

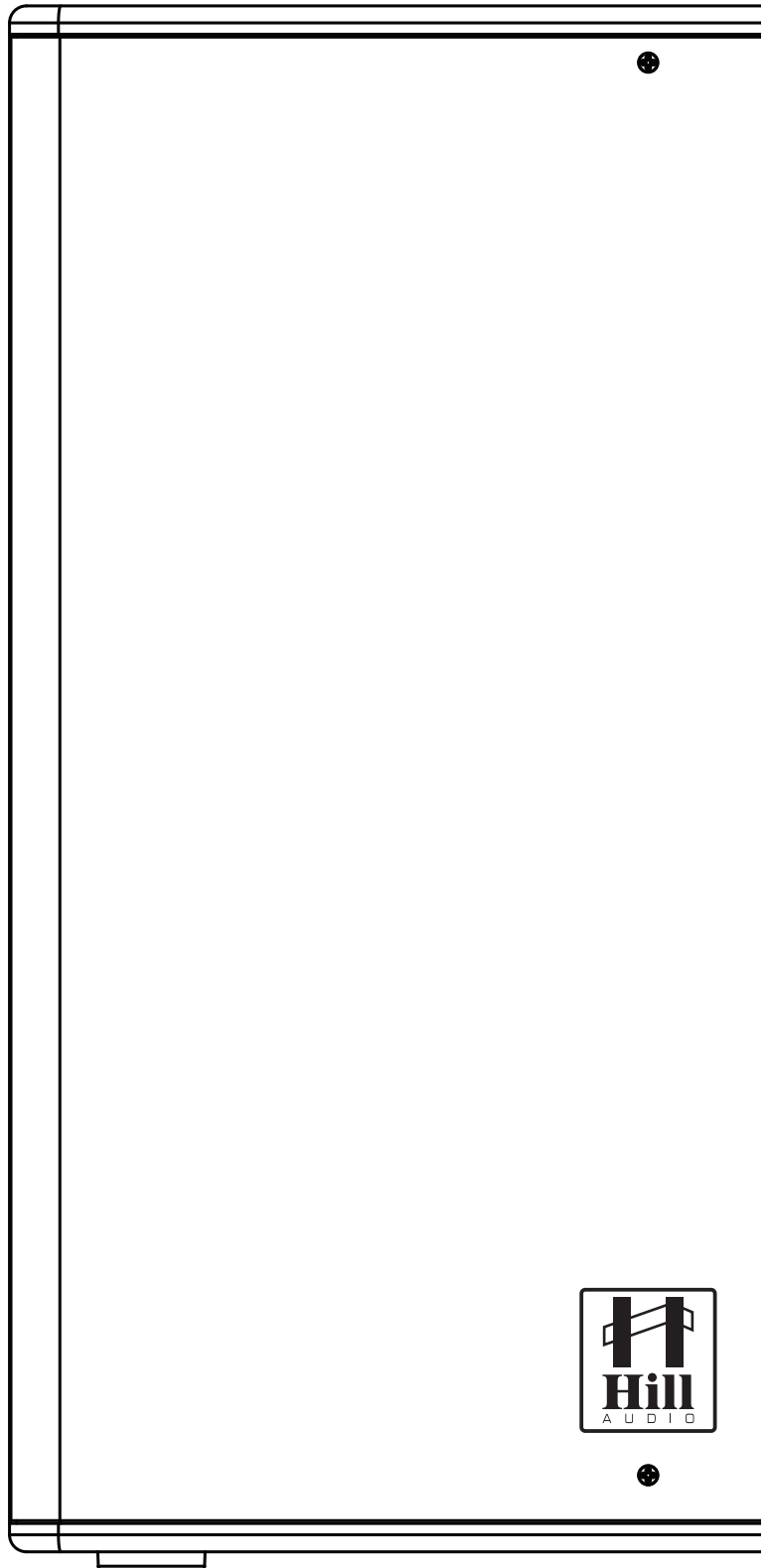


GRAVO SERIES
PRECISION ACTIVE SUBWOOFER SYSTEM

SWA-1510

USER MANUAL

RevA 06-2017



Welcome

Thank you for choosing Hill Audio for your sound system. To make sure that this product meets your expectations and provides long-term, reliable performance, please read and follow this instruction manual carefully.

