## MANUAL

# SW 11 ACTIVE - SW 11 PASSIVE



## Congratulation on your purchase of your new SW-SERIES Subwoofers.

**IMPORTANT:** Before installation of your spare-wheel-subwoofer, we recommend to read the owner's manual carefully and to follow the instructions regarding connection and fitting exactly.

**ATTENTION:** Pay attention to advices and instructions of the car manufacturer.

**IMPORTANT:** Your proof of purchase is evidence of warranty claim for repair or replacement. Keep your proof of purchase, manual and original packaging.

**ATTENTION:** Use of sound components can impair your ability to hear neccessary traffic sounds and may constitute a hazard while driving your automobile.

AUDIO SYSTEM GERMANY accepts no liability for hearing loss, bodily injury or property damage as a result of use or misuse of our products. We recommend installing the equipment by an authorized service center or dealer. A professional fitting and connection is the requirement for further warranty and perfect sound.

# SWSERIES

## **EQUIPMENT SW 1) ACTIVE**

- 27,5cm Active-Spare-Wheel-Woofer with extremely heavy housing
- PRS (Phantom-Resistor-Simulation) impedance simulation
- Extremely wide input sensitivity from 0,1 to 10 V
- Multi-Way-Protection-Circuitry: overheating, overcurrent, short circuitry & DC protection
- High-Power-Input (normally OEM radio) with automatically "Turn-On"
- Cable-High-Level-Input or Cinch-Input
- Included RTC SW wired remote for Gain, Bass Boost, Low-Pass-Filter and Phase



# **SWSERIES**

## TECHNICAL DATA SW 11 ACTIVE

Power Supply Voltage 10 - 16 V RMS Power @ 4 Ohm Mono 150 W Signal to Noise Ratio > 92 dB Low Pass Crossover (LPF) 50 - 150 Hz Subsonic Filter 20 Hz Phase Shift  $0^{\circ} / 180^{\circ}$ 

Frequency Response 35 Hz  $\sim$  150 Hz (+/-1 dB)

 THD@RMS Watts
 < 0,3%</td>

 Bass-Boost
 0 bis +12 dB

 Fuse Rating
 25A

Input Sensitivity 0,1 V  $\sim$  10 V (+/- 5%) Dimensions 360(D) x 135(H) mm

SWSERIES

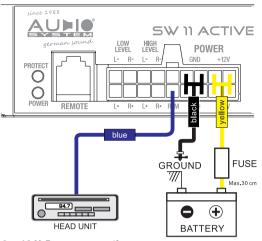
## TECHNICAL DATA SW 11 PASSIVE

Power Watt RMS 2x 175 W
Frequency Response 35 Hz ~ 150 Hz (+/-1 dB)

Impedance 2x 2 Ohm

Dimensions  $360(D) \times 135(H) \text{ mm}$ 





### 1. Battery disconnection

First disconnect the power supply of the vehicle. This works out the best by removing the ground cable of the battery.

#### 2. Ground connection

Connect the GND (ground) connection of the amplifier with the car chassis. Keep this cable as short as possible (not longer than 50 cm) and use a suitable cross section (AWG sice 6 - 10).

Make sure, that the connection with the vehicle chassis is free of paint, dirt and dust

#### 3. +12 V Power connection:

Connect the +12 V contact of the amplifier with the supply cable via a fuse directly to the vehicle battery. Keep in mind, that the length of the cable from fuseholder to vehicle battery has to be a maximum of 30 cm. Requirement for a perfect function of the amplifier is a qualitative high end fuse holder as well as a suitable cable cross section (AWG sice 6 - 10). This fuse protects the amplifier and the vehicle against the possibility of a short circuit in the power cable.

## 4. Remote connection (optional):

You can optional connect the REM-terminal of the amplifier to the remote-output (automatic 12 V antenna-output) of the head unit. Therefore use a 0,5 - 1,5 mm power cable.



