

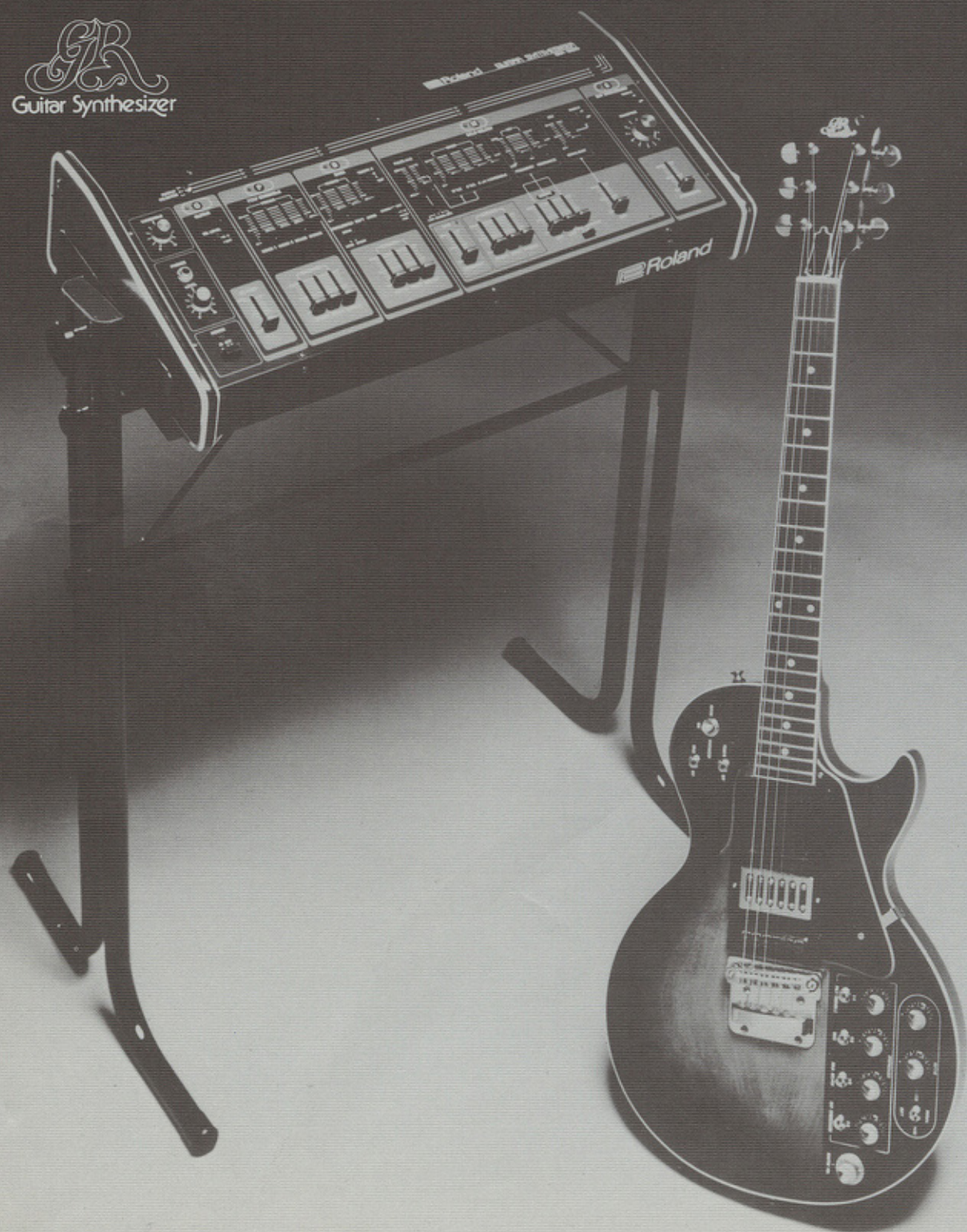
 Roland

PARAPHONIC

# Guitar Synthesizer

GS-500  
GR-500

  
Guitar Synthesizer



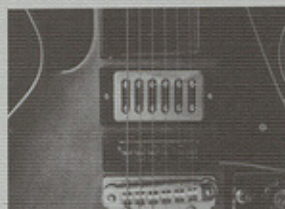


The GS500/GR500 is the first guitar synthesizer in the world—a true pioneer. Connected to a mating synthesizer GR500, GS500 boasts the following features and characteristics:

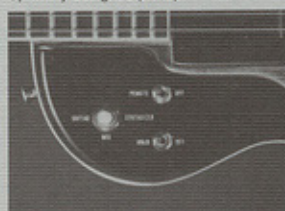
1. A synthesizer for guitarists, it can be played the same way as an ordinary electric guitar.
2. It is a paraphonic system comprising five sections: guitar, polyensemble, bass, solo melody and external synthesizer. They can be played simultaneously thereby producing sounds in unique modes.
3. Since each section has its own controls, a high degree of freedom, versatility and expanded sound dimension is rendered.
4. It can be used both in live performance, or for multiple recording with ensembles of any genre or style.



