

 **Roland**

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**SYNTHESIZER DRIVER**

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**GK-2**

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**Owner's Manual**

The Roland Synthesizer Driver GK-2 can turn the usual electric guitar to the controller for the GR-50 Synthesizer.

To make the best use of the GK-2, please read this owner's manual carefully.

## ■ FEATURES

- The GK-2 is designed to compact that it can be connected to almost all types of electric guitars.
- The GK-2 simply consists of Pickup and Pickup Controller Unit for synthesizer, therefore does not need complicated procedure for installation.
- The switches on the Controller Unit of the GK-2 can change patches on the GR-50. It is also possible to assign different functions other than Patch selection to these switches.

## ■ WARRANTY OF THE GK-2

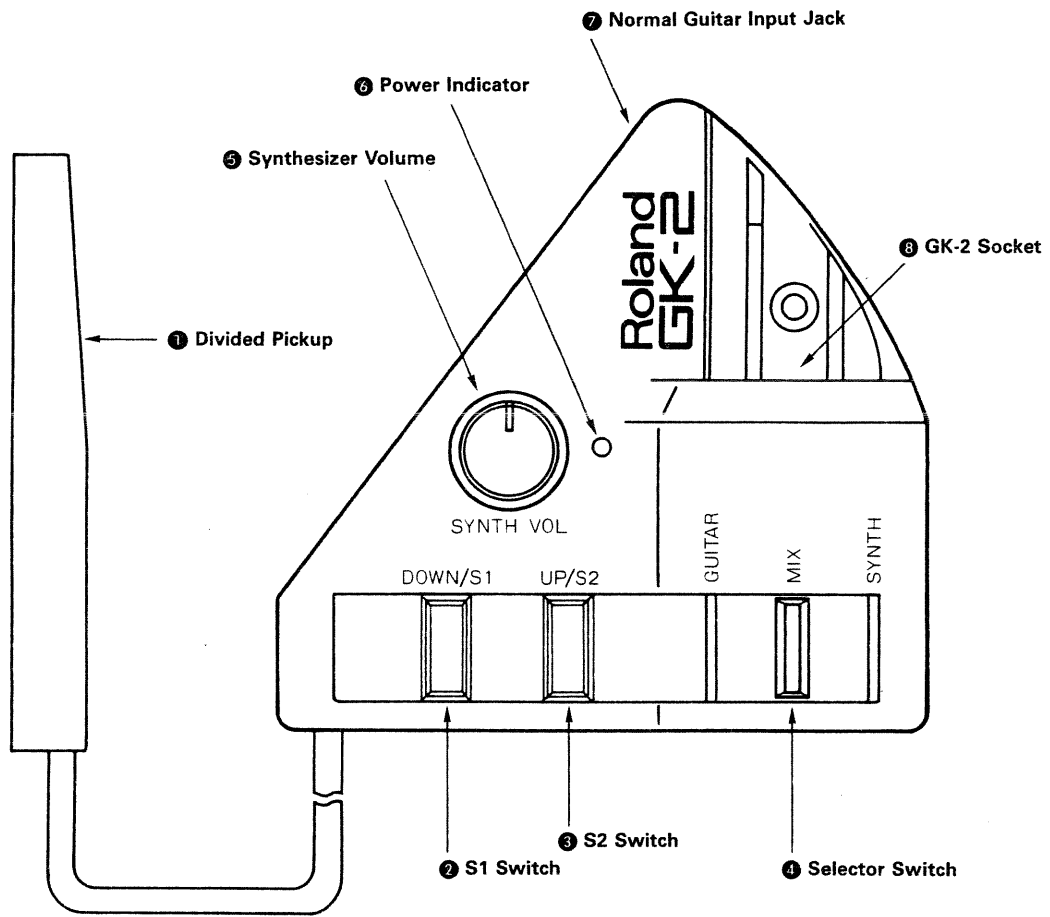
Roland guarantees the GK-2 unit and all the parts included in the package. Contact Roland service station when you wish to have the unit repaired.

Roland does not guarantee any trouble whatsoever caused by your processing the GK-2, such as deterioration in appearance or function of the GK-2 or the damage on the guitar. Such troubles should be consulted with the shop where you bought the GK-2.

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## ■ PANEL DESCRIPTION



### ❶ Divided Pickup

The Divided Pickup detects the vibration on the guitar. Connect this between the bridge and the pickup.

