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AUDIO
SYSTEM

german sound

HIGH LOW CONVERTER

MANUAL

HN SERIES

ACCESSOIRES



HLC 4 EM



DESIGNED AND ENGINEERED BY AUDIO SYSTEM GERMANY

Congratulation on your purchase of your new Z SERIES Adapter.

IMPORTANT: Before installation of your High Low Converter, 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 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.

HLC 4 EM

- 4-Channel High-Low-Adapter
- Connectable to OEM-headunit up to 100 W RMS by **HPI-technology**
- Prohibit disturb signal and power up noise
- Generate a turn-on signal(Remote) over BTL or Signal Recognition (**SE-circuit**)
- Integrated turn off for Signal Detect (**SE**)
- Outstanding sound quality
- 5-Volt preamplifier technology (RCA couplings)
- Automatic detection of SE- or BTL-mode
- Very fast and correct music recognition (**SE and BTL-technology**)
- Advanced speaker load simulation with forward-looking **PRS-circuit**

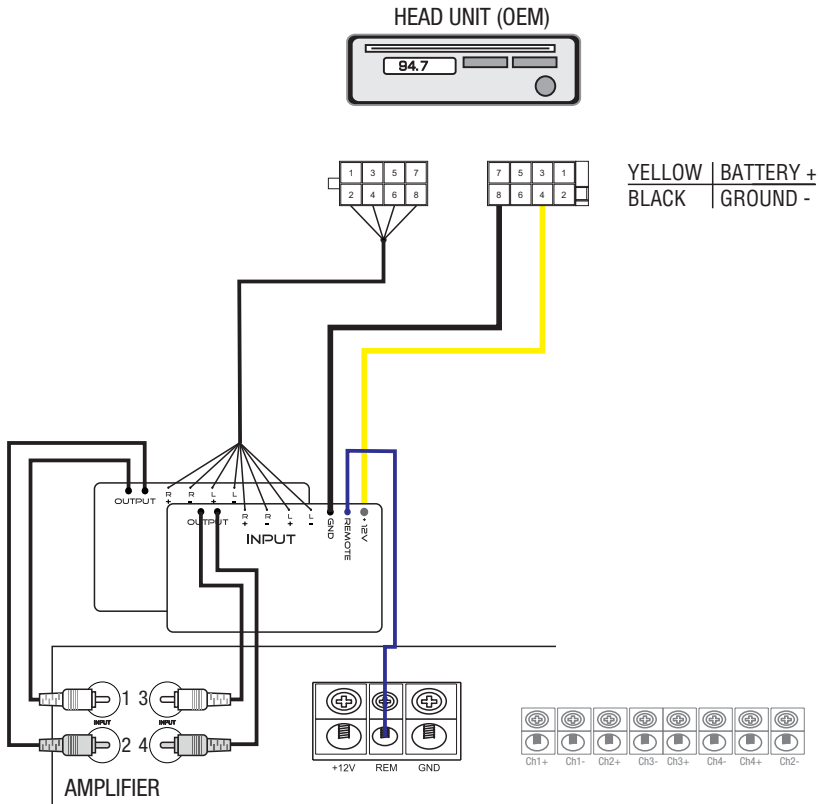


ATTENTION



Please follow the instructions during the installation of your High-Low-Adapter:

- a) Take care of a professional attachment. Pay attention, that no electrical cable, gas tank, hydraulic brakes or other components get damaged.
- b) Protect your **HLC 4 EM** from fluids, wetness, heat and foreign material as well as from other influences.
- c) The High-Low Adapter is only to be built into vehicles with a 12 V DC power supply.
- d) Never install the power supply cable with other original wires of the vehicle (gas cables), fan motors, brand control moduls etc.
- e) 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 **HLC 4 EM** have to be installed, so that there is no danger of binding, squeezing or breaking.



ATTENTION:

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. Connection

Connect the ISO connector to the headunit or to the T-Cable-Set (not included). If there is no connector for power (yellow & black) left, please connect these separately.

3. Remote connection

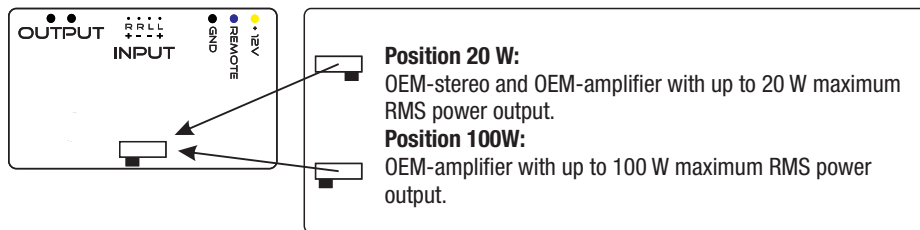
Connect the REM-terminal (blue) of the **HLC 4 EM** to the remote-input of the amplifier. Therefore use a 0.5 - 1.5 mm power cable. The amplifier turns on as soon as music signal is generated at the input of the High-Low Adapter.

4. Output

The RCA(Cinch)-outputs of the **HLC 4 EM** have to be connected to the RCA(Cinch)-inputs of the amplifier. **Important** in this respect is, that first the **gain-control** of the connected amplifier is **put to minimum**. Turn up only if necessary.

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

You can adjust the **HLC 4 EM** to different source power outputs of OEM stereo or OEM amplifier thanks to HPI-circuit. Position 20 W is suitable for most OEM stereos and most of OEM amplifiers. However, some special OEM-amplifiers deliver more than 20 W RMS output. You have to switch to 100 W position in this case. Attention: If you are not sure about output power of you OEM system ask a dealer or specialist, please.



The **HLC 4 EM** has an automatic signal detection circuit (**SE-technology**). It is automatically used if OEM stereo doesn't use BTL amplifier topology.

If using signal detection to turn on, **HLC 4 EM** will switch off remote by a pre-defined time delay. This is necessary to avoid switching off in low volume passages in music or speech.

The **HLC 4 EM** uses an advanced speaker load simulation technology called **PRS-technology**. It is always present and is for avoiding fault code messages and switch off situations of speakers by OEM stereo due to error checking techniques of OEM-amplifier.

Power Supply Voltage	10 - 16 V
Signal to Noise Ratio	>95 dB
Frequency Response	10 Hz ~ 50 KHz (+/-1 dB)
Channel Separation	75 dB
Fuse to use	2x 1A
Maximum Input Voltage	100 W RMS
Dimensions	2x 43(W) x 13(H) x 35(L) mm