GUITAR DISTORTION PROCESSOR

G1

Owner's Manual

Thank you for purchasing the **KORG ToneWorks** Guitar Distortion Processor **G1**.

The **G1** produces various natural distortion sounds using a new **Hybrid Gain Structure** system. This system combines the natural sustain and feel of an analog circuit with the power of a digital signal processor.

Along with it's nine internal distortion modes the **G1** also features a Wah-Wah effect, that can be controlled by an optional pedal, and a digital delay with four selectable delay times.

The **G1** is a programmable distortion system with uncompromising power far beyond the ability of a mere distortion stomp box!

Read this manual carefully, before operating the **G1**, so that you can fully understand all of it's features.

TONEWORKS
KORG

Ⓔ ①

Precautions

■ Location

Avoid using your **G1** in the following locations, which could cause a malfunction.

● Locations subject to direct sunlight

● Locations with extremely high or extremely low temperature or humidity

● Locations with much sand or dust

● Locations that are subject to excessive vibration

■ Power supply

Always use the AC adaptor that comes with the **G1**.

■ Effects on other electrical equipment

The **G1** uses a microcomputer and therefore may cause interference on radios or TVs. If so, move the **G1** away from these devices.

■ Handle gently

Do not apply excess force to the switches and knobs. Doing so can lead to malfunctions.

■ Cleaning

Always clean the outside case with a dry, soft cloth. Never use a liquid solvent, cleaning compounds, highly flammable polishes, or the like.

■ Take care of this user's manual.

Even after you have read this user's manual, store it away carefully for future reference.

THE FCC REGULATION WARNING

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such influence in a residential installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures;

● Reorient the receiving antenna

● Relocate the equipment with respect to the receiver

● Move the equipment away from the receiver

● Plug the equipment into a different outlet so that it and the receiver are on different branch circuits

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems"

This booklet is available from the U.S.Government Printing Office, Washington, D.C. 20402, Stock No.004-000-000345 - 4.
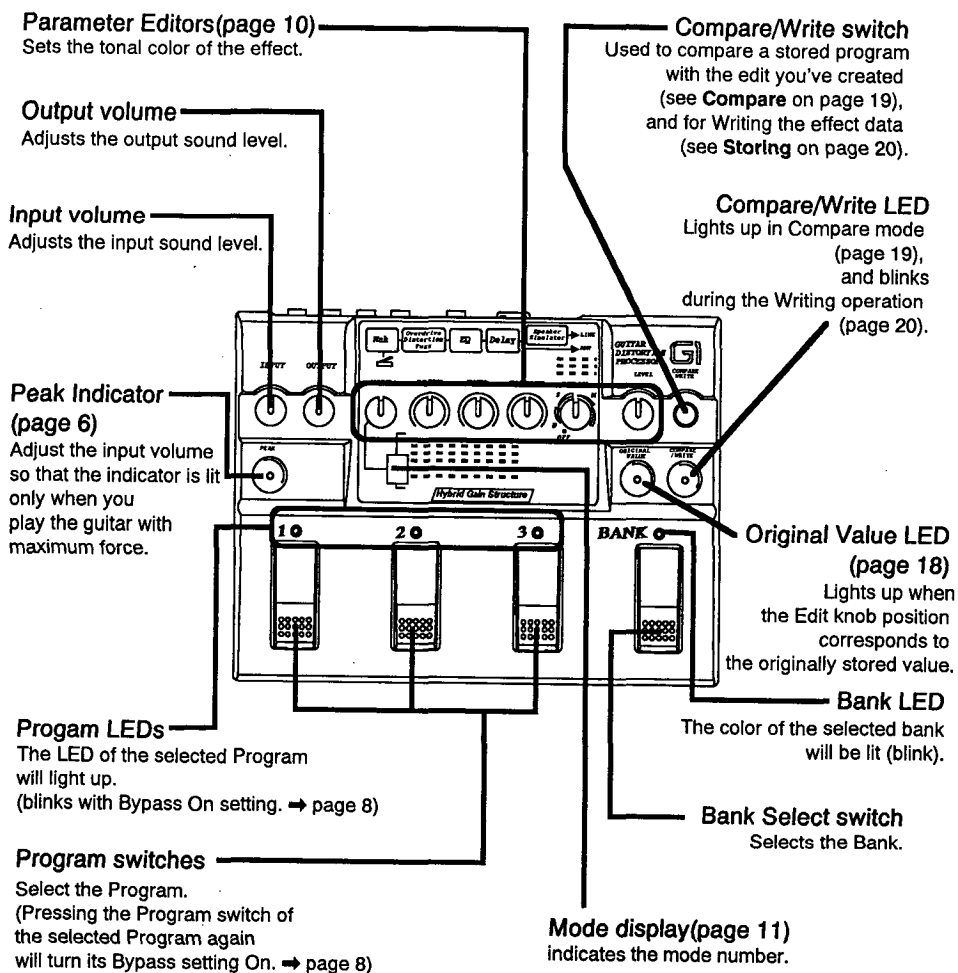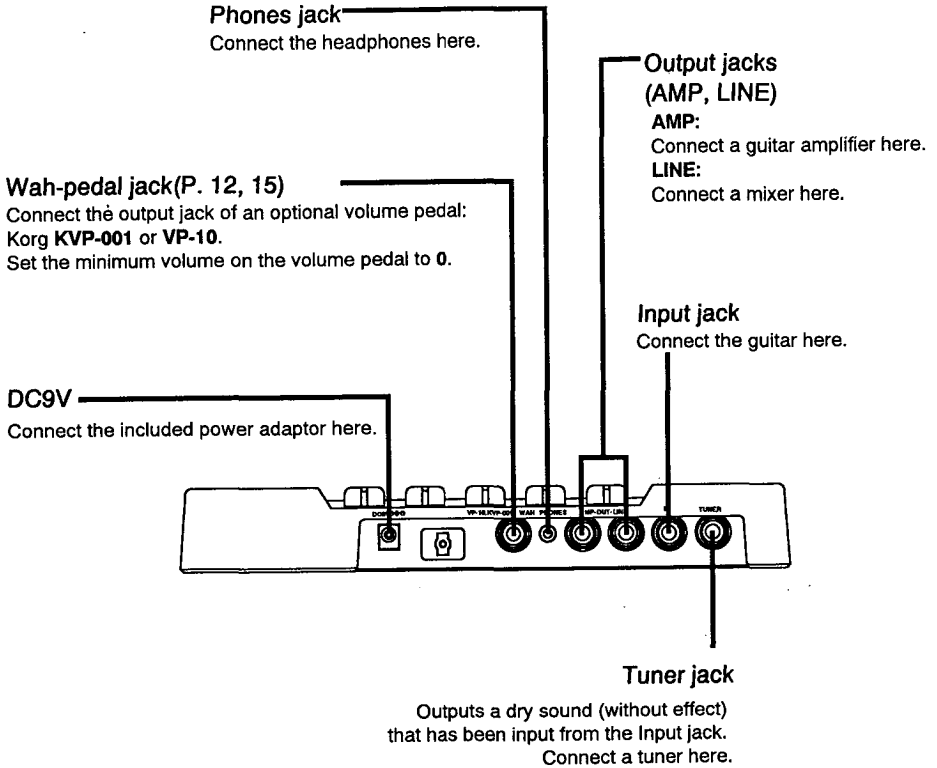