### ❷ S1 Switch

The S1 Switch controls the GR-50 in many different ways depending what Function is assigned to it. e.g. it decreases Patch Chain numbers of the GR-50. When the GR-50 is in an Editing mode, this switch changes the value of a parameter.

### ❸ S2 Switch

The S2 Switch controls the GR-50 in many different ways depending what Function is assigned to it. e.g. it increases Patch Chain numbers of the GR-50. When the GR-50 is in an Editing mode, this switch changes the value of a parameter.

### ❹ Selector Switch

This switches the signals output from the GK-2. When it is set to "Guitar", the GK-2 outputs only the signals for guitar's normal sound, and with it set to "Mix", it outputs the signals for the mixed sounds of the normal guitar and synthesizer. At "Synth" position, only the signals for synthesizer sound is output.

### ❺ Synth Volume

This controls the volume of the synthesizer sound. Adjust the guitar's normal sound with the volume control on the guitar, since the Synth Volume does not control the guitar's normal sound.

### ❻ Power Indicator

This lights up when the GR-50 and GK-2 are connected using the C-13A cable.

### ❼ Normal Guitar Input Jack

Through this jack, normal signal from the guitar is fed into the Controller Unit. Use the supplied normal guitar cord.

\* Please do not fail to connect to this jack.

### ❽ GK-2 Socket

Connect the GR-50 through this socket.

## ■ IMPORTANT NOTES

- Be sure to use the C-13A cable (supplied with the GR-50) to connect the GK-2 to the GR-50. Using any other cable will cause trouble.
- Before setting up the GK-2 with the GR-50, make sure that GR-50 is switched off.
- The C-13A is a lock-type cable which cannot be disconnected unless it is unlocked. So, for disconnecting, do not pull the cable hard, but unlock it.
- Handle the cable gently.
- Avoid using this device in excessive heat or humidity conditions, or where it may be affected by direct sunlight or dust and avoid places subject to high vibration.
- For cleaning the unit, use a dry and soft cloth.
- If the casing is stained, use a cloth slightly dampened with water.
- To remove stubborn stains, clean the casing with a cloth moistened with a neutral detergent, then wipe it dry with a soft cloth.
- Do not use solvents such as paint thinner when cleaning.
- If this unit fails to operate correctly, turn it off immediately and contact your Roland dealer.

## **1** INSTALLATION

Before installing the GK-2 with the electric guitar, read the following "Important Notes".

### **■ IMPORTANT NOTES**

- If your guitar is provided with a tremolo arm, attach the tremolo arm before setting up the GK-2.
- Before removing the tremolo arm from your guitar, set the Selector Switch on the GK-2 to the "Guitar" or "Synth" position.
- Please adjust the wrap of the neck and the height of the strings of the guitar body before installing the GK-2.
- Please try placing the Divided Pickup and the Pickup Controller Unit on the guitar to see if they are compatible before actually connecting them. At first please confirm with adhesive tape and if there is no problem on installation, then fix GK-2 with the screws.
- If the pickup on the guitar is too close to the bridge to connect the Divided Pickup, you need to shift the pickup towards the neck.
- Please use the screws for fixing the GK-2 more securely. Attaching with the adhesive tape may not be sufficient. The adhesive tape may come off with the coating of the guitar. (The supplied both-sided adhesive tape may be used just for experimenting the right position of the GK-2.)
- Please handle the divided pickup gently. Bending or twisting it will break the coil.

First, check if all the following parts are supplied.

Tapping Flat A1 3×15 [mm]



×1 (For fixing GK-2)

Tapping Pan A1 3×20 [mm]



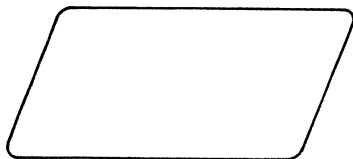
×2 (For fixing Divided Pickup)

Spring



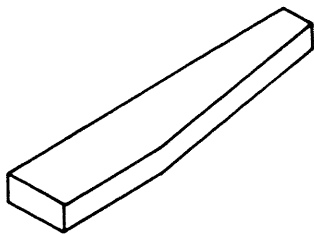
×2 (For adjusting the height of Divided Pickup)