Control volume



Specially designed pickup



Guitar/synthesizer changeover switch and remote switch



Connector



- Specially Designed Neck
- Guitar/Synthesizer Changeover Switch
- Portament ON/OFF Switch
- Remote Switch
- Humbucking Pickup
- Divided Pickup
- Bridge, Tailpiece
- Polyensemble Volume, ON/OFF Switch
- Guitar Volume Control
- Bass Volume, ON/OFF Switch
- Guitar Tone Control
- Solo Melody Volume, ON/OFF Switch
- Equalizer
- External Synthesizer Volume, ON/OFF Switch
- Master Volume
- Connector

## Poly-Ensemble Volume-ON/OFF Switch

For volume and ON/OFF control of poly-ensemble section.

## Bass Volume-ON/OFF Switch

For volume and ON/OFF control of bass.

## External Synthesizer Volume-ON/OFF Switch

For volume and ON/OFF control of external synthesizer.

## Solo-Melody Volume-ON/OFF switch

For volume and ON/OFF control of solo and melody.

## Master Volume Control

For control of master volume.

## Poly-Ensemble/Bass/Solo-Melody Switches

Used to select appropriate mode for musical mood after presetting sound volume on GR500. Individual ON/OFF control for each mode.

## Guitar Volume/Tone Control

Identical to those on conventional electric guitars.

## Equalizer Switch

Like a pick-up selector switch, the equalizer switch allows selection of soft or hard or acoustic notes.

## Connector

For connecting GS500 to GR500.

## Humbucking Pick-up

GR' original double coil pick-up.

## Divided Pick-up

Specially developed for GS500. One pick-up for each string for a total of six.

## Bridge and Tail Piece

Both specially designed for GS500

## Guitar/Synthesizer Changeover Switch

Changeover switch for humbucking pick-up and divided pick-up is mounted on GS500. Used to select between ordinary electric guitar and synthesizer notes or to mix the two when set at its center position.

## Portament ON/OFF Switch

Portament ON/OFF switch of an external synthesizer.

## Remote Switch

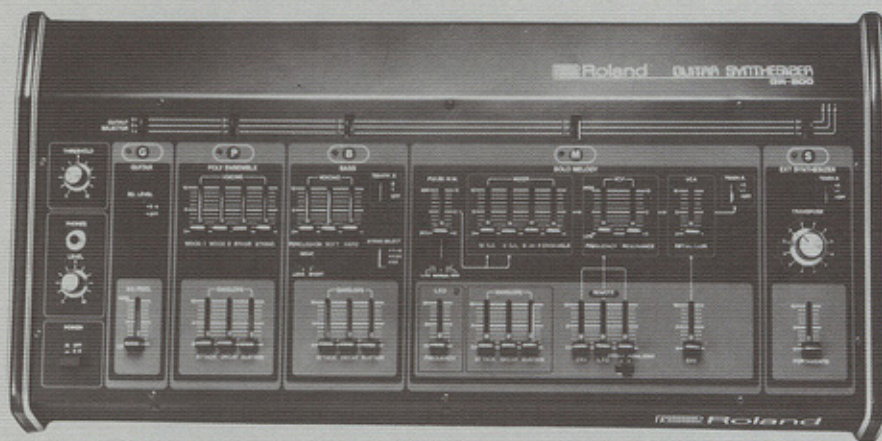
ON/OFF switch for solo-melody section, VCF and LFO modulation. Can also be used for ON/OFF control of sound effects from external amplifier (vibrato or reverb) when connected to Remote OUT on synthesizer's rear panel.

## Patch Cord

For connecting GS500 to GR500.



The revolutionary Roland GR500 creates sounds which no other stringed instrument can create. Basically, the unit is composed of 5 independent sound producing sections, each with its own output which can be directly connected to an independent amplifier. There are also three auxiliary outputs which can be used to mix individual sections. A MIX OUT is also provided which mixes output from all sections for amplification by a single amplifier. The unit is equipped with a headphone jack for private monitoring and special controls to compensate for individual differences in picking style.



### GR500 Control Panel

#### Threshold

Electronically compensates for different picking intensities, e.g. finger picking, to maintain uniform sound levels.

#### Output Selector Switch

For selecting the output from individual sections and the desired output channel.

#### Guitar Section

Used to produce ordinary guitar notes. Tone quality (timbre) can be modified by varying the equalizer frequency volume. When guitar volume is increased, a LED lights to indicate guitar section is in operation.

#### Poly-Ensemble Section

Composed of an envelope generator with separate controls for attack, decay and sustain and four voicing mixers (woodwinds, soft reeds, brass, strings). Can simulate string notes such as violin, brass ensembles, harpsichord and even the human voice. When guitar volume is increased, a LED lights to indicate this section is in operation.

#### Bass Section

This section incorporates the "last note priority system" for deadening the note of the previously picked string when a note is played on another string to enable "double playing". This system uses a string selector which can be adjusted to apply the system to all strings: 1/2/3/4/5/6; 3 strings: 4/5/6 or 2 strings: 5/6. ADS's envelope generator, soft-hard voice mixer, percussion control and decay switch allow simulation of bass bowing, tuba notes etc. A 2-position touch sensitive switch allows intonation effect.

