

since 1988

AUDIO
SYSTEM

german sound

HIGH-PERFORMANCE CAR-AMPLIFIER

OWNER'S MANUAL

X SERIES
BY AUDIO SYSTEM



X-500.1 MD



Congratulation on your purchase of your new X-SERIES amplifier.

IMPORTANT: Before installation your power amplifier, 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.

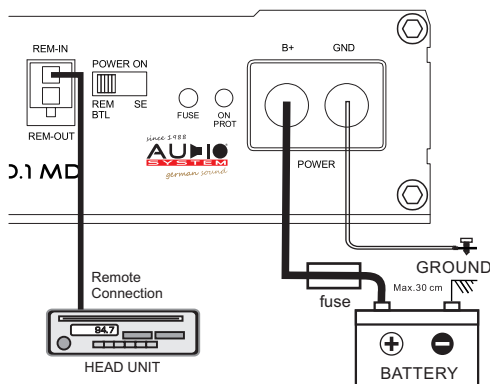
ATTENTION: Use of sound components can impair your ability to hear necessary traffic sounds and may constitute a hazard while driving your automobile.

AUDIO SYSTEMGERMANY 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

X-500.1 MD

- Digital Mono High Power amplifier with Micro-SMD Technology and MOS-FET PWM Power Supply
- Stable from 4 to 2 ohm mono
- Variable switchable subsonic filter from 10 to 50 Hz
- Variable lowpass filter from 40 to 250 Hz
- RTC bass level controller included
- High-Level-Input with automatically „TURN ON“
- Very fast and reliable music signal detection
- Input Sensitivity: variable 200 mV maximum to 6 V minimum

X-500.1 MD

**1. Battery disconnection:**

First, disconnect the power supply of the vehicle 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.

Make sure, that the connection with the

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 maximum 30cm. For the amplifier to function at its best, use a high quality fuse holder and suitable cable. This fuse protects the amplifier and the vehicle against the possibility of a short circuit in the power cable.

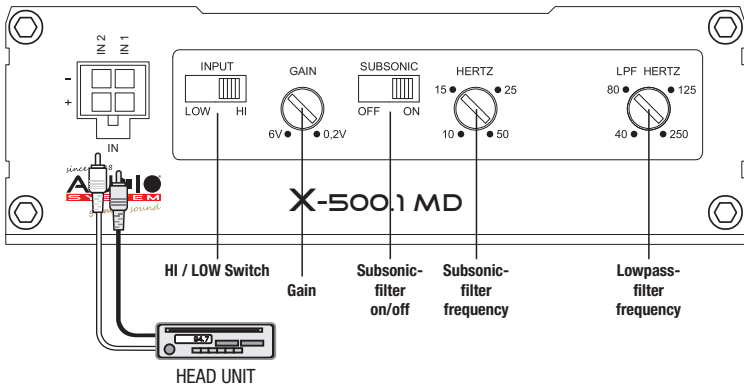
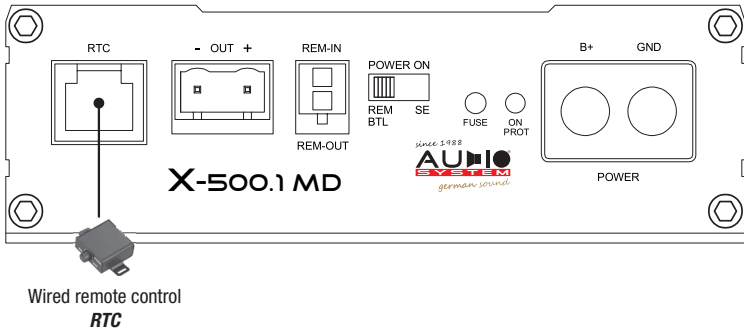
4. Remote connection:

Connect the REM-terminal of the amplifier to the remote-output (automatic 12 V antenna-output) of

**ATTENTION****Please follow the instructions during the installation of your amplifier:**

- Take care of a professional attachment. Pay attention, that no electrical cable, gas tank, hydraulic breakes or other components get damaged.
- There has to be enough cooling and air circulation. Avoid the installation in small closed boxes or close to heatening parts.
- Protect the amplifier from fluids, wetness, heat and foreign material as well as from other influences.
- The amplifier is only to be built into vehicles with a 12 V DC power supply.
- Never install the power supply cable with other original wires of the vehicle (gas cables), fan motors, brand control moduls etc.

