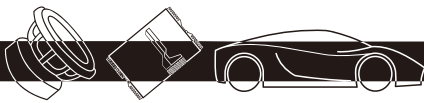


GLADEN[®]
GERMAN TECHNOLOGY

**User`s Guide
for amplifiers**

SPL 3000c1



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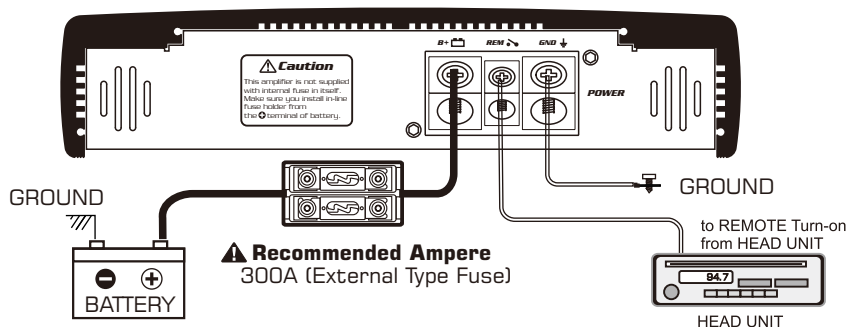
FEATURES

SPL 3000c1

- * Digital class-D linkable mono block amplifier
- * Dual MOS-FET PWM power supplies
- * Daisy-chain through output Jack
- * Stable into 1 ohm and 2 ohms load
- * 24dB/oct variable crossover
- * Variable 24 dB low pass (LPF) crossover
- * Variable Bass Boost
- * Variable phase shift
- * Variable subsonic filter
- * Efficiency : 86% @ 4 ohm, at 100Hz
- * Multi-way protection circuitry
(thermal/over current/speaker short/speaker DC protection)
- * RCA line input & output
- * Heavy duty copper layer double sided epoxy PCB
- * Zero(0) gauge power supply connectors
- * Tested voltage & THD : 14.4V & less than 1% THD
- * Operating voltage : DC10V~16V
- * Wired Remote Controller **RTC** (Optional)

POWER CONNECTION

SPL 3000c1



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 (AWG size 6 - 4). 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 maximum 30cm..

For the amplifier to function at its best, use a high quality fuse holder and suitable cable preferably AWG 6-4 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 the head unit. Use a 0,5 - 1,5 mm power cable.

⚠ Caution ⚠

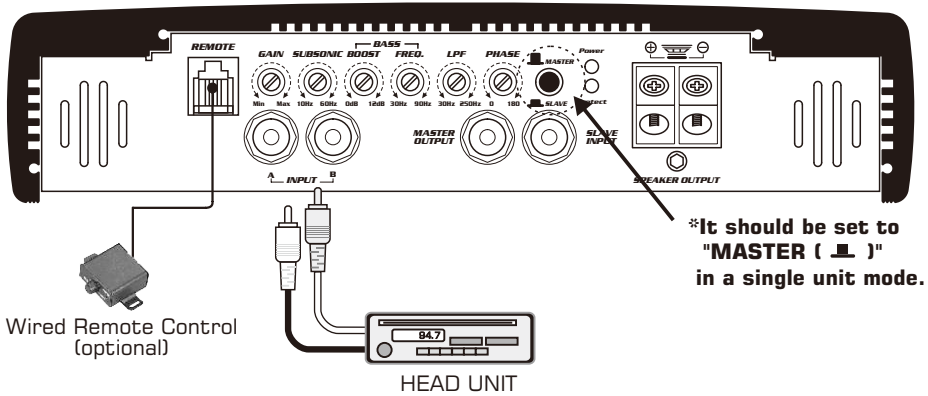
Please take the following precautions when installing your amplifier:

- Take extra care when making the connections. Make sure that no electrical cable, gas tank, hydraulic brakes or other components get damaged.
- Allow enough cooling and air circulation and avoid installing the unit in small closed boxes or close to parts that heats up easily.
- Keep the amplifier away from liquid, moisture, heat and foreign materials.
- This amplifier can only be used in vehicles with 12V DC power supply.
- Never install the power supply cable with other original vehicle wires (gas cables), fan motors, control modules etc.
- Install the signal cable (cinch cable) as well as speaker cable far away from the power cables to avoid interference with music signals.
- To avoid dangers of cables binding, squeezing or breaking, use the cables supplied with your amplifier.

