Sacred Geometry SG102

Three-Channel Signal Generator

Owner’s Manual

Version 1.0

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1. Introduction

Thank you for purchasing the **Sacred Geometry SG102**.

The SG102 is a three-channel adjustable signal generator designed to provide controlled DC-powered pulse output through three individually switched output channels. Each channel has its own positive and negative output terminals, plus its own power switch.

The unit has two main front-panel control sections:

- **Power Module — Left Side**
  Used to set the output voltage.
- **Signal Module — Right Side**
  Used to set the frequency, duty cycle, and output state.

All three channels share the same voltage and signal settings. The channel switches allow you to turn each output channel on or off individually.

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2. Safety Information

Read this manual before operating the SG102.

- Use only the included power supply.
- Use indoors only, in a dry location.
- Keep the unit away from water, moisture, metal debris, dust, and flammable materials.
- Do not open the enclosure.
- Do not short the positive and negative output terminals together.
- Do not connect the outputs to wall power, another power supply, batteries, chargers, or active electronics unless you fully understand the electrical requirements.
- Always turn the channel switches OFF before connecting or disconnecting accessories.
- Start with a low voltage and increase gradually.
- Do not exceed the voltage or current rating of any connected accessory.

- Coils, wires, and other loads may become warm during use. Stop operation if anything becomes hot, smells unusual, or behaves unexpectedly.
- This product is not a medical device and is not intended to diagnose, treat, cure, or prevent any disease.
- Do not use this product for life-support, emergency, implanted-device, or critical safety applications.
- Keep out of reach of children and pets.

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3. Front Panel Overview

Left Side: Power Module

The **Power Module** controls the voltage supplied to the signal output system.

Main controls:

- **V-SET** — enters voltage adjustment mode.
- **I-SET** — current limit setting. Usually leave this unchanged unless instructed.
- **Rotary Knob** — adjusts the selected value.
- **OK** — confirms or exits a setting.
- **Power/Output Button** — turns the module output on or off, depending on configuration.

Right Side: Signal Module

The **Signal Module** controls the pulse frequency and duty cycle.

Main controls:

- **FREQ +** — increases frequency.
- **FREQ -** — decreases frequency.
- **DUTY +** — increases duty cycle.
- **DUTY -** — decreases duty cycle.
- **SET** — changes mode when held.
- **ON** — turns the signal output on or off.

When the signal output is active, the screen normally shows **OUT**.

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4. Channel Output Layout

The SG102 has three output channels:

- **Channel 1:** Positive and Negative output terminals, plus channel switch.
- **Channel 2:** Positive and Negative output terminals, plus channel switch.
- **Channel 3:** Positive and Negative output terminals, plus channel switch.

The positive terminal is the output side marked **+**.
The negative terminal is the output side marked **-**.

Each channel switch controls only that channel's output connection. The voltage and frequency settings are shared by all channels.

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5. Quick Start Guide

1. Place the SG102 on a stable, dry surface.
2. Make sure all three channel switches are OFF.
3. Connect the included power supply to the SG102.
4. Turn on the SG102.
5. Set the desired voltage using the Power Module on the left.
6. Set the desired frequency using the Signal Module on the right.
7. Confirm the duty cycle is set as desired. For most basic square-wave use, 50% duty cycle is a good starting point.
8. Connect your accessory or load to one channel's positive and negative output terminals.
9. Turn on the Signal Module output so the display shows OUT.
10. Turn on the desired channel switch.

To stop output, turn the channel switch OFF first, then turn the Signal Module output OFF.

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6. Setting the Voltage

The voltage is controlled from the **Power Module on the left side**.

To increase or decrease voltage:

1. Turn all three channel switches OFF.
2. Press **V-SET**.
3. The voltage setting will become editable.
4. Turn the rotary knob to adjust the value.
5. Turn clockwise to increase.
6. Turn counterclockwise to decrease.
7. Press the rotary knob to move between digits, if needed.
8. When the desired voltage is shown, press **V-SET** again or press **OK** to confirm and exit.

Always start with a low voltage and increase gradually.

Do not raise the voltage above the safe rating of the connected accessory.

7. Current Limit Setting

The **I-SET** button controls the current limit.

For normal use, do not adjust this unless instructed. Lowering the current limit may reduce output power. Raising it too high may allow connected accessories to draw more current than intended.

If you need to adjust it:

1. Press **I-SET**.
2. Use the rotary knob to change the value.
3. Press the knob to move between digits, if needed.
4. Press **I-SET** again or **OK** to confirm.

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8. Setting the Frequency

The frequency is controlled from the **Signal Module on the right side**.

