



## **BAB10 USER MANUAL**

**10" (254 mm) LOW PROFILE  
AMPLIFIED SUBWOOFER**



## Welcome

Thank you for purchasing Boss Audio Systems product. Please read all instructions carefully before operation to ensure you complete understanding and obtain the best possible performance from this product.

## For Safety

- Playing loud music in an automobile can hinder your ability to hear traffic and permanently damage your hearing. We recommend listening at low or moderate levels while driving your car. Boss Audio Systems accepts no liability for hearing loss, bodily injury or property damage resulting from the use or misuse of this product.
- Stop the car before performing any complicated operations.

## Cautions and Notes

- This product is designed to operate on 12V DC, NEGATIVE ground electrical systems.
- DO NOT disassemble the product since there are no user serviceable parts inside.
- Replace the fuse with the same type and rating (20A).
- Do not let pebbles, sand or metallic objects get inside the product.
- To keep the heat dissipation mechanism running effectively, wipe the accumulated dust off periodically.
- Listening to the tape, radio, CD or MD, etc. with loud volume for a long period of time will exhaust the battery, while the engine is turned off or while the engine is idling.
- This product uses BTL (Balanced Transformer Less) amplifier circuitry, i.e., floating ground system, so please comply with the following:
  - Cover the unused terminals with insulating tape to prevent them from short circuiting.
  - When an extension lead is used, it should be as thick and short as possible; connect it firmly with insulating tape.
  - Be sure to leave an appropriate space between the antenna (aerial) and the wires of this product.

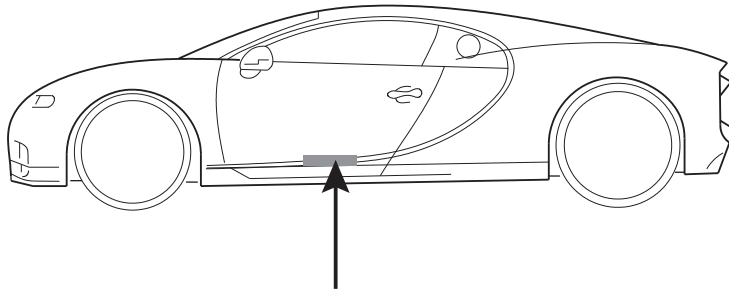
# Installation

## Placement

The following illustration shows a typical installation. To get the best performance from this product, we strongly recommend that installation be entrusted to a qualified professional.

Although these instructions explain how to install the product in a general sense, they do not show specific installation methods that may be required for your particular vehicle.

If you do not have the necessary tools or experience, do not attempt the installation yourself. Instead, ask your dealer about professional installation.



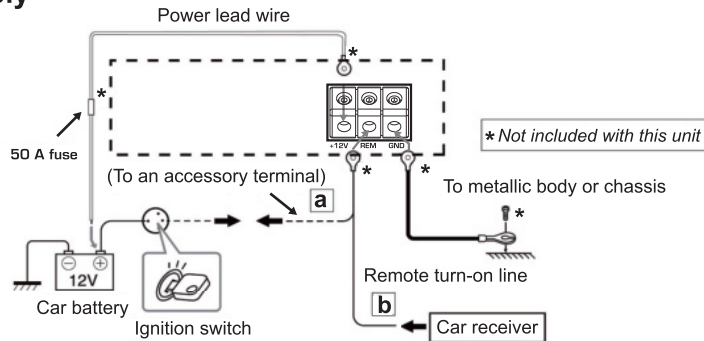
Optional amplifier location

Under front seat or under rear seat or behind rear seat

1. Disconnect the negative (-) lead from your vehicle's battery.
2. At the installation sites, locate and make a note of all fuel lines, hydraulic brake lines, vacuum lines and electrical wiring. Use extreme caution when cutting or drilling in and around these areas.
3. Choose a safe mounting location away from moisture.
4. Make sure there is sufficient air circulation at the mounting location for the product to cool itself.
5. Mount the product such as under the front seat using the supplied hardware.

# Installation

## Power Supply



### CAUTION:

To prevent short circuits while making connections, keep the battery's negative terminal disconnected.

