selections.

Use the Number 11 or Number 12 Select Touch Button to scroll down through the selections.

FILL Mode

This Advanced Feature Mode allows you to select how the FILL 1 and FILL 2 Touch Tabs work. You may select “VARI ▶,” which will cause the next variation to the right to play, “VARI ◀,” which will cause the next variation to the left to play, or “STILL,” which will cause the currently Variation to play when the FILL completes.

Use the Number 5 Select Touch Button to scroll up through the selections for FILL 1.

Use the Number 13 Select Touch Button to scroll down through the selections for FILL 1.

Use the Number 6 Select Touch Button to scroll up through the selections for FILL 2.

Use the Number 14 Select Touch Button to scroll down through the selections for FILL 2.

Program Repeat

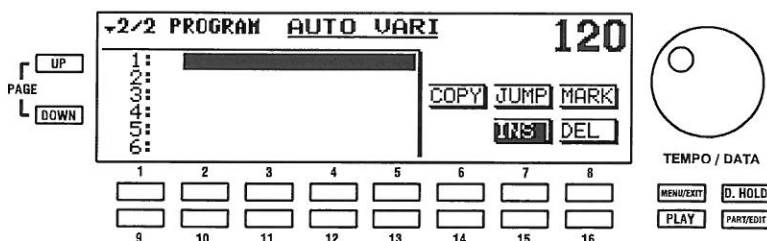
This Advanced Feature allows you to select whether you want a programmed Auto-Vari sequence to play and and stop, or repeat. You can select “ON” (the programmed sequence will play through, then repeat and keep repeating until you stop the Rhythm) or “OFF” (the programmed sequence will play through once, after which the Rhythm will stop).

Use either the Number 7 or Number 8 Select Touch Button to turn this feature ON.

Use either the Number 15 or Number 16 Select Touch Button to turn this feature OFF.

AUTO VARI Edit Menu - Page 2

From Page 1 of the AUTO VARI Edit Menu, touch the PAGE UP Select Touch Button once to display Page 2.

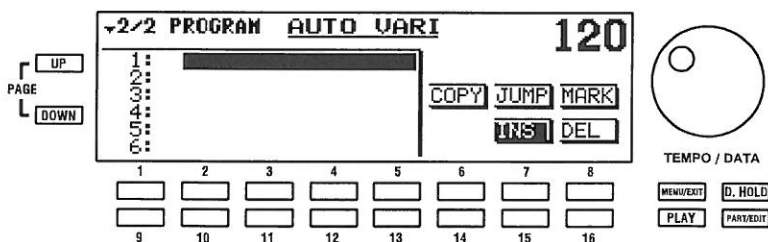


From this page, you may now use the numbered Select Touch Buttons below the screen as well as the Rhythm Touch Tabs to program your own AutoVari sequences.

Programming an AutoVari Sequence

TRY THIS:

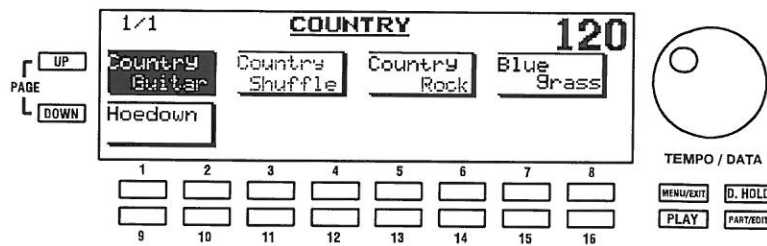
1. Use either the MENU/EXIT Touch Button or the Shortcut to display the AUTO VARI Edit Menu, then touch the PAGE UP Select Touch Button once to display Page 2:



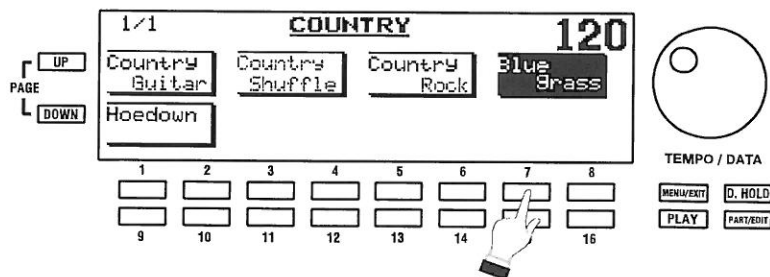
Notice that the Information Center contains several commands such as “COPY” “JUMP” etc. You can use these commands to assist you in programming your Auto-Vari Sequence. They will all be explained in subsequent paragraphs; however, the command, “INS” (INSert) should now be highlighted, meaning that it is selected.

