

Products Manuals FAQ Customer Support

VOCE[®] ELECTRIC PIANO[™] PRODUCT MANUAL



CONTENTS

Introduction Unpacking the Electric Piano Front Panel Layout Diagram Rear Panel Layout Diagram Set-Up Using The Electric Piano Presets MIDI OMNI ON Mode Multi-timbral Mode MIDI Controlled Effects Specifications Warranty

INTRODUCTION

The ELECTRIC PIANO is designed to provide the player with sounds, effects and most importantly, the expressiveness of mechanical electric pianos. The timbre of the sounds created by the ELECTRIC PIANO varies greatly and smoothly over the entire key velocity range. The effects provided can be used to achieve the sounds heard in popular recordings of the past or create new sound innovations.

The ELECTRIC PIANO is real easy to use. It requires absolutely no programming. There are front panel rotary controls for volume, overdrive, effects rate and depth, transpose and preset. It has built-in analog effects such as: Chorus, Tremolo, and Wah-wah. The Wah-wah effect can be controlled by key velocity, modulation wheel or from an external foot controller.

There are 32 presets in the ELECTRIC PIANO. The first 17 are basic keyboard sounds without effects and the remaining 15 presets are popular combinations of sounds and effects. The first 22 presets are selectable via the front panel: all 32 can be selected through MIDI. In addition, the ELECTRIC PIANO can operate in three part multi-timbral mode for any three adjacent channels as well as MIDI OMNI ON mode (all channels). There are high-level stereo audio outputs, CH2 output may be used to drive high-impedance stereo headphones. All this makes the ELECTRIC PIANO very easy and intuitive to use.

UNPACKING THE ELECTRIC PIANO

Inside the Electric Piano shipping carton you will find the following:

- Electric Piano unit
- AC adapter
- Owner's manual
- MIDI implementation chart
- Warranty card
- Four rubber feet
- Rack tray adapter screw & washer

Please return the warranty card soon after your purchase. The information you provide will allow Voce to keep you informed about updates and new products.

FRONT PANEL



- **VOLUME**: rotary volume control. Turning this control clockwise will increase the volume level. Volume can also be controlled via MIDI control number 7.
- **OVERDRIVE**: rotary overdrive control. Turning this control clockwise will increase the overdrive (distortion effect) level .
- RATE: rotary control for rate of Tremolo and Chorus effects. Turning this control clockwise
 will increase the speed of the modulation for the Tremolo and Chorus effects. RATE can also
 be controlled via MIDI. See the section on MIDI CONTROLLED EFFECTS for more information
- DEPTH: rotary control for depth of Tremolo and Chorus effects. Turning this control clockwise will increase the amount of modulation for the Tremolo and Chorus effects. DEPTH can also be controlled via MIDI. See the section on MIDI CONTROLLED EFFECTS for more information.
- CHORUS: This push-button turns the Chorus effect on or off. The Chorus effect creates a gentle swirling "doubling" sound for struck notes. The DEPTH and RATE controls are active when this effect is used. The Chorus effect can also be enabled via MIDI. See the section on MIDI CONTROLLED EFFECTS for more information.
- TREMOLO: This push-button turns the Tremolo effect on or off. The Tremolo effect provides a regular variation in volume between the two audio outputs ("ping-ponging"). The DEPTH and RATE controls are active when this effect is used. The Tremolo effect can also be enabled via MIDI, see the section on MIDI CONTROLLED EFFECTS for more information.
- WAH-WAH ON: This push-button turns the Wah-wah effect on or off. The Wah-wah effect provides real-time control over the ELECTRIC PIANO's analog filter. This resonant hi-pass filter simulates the sound of a wah-wah effect pedal. This effect was popularly used with Clavinet sounds.
- WAH-WAH ON allows both the controller's modulation wheel and the external pedal input on the ELECTRIC PIANO to control the Wah-wah effect. The Wah-wah effect can also be enabled via MIDI, see the section on MIDI CONTROLLED EFFECTS for more information.
- WAH-WAH AUTO: This push-button turns the automatic Wah-wah effect on or off. The automatic Wah-wah effect causes the analog filter (described above) to be controlled by key velocity. If WAH-WAH ON is also active, all three sources (modulation wheel, foot pedal, and

velocity) will control the filter. The WAH-WAH AUTO effect can also be enabled via MIDI, see the section on MIDI CONTROLLED EFFECTS for more information.