## ATTENTION

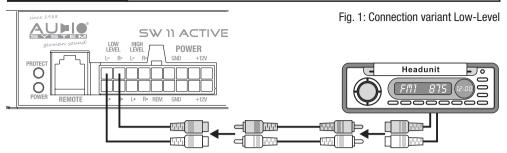


# Please follow the instructions during the installation of your amplifier:

- Take care of a professional attachement. Pay attention, that no electrical cable, gas tank, hydraulic breakes or other components get damaged.
- b) There has to be enough cooling and air circulation. Avoid the installation in small closed boxes or close to heatening parts.
- c) Protect the amplifier from fluids, wetness, heat and foreign material as well as from other influences.
- d) The amplifier is only to be built into vehicles with a 12 V DC power supply.
- e) Never install the power supply cable with other original wires of the vehicle (gas cables), fan motors, brand control moduls etc.
- f) Install the signal cable (cinch cable) as well as the speaker cable far away of the power cables to avoid troubles with the music signal.
- g) The cables of your amplifier have to be installed, so that there is no danger of binding, squeezing or breaking.

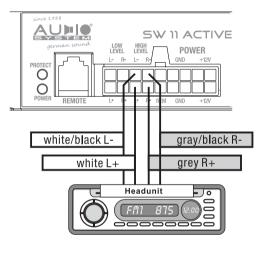


#### RCA/SPEAKER CONNECTION



The SW 11 ACTIVE has RCA LOW-LEVEL inputs to connect it to the pre-output connection of the headunit using a RCA cable. When using RCA connections you also have to connect the remote input (blue) to remote or antenna out of headunit.

If your car radio doesn't have RCA outputs (normally 0EM radios) you can connect the speaker outputs directly to the HIGH-LEVEL inputs of the SW 11 ACTIVE. The amplifier will turn on automatically with remote wire.



SW 11 ACTIVE **POWER** GND PROTECT  $\bigcirc$ POWER GND AUÞI® All settings can be adjusted by using the RTC SW wired remote. You can adjust the gain, bass boost, low-pass-filter and phase to match the car and your preferred sound setup. Fig. 3: Connection RTC SW

AMPI IFIFR

Fig. 2: Connection variant High-Level

# CONNECTION SW 1) PASSIVE | Sw 1) Passive | Sw 20 | Sw 30 | Sw

It is possible to connect the **SW 11 PASSIVE** in different configurations. By this you can use the subwoofer as 2x 2 0hm (figure), 1x 4 0hm (row) or 1x 1 0hm (parallel) subwoofer.

In this regard, AUDIO SYSTEM GERMANY recommends to adjust your amplifier through a specialized service center, dealer or a specialist.

## TROUBLE SHOOTING



This power amplifier is featured with an efficient protection system to prevent any damages like over-heating, overvoltage, short-circuit and DC at the loudspeaker output.

Occuring an error the protection-LED will light in red. In order to check the problem, first turn down all levels of the head unit, afterwards turn it off.

AMPLIFIER IS NOT POWERED UP, NO LED IS LIGHTENING	<ul> <li>ground connection professional connected?</li> <li>+12V powercable professional connected?</li> <li>remote cable professional connected?</li> <li>fuses inserted and alright?</li> <li>analyze voltage on the amplifier.</li> </ul>
PROTECTION LED ILLUMINATES GREEN WHILE AMPLIFIER IS SOUNDLESS	<ul> <li>cinch cable or high level input alrigth and professional connected</li> <li>loudspeaker professional connected?</li> <li>head unit alright?</li> </ul>
PROTECTION LED ILLUMINATES RED WHEN AMPLIFIER IS POWERED UP	<ul> <li>amplifier too hot?</li> <li>short-circuit at the loudspeaker output?</li> <li>short-circuit caused by loudspeaker cable with vehicle chassi (ground)?</li> <li>input voltage too high (e.g.faulty generator)?</li> </ul>
OVERHEATING (PROTECTION LED ILLUMINATES RED WHEN AMPLIFIER IS POWERED UP)	- impedance alright? - loudspeaker error? - adequate airflow of the amplifier? ! CAUTION!
	After cooling down, the amplifier turns on automatically.
ERROR IN AMPLIFIER FUSE	- ground professional connected? - loudspeaker impedance alright? ! CAUTION!  Make sure when changing fuses to use the same value.
SOUND TOO LOW OR LOW-DISTORTED SOUND	- ground professional connected? - loudspeaker impedance alright? ! CAUTION!

# A ATTENTION A

Please contact your specialized dealer if the amplifier is still not working after it has been checked with the error list!

For warranty adjustement / repairs the original invoice has to be attached!

Opening the power amplifier is leading to a lost of warranty in either case!