RCA CONNECTION

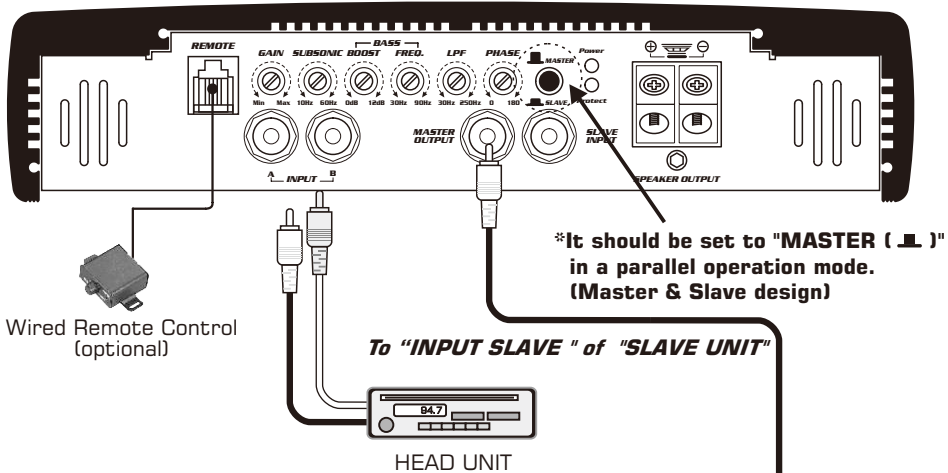
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Single Amplifier Application

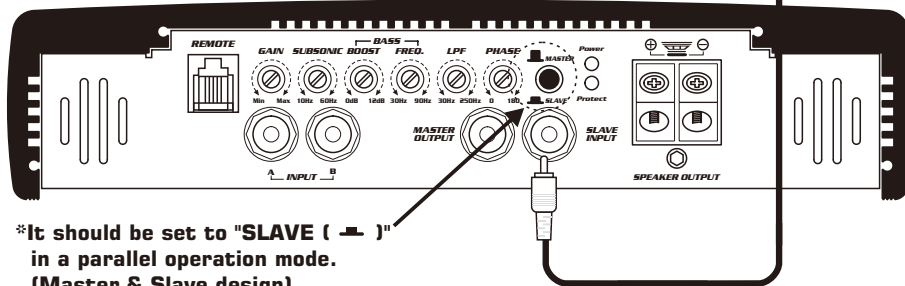


2 Amplifiers in Parallel Application (MASTER & SLAVE RCA Connection)

"MASTER UNIT"



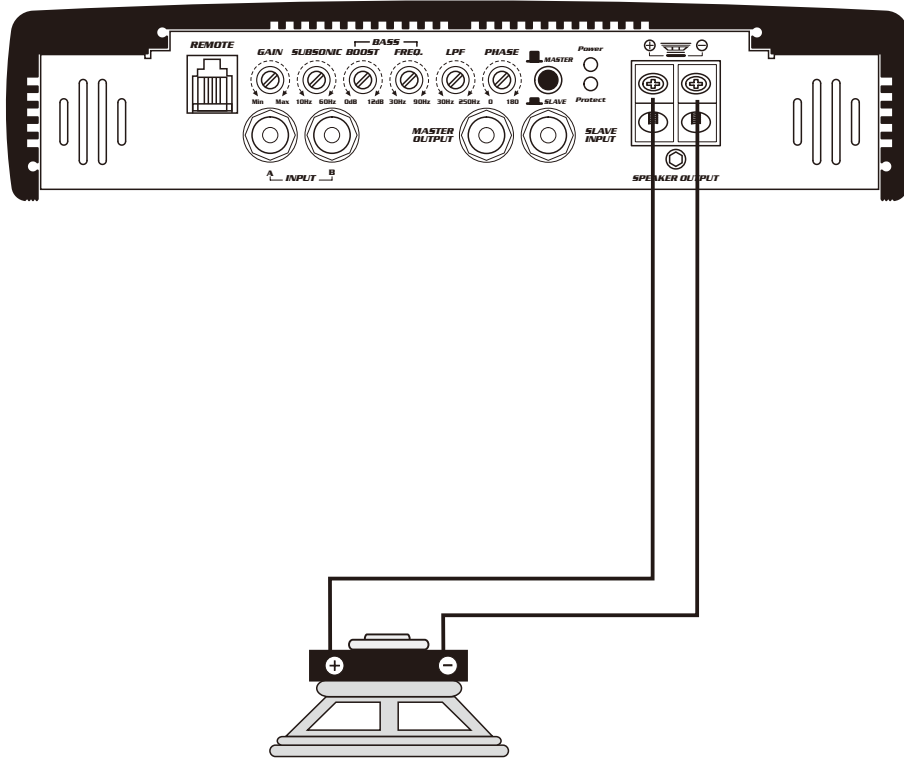
"SLAVE UNIT"