- TRANSPOSE: Used to change the musical key which the ELECTRIC PIANO will play. This
 control is helpful for utilizing different ranges of notes on your keyboard especially if your
 keyboard is 5 octaves or less.
- **MIDI**: LED indicator lights up when ELECTRIC PIANO is turned on. The LED will flash off briefly when the ELECTRIC PIANO receives MIDI transmissions from a MIDI controller.
- PRESET: rotary preset selector. Allows selection of any one of the first 22 presets as indicated by the positions marked 1 22. The position marked M selects multi-timbral mode (see page 10). The position marked P allows the ELECTRIC PIANO to accept program changes from a MIDI controller.

There are a total of 32 presets in the ELECTRIC PIANO. The first 22 can be selected through the PRESET selector. All presets (the front panel 22 and the last 10) can be selected via program changes from a MIDI controller.

REAR PANEL



- **POWER SWITCH**: push-on / push-off switch
- **POWER JACK**: The AC wall adapter connects to the ELECTRIC PIANO via this jack.
- **TUNING**: rotary tuning control. Center detent is set to A440 standard tuning.
- MIDI CH: 16 position rotary switch. Selects basic MIDI channel (channel 1 15 only) by setting the switch to positions 1 - 15. MIDI OMNI ON mode is selected by setting the switch to position 0.
- **FOOT PEDAL**: 1/4" stereo type (tip, ring, sleeve) phone jack provided for foot pedal control of the Wah-wah effect. A potentiometer type pedal or control voltage pedal may be used.
- MIDI THRU: 5-pin DIN MIDI thru output. This MIDI output may be used to send a "carbon copy" of the MIDI IN data to other modules.
- MIDI IN: 5-pin DIN MIDI input. This MIDI input accepts MIDI data from a MIDI controller (i.e. keyboard) or computer
- CH1: channel 1 audio output.
- CH2/PHONE: channel 2 audio output. Can also be used to drive high impedance stereo headphones (> 600 ohm).

SET-UP



Refer to the diagram above for setting up the ELECTRIC PIANO.

To use your ELECTRIC PIANO, please follow these easy steps:

1. Connect a MIDI Controller

The ELECTRIC PIANO requires a MIDI connection to a MIDI device such as a MIDI keyboard, digital piano, or computer in order for it to be played. Connect the MIDI out of this device to the MIDI IN jack of the ELECTRIC PIANO using a MIDI cable.

2. Connect audio outputs to amplifier

The ELECTRIC PIANO provides two audio outputs for the stereo tremolo effect. Both CH1 and CH2 outputs should be connected for stereo operation to a suitable audio system (i.e. digital piano, stereo mixer / sound system). If mono audio operation is desired, connect CH1 to the instrument amplifier (mixer etc.).

A set of high impedance (> 600 ohm) stereo headphones may be connected to the CH2 output. Depending on the type of headphones used, it may be necessary to raise the level of the front panel volume control. The headphone drive capabilities of the ELECTRIC PIANO may not be suitable in some instances where high volume levels are desired.

3. Attach MIDI THRU Output (optional)

Useful in connecting more than one MIDI module in a daisy chain configuration. Use this output for sending a "carbon copy" of the MIDI data appearing at the MIDI IN connector to other MIDI devices.