Notice also the numbers on the left of the screen. These indicate Measure numbers. Use the top row of numbered Select Touch Buttons (Numbers 1, 2, 3, 4 and 5) to scroll up through the Measure numbers, and the bottom row of numbered Select Touch Buttons (Numbers 9, 10, 11, 12 and 13) to scroll down through the Measure numbers. Normally, when starting to program an Auto-Vari Sequence, the highlighter (long black bar) should be set for Measure 1.

2. From the above screen, touch one of the Rhythm Touch Buttons; for example, COUNTRY. The Information Center Display should now look similar to this:

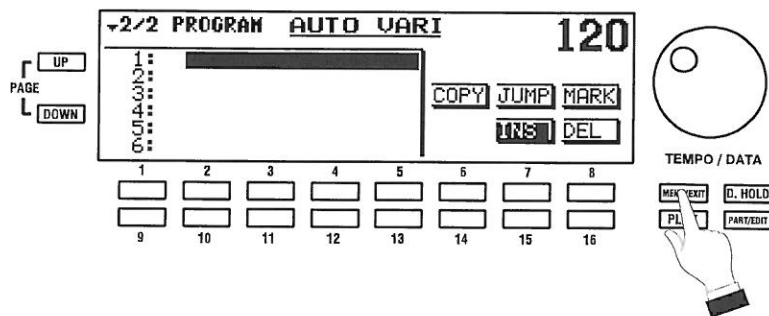


3. For this example, select the BLUEGRASS Style by touching the Number 7 or Number 8 Select Touch Button:



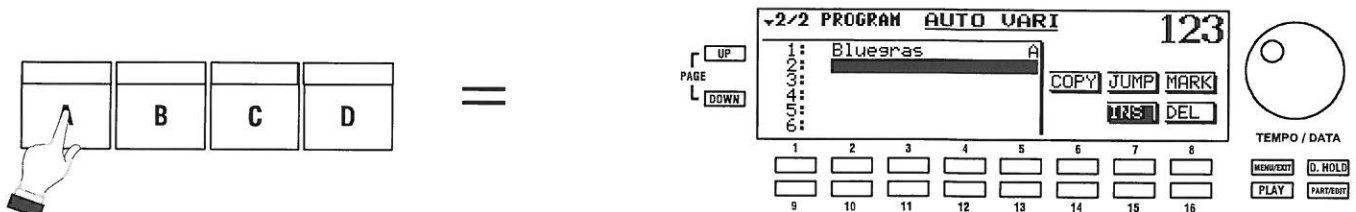
You have now selected the Style you will use to start programming your Auto-Vari Sequence.

4. To return to Page 2 of the AUTO VARI Edit Menu, touch the MENU/EXIT Touch Button.



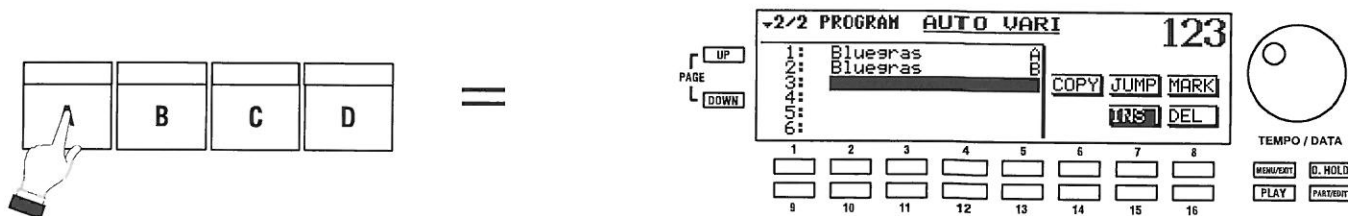
5. You can use the "A" "B" "C" and "D" Touch Tabs in the RHYTHM VARIATIONS section, as well as the FILL IN 1 and FILL IN 2 Touch Tabs to program Auto Vari Sequences.

Now touch the "A" Touch Tab once. The Information Center Display will now show the following:



Notice that the Information Center Display now shows the Rhythm Name ("Bluegrass") along with the Variation letter "A." You have now inserted BLUEGRASS Variation "A" to Measure 1 of your Auto-Vari Sequence.