SPEAKER CONNECTION

SPL 3000c1

Single amp speaker connection



1~4 ohms

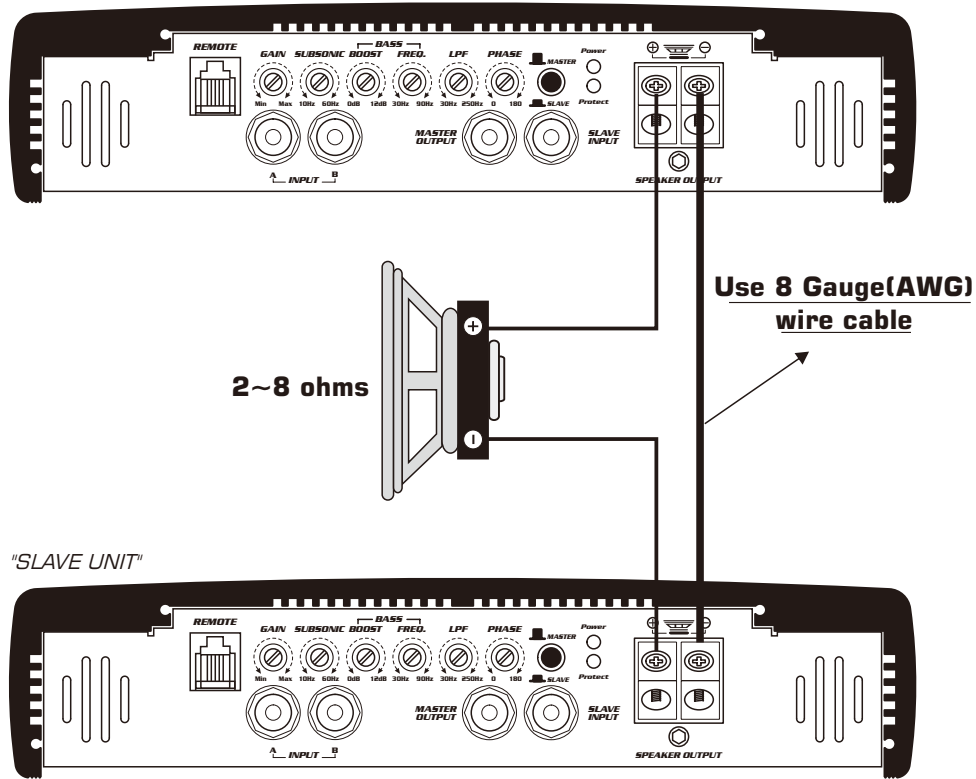
Please note that this unit is a mono block unit and only has one channel.

SPEAKER CONNECTION

SPL 3000c1

Dual amp speaker connection

"MASTER UNIT"



Using a dual amplifier configuration, the MASTER amplifier has total control over the SLAVE amplifier. The positive terminal of the subwoofer's voice coil must be connected to the positive terminal of the MASTER Amplifier and the negative terminal of the subwoofer's voice coil must be connected to positive terminal of the SLAVE Amplifier. Since the dual amplifier configuration has tremendous output potential, please ensure that your subwoofers can handle such a large amount of power.