4. Attach Foot Pedal (optional)

A potentiometer or control voltage foot pedal can be connected to this input to control the Wah-wah effect. The Wah-wah effect must be turned on to make use of this effect. This 1/4" stereo jack conforms to the following specification: Tip=control voltage input, Ring=510 ohm resistor connected to 5 volts, Sleeve=ground. For a control voltage foot pedal use positive 0 to 5 volts connected to the Tip and the Sleeve is grounded.

5. Connect AC Adapter

The ELECTRIC PIANO requires an external AC adapter. Make sure that you first connect the small barrel connector on the rear panel of the ELECTRIC PIANO before connecting the AC adapter to the wall outlet.

6. Select the Basic MIDI Channel

Set the basic MIDI channel on the MIDI channel selector located on the rear panel of the ELECTRIC PIANO. The basic MIDI channel should be the same as the channel that your MIDI controller uses to transmit MIDI note on/note off and program change information to the ELECTRIC PIANO.

Refer to the MIDI channel selection table on page 11 for a list of all valid MIDI channel combinations.

7. Select tuning

A rotary control is provided in the event that it is necessary to change the tuning of the ELECTRIC PIANO. The center detent position is A440 standard tuning. The pitch may be raised or lowered by one semitone.

USING THE ELECTRIC PIANO

Built-in Demo

A built-in demonstration will play some of the various sounds and effects the ELECTRIC PIANO is capable of creating. It may be activated by holding in the AUTO WAH-WAH button and simultaneously turning the preset selector to the M position. The VOLUME and OVERDRIVE controls will remain active during the demonstration. To exit the demonstration mode, turn the preset selector to another position.

Playing

After connecting the ELECTRIC PIANO as explained in the Set-Up section, you will be ready to begin playing. The ELECTRIC PIANO was designed to be very easy and intuitive to use. The following is a brief description of the ELECTRIC PIANO's controls together with an explanation of their usage.

Volume: Before powering-up the ELECTRIC PIANO, make sure that the volume level is turned all the way down (volume control turned full counter clockwise). Power-up the ELECTRIC PIANO, the MIDI LED should light up, then play some notes on your keyboard and gradually turn up the volume to a comfortable listening level.

Overdrive: Overdrive may be used to simulate the sound of a tube amplifier driven into clipping. It helps to realistically simulate the tube type Wurlitzer model 120 sound used by many "R & B" and rock bands.

To adjust the amount of overdrive, simply play some notes and gradually turn the overdrive knob clockwise. Notice how the amount of overdrive increases as you turn the knob. Adjust to taste.

Chorus: The ELECTRIC PIANO comes with a built-in chorus effect. This effect was popularly used with the Rhodes electric piano popular during the 70's. The Rate and Depth controls allow the player to "tweak" the effect to his or her taste. The LED indicator located near the Chorus pushbutton shows the player when the effect is on. MIDI control changes can also be sent to turn on the effect and set the rate and depth. This effect causes the polyphony to drop from 32 to 16 notes due to the assignment of 2 voices for each note.

Tremolo: An effect popularly used with the Wurlitzer electric piano. This sinusoidal amplitude modulation gently varies the volume of the sound produced. The Rate and Depth controls allow the player to set the amount and speed of the effect. This effect is stereo like the one found in the suitcase Rhodes model electric pianos. Its variation in volume alternates between the stereo audio channels. If a mono audio system is used be careful to use only one audio output from the ELECTRIC PIANO because mixing the stereo signal to mono nullifies the Tremolo effect. The LED indicator located near the Tremolo push-button shows the player when the effect is on. MIDI control changes can also be sent to turn on the effect and set the rate and depth.