X-500.1 MD



The **X SERIES** amplifiers have RCA inputs, which are connected by RCA cables to the preamp outputs of the head unit. If this is not possible (usually in an original radio, OEM) the speaker outputs of the car radio can be connected directly to the RCA / Cinch inputs of the amplifier. In this case, the Input Mode must be switched to "HI". **It is important that the gain potentiometer is first set to minimum and turned up carefully when handling.**

The power stage is automatically turned on when a signal is present. Using the variable high pass filter (HPF) - and low-pass filter (LPF), the gain knob can be seen on his personal tastes, on the characteristics of the car and the speakers set the amplifier individually. Optionally, you can connect a wired remote RTC to control to adjust the gain from another position in the car.

AUDIO SYSTEM GERMANY, recommends that you leave your amplifier set by a specialist company, specialist dealer or a specialist to meet your needs.

SIGNAL DETECTION

X SERIES
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The **X SERIES** power amplifier has a signal auto-detection. This is required if the OEM output has no overlying 6-volt DC signal. To turn on the signal detection, the switch position from **BTL to SE** has to be set

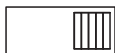
POWER ON



REM SE
BTL

Position BTL:
Automatic switch for standard control units with high power outputs

POWER ON



REM SE
BTL

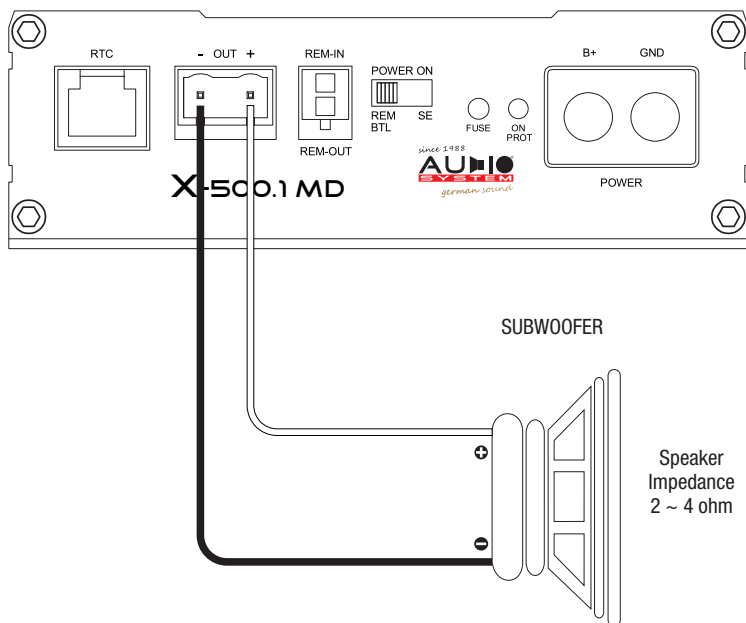
Position SE (Signal Detection):
Automatic switch for control devices or active systems with Class-D amplifiers.

SPEAKER CONNECTION

X SERIES
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X-500.1 MD

Subwoofer-Betrieb



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 style="list-style-type: none"> - ground connection professional connected? - +12V powercable professional connected? - remote cable professional connected? - fuses inserted and alright? - analyze voltage on the amplifier.
PROTECTION LED ILLUMINATES BLUE WHILE AMPLIFIER IS SOUNDLESS	<ul style="list-style-type: none"> - cinch cable alright and professional connected - loudspeaker professional connected? - head unit alright?
PROTECTION LED ILLUMINATES RED WHEN AMPLIFIER IS POWERED UP	<ul style="list-style-type: none"> - amplifier too hot? - short-circuit at the loudspeaker output? - short-circuit caused by loudspeaker cable with vehicle chassis (ground)? - input voltage too high (e.g.faulty generator)?
OVERHEATING (PROTECTION LED ILLUMINATES RED WHEN AMPLIFIER IS POWERED UP)	<ul style="list-style-type: none"> - impedance alright? - loudspeaker error? - adequate airflow of the amplifier? <p style="text-align: center;">! CAUTION ! After cooling down, the amplifier turns on automatically.</p>
ERROR IN AMPLIFIER FUSE	<ul style="list-style-type: none"> - ground professional connected? - loudspeaker impedance alright? <p style="text-align: center;">! CAUTION ! Make sure when changing fuses to use the same value.</p>
SOUND TOO LOW OR LOW-DISTORTED SOUND	<ul style="list-style-type: none"> - input level control "GAIN" is set to match the head unit? - output level control of the head unit alright? - loudspeaker error? - loudspeaker cable checked? - crossover frequencies has been properly set? (Check head unit, amplifier, DSP, soundprozessor, equalizer, frequency bandpassfilter...)
HIGH HISS-ENGINE NOISE IN SPEAKERS	<ul style="list-style-type: none"> - ground connection professional connected? - short-circuit caused by loudspeaker cable with vehicle chassis (ground)? - cinchcable (RCA) and/or loudspeaker cable installed too close to the power connection cable?