Both-sided Adhesive Tape A



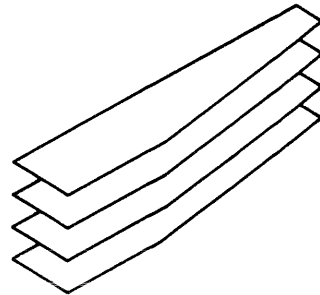
×6

Pickup Cussion



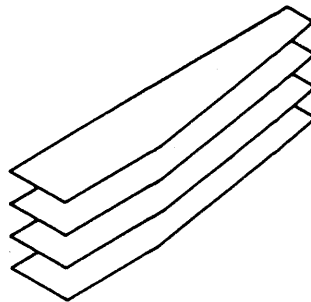
×1

Pickup Spacer B



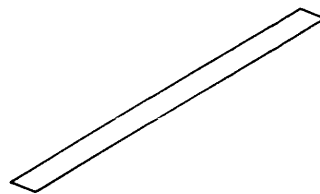
×10

Pickup Spacer C



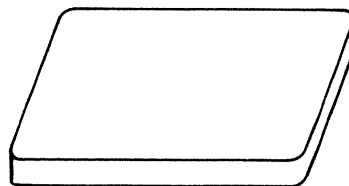
×4

Both-sided Adhesive Tape B



×1 (For attaching the divided pickup)

LP Spacer



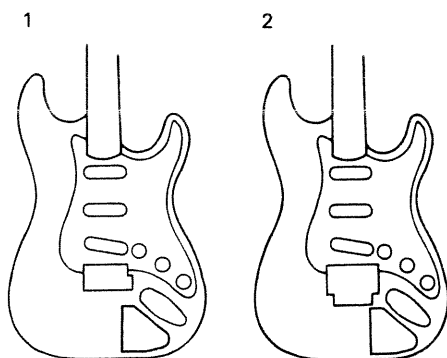
×6 (Sponge type)

## 1. How to attach the GK-2

① Place the GK-2 at the appropriate position on the guitar.

\* Set up the GK-2 to the guitar at an appropriate position where it does not prevent you from playing the guitar comfortably.

\* If your guitar has a fine tuning control, set up the GK-2 to the guitar where it does not prevent you from using the fine tuning control.



1: Usual type  
2: With a Fine Tune

\* Set up the GK-2 to the guitar where it does not prevent you from operating the S1 and S2 switches comfortably.

\* When making connections, do not stretch the cords of the Normal Guitar Socket, Divided Pickup or the connection cable of the GK-2.

\* Make sure that the plug of the GK-2's connection cable and that of the Normal Guitar are well inside the guitar's body. If not, they will be damaged when the guitar is put down with the pressure and strain given to them.

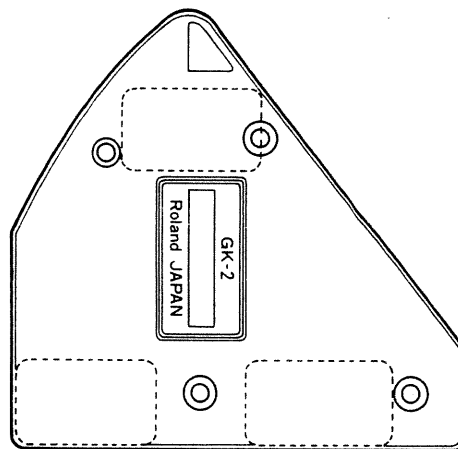
② Bore on the holes of the GK-2 to make holes underneath.

\* The diameters of the under holes should be about 2mm (0.08 inches).

\* Please make sure that the installation of Divided Pickup has no problem (e.g. height).

③ Fix the GK-2 with the screw (flat-head tapping screw) supplied with the GK-2.

\* If your guitar is arched-top type (the one with a round body), the gap between the GK-2 and the guitar may make it difficult to fix the GK-2. If this happens, attach the supplied LA spacer at the rear of the GK-2.



The both-sided tape and LA spacer should be attached to the three position indicated with dotted lines.

## 2. Attaching the Divided Pickup

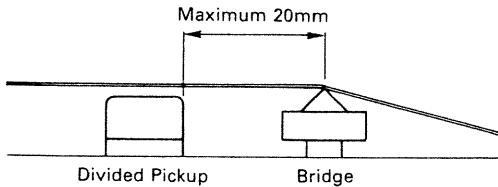
The Divided Pickup can be attached to your guitar using both-sided adhesive tape, or using screws. Attaching the Divided Pickup with screws requires higher skills, but it allows you to adjust the height of the divided pickup later.

### a. Attaching the Divided Pickup with Both-sided Adhesive Tape

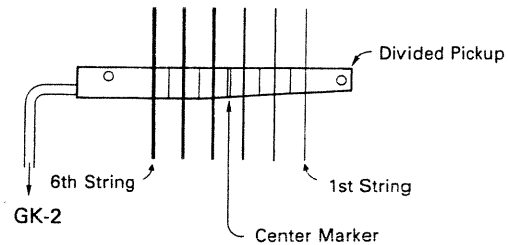
- ① Insert the divided pickup under the strings and place it at an appropriate position.

