

NBF103A

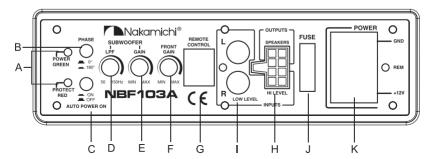
10" (2.1ch) Active Aluminum Subwoofer

User Manual

www.nakamichicaraudio.com



Panel controls and features



A.POWER STATUS LED

This bi-color LED glows green when power is on and no problems are present. If one of the protection circuits comes on, it will change to red

B.PHASE SHIFT

Use this switch to help compensate for time alignment problems in the system. Such problems usually result from having the subwoofer at a different distance from the listener than the other speakers in the system.

C.AUTO POWER ON

The AUTO POWER ON(ON/OFF) is for high level (speaker-level) connections. When the switch is in the "ON" position, the subwoofer AUTO POWER ON when there is signal input. If the amplifier detected no signal input, the amplifier will auto turn off. If you prefer to use the remote turn on/off connection, the switch is in the OFF position.

Note: Please connect the remote terminal to the remote output of head unit as Fig.5 when you hear the unit turn ON/OFF POP noise from the subwoofer.

D.LOW PASS FILTER

This control permits you define the frequency range you want the subwoofer amplifier to receive. The subwoofer will reproduce all sound BELOW the frequency you set.

Note: The low pass filter frequency can be higher or lower than the standard. There have +/-20% tolerance.

EF.INPUT GAIN CONTROL

After you have installed your system, turn this control to minimum.

Turn the head unit on (and the subwoofer will turn on via the remote connection). Turn the head unit volume to about 2/3 full level

Slowly turn up the subwoofer input gain control until you hear a small amount of distortion. Then reduce the level until the distortion is completely gone. Level the control at this setting.

G.REMOTE LEVEL CONTROL PORTL

Attach the included remote level control to control the volume level of the subwooer independently.

H.OUTPUT/HI LEVEL INPUT

The output / high level terminal permits for high-level signal in (below part: HI LEVEL INPUT). It also allows for the amplified signal to be sent to your speakers system (above part: OUTPUT) for a true 2.1 system.

Note: If you are using the RCA inputs (low level) you must disconnect the high-level plug on the cable beam in order to achieve the 2.1 system(2x50W RMS). You must respect this order, If not you might damage the product.

I.LOW LEVEL RCA INPUTS

Low level inputs are the recommended way to introduce the audio signal to the subwoofer if RCA outputs are present on your head unit or other signal source (such as a sound processor).

J.FUSE

Do not use a fuse with a different value and NEVER replace the fuse with a wire or coin.

K POWER INPUT TERMINAL

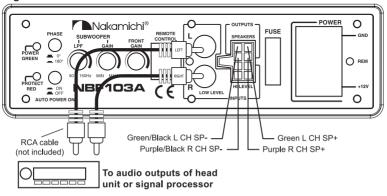


Low Level Input Wiring

Low-level (RCA) input wiring is preferred for best audio performance. Most trunk and underseat installations will require a 6-12 feet RCA cable. Always use a high quality cable.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to vour amplifier at the same time!

Fig.1



High Level Input Wiring

The high level input(s) should only be used when your receiver lacks RCA outputs. If the RCA outputs are not present, connect the speaker outputs from the receiver to the high level input connector of the amplifier. Be sure to observe polarity to avoid audio phase problems.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

Fig.2 Wiring Method A

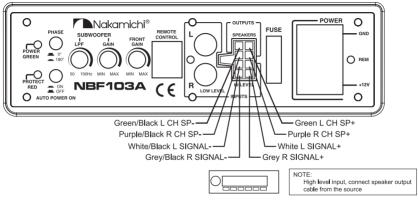
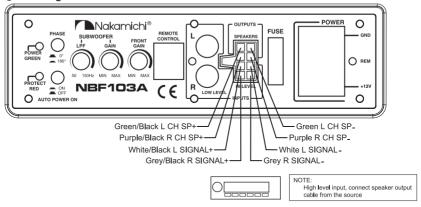




Fig.3 Wiring Method B



NOTE: You may not hear any sound when using option A with older head units. If that is the case please change speaker phase as per option B.

Power Connections

Connect the ground terminal to the closest point on the chassis of the vehicle. Use 8 gauge(or heavier) wire to connect the ground cable.

Connect the remote terminal to the remote output of head unit using 16 gauge (or heavier) wire.