⚠ ATTENTION ⚠

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

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

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

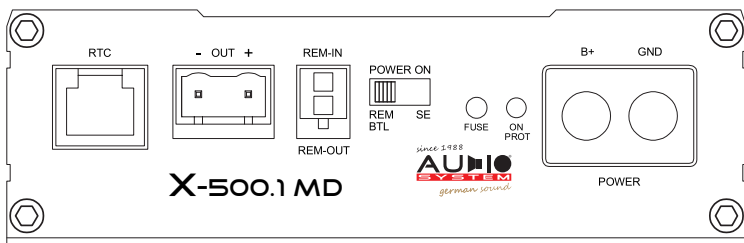
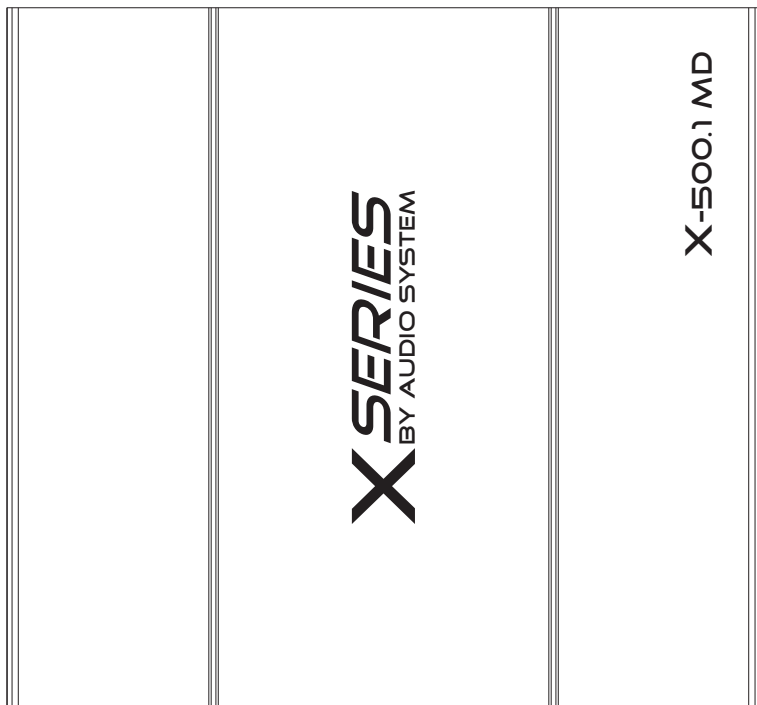
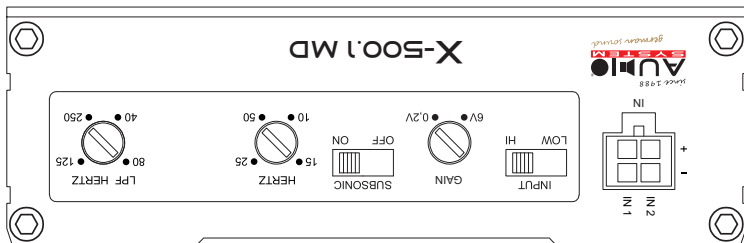
X-500.1 MD 1-CHANNEL AMPLIFIER

Power Supply Voltage	10 -16 V
Rated Power Output at 14,4 V	
-RMS power @ 4 Ohm Mono	1x 350 W
-RMS power @ 2 Ohm Mono	1x 500 W
Signal to Noise Ratio	> 87 dB
Low Pass Crossover	40 Hz ~ 250 Hz
High Pass Crossover/ Subsonic Filter	10 Hz ~ 50 Hz
Frequency Response	10 Hz ~ 250 Hz (+/-3dB)
THD@RMS Watts	< 0.01%
Channel Separation	-
Fuse Rating	1x 40 A
Input Sensitivity	200 mV ~ 6V (+/- 5%)
Dimensons	113(L)x 38(H)x 110(W)mm



AUDIO SYSTEM GERMANY
FALLTORSTRASSE 6 - 76707 HAMBÜCKEN

DESIGNED AND ENGINEERED BY AUDIO SYSTEM GERMANY



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