Wah-wah: A must for the Clavinet sound. This effect produces the same sound as when a trumpet is played with a mute. Effect pedals created to produce this sort of effect were popular for guitar during the late 60's. An analog filter inside the electric piano is used to create the Wah-wah effect. It can be controlled from as many as three sources simultaneously: the keyboard's modulation wheel, a foot controller plugged into the jack on the rear panel of the ELECTRIC PIANO, and key velocity. The key velocity control is turned on by the Auto Wah-wah push-button on the front panel. Modulation wheel and foot control are enabled by the Wah-wah On push-button. All three control sources may be active at the same time. The LED indicators located near the two Wah-wah effect push-buttons show the player which Wah-wah effects are on. MIDI control changes can also be sent to turn on the two Wah-wah effects.

Transpose: Useful for changing the musical key which the ELECTRIC PIANO will play. This control will allow you to utilize different ranges of notes on your keyboard. This is especially useful if your keyboard has five octaves or less.

PRESETS

The ELECTRIC PIANO has 32 presets. The first 22 presets can be accessed through the preset selector on the front panel; to access all 32 presets you must use a MIDI controller capable of sending at least program changes 0 to 31. Set the preset selector to **P** when using your MIDI controller to send program changes. This tells the ELECTRIC PIANO that all program changes will now be set by your MIDI controller.

#	Preset	#	Preset
1	WURLITZER 200	17	RMI
2	WURLITZER 120	18	WURLITZER 120 WITH TREMOLO
3	CLAVINET AC	19	CLAVINET WITH AUTO WAH-WAH
4	CLAVINET AD	20	RHODES NAIL POLISH WITH CHORUS

#	Preset	#	Preset
5	CLAVINET BC	21	RHODES SUITCASE WITH TREMOLO
6	CLAVINET BD	22	CLAVINET WITH AUTO WAH-WAH AND CHORUS
7	CLAVINET II	23*	PIANET "A" WITH TREMOLO
8	RHODES STAGE	24*	DX EP1 WITH CHORUS
9	RHODES SUITCASE	25*	DX EP2 WITH CHORUS
10	RHODES NAIL POLISH	26*	CLAVINET WITH WAH-WAH
11	HARPSICHORD 8'	27*	RHODES STAGE WITH CHORUS
12	HARPSICHORD 8',4'	28*	WURLITZER 200 WITH TREMOLO
13	PIANET "T"	29*	HARPSICHORD 8',4' WITH AUTO
14	PIANET "A"	30*	HARPSICHORD 8',4' WITH CHORUS
15	DX EP1	31*	DX EP1 WITH TREMOLO
16	DX EP2	32*	RMI WITH AUTO WAH-WAH

* not accessible from the front panel switch—use MIDI program change to access.

MIDI OMNI ON MODE

When the ELECTRIC PIANO is in MIDI OMNI ON mode, it will respond to all MIDI channels. Any NOTE ON/NOTE OFF information (within the note range utilized by the ELECTRIC PIANO), program changes (if the PRESET selector is set to **P**), and specified control changes regardless of MIDI channel will be recognized by the ELECTRIC PIANO in this mode.

To enable MIDI OMNI ON mode set the MIDI Channel selector on the rear panel to the "0" position.

MULTI-TIMBRAL MODE

Multi-timbral Mode allows the ELECTRIC PIANO to accept MIDI information received on three (3) adjacent channels as determined by the basic channel selected on the rear panel MIDI channel selector. Program changes may be sent to the ELECTRIC PIANO to allow different presets to play on each of the three MIDI channels simultaneously. Effect control change commands are global, affecting the sounds produced by all three channels.

To use Multi-timbral mode:

1. Set the preset selector on the front panel to **M**. By doing this you are now telling the ELECTRIC PIANO to accept MIDI data on the three channels selected in next step.

2. Select the three adjacent channels to be enabled by first setting the MIDI channel selector to the basic (first of the three consecutive) MIDI channel. The basic MIDI channel and the next two higher channels will be enabled (recognized). If channel 15 is selected, channels 16 and 1 will also be enabled. See the chart on the next page.

OMNI ON mode and multi-timbral mode are mutually exclusive. OMNI ON mode takes precedence over multi-timbral mode.