\*The Last Note Priority System is designed to take out the last picked note by suppressing the succeeding note in down-stroke picking. For example, when No. 5 string is picked after picking the No. 6 string, the note produced by the No. 6 string is suppressed at the exact moment the No. 5 string is picked. The note produced by the No. 5 string will then in turn be suppressed as

soon as the No. 4 string is picked. When the string selector switch is set to "1-6" the notes of the last picked string will be dampened on all six strings. When set to "4,5,6," only strings No. 4, No. 5 and No. 6 will be dampened.

#### Solo-Melody Section

This section acts very much like a conventional keyboard synthesizer and can be used with the Last Note Priority System. The elaborate controls allow free creations of colorful sounds from clear solo notes to special effects such as "funny cat". When guitar volume is increased, a LED lights to show this section is in operation.

#### External Synthesizer Section

When connected to an external synthesizer (such as Roland's System 700, System 100/101/102 or SH-5), even greater opportunities for creative sound become available.

### GR500 Rear Panel

#### Output Jacks

Controlled by output selector switch on front panel, these jacks allow selective input from the five sections into three output channels. This allows exact matching of individual sections to proper amplifiers, e.g. bass section to bass amplifier.

#### External Synthesizer Control Jack

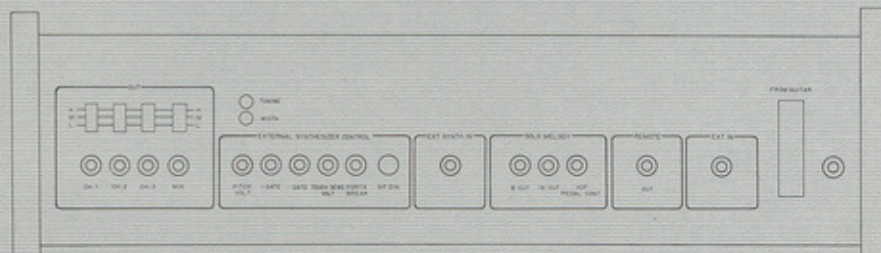
By connecting an external synthesizer to this jack, it can be controlled by the GS500.

#### External Synthesizer Input Jack

Used for connection to output of external synthesizer.

#### Solo-Melody Output Jack (8' OUT/16' OUT)

Allows output of "fixed tones" regardless of control settings. Can also be used with external synthesizers.



#### VCF Pedal Control Jack

Used for connection of Foot Volume FV2 etc. for VCF frequency control to produce "wow" effect.

#### Remote Jack

Used for connection with amp's remote jack for ON/OFF control of special amplifier effects (reverb, vibrato, tremolo, etc.) with use of corresponding switch on GS 500.

#### External Input Jack

Used to connect conventional electric guitar for colorful sound production throughout the solo-melody section.

#### From Guitar

For connecting GS500 (guitar unit) to GR500 (synthesizer unit.)



## Specifications

## GS-500

### SYNTHESIZER SECTION

Guitar/Synthesizer Changeover Switch  
Hold ON/OFF Changeover Switch  
Remote ON/OFF Changeover Switch  
Polyensemble Volume Control  
Polyensemble ON/OFF Changeover Switch  
Bass Volume Control  
Solo Melody Volume Control  
Solo Melody ON/OFF Changeover Switch  
External Synthesizer Volume Control  
External Synthesizer ON/OFF Changeover Switch

### GUITAR SECTION

Volume Control  
Tone Control  
Equalizer  
Master Volume Control  
  
Humbucking Pickup  
Divided Pickup  
Threshold

## Specifications

## GR-500

### GUITAR SECTION

Equalizer Level ON/OFF Changeover Switch  
Equalizer Frequency Volume




### POLYENSEMBLE SECTION

Voicing Volume, Wood, Soft Reed, Brass, Strings, Envelope Generator, Attack, Decay, Sustain

### BASS SECTION

Voicing Volume, Percussion, Soft, Hard, Decay LONG/SHORT Changeover Switch, String Selective Switch 1-6/4, 5, 6/5, 6,,  
Touch Sense Changeover Switch 2/1/OFF, Envelope Generator, Attack, Decay, Sustain

### SOLO MELODY SECTION

Pulse Width Modulation, Pulse Width Modulation Changeover Switch, LFO/Manual/Envelope, Mixer 16' , 8' , 8' , Polyensemble, VCF Freq., Resonance, LFO Frequency, Envelope Generator, Attack, Decay, Sustain, Modulation, Envelope, LFO, Pitch Follower, Pitch Follower/Pedal Control Changeover Switch, VCA, Initial Gain, Envelope, Touch Sense Changeover Switch 2/1/OFF

### EXTERNAL SYNTHESIZER SECTION

Transpose Changeover Switch 32'F/16'F, 5, 3/8'F, 5, 3/4F, 5, 3/2'F/1'F, Poryamento Time, Headphone Jack, Headphone Level Volume

Specifications subject to change without notice.