

**NGTA602/NGTA704**

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**EN User manual**

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**CN 用户手册**

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**Picture of NGTA series take NGTA704 as example. NGTA系列产品图片以NGTA704为例。**

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## 1. Important

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### 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.

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### 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.

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### Accessory List

1. Owner's manual	1 piece
2. Mounting screw	8 pieces
3. Fuses	1 piece or 2 pieces <small>(NGTA602) (NGTA704)</small>
4. Wire stock	1 piece or 2 pieces <small>(NGTA602) (NGTA704)</small>
5. Allen key	1 piece or 2 pieces <small>(NGTA602) (NGTA704)</small>

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### Feature

- ◆ The NGTA Series use high quality one Layer PCB.
- ◆ Uniquely designed high efficient power transformer.
- ◆ Power supply switching FET.
- ◆ 12dB/Oct stereo crossover filter.
- ◆ NGTA602 and NGTA704 have high pass/low pass/ full range switching function.
- ◆ Use highly quality deluxe guage input RCA and deluxe guage power terminal connector.
- ◆ Use Class-AB 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 NGTA 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.

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### Installation Warnings and Tips

- ◆ Always wear protective eyewear when using tools.
- ◆ Turn off all audio systems and other electrical devices before you start. Disconnect the (+) negative lead from your vehicle's battery.
- ◆ 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.

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### **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.

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### **Mounting Dimensions**

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

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### **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.

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### **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.

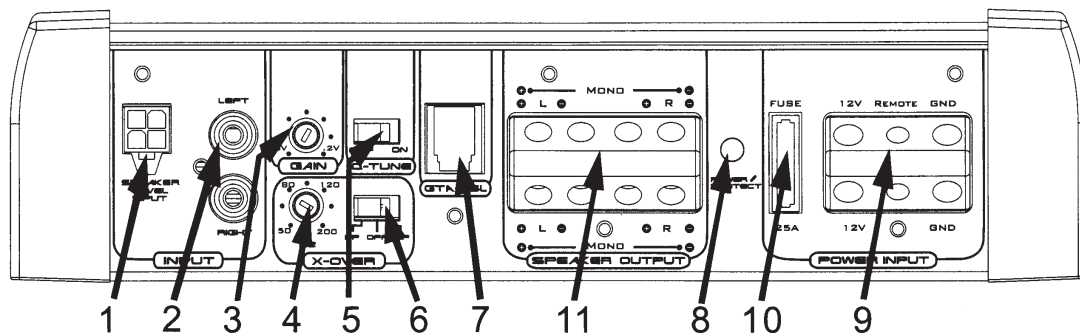
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### **Speaker Connections**

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

## 4. Control Function

### Rear Panel



#### 1. High Inputs

High Level Inputs .

#### 2. RCA Inputs

RCA Inputs of channels left and right.

#### 3. Inputs Gain Control

To adjust the sensitivity, turn the control fully counterclockwise to minimum. Adjust the radio /head unit volume knob to maximum volume, and then turn this controls on the amplifier clockwise until audible distortion occurs.

#### 4. HPF and LPF Frequency Controller

Controls the high and low pass frequency of the amplifier at 50Hz or 200Hz.

#### 5. Bass Boost

For adjusting input signal bass boost level at 0dB or 6dB.

#### 6. Crossover Switch

Switches the left and right channels in low pass, full range or high pass mode.

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### 7. Cable terminal of LP Level remote control.

Connect the regulator of level remote control to the cable terminal.

### 8. Protect/Power LED

The LED lit's red if the amplifier is in safety mode.

The LED lit's green if the amplifier is in use.

### 9. 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 8 gauge cable or bigger. Always protect this wire by installing a fuse within 400mm of the battery terminal connection.

### 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 Terminal

Connect the channels left and right to the speakers left and right. Be sure of right polarity. Use only the output R- and L+ to bridge the channels.

**WARNING! Never connect the speaker cables to the vehicle body. Don't use speaker impedance lower than 2Ω in stereo or 4Ω in bridged mode.**



