



# WAVES SOUNDGRID SERVER

User Guide



 **WAVES**LIVE

## Welcome

Thank you for choosing Waves. In order to get the most out of your SoundGrid server, please take the time to read through this manual. We also suggest that you become familiar with Waves Support, [www.waves.com/support](http://www.waves.com/support). There you will find an extensive answer base, the latest tech specs, detailed installation guides, new software updates, and current information about licensing and registration. By signing up with Waves Support, you'll receive personalized information about your registered products, reminders when updates are available, and information about your authorization status.

Please register your SoundGrid server. To do so, you will need the hardware serial number, which can be found on the **registration card** inside the package or on the hardware itself.

Visit the Waves web site at [www.waves.com](http://www.waves.com). If you have a Waves account, log in and select **Register New Product**, which is on the main page. Submit your serial number. Once you've registered, you will receive personalized information, reminders when updates are available, information on your authorization status, and a direct line to Waves technical support.

If you don't have a Waves account, please create one at <https://www.waves.com/create-account>.

Once that's done, you can register your SoundGrid server.

## Package Contents

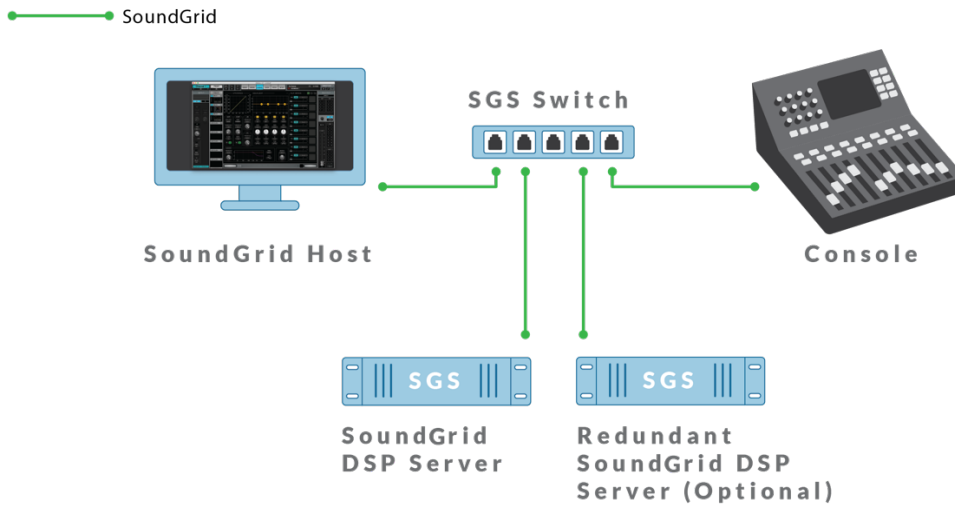
- SoundGrid server
- Power Brick (US and EU standards)
- Warranty card
- Registration card
- This user guide

## About SoundGrid

SoundGrid is a networking and processing platform for real-time professional audio applications. It was developed by Waves Audio.

The SoundGrid system consists of a server, SoundGrid-compatible plugins, a Mac or Windows control computer, and an I/O. It is used for live sound, broadcast, postproduction facilities, and more, providing a high-channel-count and extremely low-latency environment for high-precision audio processing on major consoles (DiGiCo, Allen & Heath, Yamaha, and more).

For more information on SoundGrid, visit <http://www.waves.com/live-sound>.



## The SoundGrid Server (SGS)

The SoundGrid server is the "number cruncher" that performs the audio processing. Audio is streamed from the SoundGrid-compatible I/O to the server for low-latency processing. Then it streams back to the I/O and the SoundGrid host application.

The SoundGrid server comes pre-installed with the SoundGrid server software on an internal flash disk.

## How to Connect

Connecting a SoundGrid server to a SoundGrid network is easy. Simply connect a Cat 6 cable from the server's rear-panel WSG port to your SoundGrid-compatible switch.

For a list of compatible switches, consult

<http://www.waves.com/support/network-switches-for-soundgrid-systems>

## Minimum Network Latency Settings

The Network Latency is the round-trip time from the SoundGrid I/O to the SoundGrid server and back. This setting is controlled by the user through the SoundGrid host. There is, however, a recommended minimal network latency.

Here are the recommended network latency settings, based on these server models:

	48 kHz	96 kHz
<b>Extreme Server</b>	40 Samples (0.8 ms)	80 Samples (0.8 ms)
<b>Server One</b>	40 Samples (0.8 ms)	80 Samples (0.8 ms)
<b>Impact Server</b>	40 Samples (0.8 ms)	80 Samples (0.8 ms)
<b>Proton Server</b>	40 Samples (0.8 ms)	Not supported

For in-depth setup instructions, please refer to your SoundGrid-compatible host manual.

## **Useful Contacts**

<https://www.waves.com/contact-us>

Tech Support Phone: 1-865-909-9200 ext. 1

Mon- Thu: 4:00 am-midnight (EST)

Fri: 9:00 am-midnight (EST)

Sat-Sun: 11:00 am- 6:00 pm (EST)

Saturday: Urgent live sound requests only at Live Sound Phone, +1-865-909-9268.

**Thank you for purchasing a Waves SoundGrid server!**

## Specifications

### Electrical

Power Brick:  
110/220v, 60 Hz or 50 Hz, auto-switching  
12V DC, 3A

### Dimensions

Case:  
Width: 19.5 cm / 7.6 in  
Length (front to back): 20.5 cm / 8 in  
Height: 3.8 cm / 1.5 in

*Rubber Feet:*  
Height: 4 mm / 0.15 in

**Weight:** 1.06 Kg / 2.34 lbs.

Ambient operating and storage conditions (temperature and relative humidity):

5-40°C, 85% RH

Norway ONLY: Product is permitted to be connected to IT power systems.

### Installation Notes:

If the server is installed in a rack, the rack manufacturer's safety instructions apply.

Approvals cover use in ambient air temperature of up to 40°C. Operation in higher temperatures should be avoided. A 1U space should be left above and below the unit to prevent heat transfer from adjacent equipment, if this generates heat above 40°C.

At least 75 mm (3 inches) should be allowed on the sides of the unit to allow ventilation. At least 75 mm (3 inches) of free air should be available at both the front and the rear sides of the rack to allow heat dissipation. Under no circumstances should the fan (where fitted) or ventilation outlets be blocked or restricted. The server requires at least 25mm (1 inch) free air at the top of the unit to allow for ventilation.

**CAUTION**  
**RISK OF EXPLOSION IF THE BATTERY IS**  
**REPLACED WITH AN INCORRECT TYPE.**  
**DISPOSE OF USED BATTERIES ACCORDING**  
**TO LOCAL REGULATIONS.**