Manual Language

UK	This user manual is written in English. For other languages, visit	www.hill-audio.com
FR	Ce guide est écrit en anglais. Pour les autres langues, visitez:	www.hill-audio.com
DE	Diese Anleitung ist in Englisch verfasst. Für andere Sprachen:	www.hill-audio.com
ES	Este manual está escrito en Inglés. Para otros idiomas, visite:	www.hill-audio.com
PT	Este manual está escrito em Inglês. Para outros idiomas, visite:	www.hill-audio.com
IT	Questo manuale è scritto in inglese. Per altre lingue, visitare:	www.hill-audio.com

Important safety instructions

- Read these instructions and all markings on the product. Keep these instructions.
- Heed all warnings and instructions, both in this manual and on the product.
- Clean only with a dry cloth. Unplug from AC supply before cleaning.
- Do not use this product near water and avoid any exposure to water.
- Before connecting this product to any AC supply, make sure to check whether the AC mains voltage and frequency match the indication on the product and its packaging.
- Only connect this product to an AC supply with sufficient power handling, protective earth connection, ground-fault (earth-fault) protection and overload protection.
- Disconnect the product from the AC supply during thunderstorms or longer periods of being unused.
- Make sure any heat sink or other cooling surface, or any air convection slot, is exposed sufficiently to free air circulation and is not blocked.
- Do not operate this product in environmental temperatures exceeding 35 degrees Celsius and/or 85% relative humidity.
- Position the product in a safe and stable place for operation, out of reach of unauthorized persons.
- Make sure any cable connections to and from the product are neither subject to potentially destructive mechanical impact nor present any risk of stumbling or other accident risk to people.
- Audio equipment may generate sound pressure levels sufficient to cause permanent hearing damage to persons. Always start up at low volume settings and avoid prolonged exposure to sound pressure levels exceeding 90 dB.
- Do not open this product for service purposes. There are no user-serviceable parts inside. Warranty will be void in any case of unauthorized service by the user or other not authorized persons.
- Take any precaution required by local law, applicable regulations or good business practice to avoid injury of people or material damage by use of this product.

Explanation of symbols used in this manual and on the product:



ATTENTION!
Read manual before installation and operation.



DANGER!
Safety hazard.
Risk of injury or death.



WARNING!
Hazardous voltage.
Risk of severe or fatal electric shock.



WARNING!
Fire hazard.

Description

The Gravo subwoofer series is a range of powerful stand-alone active subwoofers, designed to work in a 2.1 configuration with two active satellite speakers or an external stereo amplifier and passive speakers. Using rugged and acoustically superior birch plywood as the cabinet material and a high-headroom class D amplifier, these subwoofers are both robust in their handling and powerful in their performance. Adding precision transducers, they offer great sound as an extension in the subbass frequency range to any portable and installed sound system.

The Gravo series consists of three different models:

- SWA-1210: 12" Driver
- SWA-1510: 15" Driver
- SWA-1810: 18" Driver

Availability of models may vary based on territory. The specifications for each model are available at the end of this user manual.

Setting up

A. Location

When choosing a location for the Gravo subwoofers, keep the following in mind:

- During transport or setup, avoid touching the cones of the loudspeakers with any object or with your hands, as this could cause irreparable damage. Do not remove the protection grille.
- Avoid pointing microphones in the direction of the speakers, as this could result in annoying feedback which can damage the speaker drivers.