CANADA

THIS DIGITAL APPARATUS DOES NOT EXCEED THE "CLASS B" LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS SET OUT IN THE RADIO INTERFERENCE REGULATION OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

LE PRESENT APPAREIL NUMERIQUE N'EMET PAS DE BRUITS RADIOELECTRIQUES DEPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMERIQUES DE LA "CLASSE B" PRESCRITES DANS LE REGLEMENT SUR LE BROUILLAGE RADIOELECTRIQUE EDICTE PAR LE MINISTERE DES COMMUNICATIONS DU CANADA.
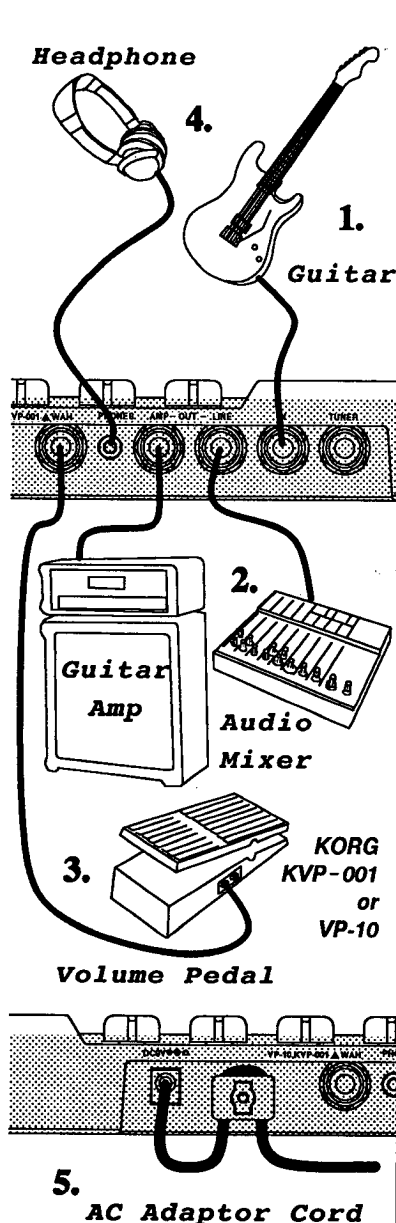
Panel Descriptions

Parameter Editors(page 10)
Sets the tonal color of the effect.

Output volume
Adjusts the output sound level.

Input volume
Adjusts the input sound level.

Peak Indicator (page 6)
Adjust the input volume so that the indicator is lit only when you play the guitar with maximum force.

Compare/Write switch
Used to compare a stored program with the edit you've created (see **Compare** on page 19), and for Writing the effect data (see **Storing** on page 20).

Compare/Write LED
Lights up in Compare mode (page 19), and blinks during the Writing operation (page 20).

Original Value LED (page 18)
Lights up when the Edit knob position corresponds to the originally stored value.

Bank LED
The color of the selected bank will be lit (blink).

Progam LEDs
The LED of the selected Program will light up.
(blinks with Bypass On setting. ➡ page 8)

Program switches
Select the Program.
(Pressing the Program switch of the selected Program again will turn its Bypass setting On. ➡ page 8)

Bank Select switch
Selects the Bank.

Mode display(page 11)
indicates the mode number.

♪ 2

Phones jack
Connect the headphones here.

**Output jacks
(AMP, LINE)**
AMP:
Connect a guitar amplifier here.
LINE:
Connect a mixer here.

Wah-pedal jack(P. 12, 15)
Connect the output jack of an optional volume pedal:
Korg **KVP-001** or **VP-10**.
Set the minimum volume on the volume pedal to **0**.

Input jack
Connect the guitar here.

DC9V
Connect the included power adaptor here.

Tuner jack
Outputs a dry sound (without effect)
that has been input from the Input jack.
Connect a tuner here.

Setting Up the G1

Headphone

4.

1.