Basically, the pickup should be located at the middle of the six strings, and nearest to the bridge. If, however, your guitar has a tremolo unit, it may be touched by the Divided Pickup. If so, move the Divided Pickup so far that it will not interrupt the function of the tremolo unit. When using a guitar with heavy gauge strings, attach the divided pickup about 15mm ( $\frac{9}{16}$ " ) away from the bridge.

- \* In any case, do not keep the Divided Pickup away from the bridge by more than 20mm ( $1\frac{3}{16}$ " ).



- \* The appropriate position of the divided pickup is where the center marker marked on the pickup stays about the middle of the third and the fourth strings.

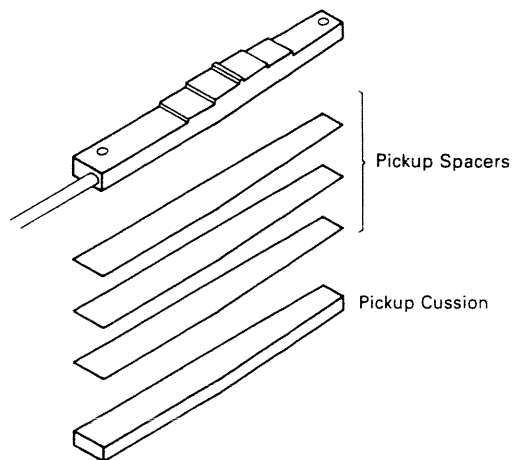


- \* Please mark the position of the pickup so that it can be distinguished later.
  - \* Be sure that the direction of the divided pickup is correct. Where the cord comes from is the sixth string.
- ② Check if the warp of the neck and the height of the strings are optimum (if not, be sure to adjust them), then tune each string.
  - ③ Adjust the height of the divided pickup by putting the supplied spacer under the pickup. (At this stage, do not peel the tape yet.)

Use either of the two pickup spacers (thicker and thinner ones) depending on the height of the pickup.



When using an arched-top guitar, put a pickup cussion under the pickup spacers.



The pickup spacer and pickup cussion are attached to the guitar with the supplied both-sided adhesive tape which will become thinner by 0.1mm (0.04") when peeled. Therefore, when using many numbers of adhesive tapes, you must set the height slightly higher.

The optimum height of the pickup is where the distances between the pickup and the first and the sixth strings are about 1.0mm with the highest fret being pressed. Adjust and check the height using the supplied clearance and gauge.

If the height of the pickup differs at the first and the sixth strings, add half-cut or the one third portion of spacer to make the height even.

- ④ Loosen the strings and remove them.
- ⑤ Peel the tape on the pickup cussion, pickup spacer, and divided pickup, then attach them onto the guitar.
- ⑥ Apply the strings to the guitar as before, and tune the strings, then check if the height of the divided pickup is correct.

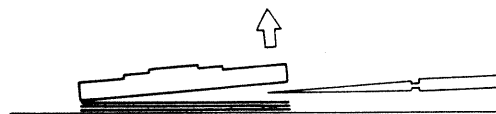
Use the clearance gauge, then play the string to see that it does not touch the divided pickup.

- ⑦ If the divided pickup is too high or too low, use the following procedure:
  - (1) If it is too low, provide as many spacers as necessary, and if it is too high, work out how many spacers to be removed.

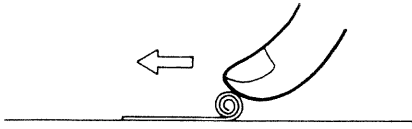
- (2) Loosen the strings and remove them.
- (3) Remove the divided pickup from the guitar.

\* Please handle the divided pickup gently. Bending or twisting it will break the coil.

Insert something thin such as table knife under the divided pickup from the sixth string side, then gently peel it.



- (4) Remove the both-sided adhesive tape from the bottom of the divided pickup carefully as shown in the picture.