B. Position

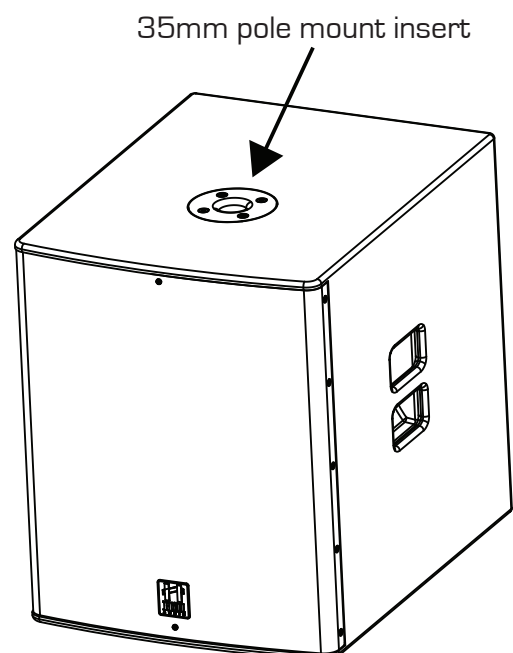
Gravo subwoofers are designed for floor standing operation. Make sure that the floor is flat and even to avoid the speaker to tumble. Avoid resonating floor positions for better sound.

C. Satellite Speaker Placement

The Gravo subwoofers are equipped with a 1-3/8 inch (35mm) stand pole mount, to allow mounting of a satellite speaker right on top of the subwoofer by means of a 35mm distance tube.

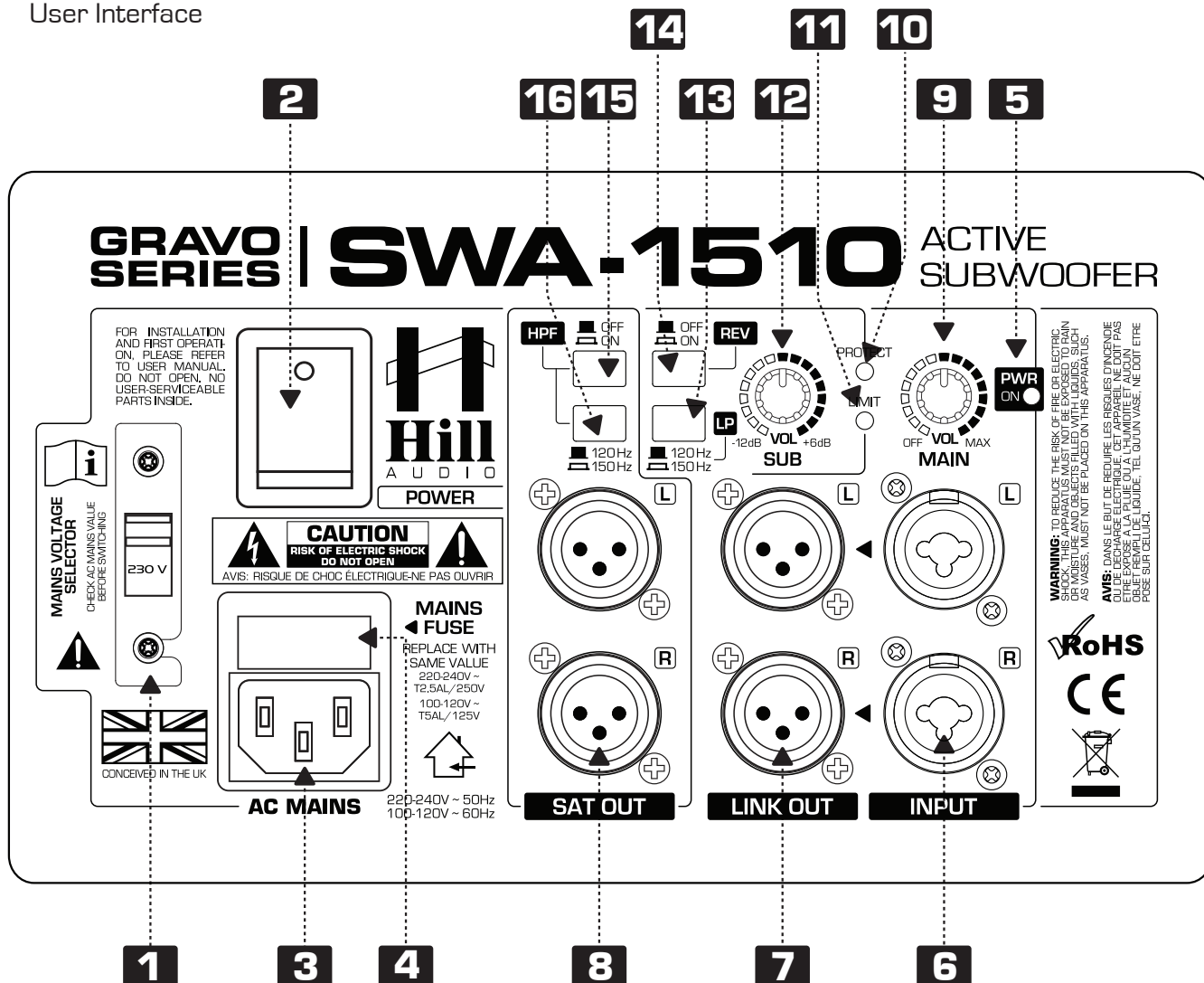
Before lifting the speaker onto the tube, be confident that you can handle the weight safely and without injury to yourself, others, or damage to the speaker.

