

NGTD600.1/NGTD1200.1

EN User manual

Picture of NGTD series take NGTD1200.1 as example.

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1. Important

Safety

- Please read and understand all the instruction before you use the apparatus. Misuses are excluded from the warranty.
- This unit is designed for negative ground (earth) 12VDC operation only.
- Use only the supplied mounting hardware for safe and secure installation.
- To ensure safe driving, adjust the volume to a safe and comfortable level.
- To avoid short, never pour water on the product or place the product into the wet environment.
- Never expose the apparatus to direct sunlight, naked flames or heat.
- Clean the apparatus with soft, damp cloth. Never use substances such as alcohol, chemical or household cleaners on the apparatus.

Notice

Environmental Information

All unnecessary packaging has been omitted. We have tried to make the packaging easily to separate into three material: cardboard (box), polystyrene foam (buffer) and polyethylene (bags, protective foam sheet).

Your system consists of materials which can be recycled and reused if disassembled by a specialized company. Please observe the local regulations regarding the disposal of packaging materials, exhausted batteries and old equipment.

The appearance, parameter and the accessories of the product follows what it is.

Specifications are subject to change without notice. Trademarks are the property of Nakamichi or their respective owners. Nakamichi reserves the right to change products at any time without being obliged to adjust the earlier supplies accordingly.

2. System Equipment

Thank you for your purchase, and welcome to Nakamichi ! In order to enjoy the better service from us, please keep your original invoice well and complete the warranty card. You'd better post the copy of the warranty card back to the appointed service agent of Nakamichi, so that you may get more technical support.

Accessory List

1.Owner's manual	1piece
2.Mounting screw	4pieces
3.Fuses	2pieces or 3pieces <small>(NGTD600.1) (NGTD1200.1)</small>
4.Allen key	1piece

Feature

- ◆ The NGTD Series use high quality double Layer PCB.
- ◆ Uniquely designed high efficient power transformer.
- ◆ Power supply switching FET.
- ◆ 12dB/Oct stereo crossover filter.
- ◆ Use highly quality deluxe guage input RCA and deluxe guage power terminal connector.
- ◆ Use Class-D circuitry.
- ◆ Power and protect indicators.

3. Installation

Warning: Play music too loud in an automobile can hinder your ability to hear the traffic and permanently damage your hearing. We recommend listening at low or moderate levels while driving. Nakamichi accepts no liability for hearing loss, bodily injury or property damage resulting from the use or misuse of this product.

Important: To get the best performance from your Nakamichi NGTD Series amplifiers, we strongly recommend that installation be entrusted to a qualified professional. Although the instruction explains how to install this amplifiers 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, please ask your authorized Nakamichi car audio dealer about professional installation.

Installation Warnings and Tips

- ◆ Always wear protective eyewear when using tools.
- ◆ Turn off all audio systems and other electrical devices before you start. Ensuring the safety of the positive connection.
- ◆ Make sure that both sides of the planned mounting surface are clean before drilling or installing any screws. Remember that the screws can pass through the barrier .
- ◆ At the installation sites, locate and make a lot of all fuel lines, hydraulic brake lines, vacuum lines, and electrical wiring. Use extreme caution when cutting or drilling in and around these areas.
- ◆ Before drilling of cutting holes, use a utility knife to remove unwanted fabric or vinyl to keep material from snagging in drill bit.
- ◆ When routing cables, keep input-signal cables away from power cables and speaker wires.
- ◆ When making connections, make certain they are secure and properly insulated.

Choosing a Mounting Location

Amplifiers need air to stay cool. Suitable locations are under a seat. (Provided the amplifier doesn't interfere with the seat adjustment mechanism), in the trunk, or in any other location which provides enough air for the amplifier to cool itself. For the heat sink of the Nakamichi on the both side, Note convection cooling of the both heat sink, and keep the bottom or top of the amplifier no-touching any fabric or vinyl material.

Mounting Dimensions

Mount the amplifier so that it remains dry, and attaches the amplifier to the mounting surface with screws. Make sure the amplifier is mounted securely.

Power Connection

Connect a wire directly to the vehicle's positive battery terminal, and install an appropriate fuse holder within 400mm of the battery terminal. Route the wire to the Amplifier's location, and connect it to the Amplifier's positive terminal (+12V). Be sure to use appropriate grommets whenever routing wires through the firewall or other sheet metal. Failure to adequately protect the positive wire from potential damage may result in a vehicle fire. When you have done routing and connecting this wire, you may install the fuse near the battery.