Guitar

VP-001 ▲WAH   POWER AMP-OUT LINE   TUNER

2.

Guitar Amp

Audio Mixer

3.

KORG
KVP-001
or
VP-10

Volume Pedal

DC9V●●   VP-10,KVP-001 ▲WAH   PH

5.

AC Adaptor Cord

♪4

1. Connect the guitar to the **Input** jack.

2. Connect the **AMP-OUT** of the **G1** to the input of a guitar amplifier.

    If the **G1** is to be connected to the input(LINE) of a mixer, use the **OUT-LINE** jack. The signal from the **LINE** output comes from a **Speaker Simulation** effect.

    Speaker Simulation is an effect that recreates the tone of guitar amplifire's speakers. This allows the **G1** to be used for applications such as direct recording.

3. Connect a volume pedal (Korg **KVP-001** or **VP-10**) to the **WAH** jack to control a pedal wah-wah effect. (see page 15)

4. Connect the headphones to monitor the speaker simulation sound output from the LINE jack.

5. After finishing the connections described above, connect the power adaptor.

    The **G1** does not have a power switch. When you connect the power adaptor, it is ready for use.

    Note : Place the power adaptor 30cm away from the main unit. Placing the adaptor too close to the unit may create noise.

    After connecting the power adaptor, secure the power cord as shown in the figure on the left so that the plug will not be removed accidentally.

    Note : **Be sure to lower the volume of all the connected devices when you connect and remove the power adaptor of the G1.**

Ⓔ

Playing the Preset Programs

BANK I Green

BANK II Red

BANK III Orange

1   *3*

2
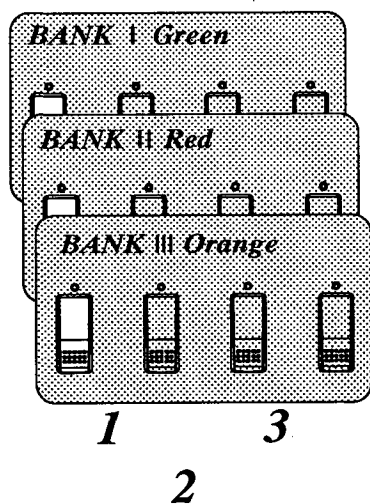
1. What is a Preset Program?

The **G1** has three Effect Programs each in **Bank I (Green), Bank II (Red),** and **Bank III (Orange).**

Bank I (Green)	1·····**MR. SCARY**
	2·····**GAIN MEISTER**
	3·····**VALVE SCREAMER**
Bank II (Red)	1·····**BRITISH STEEL**
	2·····**BLUES BURN**
	3·····**TWEED TONE**
Bank III (Orange)	1·····**BEYOND DRIVEN**
	2·····**ENTER WAHMAN**
	3·····**OCTAFUZZ**

These nine Programs originally stored in the **G1** are called **Preset Programs**.

You can edit (modify) these Effect Programs to suit your taste, and save your edit as a new Program.

Editing a Preset Program allows you to adjust the Effect sound to your personal taste. By making edits to an existing Preset you can personalize the Effect Program or you can create something entirely different.

♪ 5

Ⓔ

1. Guitar Input

Input Volume
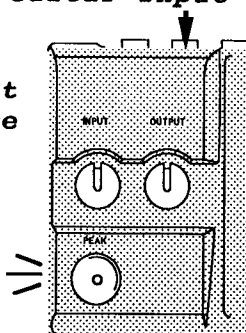
2. Output Volume

3. Bank Select Switch

Blinking in red
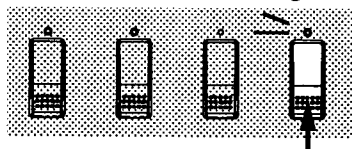
Green

Red

Orange

4. Program Switch

Lit   *Lit in red*
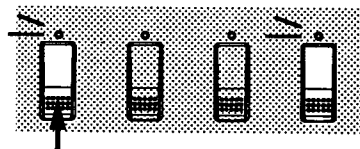
1. Adjust the input level while playing the guitar.

Adjust the Input volume so that the Peak indicator is lit only when you strum the guitar hardest.

Note Depending on the Parameter Editor settings, the sound may be distorted (clipping) even if the Peak indicator is not lit. In this case, lower the input volume until the distortion disappears.

2. Raise the output volume to set the volume level.

3. Select a Bank using the Bank Select switch.

Pressing the Bank Select switch each time will advance the Bank color in the following sequence:

Green(I) ➡ Red(II) ➡ Orange(III)

For example, let's select **Bank II** . The Bank LED blinks in red.

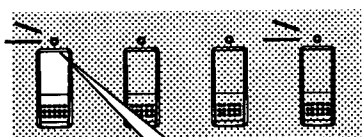**4.** Select a Program using the Program switch.

For example, let's select **Program 1 of Bank II** . The Program 1 LED will be lit.

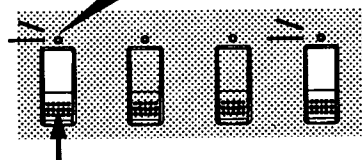At the same time, the Bank LED will stop blinking, and remain lit in red.

Note When you turn on the power, **Program 1** of **Bank I** will be automatically selected.