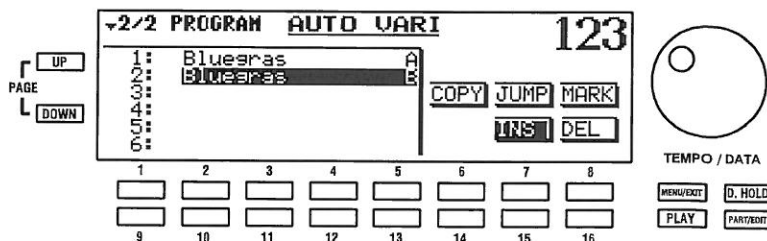
6. Now, suppose you wanted to insert Variation "B" of the BLUEGRASS to Measure 2. Touch the "B" Touch Tab once. The Information Center Display will now show the following:



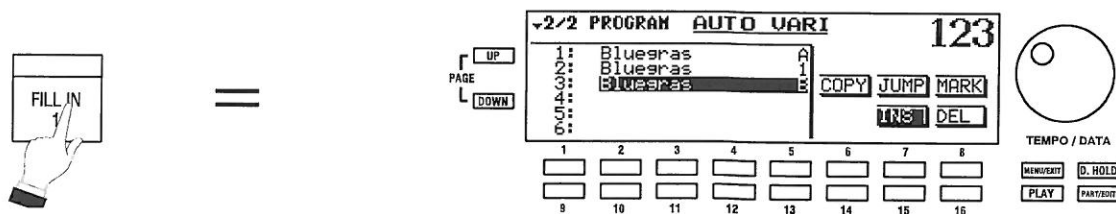
Notice that the highlighter automatically selects the next Measure after you have programmed the previous one.

You can also insert a FILL IN as part of an Auto-Vari Sequence. To do this, touch either of the FILL IN Touch Tabs.

7. For this example, move the highlighter using the numbered Touch Buttons until it is over Measure 2.



8. Now touch FILL IN 1. The Information Center Display should now look like this.



You have now inserted FILL IN 1 at measure 2 and your previously inserted measure has been moved down to Measure 3.

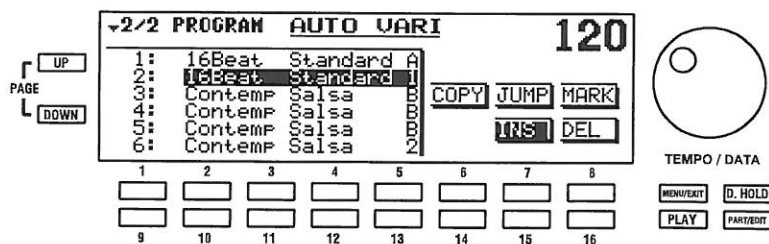
NOTE: An Auto-Vari Sequence may consist of up to 256 measures. In addition, INTROS and ENDINGS may not be used in an Auto-Vari Sequence.

MARK, COPY and PASTE

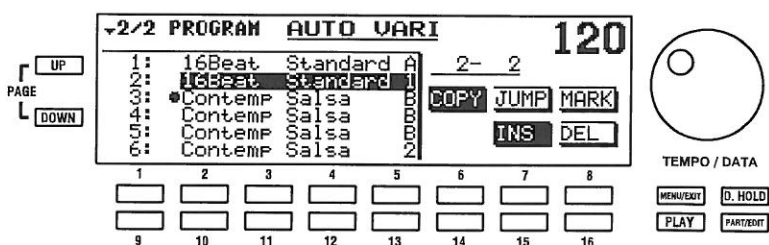
In order to make it easier to program Auto-Vari Sequences, several additional features are also included. The following short example illustrates the MARK, COPY and PASTE features since these are normally used in conjunction with each other.

TRY THIS:

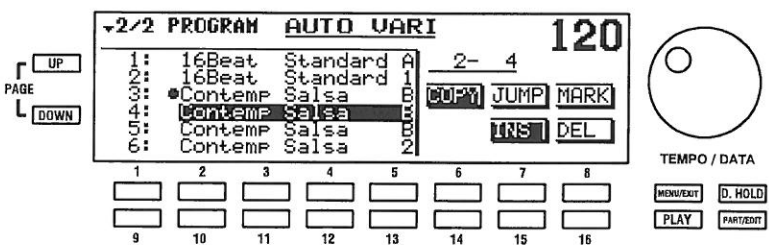
1. Program an Auto-Vari Sequence of several measures using the method described above. The following example is: Measures 1 and 2 using one rhythm and 4 additional measures using another.