Remote Connections

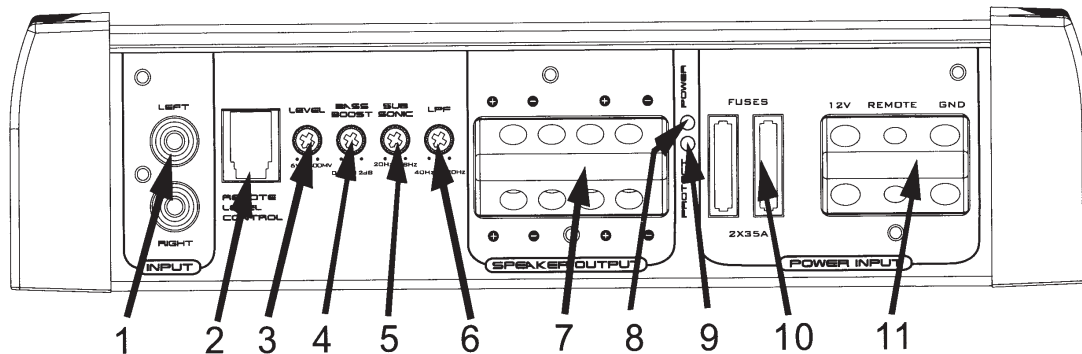
Connect the amplifier's Remote (REM) terminal to the source unit's remote turn on lead using a minimum of 18-gauge wire.

Speaker Connections

Speaker connections should be made use a minimum of 12-gauge wire.

4. Control Function

Rear Panel



1. RCA Audio Input Connection

Using high quality shielded stereo RCA cables, connect the Source signal to the amplifier RCA inputs.

2. Remote Level Control Connection

Connect the remote level control to this terminal. The remote level control allows adjustment of the subwoofer level from a remote location in the vehicle .

3. Level Sensitivity

Adjust the amplifier amp sensitivity level . The minimum sensitivity level is 200mV, while the maximum level is 6V .

4. Bass Boost

Adjust the amplifiers 45Hz Bass Boost level up to 12dB .

5. Subsonic Crossover

Adjust the frequency setting of the subsonic crossover . The frequency range is 20Hz-38Hz. Frequencies lower than the setting will be filtered out of the audio signal.

6. Low Pass Crossover

Adjust the frequency setting of the low pass crossover . The frequency range is 40Hz-220Hz . Frequencies higher than the setting will be filtered out of the audio signal.

7. Speaker Power Terminal

Connect the subwoofer(s) to the corresponding (+)&(-) terminals . If only one subwoofer with 1Ω is used, use only one (+)&(-) terminal . If two subwoofers are used with 2Ω each, use one (+)&(-) terminal for each subwoofer .

8. Power Indicator LED

When the amplifier is on and in proper working condition, this LED will illuminate blue .

9. Protect Indicator LED

If the amplifier activates protection mode, this LED will illuminate red .

10. Fuses

The fuses protect the amplifier against internal electrical damage. When changing a fuse please always replace with one of the same value.

11. Speaker Power Terminal

GND: Connect the proper gauge ground wire to the amplifier “GND” terminal and run the cable to the battery’s negative (-) terminal.

REM: Connect the remote terminal to the remote output of your head unit.

+12V: Connect the proper gauge power wire to the amplifier “+12V” terminal and run wire to the battery’s positive (+) terminal. Please use 4 gauge cable or bigger. Always protect this wire by installing a fuse within 400mm of the battery terminal connection.

**WARNING! Never connect the speaker cables to the vehicle body.
Don't use speaker impedance lower than 1Ω in bridged mode.**

Specification

MODEL	NGTD600.1
Power supply voltage	9-16VDC
Idling current	1.4A
Output power (RMS) @ 14.4V/4Ω	1x300W
Output power (RMS) @ 14.4V/2Ω	1x500W
Output power (RMS) @ 14.4V/1Ω	1x600W
Output power (MAX)	6000W
Frequency response	10Hz-220Hz
Low pass filter	40Hz-220Hz
High pass filter	38Hz-220Hz
Distortion(THD)	≤1%
Low Input	200mV-6V
Signal to noise ratio+A	≥100dB
Fuse	35Ax2
Dimension (LxDxH)	240x207x55mm