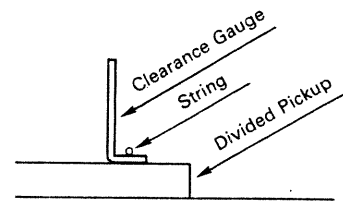
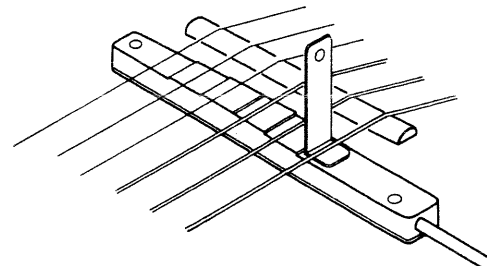


- (5) If the both-sided adhesive tape remains on the upper side of the spacer that is applied to the guitar side, remove it similarly.
- (6) To add spacers, simply attach them. To subtract spacers, remove them, then the both-sided adhesive tape if necessary.
- (7) Attach the supplied both-sided adhesive tape onto the bottom of the divided pickup.
- (8) Attach the divided pickup onto the upper side of the spacer that is applied to the guitar side.
- (9) Apply the string to the guitar, tune it, then check if the height of the divided pickup is correct.

#### HOW TO USE THE CLEARANCE GAUGE

It is necessary to adjust the divided pickup of the 1st and 6th strings so that the distance between a string and a divided pickup is 1.0 mm (0.04") with the highest fret pressed.

The supplied clearance gauge is 1.0 mm (0.04") thick. As shown below, insert the clearance gauge between the divided pickup and the string and adjust the distance.



## b. Attaching the Divided Pickup with the Screws

You can also use screws for fixing the divided pickup. How to mark the position of the divided pickup and check the height of the divided pickup is exactly the same as "a. Attaching the Divided Pickup with the Both-sided Adhesive Tape".

► First of all, carefully read "a. Attaching the Divided Pickup with the Both-sided Adhesive Tape".

① Place the divided pickup at an appropriate position.

Mark the screw holes located at the both sides of the pickup on the guitar.

② Loosen the strings and remove them.

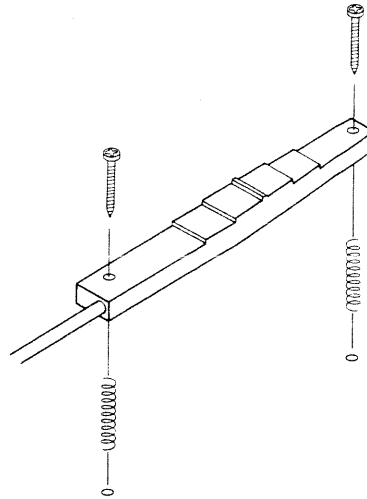
③ Carefully bore the holes underneath the screw holes you marked.

\* If the holes are not bored at the correct positions, the divided pickup will not be attached correctly.

\* The diameters of the holes should be about 2mm (0.08").

\* If the guitar is made of a hard material, bore the holes slightly larger than 2mm.

④ As shown in the picture, insert the supplied springs between the holes and the pickup, then tighten them with the screws.



⑤ Apply the strings to the guitar, then tune them.

⑥ Adjust the height of the pickup.

By rotating the screws, adjust the height with the clearance and gauge so that the distances between the pickup and the first and the sixth strings are about 1.0mm (0.04") when the highest fret is pressed.

## 2 OPERATION

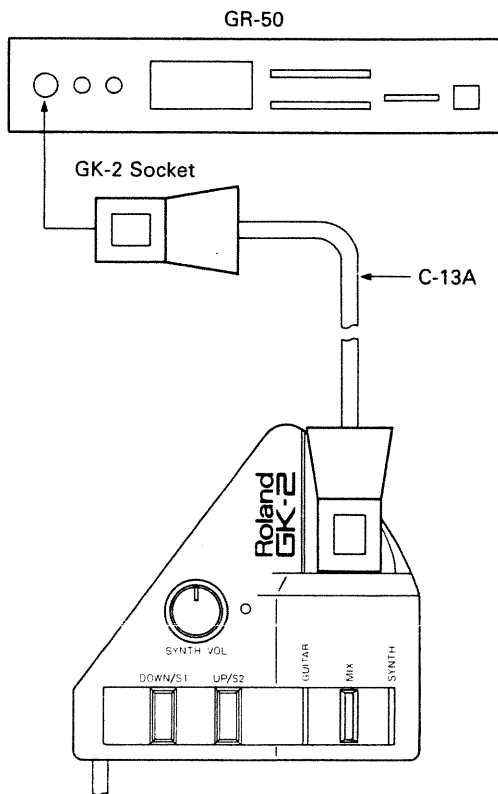
### 1. How to Connect the GK-2

① Make sure that the GR-50 is switched off. Then connect the GR-50 with the GK-2 using the C-13A, the cable supplied with the GR-50.