When taking the satellite speaker off the tube, take caution if the tube gets caught in the satellite speaker's stand mount, as it may fall off unexpectedly and cause risk of injury or damage.



Operation

User Interface



Functional Description

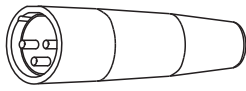
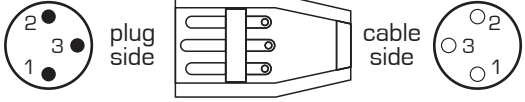
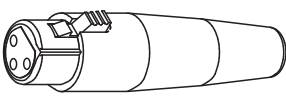
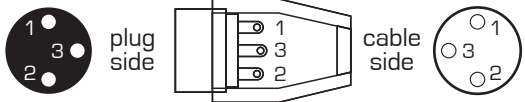
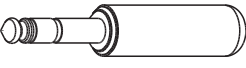
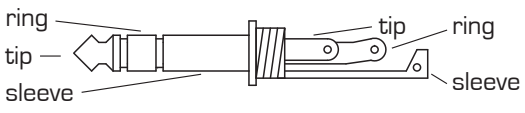
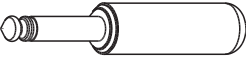
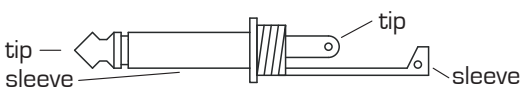
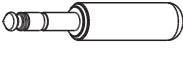
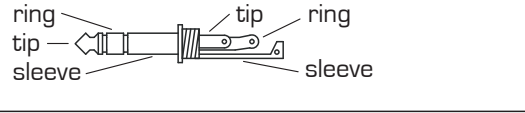
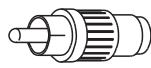
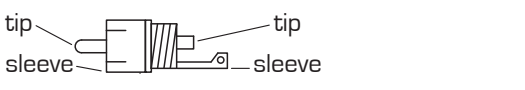
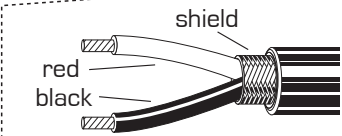
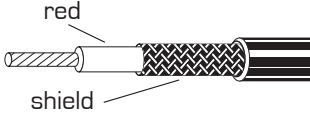
Andante V2 speakers offer a user interface which resembles a basic 4-channel mixer. Apart from the main mono line input (CH1), a dedicated microphone input (CH2) and two stereo line inputs (CH3/4) are provided. For the stereo inputs, it can be decided whether they are summed to mono and played by the internal speaker or whether the left channel is played by the internal speaker and the right channel is sent to a 2nd speaker. Various filter options complete the feature set.

- 1** Voltage selector switch. The product shall be preset to the voltage of your location, but it is recommended to check this before first operation. Available settings are 230V and 115V.
- 2** Power switch. Switches the product on and off.
- 3** AC inlet. Connect the supplied AC cord here.
- 4** Fuse holder. The fuse can be removed and exchanged by pulling out the holder tray. Switch the unit off and disconnect the AC supply before doing so. Replace fuses only with same value and rating. If the fuse blows a 2nd time, submit product for repair.