1. When using a power cord, be sure to place the 50A fuse (not included) within 18 inches from the battery.
2. Connect the power lead wire (not included) through which power is supplied directly to the battery's "+" terminal only after all the other connections have been made. The power lead wire connected to the +12V terminal of this unit should have a cross-section of more than 5mm<sup>2</sup> or 8 gauge. Be sure to use a ring terminal (optional) for secure connection.
3. If you have any questions regarding the thickness of the power cord, etc., consult your dealer.

If you use a car receiver without a remote lead (a), connect to the accessory circuit of the car which is activated by the ignition switch. In this case, noise may occur when the car receiver is turned on or off. To avoid this noise, do not turn on or off the car receiver itself. You can turn on or off the car receiver with the on/off operation of the ignition switch.

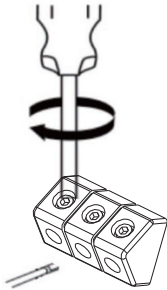
If you use car receiver with a remote lead (b), connect to the REM terminal on this unit.

If the Protection LED glows red, it indicates amplifier in protection mode.

In normal status, the Power LED glows green. Please ensure correct speaker wiring and connections.

**BEFORE connecting the power supply:** securely connect all the parts. If the connections are loose due to contact resistance, etc., heat will break out and may cause an accident. Secure and cover the cords with insulating tape and run them under the car mats.

## Terminal Connections



When making the terminal connections, properly fix the terminal with the screw provided by turning it in the direction as illustrated.

### NOTE:

When you tighten the screw, make sure that the screw is securely fixed in place to prevent disconnection of the terminal.

Avoid over-tightening as it may cause damage to the screw or its head slot.

## Controls

### Low Level Inputs

Using RCA cables (not included), connect the RCA inputs (INPUT L/R) on this unit to the RCA pre-amp outputs on the source unit.

Low level inputs provide an exceptional clean sound from the source unit.

Choose the correct length and style of RCA patch cables for your needs. Better RCAs usually have gold plated connectors and multiple layers of shielding for better noise rejection (consult your dealer).

Be careful when running your RCA patch cables. Car environments are notorious for poorly insulated wires. This means that hiss, engine noise, and fan noise can easily be picked up through RCA cables if run incorrectly. Avoid running your RCAs near large wire looms or electric fans if possible. Run your patch cables on the opposite side of the vehicle as you did the power wire. Be sure to check for correct balance (red is right and black or white is left).

### High Level Inputs

Using the supplied high level input wire, connect the 4-pin jack (HIGH INPUT) on this unit to the speaker outputs on the source unit.

See the next page on how to set high input auto turn on.

High level inputs make this unit virtually adaptable to any source unit. High level inputs should only be used when RCA outputs are not available.

NOTE: Under no circumstances should both low level and high level inputs be used simultaneously.

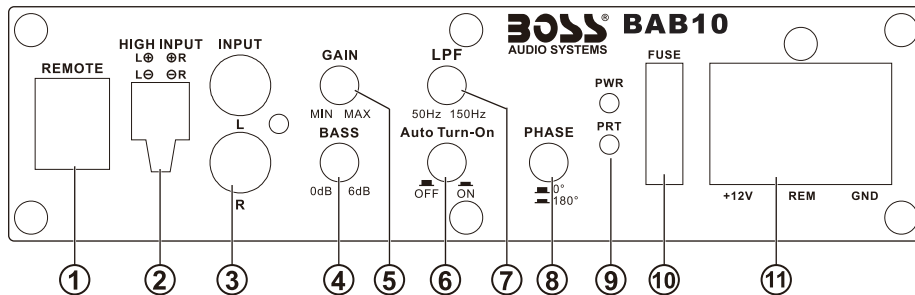
### Gain Control

This control is designed only to match the output level of your source unit to the input level of this unit.

NOTE: The gain control is not a volume control. Follow the three following steps to set the correct input gain. Ignoring the steps below may leave you with damaged speakers and probably a damaged amplifier.

- a. Turn the gain control all the way down
- b. Turn on the source unit and adjust it to 2/3 of the max volume.
- c. Adjust the gain control until desired volume is achieved without audible distortion.