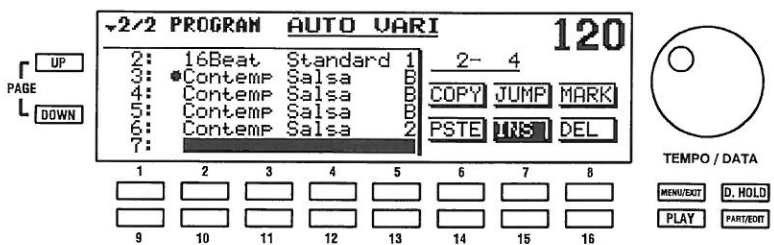
2. For this example, suppose you want to copy measures 2 through 4 to measures 7 through 9. To do this, move the highlighter to measure 2 and touch the Number 8 (MARK) Select Touch Button.



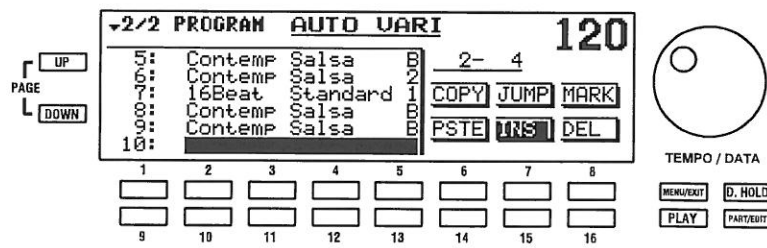
3. Now move the highlighter down to measure 4. Then touch the Number 6 (COPY) Select Touch Button.



4. You have now selected measures 2 through 4. Now move the highlighter down to measure 7.



Notice that a new box, "PSTE" (Paste) has now appeared in the screen. Touch the Number 14 (PSTE) Select Touch Button. The Information Center Display should now look similar to this:



You have now "pasted" measures 2 through 4 to measures 7 through 9.

JUMP

Since an Auto-Vari Sequence can contain up to 256 measures, it is possible that you may forget where you have placed various Marks in the course of programming. Use the Number 7 (JUMP) Select Touch Button to find where you have placed Marks. Each time you touch the Number 7 Touch Button, the screen will jump to the next Mark.

► RHYTHM EDIT Menu

This Advanced Feature Menu allows you to create your own Rhythm patterns.

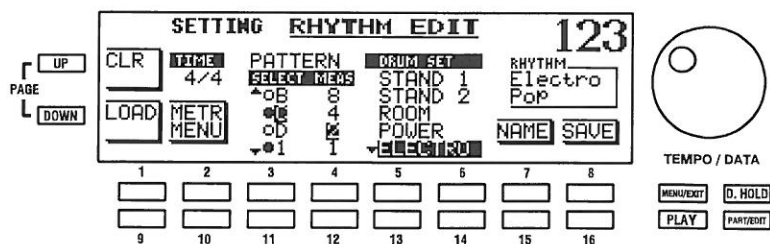
NOTE: This Advanced Feature Menu has no Shortcut. It is accessible only via the MENU/EXIT Touch Buttons.

Accessing the RHYTHM EDIT Menu:

1. Touch the gray MENU/EXIT Select Touch Button to see the first screen of the MENU Mode. You will see "1/4" displayed in the extreme upper left corner of the Information Center Display. This indicates that the MENU Mode has 4 Pages and that Page 1 is displaying.
1. Touch the PAGE UP Select Touch Button two times. Page 3 of the MENU Mode will now display. You will now see "3/4" in the upper left corner of the Information Center Display.
1. Touch the Number 9 or Number 10 Select Touch Button. The words, "RHYTHM EDIT" will now display at the top of the screen.

You are now in the RHYTHM EDIT Menu. You may now use the numbered Select Touch Buttons below the screen to record your own User Rhythms.

RHYTHM EDIT Menu - Page 1



After first entering the RHYTHM EDIT Menu, Page 1 is the first to display. Using the numbered Touch Buttons and the keyboard, you can record your own Rhythm patterns.

CLR/LOAD

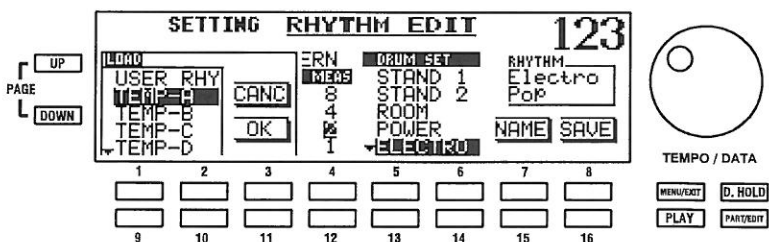
While you are recording a Rhythm, this Advanced Feature allows you to erase part or all of a Rhythm you have recorded or copy one pattern to another - for example, you can record a 2-measure pattern into Variation "A" and copy it to Variation "B."

