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# User Manual Subwoofer Module DS 2.0







General safety instructions	3
Introduction	4
Connections	5
Crossover settings	6
Technical data / Warranty	7



#### CAUTION

NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: SHOCK HAZARD. AVIS: RISQUE DE CHOC ELECTRIQUE. NE PAS OUVRIR.

CAUTION: REPLACE FUSE WITH SAME TYPE AND RATING. ATTENTION: UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE.

DISCONNECT SUPPLY CORD BEFORE CHANGING FUSE. ATTENTION: DEBRANCHER AVANT DE REMPLACER LE FUSIBLE.

#### WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

#### **GENERAL SAFETY INSTRUCTIONS**

- 1) Read instructions. Read the safety and operating instructions before operating the appliance.
- 2) Retain instructions. Retain the safety and operating instructions for future reference.
- 3) Water and moisture. Do not use the appliance near water, for example near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool and the like.
- 4) Heat. Site the appliance away from heat sources such as radiators, heaters, stoves, or other appliances that produce heat.
- 5) Power cord protection. Route power cords so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, power sockets, and at the point where they exit from the appliance.
- 6) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 7) Objects and liquid entry. Take care not to let objects or liquids fall into the product.
- 8) The product should be serviced by qualified personnel only.

#### **REPLACING THE FUSE**

Should the mains fuse blow, replace it only with an equivalent part. The fuse holder is located just below the mains inlet socket. To replace the fuse, disconnect the product from the mains supply. Using a flat blade screwdriver remove and replace the fuse. Contact your local retailer.





# Introduction



- High efficiency Class D design.
- Active subwoofer amplifier.
- Power output 175 Wrms into 4 ohms.
- Crossover filter, 18dB/octave.
- Subsonic-filter 12Hz, 24dB/octave.



The DS 2.0 is a state-of-the-art Class D amplifier module for active subwoofer use. Accurate rendition of the low bass range is a substantial component of a high-quality music reproduction. For an impressive bass rendition large loudspeakers are unfortunately inevitable. If you prefer small loudspeakers for optical reasons, you can use the DS2.0 to extend your bass rendition. The crossover frequency is adjustable steplessly between 30Hz and 120Hz. Due to this large range of control a problem-free connection is possible to different subwoofer and other loudspeaker systems. Additionally this active system has a low bass rise. An active 4th order subsonic filter with Butterworth characteristic protects the loudspeaker against mechanical overloading, since the ultralow portion of the fed signal would cause extreme diaphragm deflections.

# Connections



Be sure to disconnect the DS2.0 from the mains before proceeding!

Connect the loudspeaker, wired with wire of sufficient cross-section (1.5mm<sup>2</sup> or 15AWG), to the amplifier board as shown in the picture above. Use suitable crimp connectors and crimp them with a suitable crimp tool. Check the voltage selector on the front panel and make sure the voltage is set according the mains voltage used in your country.



Mains voltage selector.



# **Crossover settings**

### Crossover example 1.



Crossover frequency is set to 30Hz.

#### Crossover example 2.







# DS2.0

# Technical Data

Continuous output power (8 Ohm) Continuous output power (4 Ohm) Gain (RCA input) Gain (High level input) Input sensitivity (RCA input) Input sensitivity (High level input Subsonic-filter Phase Crossover frequency subwoofer Bassboost Bassboost level Damping factor Protection Crossover filtering Input impedance RCA Input impedance high level Dimensions Weight

100 Watts 175 Watts 46dB 16.5dB 0,13Vrms 4Vrms 12Hz / -3dB, 24dB/Octave 0° - 180°, 180° - 360° 30Hz - 120Hz, 18dB/Octave 20Hz - 50Hz 0dB - +6dB 500 Output shortcut 18dB/Octave 10 kOhm 1 kOhm 190mm x 220mm x 60mm (W x H x D) 2.5 kg





# Warranty

The work carries warranty out for all provable material and production defects for the duration of 12 months starting from sales. All damage, which is caused by wrong or inappropriate operation, is excluded from the warranty.

DISCLAIMER: This subassembly is designed for use in music reproduction equipment only. No representations are made as to fitness for other uses. Except where noted otherwise any specifications given pertain to this subassembly only. Responsibility for verifying the performance, safety, reliability and compliance with legal standards of end products using this subassembly falls to the manufacturer of said end product.

LIFE SUPPORT POLICY: Use of Hypex products in life support equipment or equipment whose failure can reasonably be expected to result in injury or death is not permitted except by explicit written consent from Hypex Electronics BV.