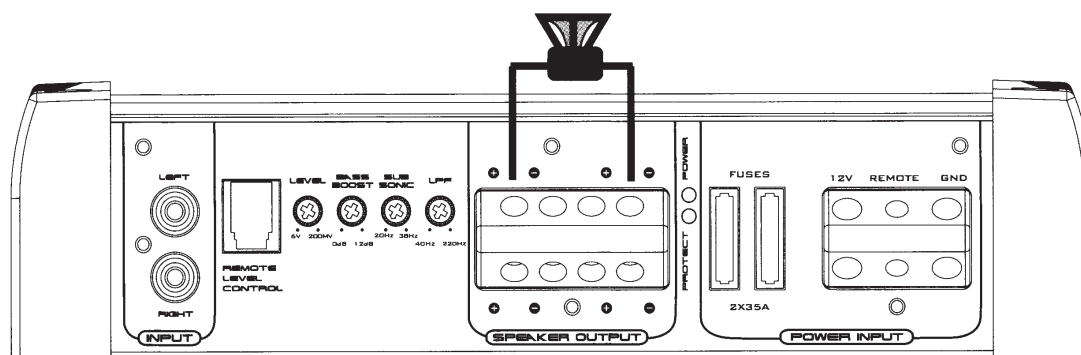
System Examples

This NGTD600.1 can operate in one channel mode.

Be sure to have the positive wire from the speaker connected to the speaker terminal of the amplifier.

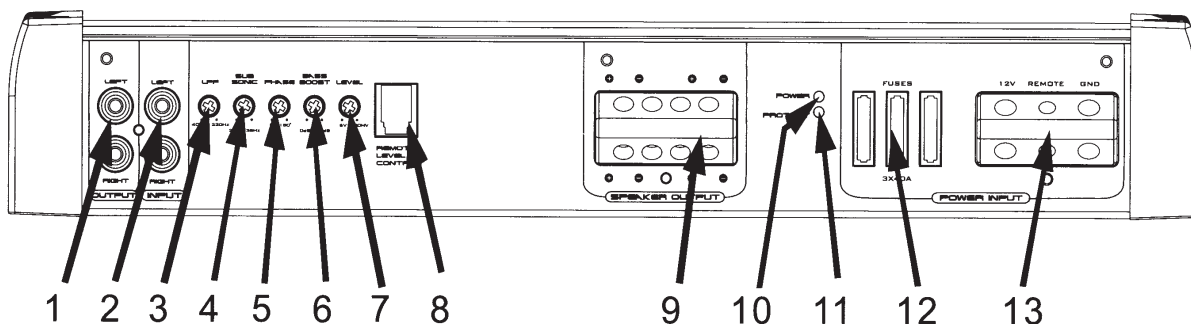
Reversing any of these connections will result the speaker cones moving out of phase which causes bass cancellation.

1-Channel Configuration



5. Control Function

Rear Panel



1. RCA Audio Output Connection

Using high quality shielded stereo RCA cables, connect the audio signal to the RCA audio inputs input of additional system component.

2. RCA Audio Input Connection

Using high quality shielded stereo RCA cables, connect the Source signal to the amplifier RCA inputs.

3. Low Pass Crossover

Adjust the amplifier amp sensitivity level . The minimum sensitivity level is 200mV, while the maximum level is 6V.

4. Subsonic Crossover

Adjust the frequency setting of the subsonic crossover . The frequency range is 20Hz-38Hz. Frequencies lower than the setting will be filtered out of the audio signal.

5. Phase

Adjust the phase setting, The phase position range is 0°-180°.

6. Bass Boost

Adjust the amplifiers 45Hz Bass Boost level up to 12dB.

7. Level Sensitivity

Adjust the amplifier amp sensitivity level . The minimum sensitivity level is 200mV, while the maximum level is 6V.

8. Remote Level Control Connection

Connect the remote level control to this terminal . The remote level control allows adjustment of the subwoofer level from a remote location in the vehicle .

9. Speaker Power Terminal

Connect the subwoofer(s) to the corresponding (+)&(-) terminals . If only one subwoofer with 1 Ω is used , use only one (+)&(-) terminal . If two subwoofers are used with 2 Ω each , use one (+)&(-) terminal for each subwoofer .

10. Power Indicator LED

When the amplifier is on and in proper working condition, this LED will illuminate blue .

11. Protect Indicator LED

If the amplifier activates protection mode, this LED will illuminate red .