Use the Number 1 Select Touch Button to select CLR. The Information Center Display will look similar to this:



You can select either "PATTERN" (only the selected pattern will be erased) or "ALL" (the entire Rhythm you recorded will be erased). Use the Number 3 Select Touch Button to select CANCEL or the Number 11 Select Touch Button to select OK.

Use the Number 9 Select Touch Button to select LOAD. The Information Center Display will look similar to this:



The legends, "TEMP-A," "TEMP-B," etc., refer to the components of the Rhythm you are recording. You can select one of these to LOAD, or you can select an entire User Rhythm to edit.

NOTE: If there are no User Rhythms currently loaded, selecting USER RHY will have no effect.

Use the Number 1 or Number 2 Select Touch Button to scroll up, and the Number 9 or Number 10 Select Touch Button to scroll down. Use the Number 3 Select Touch Button to select CANCEL or the Number 11 Select Touch Button to select OK.

If you select “OK” after having selected one of the TEMP patterns, the pattern you selected will be copied to the pattern chosen by the PATTERN Advanced Feature, which is explained on page 78.

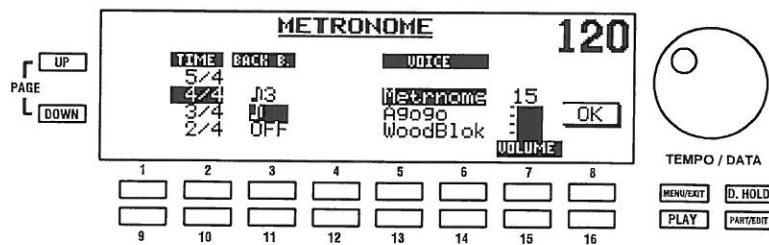
TIME

This displays the currently selected time signature. To change it, touch the Number 10 Select Touch Button to enter the METRONOME Edit Menu.

METR MENU

This Advanced Feature Shortcut allows you to access the METRONOME Edit Menu. Touch the Number 10 Select Touch Button to use this Shortcut.

METRONOME Edit Menu



When you record a Rhythm on the XE-1, a Metronome will count off each beat. This Advanced Feature allows you to change the characteristics of the Metronome to your preference.

NOTE: The METRONOME Edit Menu is accessible only via Shortcut. It is accessible from several Advanced Feature Menu Pages; however, it will be explained here since it is an integral part of Rhythm recording. When the Metronome is referred to later on in this Guide, you will be referred back to this page number for the explanations of the various Metronome functions.

Time Signature

This Advanced Feature allows you to select the Time Signature for your Song. This setting will also determine where the downbeat will sound when the Metronome is playing. You can select “2/4” “3/4” “4/4” or “5/4.”

Use the Number 2 Select Touch Button to scroll up through the choices.

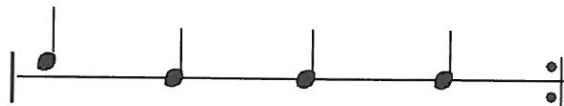
Use the Number 10 Select Touch Button to scroll down through the choices.

Upbeat

This Advanced Feature allows you to “sub-divide” the beat using the Metronome in order to make it easier to record songs with precise rhythm. You can select “OFF” “Eighth Notes” or “Eighth Note Triplets.”

The chart below shows graphically how the Metronome will sound for each selection.

OFF



Eighth Notes



Eighth Note Triplets



Use the Number 2 Select Touch Button to scroll up through the choices.

Use the Number 10 Select Touch Button to scroll down through the choices.

Voice

The Metronome plays using rhythm voices from the Drum Kits. This Advanced Feature allows you to select the rhythm voices the Metronome will play. You can select “Metronome” (a bell on beat 1 of every measure followed by a click on the upbeats), “Agogo” (high and low Agogo Bells on down- and upbeats respectively) or “Woodblock” (high and low Wood Blocks on down- and upbeats respectively).

Use the Number 5 or Number 6 Select Touch Button to scroll up through the choices.

Use the Number 13 or Number 14 Select Touch Button to scroll down through the choices.

RHYTHM EDIT Menu - Page 1 (cont.)

PATTERN

This Advanced Feature allows you to select the portion of the Rhythm to want to write. You can select, “I” (Intro) “A” “B” “C” “D” (Variations A through D), “1” (FILL IN 1) “2” (FILL IN 2) and “E” (Ending).

Use the Number 3 Select Touch Button to scroll up through the choices.

Use the Number 11 Select Touch Button to scroll down through the choices.