♪ 6

Ⓔ

Bypass
Blinking
slowly

Blinking
fast
Mute
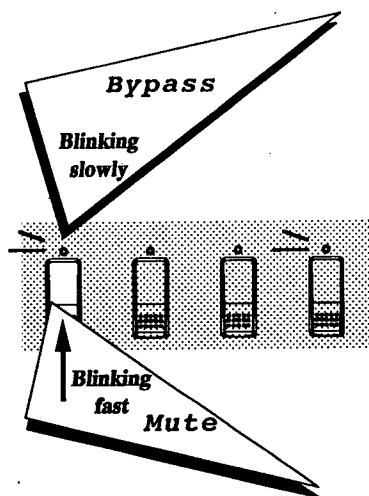
Bank I Prog.1
Lit in green

Blinking in red
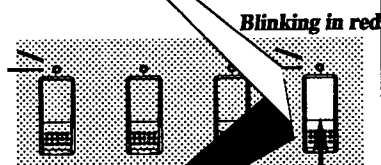
Green → red
Bank II Prog.1
Lit in red

5. Now **Program 1** of **Bank II** has been selected. Playing the guitar will produce the effect sound of Program 1.

6. If you wish to produce a dry sound (**bypass sound**) temporarily, **press the Program switch of the selected Program (Program 1 in this example) again**.

With Bypass on, the Program LED of the selected Program blinks. (For Bypass, see **Bypass** on page 8.)

When you wish to mute a sound temporarily (for example, when you tune the instrument on stage), **press and hold the Program switch of the currently selected program for more than one second.**

The selected program's LED blinks faster. To restore the effect sound, press the Program switch again. (See page 9, **Mute function**.)

**7.** Repeat steps **3 - 6** to try various bank Programs.

To select another Program in the same Bank, press the corresponding Program switch.

Note : Pressing the Bank switch does not change the current Program. The Program is changed when you press a Program switch after selecting the new Bank.

For example, to change the Program from **Program 1** of **Bank I** to **Program 1** of **Bank II** , first press the Bank Select switch to change the Bank from Green to Red, then press the **Program 1 switch**.

♪7

Ⓔ

Bank I Prog.1

Lit   Lit in green

Bypass

blinking
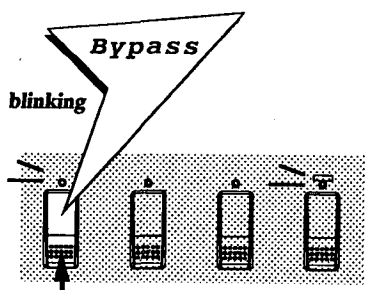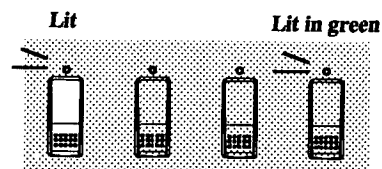
When you press the Program switch of the currently selected Program, that Program's LED will blink and the Bypass sound (a dry sound without effect) will be output.
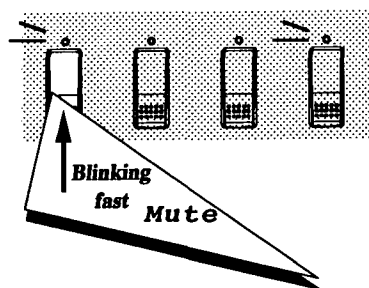
If you wish to change this to the effect sound, press the Program switch again.

`Note` : Bypass mode will be cancelled when you switch to another effect program.

`Note` : **When Bypass is set to On, editing will not change the sound.**

To edit the sound, restore the effect sound by pressing the program switch.

♪ 8

Ⓔ

Blinking
fast Mute

The **Mute function** is useful when you do not want to produce a sound on stage.

Press and hold the Program switch of the currently selected Program for more than one second. The Selected Program's **LED blinks faster,** and the Mute function mutes the sound of the **G1**.

To restore the effect sound, press the Program switch again. You can also change the selected Effect Program when Mute is on (the Program for which the LED is blinking when Mute is on) to another Program. (When the Mute function is cancelled, the effect sound will be restored regardless of the status before the Mute function was on. If you wish to change from Mute to Bypass mode, first restore the effect sound, then press the Program switch again.)

Note :The sound output from the headphones is also muted.

Note : Editing Parameters in Mute mode will not change the sound. To edit the sound, first restore the effect sound.

♪ 9

Ⓔ

Creating Programs

You may edit any of the nine Effect Programs in the **G1** to create your own programs.

Various setting elements that change the effect sound are called **parameters**. On the **G1**, you can create your own effect programs easily by using the **Parameter Editors** on the front panel. The modification of a program is called an **edit**. You can store an edited Program in the memory as a new Program.

The **G1**'s editing system lets you create your own sound intuitively on the **G1** without bothering with complex parameters.

♪ 10

Ⓔ
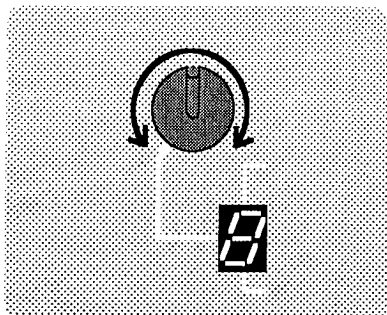
MODE

The mode number will appear.

· · · · · · · · **Select a type of distortion (mode).**

The selected mode number appears on the display.

1. Classic OD(Classic Overdrive)

This is a blues-style overdrive that creates a natural distortion without destroying the guitar's original sound and the subtle nuances produced by various picking attacks.

2. Tube OD(Tube Overdrive)

This mode will simulate distortion obtained from a tube amplifier. This is a high-gain overdrive that contains more overtones than the Classic Over-drive.

3. High Gain Dist(High Gain Distortion)

This high-gain distortion has a wild attack and smooth sustain. You may use this mode for both rhythm and solo parts.

4. Shred Dist(Shred Distortion)

This distortion has fine and dense overtones and harmonics, and is suitable for power chords and heavy metal tapping sounds.

5. Fuzz

This mode recreates the popular fuzz sounds of the 60's.