⚠ Caution

When utilizing the dual amplifier configuration, it is important to note that the connected speakers' load cannot be lower than 2 ohms. Connecting a lower impedance load can damage the amplifier and void your warranty.

SPECIFICATIONS

SPL 3000c1

Rated power output

-RMS power, 4 ohms mono	-----	1000W x 1CH
-RMS power, 2 ohms mono	-----	1850W x 1CH
-RMS power, 1 ohm mono	-----	3100W x 1CH
-RMS power, 4 ohms linkable/dual mono	-----	3500W x 1CH
-RMS power, 2 ohms linkable/dual mono	-----	5700W x 1CH
Signal to noise ratio	-----	>90dB
Low pass frequency crossover	-----	30Hz~250Hz
Subsonic filter	-----	10Hz~60Hz
Bass boost @ 45Hz	-----	0~12dB
Bass boost Frequency	-----	30Hz~90Hz
Phase shift control	-----	0~180 degree
Frequency response	-----	10Hz~350Hz (+/- 1dB)
THD@RMS watts	-----	<1.0%
Efficiency @ 4 ohm	-----	86%
Fuse rating	-----	300A (external type fuse)
Input sensitivity	-----	200mV ~ 6V (+/- 5%)
Dimensions (mm)	-----	235(W) x 52(H) x 524(L)

TROUBLESHOOTING

This power amplifier features an efficient protection system to prevent damages due to overheating, overvoltage, short-circuit and DC at the loudspeaker output. If there is an error or problem, the protection LED will light up red.

To check the problem, first turn down all levels of the head unit and then turn it off.

AMPLIFIER DOESN'T POWER UP / LED DOESN'T LIGHT UP	<ul style="list-style-type: none"> - check condition of ground connection - check if 12V power cable has been connected properly - check condition of remote cable connection - check if fuses have been inserted properly - check voltage on the amplifier
PROTECTION LED LIGHTS GREEN WHEN AMPLIFIER IS SOUNDLESS	<ul style="list-style-type: none"> - check condition of cinch cable - check condition of loudspeaker connection - check condition of head unit
PROTECTION LED LIGHTS RED WHEN AMPLIFIER IS POWERED UP	<ul style="list-style-type: none"> - Check if amplifier is too hot - Check for short-circuit at the loudspeaker output - Check for short-circuits caused by loudspeaker cable with vehicle chassis (ground) - Check if input voltage is too high (Ex: Faulty Lighting Dynamo)
OVERHEATING (PROTECTION LED LIGHTS RED WHEN AMPLIFIER IS POWERED UP)	<ul style="list-style-type: none"> - check impedance - check for problems on loudspeaker - check if there is adequate airflow around the amplifier <p style="text-align: center;">! CAUTION !</p> <p>When changing fuses, make sure you use the fuses with the same values.</p>
ERROR IN AMPLIFIER FUSE	<ul style="list-style-type: none"> - check condition of ground connection - check if correct loudspeaker impedance has been used <p style="text-align: center;">! CAUTION !</p> <p>When changing fuses, make sure you use the fuses with the same values.</p>
SOUND TOO LOW / LOW DISTORTED SOUND	<ul style="list-style-type: none"> - check if input level control "Gain" has been set to match the head unit - check output level control of the head unit - check for problems on loudspeaker - check loudspeaker cables - check if crossover frequencies have been set properly (Check head unit, amplifier, DSP, sound processor, equalizer, frequency bandpassfilter...)
HIGH HISS-ENGINE NOISE FROM SPEAKER	<ul style="list-style-type: none"> - Check condition of ground connection - Check for short-circuits caused by loudspeaker cable with vehicle chassis (ground) - Check if cinch cable (RCA) and/or loudspeaker cables are installed too close to power connection cable - Check if cinch ground (RCA) of head unit is in good condition

⚠ CAUTION ⚠

Please contact your authorized dealer if your amplifier still doesn't work even after following the troubleshooting guides!

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

Opening or disassembling the power amplifier will void your warranty!

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