## Controls



### ① Remote Gain

Connect the supplied external remote control to imitate function of gain control knob.

### ② High Level Inputs

Use the high level inputs only if your source unit does not have RCA pre-amp outputs.

### ③ RCA Inputs (Low Level)

RCA inputs are preferred for best audio performance.

### ④ Bass Boost

Add low bass response. Rotate the knob to add 0-6dB of boost centering around 50Hz.

### ⑤ Gain Control

Adjust to match the output level of your source unit to the input level of this unit. See the previous page on how to correctly adjust gain control.

### ⑥ Auto Power On With Smart Sense

**NOTE:** This function works only with high level input connection, and make sure the remote wire is not connected at the REM terminal on the subwoofer. Press the **ON** switch to activate the function. If activated, the unit will auto detect high input signal and power on when the source unit is turned on.

### ⑦ Low Pass Filter

Rotate this knob to set the desired low frequency response from 50Hz to 150Hz.

### ⑧ Phase Control

Set the phase control switch to select phase of the amplifier output signal (0° or 180°).

### ⑨ Power/Protection LED

Green LED: The unit is powered on and operational.

Red LED: The unit is in protection status and not operational. This includes thermal protection mode. If in thermal protection mode, the unit will automatically begin to play again as soon as it has cooled down to operating temperature.

### ⑩ Fuse Holder

When replacing the fuse, use the same type and rating (25A).

### ⑪ Power Terminal

See section "Installation" for **+12V**, **REM** and **GND** connections.

## Troubleshooting

If you have problems using this product, check the following points before you request service. If you still have a problem, contact our technical support.

### **The power LED does not light**

- Check if the fuse is blown.
- Check if the ground lead is connected securely to a metal part of the car.
- Make sure that the equipment connected to this unit is turned on.
- Use a relay if your system employs too many amplifiers.
- Confirm the battery voltage (11V to 16V).

### **The protection LED glows red and/or unit heats up abnormally**

- Leave the unit turned off for a while as it cools down.

### **Auto turn-on function does not work**

- Check if the high level input connection is made.
- Check if the REM (remote turn-on) wire is disconnected.
- Check if auto turn-on function is activated (by pressing the  $\overline{\text{ON}}$  switch on the panel).

### **No sound is heard**

- Check if the unit is powered on (Power LED glows green).
- Check the remote turn-on wire is connected correctly.
- Check the RCA cables are connected to the low input jacks.
- Check the speaker outputs from the source unit are connected to the high input.
- Check the unit is grounded.

### **Alternator noise is heard**

- Keep the power cables away from the RCA cables.
- Keep the RCA cables away from other electrical cables in the car.
- Check the ground wire of this unit is properly connected to a metal part of the car when connecting high level inputs.
- Check the source unit is properly grounded to a metal part of the car.
- Check if the negative speaker leads are touching the car chassis.
- Check if the noise originates in the source unit.
- Replace the plugs or use plugs with load resistors.
- Connect a bypass capacitor across the accessory switches (horn, fan, etc.).

### **Noise when connected to AM (MW/LW) tuner**

- Move the power cables away from the antenna (aerial) cable.

### **Distorted audio**

- Check if input level (gain control) is set properly.
- Check if the amplifier of the source unit is defective.

## Specifications

<b>MODEL</b>		<b>BAB10</b>
P.W.M (Pulse Width Modulated)		✓
Input sensitivity, RCA level		0.2V-6V
Input sensitivity, HIGH level		3V
Remote control for subwoofer level		✓
Phase switch		0°-180°
Bass boost		0dB~+6dB
Fixed subsonic filter		20Hz
LPF filter		50Hz-150Hz
T.H.D		<0.38%
Output power		up to1200W
High level inputs with auto start smart turn-on		✓
Soft delayed remote turn-on		✓
Protection circuit	Thermal protection circuit	✓
	Short protection circuits	✓
LED indicator		Green-Power On Red-Protection
Single voice coil loud speaker		✓
Signal-to-noise ratio		>98dB
Frequency response		15Hz-120Hz
Fuse rating		25A
Slim woofer		10" (2.6 Ohms)
Dimensions (L x W x H)		14.0" x 12.25" x 3.25"

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# Notes



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