6. Octafuzz

The Octafuzz emphasizes the second overtone, and creates a unique sound with the pitch raised one octave when you play the higher frets.

♪ 11

Ⓔ

You may use the wah effect as a fixed pre-filter by pressing the pedal to a certain position, as well as for usual wah effects by moving the pedal in real time. The **G1** wah effect can store the position of the pressed pedal, which is very useful when you wish to use the effect as a pre-filter for creating a specific sound.

(See page 20, Program Write)

1. Connect the Korg KVP-001 or VP-10 to the WAH jack on the **G1** rear panel, and select Mode 7, 8, or 9 using the Mode knob.
At this time, the Wah produces a sound like that of the pedal in its preset position.

2. Move the KVP-001 or VP-10 to a position that gives you the desired sound.

3. Perform the Write operation using the Write switch, and the pedal position will be stored.

When you recall the Program, you will obtain the sound with the specified wah pedal position.

7. Classic OD + Wah(Classic Overdrive + Wah)

This mode uses a pedal wah before the Classic Overdrive.

8. High Gain Dist + Wah

(High Gain Distortion + Wah)
This mode uses a pedal wah before the High Gain Distortion.
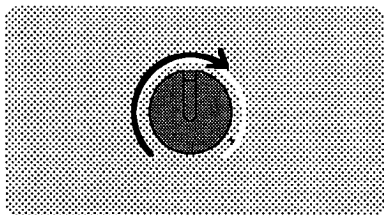
9. Shred Dist + Wah(Shred Distortion + Wah)

This mode uses a pedal wah before the Shred Distortion.

Modes **7, 8** and **9** allow you to add a wah effect to the distortion. Refer to page 15 for information on how to set the wah pedal to control the sound.

DRIVE
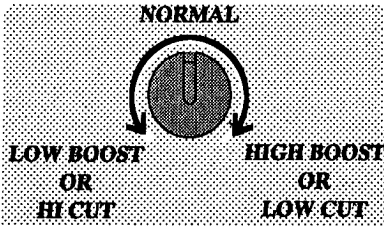
········ **Controls the amount of distortion.**

DRIVE

Turning the knob clockwise will increase the amount of distortion.

♪ 12

Ⓔ

TONE

NORMAL

LOW BOOST
OR
HI CUT

HIGH BOOST
OR
LOW CUT

CONTOUR

MID
BOOST

FLAT
OR
MID CUT

········ **Allows you to set the High and Low EQ balance.**

The center EQ frequency and the boost amount set by **Tone** vary depending on the mode.

Mode 1 – 4, 7 – 9

Turning the knob counterclockwise will boost the low end, and turning the knob clockwise will boost the high end.
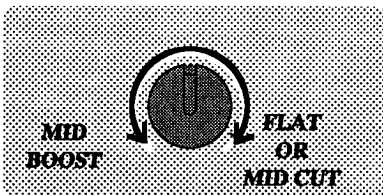
The center value is **normal**.

Mode 5, 6

Turning the knob counterclockwise will cut the higher frequencies, and turning the knob clockwise will cut the lower frequencies.

The center value is **normal**.

CONTOUR

········ **Allows you to set the MID EQ.**

The center EQ frequency and the boost amount set by **Contour** vary depending on the mode.
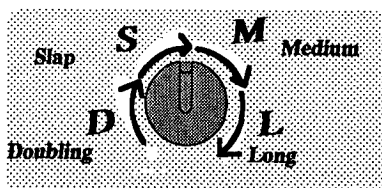
Mode 1, 2, 7

Turning the knob all the way to the right will set MID EQ to flat (no boost or cut), and turning the knob all the way to the left will boost the MID EQ.

Mode 3 – 6, 8, 9

Turning the knob counterclockwise will further boost the MID EQ, and turning the knob clockwise will cut the MID EQ.

♪13

Ⓔ

DELAY

········**Allows you to set the delay.**

There are four types of delay; Doubling delay, Slap delay, Medium delay, and Long delay.

Range **D** will produce a **doubling delay** effect.
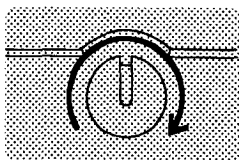Range **S** will produce a **slap delay** effect.
Range **M** will produce a **medium delay** effect.
Range **L** will produce a **long delay** effect.

Turning the Parameter Editor to the right within each range will emphasize the corresponding effect.

LEVEL

········**Allows you to set the volume level for each Program.**

Turning the knob clockwise will increase the volume level.

♪14

Ⓔ

Modes 7, 8, and **9** will produce the effect of a **Wah-pedal**.

Be sure to use the Korg **KVP-001** or **VP-10** volume pedal.

Connect the **Wah** Pedal jack on the rear panel of the **G1** to the Output terminal on the volume pedal, and select **Mode 7, 8,** or **9**.

Set the minimum volume of the volume pedal to 0.

Refer to the user's manual of the volume pedal for the location of the minimum volume.

WAH

from
Volume Pedal
KORG
KVP-001
or
VP-10

♪ 15

Ⓔ
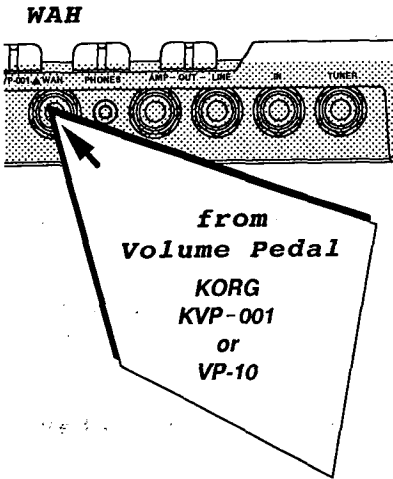
The **G1** has an **Auto Noise Reduction** system that strengthens noise reduction when the **Drive** and noise levels are high, and weakens the noise reduction when the **Drive** and noise levels are low.