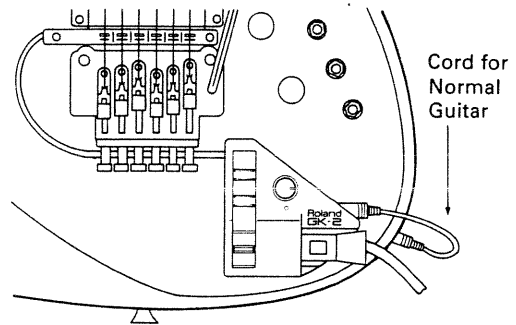
\* Connect the "GK-2 Socket" on the GR-50 to that on the GK-2.

\* Do not use any other cable but the C-13A.

\* The C-13A is a lock-type cable which cannot be disconnected unless it is unlocked. So, for disconnecting, do not pull the cable hard, but unlock it by pressing the lock with your thumb and meanwhile sliding the plug.



② Connect the plug (large) of the supplied cord for the normal guitar to the output jack on the guitar, and the smaller plug to the Normal Guitar Input Jack ⑦ on the Controller Unit.



\* This connection is necessary not only for mixing the guitar's normal sound and synthesizer sound but also connecting the guitar's earth and the GK-2's earth. Therefore, be sure to do it even when you do not need the guitar's normal sound at all. If you fail to do it, the guitar will not work properly.

③ Turn on the GR s-50.

The Power Indicator ⑧ on the Controller Unit will light up.

Now, you can play the guitar with sound of the GR-50.

The Power Indicator does not light up unless the following two conditions are fulfilled.

(1) When the GK-2 is connected with GR-50 using the C-13A.

(2) When the GR-50 is switched on.

## 2. Functions of Switches

### [Synth Volume]

This always controls the volume of the synthesizer's sound regardless of the GR-50's condition (no matter which mode the GR-50 is set to).

- \* Adjust the volume of the normal guitar sound with the volume control on the guitar.

### [Selector Switch]

This switches the signals output from the GK-2. When it is set to "Guitar", the GK-2 outputs only the signals for guitar's normal sound, and with it set to "Mix", it outputs the signals for the mixed sounds of the normal guitar and synthesizer. At "Synth" position, only the signals for synthesizer sound is output.

### [S1 and S2 Switches]

Various different functions can be assigned to the S1 and S2 switches which then control the GR-50 differently. The functions which can be assigned to these switches are as follows.

S1	S2
OFF	OFF
Patch Chain Down	Patch Chain Up
Modulation	Modulation
Sostenuto-S	Sostenuto-S
Octave up	Octave up

- \* Sostenuto S shown above is quite different from MIDI Sostenuto messages.

The above control functions' assignment is done in the System Setup mode on the GR-50. For details, see "Control Assign" in the GR-50's owner's manual.

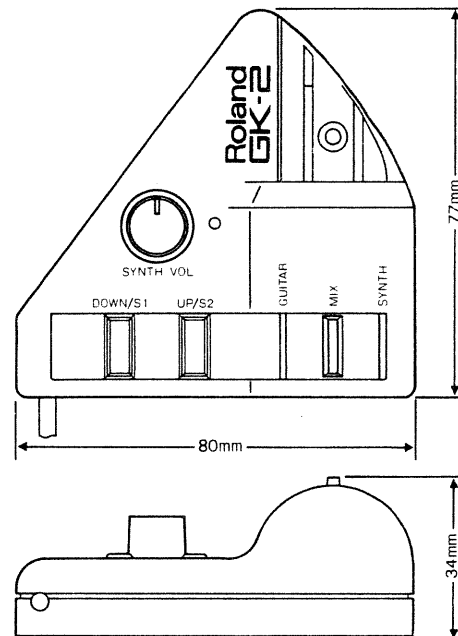
- \* When the GR-50 is set to an Editing mode, the S1 and S2 switches function just like the VALUE button (that changes values of parameters) on the GR-50.

## SPECIFICATIONS

### GK-2: GR-50 Synthesizer Driver

- Synth Volume Control × 1
- DOWN/S1 Switch × 1
- UP/S2 Switch × 1
- Selector Switch × 1
- GK-2 Socket (13 pin type)
- Normal Guitar Input Socket
- Power Indicator
- Divided Pickup (fixed with both-sided adhesive tape or a screws at one position)

**Dimensions:** See the below



**Weight:** 70g

### Accessories:

- Cord for Normal Guitar × 1
- Parts for installation
- Clearance and gauge
- Owner's Manual

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