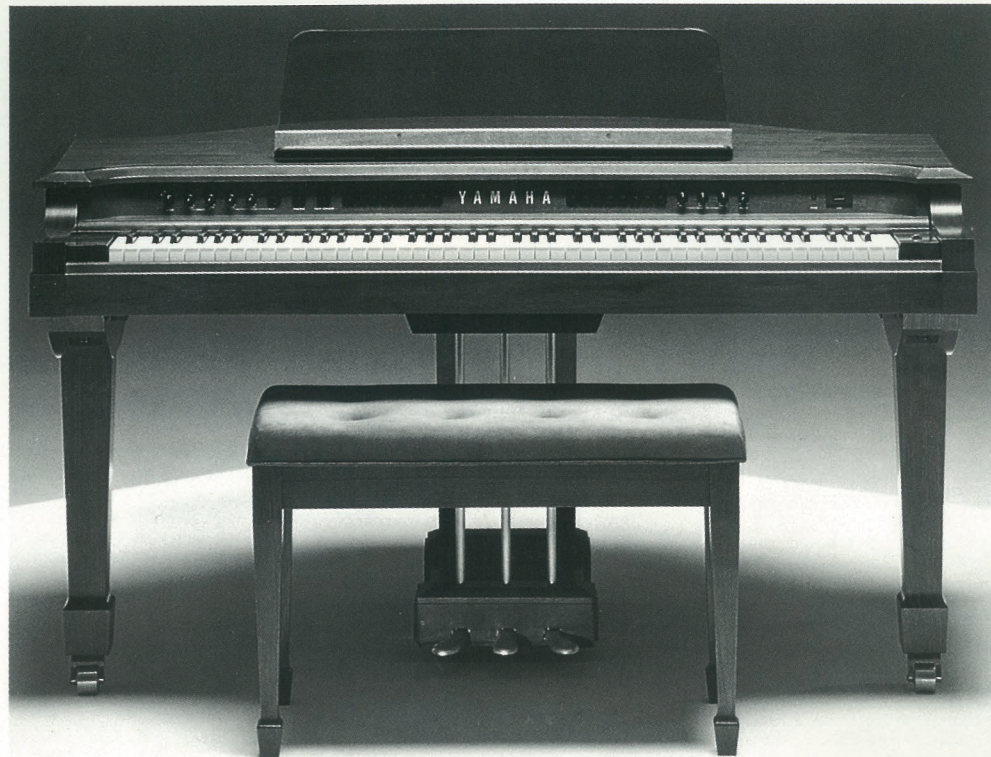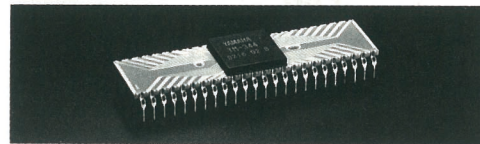# DIGITAL KEYBOARD GS 1

The GS-1 digital keyboard is the beginning of a new generation in electronic keyboards. The GS-1 is an 88 key, 16 note polyphonic keyboard featuring sophisticated new Yamaha technology like FM tone generation, which permits creation of music waveforms nearly identical to those of acoustic instruments. Velocity/pressure sensitive keys also give you more creative flexibility with Initial Touch Response and After Touch Response, which allow you to vary the dynamics and tone coloration of the notes according to the velocity of key attack and the pressure applied to the keys. There are 32 voices preprogrammed and stored on magnetic cards which can be "read' by the GS-1 to reprogram the button-selectable voices. All this creative potential has been made possible in the GS-1 thanks to Yamaha's advanced digital technology and unique musical sensitivity, for an exciting new generation of electronic keyboard performance.

Digital FM Tone Generator For Incredibly "Real" Sound

Yamaha has provided the GS-1 with a means of creating music waveforms with a truly natural harmonic spectrum—a digital frequency modulation tone generator. The latest digital technology has been applied in the GS-1, resulting in the ability to generate natural, irregular harmonic waveform structure, for voices that accurately imitate the sounds of acoustic instruments. This incredible musical realism just isn't possible with conventional synthesizer technology. Four digital FM tone generator channels are employed to produce each note played on the GS-1.

The Yamaha Voice Library System

The GS-1 comes with a library of pre-programmed magnetic cards, each with 32 different voices. This voice library, combined with the GS-1's digital FM tone generation technology and dual Touch Response capability gives you new musical scope. The GS-1 memory system lets you to preset up to 16 of the 32 voices provided on each voice card, for fast and simple voice selection during performance with the front panel Voice Selectors. A Program Lock switch protects the cards from accidental erasure, and battery back-up power prevents data erasure when main power to the instrument is switched off.
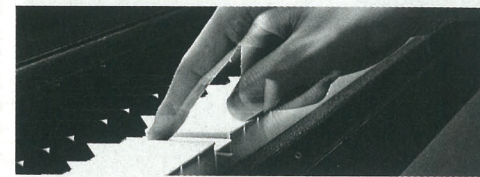

Dual Touch Response Functions

Velocity/pressure sensitive keys on the GS-1 give you two versatile means of controlling dynamics and tonality—Initial Touch Response and After Touch Response. Initial Touch Response lets you control the volume and tonal quality of each note played according to the speed with which you strike the keys. The dynamic range provided by Initial Touch Response is an impressive 96 dB, and a real wood keyboard contributes to superior action and response.
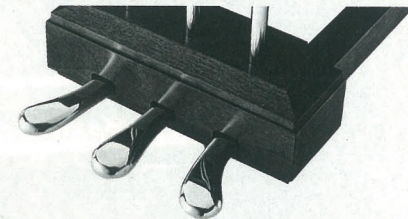
After Touch Response allows you to control volume and tonal quality of notes played according to the pressure applied to the keys. The effect is wide ranging, and since each note responds independently, a variety of expressions can be generated within an individual chord. The dynamic range available with After Touch Response is broad, and a convenient front panel Touch Response switch allows you to turn After Touch Response function on or off as desired. The Touch Response effect is different for each of the 32 available voices in order to provide the most effective Touch Response control capability for each individual sound.
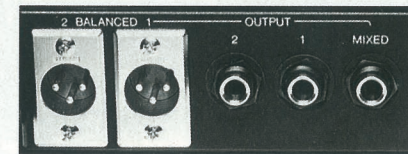

Unique, Useful Effects

The GS-1 has a number of Effects which let you tailor the sound according to your own musical preferences. The Detune effect allows you to offset the pitch of one output channel in relation to the other for a "honky-tonk" piano effect. Detune is switchable between Random Detune, varying the effect according to the order in which the keys are struck, and Static Detune, which generates a consistent Detune effect. In addition to this effect, Ensemble lets you create a multiple instrument accompaniment effect, and Tremolo and Vibrato are also provided. Convenient foot pedals let you control three effects with greater ease—Vibrato On/Off, Tremolo On/Off, and Damper.

Professional Output Standards

The GS-1 is compatible with professional output standards. Three phone jack connections are provided for Channels 1, 2 and Mixed Channel output, and Channel 1 and 2 output is also possible via balanced-output type XLR connectors. All output jacks meet professional specifications for PA and recording situations.

Standard Accessories

• Voice Card x 32   • Blank Voice Card x 8
• Card Holder   • AC cord

Options

• BGS-1 Bench   • FC-3A Foot Controller