- 5** Power indicator. This LED indicates whether the product is switched on or off.
- 6** Audio Input (Left and Right). This is an electronically balanced Combo input for line level signals which accepts male XLR plugs or TRS plugs.
- 7** Audio LINK OUT connectors. These male XLR sockets carry the same signal as the audio input (6) and may be used to forward the input signal to other recipients. The level at this link output is not influenced by the MAIN level control (9).
- 8** SATELLITE OUT connectors. These male XLR sockets carry the mid and high frequency signal content after being processed by the internal active crossover. Connect your active satellite speakers or an amplifier for passive satellite speakers here. The internal active crossover can be set either to 120Hz or 150Hz via switch (16) or can be disabled via switch (15).
- 9** MAIN Level control. Controls both the volume of the internal subwoofer amplifier as well as the connected satellite speakers on output (8).
- 10** PROTECT Indicator. Lights up when the internal amplifier goes into protection, either by over-heat or other faults. If the PROTECT indicator does not light off after a cool down period, address a qualified service technician for inspection of the unit.
- 11** LIMIT Indicator. Indicates that the internal level limiter becomes active. Make sure that this indicator only lights up occasionally, or reduce input level or MAIN volume otherwise.
- 12** SUB Level control. Sets the subwoofer level in relation to the overall level which is adjusted with the MAIN level control (9).
- 13** Subwoofer LowPass filter frequency selector. Switches the internal filter between 120Hz and 150Hz. For a smooth overall response, set this witch to the same frequency as the satellite HighPass filter switch (16).
- 14** Subwoofer Phase Reverse switch. Depending on the setup arrangement, reversing the output phase of the subwoofer might be necessary for better acoustical results.
- 15** Satellite HighPass filter enable switch. Switches the Highpass filter for the satellite output on and off. The frequency of the filter can be selected via switch (16).
- 16** Satellite HighPass filter frequency selector. Switches the internal filter between 120Hz and 150Hz. For a smooth overall response, set thiss witch to the same frequency as the subwoofer LowPass filter switch (13).

Connections

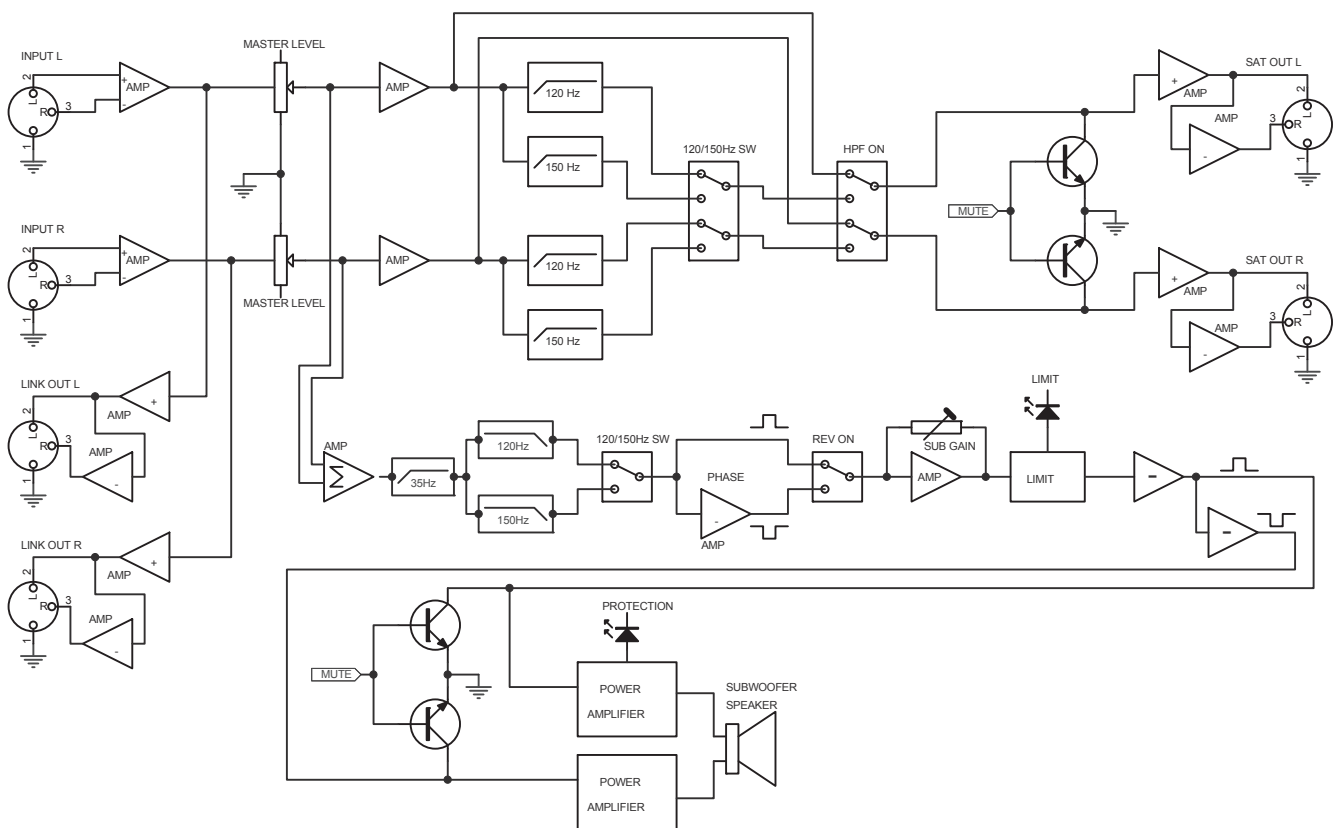
The Andante V2 series speakers use the below connector types, for which the pin assignment must comply with the following specification. Always make sure to use good connectors and cables to ensure proper operation. Balanced connections are to be preferred over unbalanced connections where applicable and feasible. Avoid unbalanced connections exceeding 2m of cable length.