Frequency means how many pulses occur per second. Frequency is measured in **Hz** or **kHz**.

- **1 Hz** = 1 pulse per second.
- **10 Hz** = 10 pulses per second.
- **1.000 kHz** = 1,000 Hz.

To increase frequency:

Press **FREQ +**.

To decrease frequency:

Press **FREQ -**.

To scroll faster:

Press and hold **FREQ +** or **FREQ -**.

Short presses make smaller adjustments. Holding the button scrolls through values faster.

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9. Setting the Duty Cycle

Duty cycle controls how long the signal stays ON during each pulse cycle.

For example:

- **50% duty cycle** means the signal is ON half the time and OFF half the time.
- A higher duty cycle means the signal stays ON longer during each pulse cycle.

- A lower duty cycle means the signal stays ON for a shorter part of each pulse cycle.

To increase duty cycle:

Press **DUTY +**.

To decrease duty cycle:

Press **DUTY -**.

For most basic square-wave operation, use **50% duty cycle** unless you have a specific reason to use another value.

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10. Turning the Signal Output On or Off

The right-side Signal Module has an **ON** button.

- Press **ON** to turn signal output on.
- Press **ON** again to turn signal output off.

When output is active, the display should show **OUT**.

If **OUT** is not shown, the Signal Module output is off.

The channel switches still control whether each individual channel is active.

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11. Normal Operating Mode

For most users, the SG102 should be used in standard frequency mode.

In this mode, the Signal Module display shows a percentage symbol **%**, because duty cycle is active.

If the display does not show **%**, the unit may be in pulse timing mode. To return to standard frequency mode, press and hold **SET** for about 6 seconds until the display returns to the frequency/duty-cycle screen.

For normal use:

- Set frequency with **FREQ +** and **FREQ -**.
- Set duty cycle with **DUTY +** and **DUTY -**.
- Turn output on or off with **ON**.

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12. Recommended Startup Procedure

Use this sequence for safest operation:

1. All channel switches OFF.

2. Signal output OFF.
3. Power on the SG102.
4. Set voltage on the left Power Module.
5. Set frequency on the right Signal Module.
6. Set duty cycle.
7. Connect the accessory to the selected channel.
8. Turn Signal Module output ON.
9. Turn selected channel switch ON.

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13. Recommended Shutdown Procedure

1. Turn all channel switches OFF.
2. Turn the Signal Module output OFF.
3. Power down the SG102.
4. Disconnect the accessory from the output terminals.
5. Unplug the power supply when not in use.

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14. Example Setup

Example only:

- Voltage: 12.00 V
- Frequency: 10 Hz
- Duty Cycle: 50%
- Channel 1 switch: ON
- Channel 2 switch: OFF
- Channel 3 switch: OFF

This would send a 10 Hz pulsed output to Channel 1 only.

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15. Troubleshooting

The screen turns on, but there is no output.

Check the following:

- Is the Signal Module output ON?
- Does the display show OUT?
- Is the desired channel switch ON?

- Is the accessory connected to the correct positive and negative terminals?
- Is the voltage set above 0?
- Is the current limit set too low?
- Is the connected accessory drawing too much power?

The frequency buttons are not changing the frequency.

Make sure the Signal Module is in standard frequency mode. The display should show the **%** symbol. If not, hold **SET** for about 6 seconds to switch modes.

The voltage is not changing.

Press **V-SET** first, then adjust using the rotary knob. Press the knob to move between digits if needed. Press **OK** or **V-SET** again to save.

The output turns off unexpectedly.

The connected accessory may be drawing too much current, or the unit may have entered a protection state. Turn everything off, disconnect the accessory, allow the unit to rest, and restart with a lower voltage.

The accessory gets hot.

Turn the channel switch OFF immediately. Lower the voltage or duty cycle before using again. Do not continue using any accessory that overheats.

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16. Care and Storage

- Store in a dry indoor location.
- Do not leave the unit plugged in when not in use.
- Keep the terminals clean and free from debris.
- Do not expose the unit to moisture, vibration, or extreme heat.
- Do not modify the enclosure, wiring, or output terminals.

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17. Support

For support, contact the seller with:

- Your order number.
- A description of the issue.
- Photos or video of the setup, if possible.
- The voltage, frequency, and duty cycle settings being used.
- A description of what was connected to the output channel.

18. Important Use Notice

The Sacred Geometry SG102 is an adjustable electrical signal generator. It should be used only by adults who understand basic electrical safety.

The user is responsible for making sure that any connected accessory is compatible with the voltage, frequency, duty cycle, and current being used.

This product is not a medical device.