There are nine stages of the Auto Noise Reduction effect.

Setting

1. Select a Program, and **press and hold the Bank Select switch**.
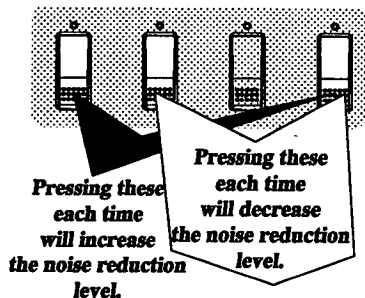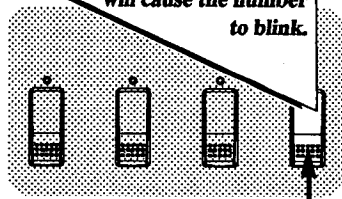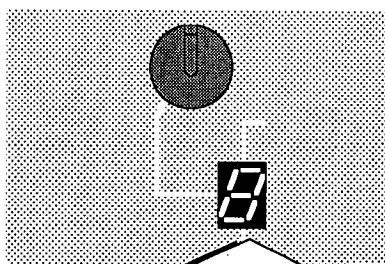
The mode display starts blinking.

2. Pressing **Program switch 2** repeatedly while pressing and holding down the Bank Select switch will increment the mode number by one. Similarly, pressing **Program switch 1** repeatedly will decrement the mode number.

Number **0** indicates that the noise reduction effect is at its strongest, and number **8** indicates that the effect is at its weakest.

(Factory default setting is **1**.)

3. Releasing the Bank Select switch will store the effect level of the noise reduction system.

Note : You cannot set the noise reduction separately for each Program. **A single setting applies to the entire G1**.
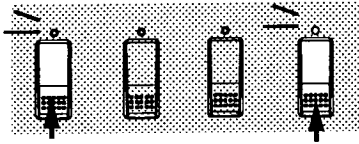
Pressing and holding down this button will cause the number to blink.

Press and hold.

Pressing these each time will increase the noise reduction level.

Pressing these each time will decrease the noise reduction level.

♪ 16

Ⓔ

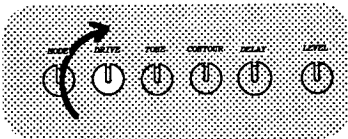Now, let's create your own Effect Program by adjusting the Parameter Editors.

Prog.1   **Lit in green**

1. Select a Program to edit. For example, select **Program 1** of **Bank** I

Make sure that **Compare mode** is not engaged. If the **Compare/Write LED** is lit, Compare mode is engaged. Press the Compare/Write switch once to cancel Compare mode.

DRIVE

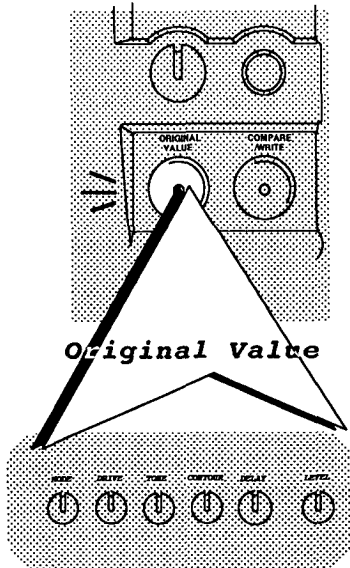**2.** Adjust the parameters using the **Parameter Editors** on the front panel.

For example, adjust the **DRIVE**. Turn the **DRIVE Parameter Editor** and listen to the sound. (Increasing the value of distortion.)

3. Adjust the other parameters using the Parameter Editors. (See page 10 for a detailed explanation of each parameter.)

4. If you wish to edit other Programs, select one using the Bank Select switch and Program switch. If you wish to save the data edited so far, perform a Program Write operation. (See page 20.)

Note : **If you select another Program without performing Program Write the edited data will be lost.**

♪ 17

Ⓔ

You may sometimes wish to recall the original positions of the Parameter Editors for a particular Effect Program while you are editing the Program.

The **Original Value LED** provides you with the original settings so you can compare new edits with the original Program.

The **G1** automatically **marks** the positions of the Parameter Editors when the Program is saved, and allows you to check these original positions later, during the edit operation.

When each Parameter Editor knob (**MODE, DRIVE, TONE, CONTOUR, DELAY, LEVEL**) is turned to the position originally set for the Program (the Original Value position), the Original Value LED lights up.

Note : To check for the Original Value, turn the Parameter Editors slowly while observing the Original Value LED. If you turn the Parameter Editors too quickly, the Original Value LED may be lit very briefly and you may not notice its illumination.

Note : The position of the illuminated Original Value LED may be slightly displaced from the position of the Parameter Editor stored by the Program Write operation. However, the sound obtained always matches the sound stored by the Program Write operation.

♪ 18

Ⓔ

Press the **Compare/Write switch** to turn on the **Compare/Write LED**.

If you edit a sound using the Parameter Editors you may wish to hear the original Effect Program or compare the new edit with the original Program.

In Compare mode, you can listen to the original sound stored in the Program. Pressing the Compare-/Write switch repeatedly allows you to compare the edited and original sound.

Note : Operating the Parameter Editors in Compare mode will not modify the sound. To edit the sound, first press the Compare/Write switch to cancel Compare mode. (See page 10, Parameter Edit.)