	Structure	Balanced connection	Unbalanced connection
XLR male 		red = 2 black = 3 shield = 1	red = 2 shield = 1+3
XLR female 		red = 2 black = 3 shield = 1	red = 2 shield = 1+3
6.35mm TRS-stereo 		red = tip black = ring shield = sleeve	red = tip shield = sleeve+ring
6.35mm TRS-mono 		red = tip black = sleeve shield = uncon.	red = tip shield = sleeve
3.5mm TRS-stereo 		red = tip black = ring shield = sleeve	red = tip shield = sleeve+ring
RCA 		red = tip black = sleeve shield = uncon.	red = tip shield = sleeve
CABLE Types	 <p>2-conductor shielded cable (for balanced connections)</p>	 <p>1-conductor shielded cable (for unbalanced connections)</p>	

Technical Specifications

Frequency response (-6 dB).....	39Hz-150Hz
Additional switchable LPF.....	120Hz
LF Driver.....	15", 3.0"VC, 700W
Max SPL.....	RMS/Program/Peak 126/129/132dB
Amplifier Topology.....	Class D
Amplifier power EIA/RMS.....	770/500W
AC IN.....	115/230V~ 50Hz-60Hz (600W)
Dimensions.....	W450.0xD585.0xH545.0 mm
Material.....	15mm birch plywood
Surface.....	Scratch-resistant paint, black
Weight.....	28.0 kg

Block Diagram



EC Declaration of Conformity

Manufacturer: Adelto Technologies Limited
Address: Unit 2A Springfield Road, Springfield Industrial Estate
Burnham-on-Crouch, Essex CM08UA, England

We declare on our own responsibility, that the equipment

Hill Audio Gravo SWA-1210
Hill Audio Gravo SWA-1510
Hill Audio Gravo SWA-1810

is in conformity with the following directives and standards or regulations:

EMC Directive 2014/30/EU
EN55032:2012 (Emissions)
EN55103-2:2009 (Immunity)
EN61000-3-2:2014
EN61000-3-3:2013

LVD Directive 2014/35/EU
EN60065:2014

ROHS2 Directive 2011/65/EU

and is marked as follows:



Burnham-on-Crouch, 16.12.2016
Place and date of issuing


Authorized Signature

www.hill-audio.com



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