You can also select the number of measures you want each portion to be. You can select “1” “2” “4” or “8”

Use the Number 4 Select Touch Button to scroll up through the choices.

Use the Number 12 Select Touch Button to scroll down through the choices.

NOTE: FILL IN 1 and FILL IN 2 are fixed at 1 measure.

DRUM SET

This Advanced Feature allows you to select the Drum Kit you want to use. You can select from 10 different drum kits.

Use the Number 5 or Number 6 Select Touch Button to scroll up through the choices.

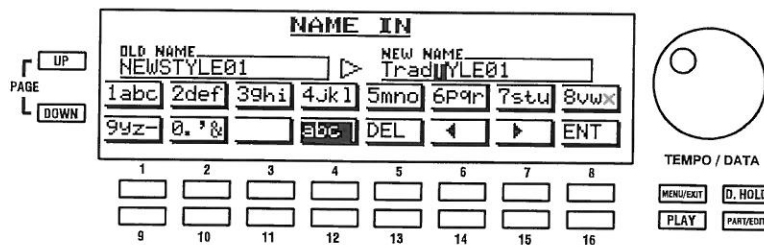
Use the Number 13 or Number 14 Select Touch Button to scroll down through the choices.

NOTE: For a complete list of the Drum Kits and the drum voices they contain, consult the APPENDIX located at the back of this Guide.

NAME

This Advanced Feature allows you to name your Rhythm.

1. Touch the Number 15 Select Touch Button to enter the NAME IN Menu. The Information Center Display will now look similar to this:



2. Use the numbered Touch Buttons to rename the Rhythm. The current name will display in a box in the left part of the screen called "OLD NAME," while the new name will display in a box in the right part of the screen called "NEW NAME." The way the letters are displayed in the screen determines which numbered Touch Button you would use to make your choice. For example, use the Number 1 Touch Button to enter the characters, "1ABC," use the Number 2 Touch Button to enter the characters, "2DEF," etc.

Use the Number 11 Select Touch Button to enter a space.

Use the Number 12 Select Touch Button to select upper- or lower-case letters. The letter boxes in the Information Center Display will show which type has been selected - "1ABC," or "1abc," for example.

Use the Number 13 Select Touch Button to delete a character.

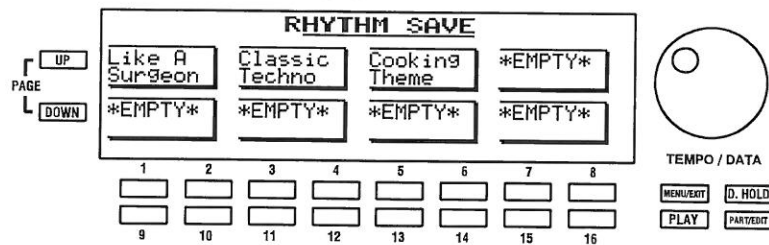
Use the Number 14 and Number 15 Select Touch Button to scroll backward and forward through the characters.

Use the Number 16 Select Touch Buttons to enter characters after you have selected them using the other numbered Touch Buttons.

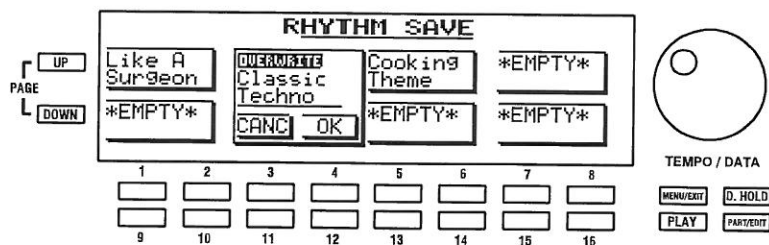
3. After you have entered your name (up to 8 characters), touch the ENT (Number 16 Select Touch Button). A box will show in the Information Center Display, "Saving Name. Please wait." When this box disappears and the screen returns to normal, your new Preset name is saved.