Note : When **Bypass** is On, pressing the Compare-/Write switch will not change the mode to Compare mode, nor will it turn on the Compare/Write LED.

Compare/Write Switch

Compare mode

Compare/Write LED

♪ 19

Ⓔ
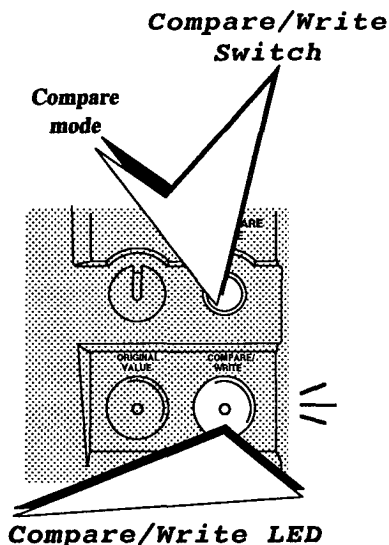
Storing Programs

You can store a new Effect Program you have created in the memory of the **G1**. This operation is called **Program Writing**.
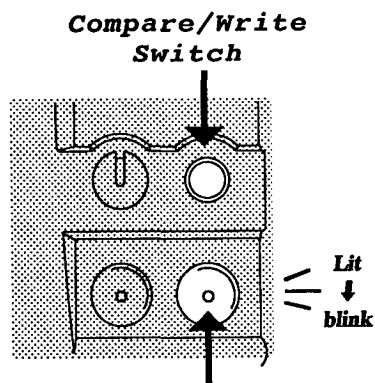
You can recall a stored Program as well as a Preset Program using the Bank Select switch and the Program switch on the **G1**.

If you wish to Write the Program to anther the editing of the Program will be lost when you press another Program switch or turn off the power.

When you Write a Program, the data pre-existing in the destination Program will be lost.

Compare/Write Switch

Lit
↓
blink

Compare/Write LED

Press the Compare/Write switch
→ G1 enters Compare mode.

↓

Press the switch for more than one second.
→ Compare/Write LED starts blinking

1. After finishing the edit operation, **press the Compare/Write switch for more than one second.** The Compare/Write LED starts blinking, indicating that the **G1** is ready for the Program Writing operation.

If you wish to write the Program to another Program or Bank, use the Bank Select switch and the Program switch to select the destination Bank and Program. The selected Bank and Program's LED will light up.
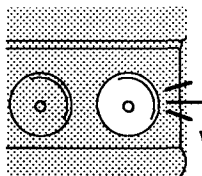
♪ 20

Ⓔ

If you wish to cancel the Program Write operation when the **G1** is ready (the Compare/Write LED is blinking), press the Bank switch and any Program switch. The Compare/Write LED will be turned off, and the **G1** will be ready for editing.

Press the switch again.
→ The Writing operation is executed.

Flashing three times.
Writing completed.

2. If you wish to continue with the Program Write operation, press the Compare/Write switch again. The Compare/Write LED will blink three times, indicating that the edited data has been written.

`Note` : Pressing the Compare/Write switch will first switch to **Compare mode** (page 19). Therefore, if you perform the Writing operation while listening to the sound, you may hear a brief change in the effect sound while you are holding down the switch (as if the original sound was restored). However, the Program data to be stored will not be affected.

If you have written the data to a different Bank and different Program, that destination Program is recalled. At this time, Compare mode will be cancelled automatically.

`Note` : **Do not press any other Program switches before executing the Program Writing operation.** Otherwise, the edited data will be lost.

`Note` : When Bypass is On, pressing the Compare/Write switch will not execute the Writing operation nor turn on the Compare/Write LED.

♪ 21

Ⓔ

Useful functions

Compare/
Write
Switch
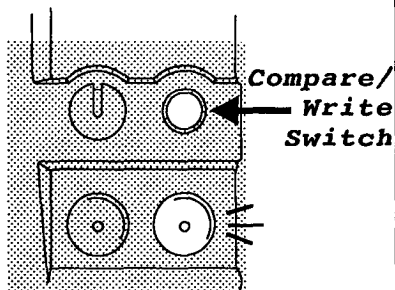
In Compare mode
the sound will not change
even when you touch the Editor knobs.

1. Lock mode for Parameter Editors (Compare mode)

It is recommended to enter Compare mode if you wish to avoid changing the effect sound by touching the Parameter Editor accidentally during performance.

Press the **Compare/Write switch** to turn on the **Compare/Write LED**. Operating the Parameter Editors in Compare mode will not change the sound.

Compare mode is usually used to compare the stored sound with the edited sound. However, it can also be used to lock the Parameter Editor function as described above. We recommend you use this mode in a live performance.

It is possible to restore the initial settings of the Programs (that is, the factory default setting, without edits). Follow the steps below to do so. This operation is called **initialization**.

Connecting the power adaptor while pressing and holding down the **Bank Select switch** and the **Compare/Write switch** will cause **all the LEDs to blink**.

Press the **Compare/Write switch** to turn on the Compare/Write LED. All the Effect Programs will be initialized back to the factory settings (Preset data 1).