12. Fuses

The fuses protect the amplifier against internal electrical damage. When changing a fuse please always replace with one of the same value.

13. Speaker Power Terminal

GND: Connect the proper gauge ground wire to the amplifier “GND” terminal and run the cable to the battery’s negative(-) terminal.

REM: Connect the remote terminal to the remote output of your head unit.

+12V: Connect the proper gauge power wire to the amplifier “+12V” terminal and run wire to the battery’s positive (+) terminal. Please use 4 gauge cable or bigger. Always protect this wire by installing a fuse within 400mm of the battery terminal connection.

**WARNING! Never connect the speaker cables to the vehicle body.
Don’t use speaker impedance lower than 1 Ω in bridged mode.**

Specification

MODEL	NGTD1200.1
Power supply voltage	9-16VDC
Idling current	1.6A
Output power (RMS) @ 14.4V/4Ω	1x400W
Output power (RMS) @ 14.4V/2Ω	1x800W
Output power (RMS) @ 14.4V/1Ω	1x1200W
Output power (MAX)	8000W
Frequency response	10Hz-220Hz
Low pass filter	40Hz-220Hz
High pass filter	38Hz- 220Hz
Distortion(THD)	≤1%
Low input sensitivity	200mV-6V
Signal to noise ratio+A	≥100dB
Fuse	40Ax3
Dimension (LxDxH)	360x207x55mm

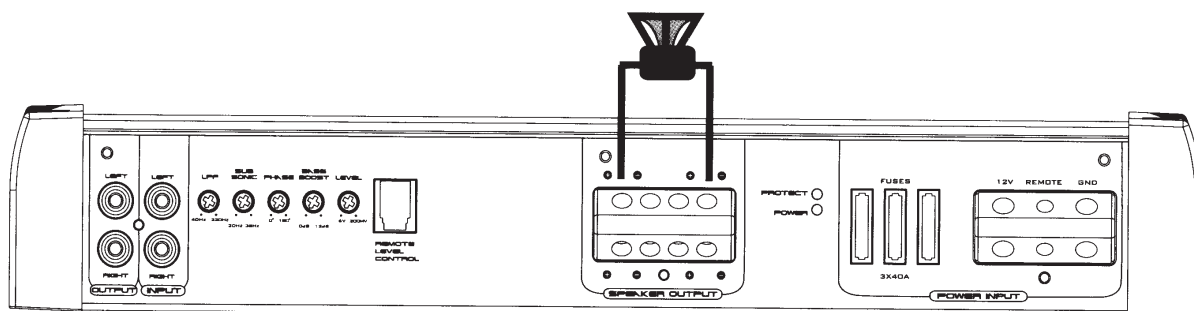
System Examples

This NGTD1200.1 can operate in one channel mode.

Be sure to have the positive wire from the speaker connected to the speaker terminal of the amplifier.

Reversing any of these connections will result the speaker cones moving out of phase which causes bass cancellation.

1-Channel Configuration



6. Troubleshooting

1. Status LED on Amplifier not lit when head unit (source) turned on, please verify:

- Remote turn-on wire from source to amplifier has proper voltage.
- Power (B+) connections at amplifier, terminal blocks, and battery are secure.
- Ground (GND) connections at amplifier and vehicle chassis are secure.
- Amplifier fuse or Battery B+ is OK.
- B+ at battery and B+ amplifier have proper voltage.

2. Status LED Lit, no output from Speakers in Normal Operating Condition, please verify:

- High-level cables from speaker(s) to amplifier are securely connected.
- RCA cables from amplifier to source are securely connected.
- Volume adjustment on amplifier is correctly adjusted.

3. Engine Noise From Speaker(s), please verify:

- Turn source OFF, Disconnect RCA cables at amplifier if noise stops, check equipment and cables leading to amplifier.

4. Amplifier output distorted music not recorded with Intentional Distortion, please verify:

- Source output to amplifier is not distorted.
- Source output sensitivity is correctly adjusted.

5. Amplifier Shuts down, Red LED are lit Amplifier is in Thermal Protection Mode, please verify:

- Amplifier is mounted with adequate air circulation around vents.
- Amplifier is not mounted under carpet.
- Speakers meet correct impedance for application.

6. Amplifier does not turn on, and Red LED is lit amplifier not connected to a short-circuit Speaker, please verify:

- Speaker crossover is not defective.
- High-level cables from speaker to amplifier are not shorted.



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