

Chapter 32

Specifications

K2vx FEATURES

- 240 x 64-pixel backlit graphic display with adjustable contrast
- 3.5-inch floppy disk drive, for DD or HD disks, DOS compatible
- MIDI In, Thru, and Out
- MIDI LED to indicate MIDI activity
- 24-note polyphony with dynamic voice allocation
- Multi-timbral, for multi-track sequencing and recording
- 199 factory preset programs, and 100 factory preset setups
- Up to 3 layers per program, up to 32 layers for programs on drum channels
- Receives mono (channel) pressure and poly (key) pressure
- 3-zone setups transmit on 3 MIDI channels with independent programmable controls
- Fully featured onboard sequencer for recording from keyboard or via MIDI; loads and plays MIDI Type 0 sequences
- Easy-to-use programming interface including soft buttons, Alpha Wheel, and alphanumeric pad
- 8 Megabytes of 16-bit sample ROM, including acoustic instrumental sounds, waveforms, and noise
- 20 KHz maximum bandwidth
- Optional stereo sampler with analog and digital inputs
- Sound ROM expandable to a total of 24 Megabytes
- 4 SIMM sockets for optional sample RAM—up to 64 Megabytes
- Stereo sample playback capability
- Akai® S1000 sample disk compatibility
- Two 1/4-inch mixed audio outputs (stereo pair)
- Four 1/4-inch audio outputs programmable as two stereo pairs or as four separate outputs, with insert capability for effects patching
- Stereo headphone jack
- 128K battery-backed RAM for user programs, setups and other objects, expandable to 750K
- Two SCSI ports for connection with external SCSI disks, CD-ROM drives, or Macintosh® personal computers
- Optional internal hard disk
- Realtime DSP for each voice: 31 programmable DSP algorithms incorporating filters, EQ, distortion, panning, pulse width modulation, and more; up to 3 programmable DSP functions per voice
- Filters: Lowpass, Highpass, Allpass, Bandpass, Notch, programmable resonance
- Programmable stereo multi-effects on MIX outputs, including simultaneous reverb, chorus, delay, flanging, EQ—and more

Specifications

K2vx FEATURES

- Realtime internal and MIDI control of effects parameters
- MIDI standard sample dump/load capability
- SMDI sample dump/load capability
- System Exclusive implementation
- MIDIScope™ for analyzing MIDI events

Environmental Specifications

Temperature ranges

For operation:	minimum	41° F (5° C)
	maximum	104° F (40° C)
For storage:	minimum	-13 ° F (-25° C)
	maximum	186° F (85° C)

Relative humidity ranges (non-condensing)

Operation and storage:	5—95%
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Physical Specifications

Overall dimensions

Width	16.9 in*	43 cm
Depth	13.9 in	35.4 cm
Height	5.1 in	13 cm
Weight:	24.65 lb	11.2 kg

* Excluding the rack-mount brackets

Electrical Specifications

AC supply: selectable; 100V, 120V, 220V, or 240V. 1.0 amps at 120 volts nominal

Safe voltage ranges

Voltage setting:	100V	120V	220V	240V
Safe voltage range:	85—107	95—125	180—232	190—250
Safe frequency range:	48—65	48—65	48—65	48—65

If the voltage drops below the minimum safe level at any voltage setting, the K2vx will reset, but no data will be lost. If the voltage exceeds the maximum safe level, the K2vx may overheat.

MIDI Implementation Chart

Model: K2vx

Manufacturer:
Young Chang

Date: 3/21/95
Version 1.0

Digital Synthesizers

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1	1	Memorized
	Changed	1 - 16	1 - 16	
Mode	Default	Mode 3	Mode 3	Use Multi mode for multi-timbral applications
	Messages			
	Altered			
Note Number			0 - 127	0-11 sets intonation
	True Voice	0 - 127	0 - 127	Key
Velocity	Note ON	O	O	
	Note OFF	O	O	
After Touch	Keys	X	O	
	Channels	O	O	
Pitch Bender		O	O	
Control Change		O 0 - 31 32 - 63 (LSB) 64 - 127	O 0 - 31 32 - 63 (LSB) 64 - 127	Controller assignments are programmable
Program Change		O 1 - 999	O 1 - 999	Standard and custom formats
	True #	0 - 127	0 - 127	
System Exclusive		O	O*	
System Common	Song Pos.	O	O	
	Song Sel.	O	O	
	Tune	X	X	
System Real Time	Clock	O	O	
	Messages	O	O	
Aux Messages	Local Control	O	O	
	All Notes Off	O	O	
	Active Sense	X	X	
	Reset	X	X	
Notes *Manufacturer's ID = 07 Device ID: default = 0; programmable 0 - 127				

Mode 1: Omni On, Poly
Mode 3: Omni Off, Poly

Mode 2: Omni On, Mono
Mode 4: Omni Off, Mono

O = yes
X = no