(If you press any switch other than the Compare/Write switch, the Programs will not be initialized. The condition obtained will be the same as when you connect the power adaptor.)
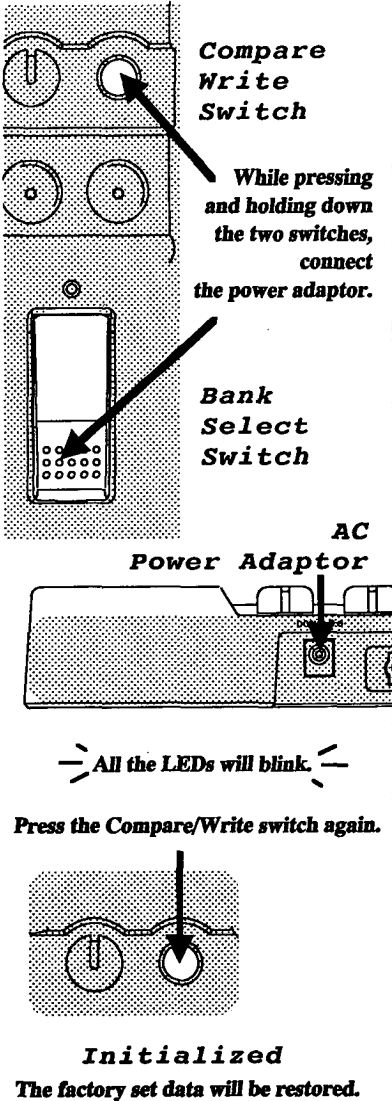
Connecting the power adaptor while pressing and holding down the **Bank Select switch** and the **Program 3** switch will also cause all the LEDs to blink.

Press the Compare/Write switch to turn on the Compare/Write LED. All the Effect Programs will be changed to Preset data 2.
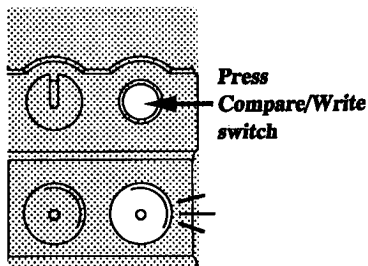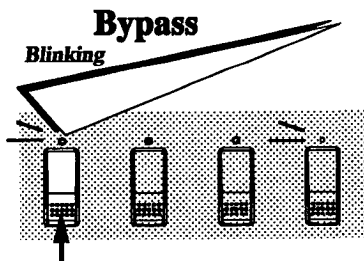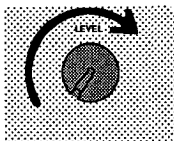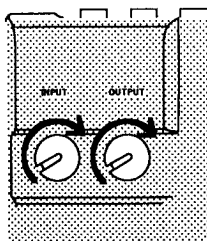
(If you press any switch other than the Compare/Write switch, the Programs will not be initialized. The condition obtained will be the same as when you connect the power adaptor.)

Note : **Initializing will erase all Program data stored in the G1.**

Note : If all the LEDs are not blinking, some remain illuminated, or no LED is lit, turn the power off and try again.

Compare
Write
Switch

While pressing and holding down the two switches, connect the power adaptor.

Bank
Select
Switch

AC
Power Adaptor

-- **All the LEDs will blink.** --

Press the Compare/Write switch again.

Initialized
The factory set data will be restored.

♪ 23

Ⓔ

Troubleshooting

If you have a problem, first check the following items. If the problem persists, consult the nearest Korg dealer or Korg Service Center.

| Symptom 1 ··· No sound is output. |

1. The **Input Volume** or the **Output Volume** is set to **0**.

2. If the sound is output with the **Bypass on** setting, the Level parameter of the Program is set to minimum.

3. The **Mute function** is On. If the **Program LED** is blinking fast, it indicates that the Mute is On. Press the Program switch to cancel the Mute function.

| Symptom 2 ·· No effect, or turning the knobs does not change the sound. |

Bypass

Blinking

1. Bypass is on. The blinking **Program LED** indicates that Bypass is on. Press the Program switch to cancel the Bypass setting.

2. Compare mode is engaged. If the **Compare-/Write LED** is lit, press the **Compare/Write switch** to cancel Compare mode.

3. When the Program LED is lit, the position of each Parameter Editor is set to the minimum.

Press Compare/Write switch

♩ 24

Ⓔ

Symptom 3 ····· All the LEDs are blinking, and no sound is produced.

1. The **G1** is now ready for initializing the data to the Preset data. Press the Program switch or the Bank Select switch to cancel the initialization-ready status.

2. Turn the power off and on again without pressing any switches.

Symptom 4 ·······When turning the Parameter Editors, their position on the scale and the position at which the stored effect is obtained do not match.

The scale around the Parameter Editor indicates a rough guideline of the range of each effect. The position of the Parameter Editor that switches the effect and the position in the scale do not necessarily match.

♪ 25

Ⓔ

Specifications/Options

Built-in Effects	WAH, OVERDRIVE/DISTORTION/FUZZ (9 types), EQ, DELAY, SPEAKER SIMULATOR, NOISE REDUCTION
Number of Programs	9 (3 × 3 banks)
Front panel	Knobs: Input Volume, Parameter Editors, Output Volume Switches: Bank Select switch, Compare/Write switch, Program switches LEDs: Mode Display, Program LEDs, Compare/Write LED, Bank LED, Original Value LED, Peak Indicator
Rear panel	DC9V AC adaptor jack, Input jack, Output jacks (AMP, LINE), Wah-pedal jack, Phones jack, Tuner jack
Frequency response	20 Hz — 20 kHz (+1.5/ − 3dB)
Sampling rate	48 kHz
A/D	64-times oversampling, 16 bit ADC
D/A	8-times oversampling, 18 bit DAC
Dynamic range	90 dB (IHF-A, at bypass)
Power supply	DC 9V (with AC adaptor)
Current Consumption	400 mA
Input sensitivity/ Impedance	− 13.0 dBu — +7.0 dBu / 1M Ω
Maximum output level/ Impedance	+6.0 dBu / 5k Ω (0dBu=0.775Vrms)
Dimensions	281(W) × 209(D) × 38(H)mm
Weight	1.1 kg
Option	Volume pedal KVP-001, VP-10

Ⓔ