Switch Position	Basic MIDI Channel	Multi-Timbral Channels
0	OMNI ON (ALL)	N/A
1	1	1, 2, 3
2	2	2, 3, 4
3	3	3, 4, 5
4	4	4, 5, 6
5	5	5, 6, 7
6	6	6, 7, 8
7	7	7, 8, 9
8	8	8, 9, 10
9	9	9, 10, 11
10	10	10, 11, 12
11	11	11, 12, 13
12	12	12, 13, 14
13	13	13, 14, 15
14	14	14, 15, 16
15	15	15, 16, 1

MIDI Channel Selection Table

MIDI CONTROLLED EFFECTS

The ELECTRIC PIANO allows control of several of its effects via MIDI control changes. The following table lists the effects that can be controlled by MIDI, their MIDI control numbers, and the associated control values:

Effect	MIDI Control #	Value
Rate	94	0 - 127, 0 = slowest 127 = fastest
Depth	91	0 - 127, 0 = least 127 = most
Chorus On/Off	80	0 - 63 = Off, 64+ = On
Tremolo On/Off	81	0 - 63 = Off, 64+ = On
Wah-wah On/Off	82	0 - 63 = Off, 64+ = On

Effect	MIDI Control #	Value
Wah-wah frequency (when Wah-wah On)	1	0 - 127, 0 = lowest 127 = highest
Auto Wah-wah (On/Off)	83	0 - 63 = Off, 64+ = On

Note the MIDI control numbers are fixed, therefore to control the effects mentioned in the table you will need a programmable MIDI controller. The various buttons, wheels, sliders, or pedals of your MIDI controller must be assigned to the control number corresponding to the effect you wish to control. It is advisable to determine the ability of your controller to be reprogrammed before attempting the following:

Examples:

Controlling The Wah-wah Filter Frequency From A Continuous Controller:

Program the MIDI keyboard's controller (foot, slider, ect.) to send data on MIDI control number 1, just like the modulation wheel. The ELECTRIC PIANO recognizes controller number 1 as the Wah-wah's filter frequency control.

Using a push-button to turn the Chorus effect on and off:

Let's say your MIDI controller has a push-button control that can be assigned to any MIDI control number. Program the MIDI control number of the keyboard's push-button control to 80. The ELECTRIC PIANO will interpret MIDI control number 80 as the Chorus ON/OFF control. Most push-button MIDI controllers will output a value of 127 when in the "on" position and a value of 0 when in the "off" position. If your MIDI controller allows you to program the control value, make sure you set it to a value between 0 and 63 for "off" and between 64 and 127 for "on". Now you should be able to turn the Chorus effect on and off by pressing the push-button.

SPECIFICATIONS

- CONTROLS: 4 rotary controls: VOLUME, OVERDRIVE, RATE, and DEPTH. 2 rotary selectors: TRANSPOSE (+/- 2 octaves and semitonal) and PRESET (22 presets, multi-timbral mode, program change enable). 4 push-buttons: CHORUS on/off, TREMOLO on/off, WAH-WAH on/off, and AUTO WAH-WAH on/off. Rear: MIDI channel (OMNI ON mode), Wah-wah effect foot switch connector, tuning control, and power switch
- PRESETS: 32 total (22 front panel selectable)
- **POLYPHONY**: 32 notes maximum, 16 notes minimum
- AUDIO: 2 1/4" audio outputs provide stereo. +4 dBm nominal output level. CH2 output may drive stereo headphones with >600 ohm impedance (used for test purposes only, not suitable for driving headphones at high output levels).
- MIDI I/O: MIDI IN and MIDI THRU
- POWER: 12 volts AC @ 800 mA, 2.5mm connector
- **CABINET**: Extruded aluminum chassis, aluminum front and rear, steel bottom panel
- DIMENSIONS: 8" x 8" x 1.5"
- WEIGHT: 4 lbs. excluding AC adaptor