SAVE

This Advanced Feature allows you to save your new Rhythm. After you have recorded your Rhythm, touch the Number 16 Select Touch Button. The Information Center Display will look similar to this:



Touch one of the numbered Touch Buttons to select the location to which you want to save your Rhythm. The boxes on the screen are arranged in a pattern corresponding to that of the numbered Touch Buttons similar to the RHYTHMS & STYLES. If you are about to overwrite a Rhythm already in memory, you will see a screen similar to this:



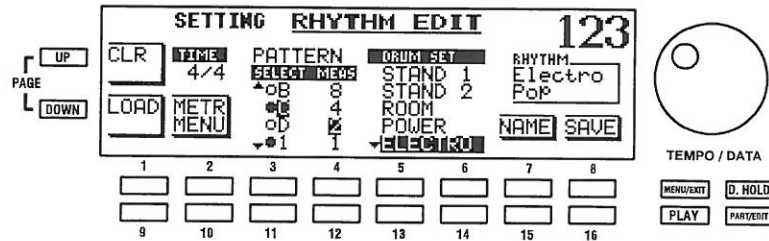
If you DO NOT wish to overwrite any of the Rhythms, touch either the Number 3 or Number 11 Select Touch Button. The RHYTHM EDIT Menu will reappear and your Rhythm will not be saved. If you want to save your Rhythm, touch either the Number 4 or Number 12 Select Touch Button. A box, "Please wait," will show in the Information Center Display for approximately 1 second. When this box disappears, your Rhythm is saved.

Recording a USER RHYTHM

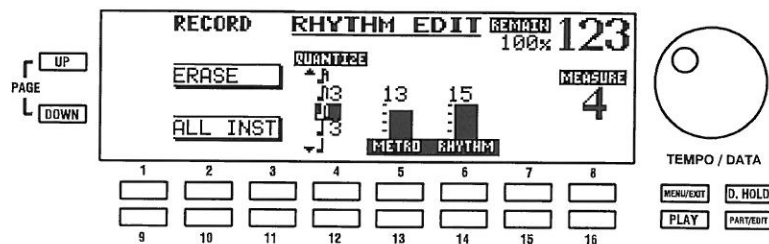
TRY THIS:

1. Touch the MENU/EXIT Touch Button to enter the MENU Mode.
2. Touch the PAGE DOWN Touch Button two times. Page 3 of the MENU Mode will now display.

3. Touch the Number 9 or Number 10 Touch Button. The RHYTHM EDIT Menu will now display:



4. Select a pattern to record - for example, "A." Use the Number 3 and Number 11 Select Touch Buttons to make your choice.
5. Select the number of measures you want to record - for example, "2." Use the Number 4 and Number 12 Select Touch Buttons to make your choice.
6. Select a Drum Set - for example, "STAND 1." Use the Number 5, 6, 13 and 14 Select Touch Buttons to make your choice.
7. Now touch the large START/STOP Touch Tab to begin recording. You will hear the Metronome counting off each beat. The Information Center Display will now look like this:



You will now see the RHYTHM EDIT Menu - Page 2, which is only accessible while you are recording.

8. If the Rhythm Tempo is too fast or too slow, use the Tempo Wheel Control to adjust it to your liking.
9. Now, record a Rhythm pattern by playing keys on the manual. As soon as you finish playing, the Rhythm you recorded will play back.

While you are recording, there are numerous ways to edit your Rhythm pattern.

ERASE

If you make a mistake while recording, you can erase the mistake or erase all of the entries made using a particular instrument. Simply touch and hold the Number 2 or Number 3 Select Touch Button while the recording is playing, and press and hold the key which represents the drum voice you want to erase.

ALL INST

If instead of erasing individual instruments you want to erase the entire pattern and start over;

Touch and hold the Number 2 or Number 3 Select Touch Button.

Touch and hold the Number 10 or Number 11 Touch Button at the same time.

Continue to hold both Touch Buttons for the full length of the recording. The entire pattern will be erased.

QUANTIZE

This Advanced Feature allows you to select how you want to “quantize,” or round off, the pattern you record. This is useful if you should happen to touch a note slightly behind or slightly ahead of the beat. You can select Quarter Notes, Quarter Note Triplets, Eighth Notes, Eighth Note Triplets, Sixteenth Notes, Sixteenth Note Triplets, 32nd Notes or 32nd Note Triplets.

Use the Number 4 Select Touch Button to scroll up through the choices.

Use the Number 12 Select Touch Button to scroll down through the choices.

Metronome Volume

Use the Number 5 Select Touch Button to increase the volume of the Metronome.

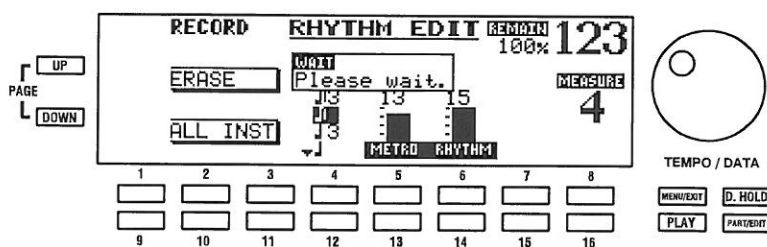
Use the Number 12 Select Touch Buttons to decrease the volume of the Metronome.

