

# Appendix A

## Specifications

### K2600 Features

- 240 x 64-pixel backlit fluorescent graphic display with adjustable contrast
- 3.5-inch floppy disk drive, for DD or HD disks, DOS compatible
- MIDI In, Thru, and Out with selectable second MIDI Out
- MIDI LED to indicate MIDI activity
  
- 48-note polyphony with dynamic voice allocation
- Multi-timbral, for multi-track sequencing and recording
- Hundreds of factory preset programs, and more than 100 factory preset setups
- Up to three layers per program, up to 32 layers for drum programs
- Receives mono (channel) pressure and poly (key) pressure
- Eight-zone setups transmit on eight 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
  
- Eight 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
- AES/EBU I/Os and optical I/O
- Sound ROM expandable to a total of 28 Megabytes
- Two SIMM sockets for optional sample RAM—up to 128 Megabytes
- Stereo sample playback capability
- Akai<sup>®</sup> S1000, Roland,<sup>®</sup> and EPS<sup>®</sup> sample disk compatibility
  
- Two 1/4-inch mixed audio outputs (stereo pair)
- Eight 1/4-inch audio outputs programmable as four stereo pairs or as eight separate outputs, with insert capability for effects patching
- Stereo headphone jack

## Specifications

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### Environmental Specifications

- 500K battery-backed RAM for user programs, setups and other objects, expandable to 1500K
- Two SCSI ports for connection with external SCSI disks, CD-ROM drives, or personal computers
- Optional internal hard disk
- Optional eight-channel interface to AES, ADAT, DA-88
  
- 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
- 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	K2600R		K2600		K2600X	
Width	16.9 in <sup>1</sup>	43.0cm	47.8 in	121.4cm	54.3 in	137.9cm
Depth	13.9in	35.4cm	17.8 in	45.1cm	17.8 in	45.1cm
Height	5.1 in	13.0cm	4.8 in	12.2cm	4.8 in	12.2cm
Weight	24.65lb	11.2 kg	55.5 lb	25.2 kg	72.0 lb	32.7 kg

1. Excluding 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 K2600 will reset, but no data will be lost. If the voltage exceeds the maximum safe level, the K2600 may overheat.

## Specifications

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### Analog Audio Specifications

# Analog Audio Specifications

## Audio Jacks

- 1/4-inch TRS balanced/unbalanced
- Tip = Positive
- Ring = Negative
- Sleeve = Chassis Ground

## Separate Outputs

	Balanced	Unbalanced
Maximum Output	21 dBu	15 dBu
Output Impedance	200 $\Omega$	200 $\Omega$

## Mix Outputs

	Balanced	Unbalanced
Maximum Output	27 dBu	21 dBu
Output Impedance	200 $\Omega$	200 $\Omega$

## Headphone Output

Maximum Output	21 dBu
Output Impedance	47 $\Omega$

# MIDI Implementation Chart

## Model: K2600

Manufacturer:  
Young Chang

Date: 3/21/95  
Version 1.0

### Digital Synthesizers

Function	Transmitted	Recognized	Remarks
Basic Channel	Default	1	Memorized
	Changed	1 - 16	
Mode	Default	Mode 3	Use Multi mode for multi-timbral applications
	Messages		
	Altered		
Note Number		0 - 127	0-11 sets intonation key
	True Voice	0 - 127	
Velocity	Note ON	O	
	Note OFF	O	
After Touch	Keys	X	
	Channels	O	
Pitch Bender		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	Standard and custom formats
	True #	O 0 - 127	
System Exclusive		O*	
System Common	Song Pos.	O	
	Song Sel.	O	
	Tune	X	
System Real Time	Clock	O	
	Messages	O	
Aux Messages	Local Control	O	
	All Notes Off	O	
	Active Sense	X	
	Reset	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