Connect an empty fuse holder within 16" (40 cm) of the car battery, and run 8 gauge (or heavier) cable from this fuse to the amplifier location. Then connect the fuse holder to the "BATT+" (+12V) connection on the subwoofer rear panel.

Fig.4

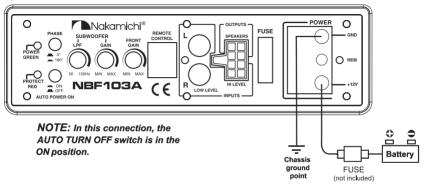
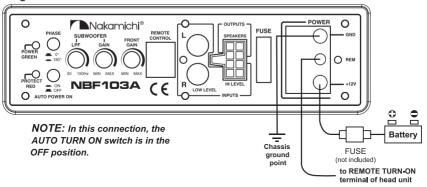


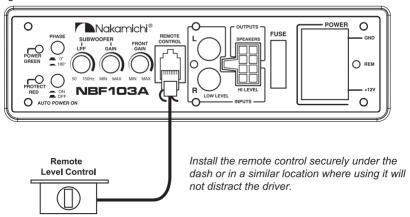


Fig.5



Remote Level Control Connection

Fig.6





Specifications

MODEL: NBF103A	SUB	FRONT
RMS power	150W@2ohm	2x50W@4ohm
THD	<0.4%	<0.1%
Signal-to-noise ratio	>90dB	>100dB
Frequency response	20Hz - 150Hz	30Hz - 20KHz
Input sensitivity, high level	0.5V	1.0V
Input sensitivity, low level	100mV	300mV
Low Pass Filter	50Hz - 150Hz	1
Load	2 ohm	4-8 ohm
Fuse rating	30A	
Subwoofer	10inch,2ohm	
Dimensions(L x W x H) mm	365 x 290 x 80	

All specifications subject to change without notice.

ACCESSORY LIST	
1.Owner's Manual	2pieces
2.Mounting Screw (Ø4×25mm)	4pieces
3.Mounting Screw (Ø3×14mm)	2pieces
4.Mounting Screw (Ø4×6mm)	8pieces
5. High Level Input Cable / Amplifier Output	1piece
6.Remote Cable	1piece
7.Remote Control	1piece
8.Mounting Bkt	4pieces
9.3.0mm"L"type Wrench	1piece
10.Magic Tape(38x80mm)	2pieces



Troubleshooting

If you experience operation or performance problems with this product, compare your installation with the electrical wiring diagram on the previous pages. If problems persist, read the following troubleshooting tips which may help eliminate the problems.

SYMPTOM	POSSIBLE REMEDY
Amplifier will not power up	Check to make sure you have a good ground connection. Check that the Remote Input (Turn-On) has at least 5VDC. Check that there is battery power on the (+) terminal. Check that there is at least 12v. Check the fuse, replace if necessary. Make sure that the Protection LED is not illuminated. If it is lit, shut off the amplifier briefly, and then repower it.
Protection LED comes on when amplifier is powered up	Check for short circuits on speaker leads. Turn down the volume control on the head unit to prevent overdriving. Remove speaker leads, and reset the amplifier. If the Protection LED still comes on, then the amplifier is faulty and needs servicing.
No output	Check that all fuses are OK. Check that the unit is properly grounded. Check that the Remote Input (Turn-On) has at least 5V DC. Check that the RCA audio cables are plugged into the proper inputs. Check all speaker wiring.
Low output	Reset the Level Control. Check the Crossover Control settings.
High hiss in the sound	Disconnect all RCA inputs to the power sub's control panel. If the hiss disappears, then plug in the component driving the amplifier and unplug its inputs. If the hiss disappears at this point, go on until the faulty/noisy component is found. It is best to set the amplifier's input level control as low as possible. The best subjective signal-to-noise ratio is achieved in this manner. Try to set the head unit as high as possible (without distortion) and the amp input level as low as possible.
Squealing noise is present	Check for improperly grounded RCA interconnects.
Distorted sound	Check that the Input Level Control is set to match the signal level of the head unit. Always try to set the Input Level as low as possible. Check that all crossover frequencies are properly set. Check for short circuits on the speaker leads.
Amplifier gets very hot	Check that the minimum speaker impedance for the amp model is correct. Check that there is good air circulation around the amp. In some applications, it may be necessary to add and external cooling fan.
Engine noise (static type)	This is usually caused by poor quality RCA cables, which can pick up radiated noise. Use only the best quality cables, and route them away from power cables.
Engine noise (alternator whine)	Check that the RCA grounds are not shorted to the vehicle chassis. Check that the head unit is properly grounded.