Rhythm Volume

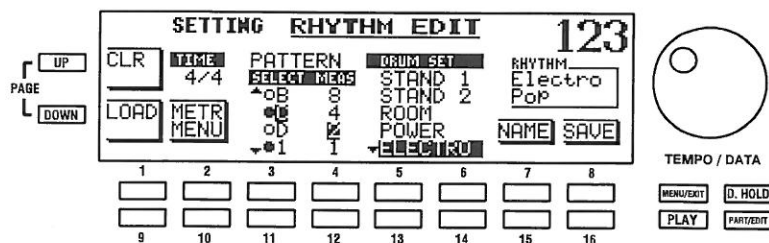
Use the Number 5 Select Touch Button to increase the volume of the Rhythm.

Use the Number 12 Select Touch Buttons to decrease the volume of the Rhythm.

After you have finished recording your Rhythm, touch the large START/STOP Touch Tab. The Information Center Display will display the following for approximately 1 second:



After the above message stops displaying, Page 1 of the RHYTHM EDIT Menu will return:

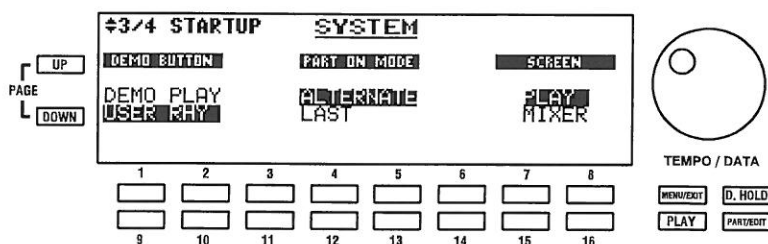


You can now Name or Save your new Rhythm using the procedures described on the previous pages.

Recalling a USER RHYTHM

After you have saved a User Rhythm, you can recall it by doing the following:

1. The DEMO Touch Tab can either play Demo Songs, or allow you to recall your User Rhythm patterns. Set the DEMO Touch Tab for USER RHYTHM Mode by first touching the MENU EXIT Touch Button to enter the MENU Mode.
2. Touch the PAGE UP or PAGE DOWN Touch Button to select Page 4 of the MENU Mode.
3. Touch the Number 11 or Number 12 Select Touch Button to select SYSTEM.
4. Touch the PAGE UP Touch Button repeatedly until the Information Center Display shows the following:

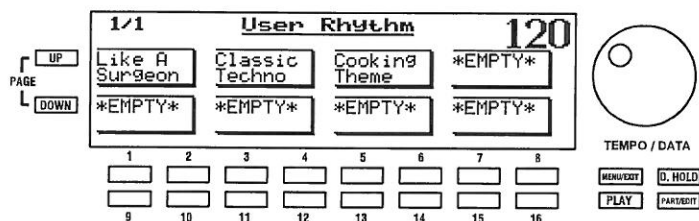


You are now in the SYSTEM Edit Menu. On the left side of the screen you will see, "DEMO BUTTON." This Advanced Feature allows you to select whether you want to use the DEMO Touch Tab to play the inbuilt Demo Songs, or to play User Rhythms you have created using the RHYTHM EDIT Advanced Feature.

Use the Number 9 or Number 10 Select Touch Button to select USER RHYTHM.

5. After doing the above, touch the PLAY Touch Button to return to PLAY Mode.

6. Now touch the DEMO Touch Tab. The Information Center Display should now look similar to this:



You will now see your User Rhythms with the names you gave them, at the locations where you saved them. Use the numbered Touch Buttons to select the User Rhythm you want to use.

NOTE: If no User Rhythm has been saved to a particular location, the box representing that location will display *EMPTY*. All boxes will display *EMPTY* if there are no User Rhythms.

♦ EASY PLAY SYSTEM Touch Tab

Touching the EASY PLAY SYSTEM Touch Tab produces the sound of multi-fingered chords using a minimum number of fingers on the Lower Manual. Play one note on the Lower Manual using Drawbars and/or Voices after selecting the EASY PLAY SYSTEM Touch Tab to hear this effect.



NOTE: The EASY PLAY SYSTEM Touch Tab affects ONLY the Drawbars and Voices selected for the Lower Manual. The chording for the AUTOBAND feature is controlled separately, from the AUTOBAND Edit Menu, which is described on page 58.

NOTE: To see a complete list of all chords recognized by the EASY PLAY SYSTEM, consult the APPENDIX located at the back of this Guide.