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**Specification**

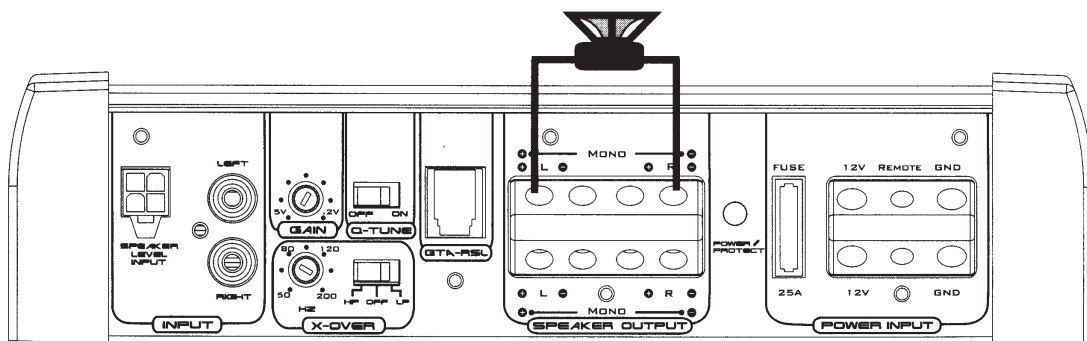
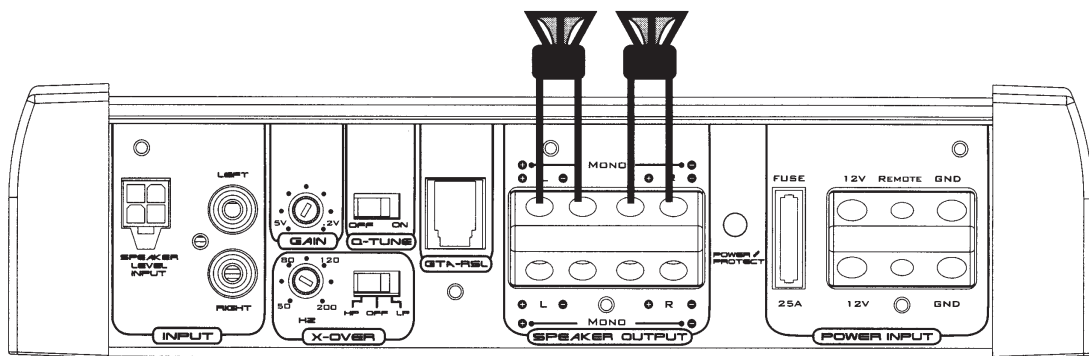
<b>MODEL</b>	<b>NGTA602</b>
Power supply voltage	9-16VDC
Idling current	0.6A
Output power (RMS) @ 14.4V/4Ω	2x60W
Output power (RMS) @ 14.4V/2Ω	2x90W
Output power (RMS) @ 14.4V/4Ω Bridged	1x180W
Output power (MAX)	2500W
Frequency response	10Hz-50KHz
Low pass filter	50Hz or 200Hz
High pass filter	50Hz-200Hz
Distortion(THD)	≤1%
High Input	400mV-10V
Low Input	200mV-5V
Signal to noise ratio	>90dB
Fuse	25A
Dimension (LxDxH)	240x207x55mm

### System Examples

This amplifier can operate in two channel mode. The minimum impedance for stereo operation is 2 Ohm per channel. The minimum impedance for bridged operation is 4 Ohm. Be sure to have the positive wire from the speaker connected to the speaker terminal of the amplifier.

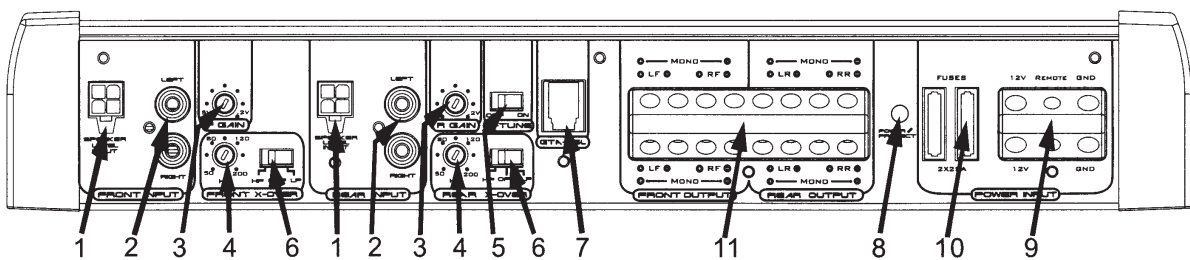
Reversing any of these connections will result the speaker cones moving out of phase which causes bass cancellation.

### 2-Channel Configuration



## 5. Control Function

### Rear Panel



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RCA Inputs of channels left and right.

#### 3. Inputs Gain Control

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Connect the channels left and right to the speakers left and right. Be sure of right polarity. Use only the output R- and L+ to bridge the channels.

**WARNING! Never connect the speaker cables to the vehicle body. Don't use speaker impedance lower than 2Ω in stereo or 4Ω in bridged mode.**

**Specification**

<b>MODEL</b>	<b>NGTA704</b>
Power supply voltage	9-16VDC
Idling current	0.5A
Output power (RMS) @ 14.4V/4Ω	4x60W
Output power (RMS) @ 14.4V/2Ω	4x90W
Output power (RMS) @ 14.4V/4Ω Bridged	2x180W
Output power (MAX)	4500W
Frequency response	10Hz-50KHz
Low pass filter (FRONT)	50Hz or 200Hz
High pass filter (FRONT)	50Hz-200Hz
Low pass filter (REAR)	50Hz or 200Hz
High pass filter (REAR)	50Hz-200Hz
Distortion(THD)	≤1%
High input sensitivity	400mV-10V
Low input sensitivity	200mV-5V
Signal to noise ratio	>90dB
Fuse	25Ax2
Dimension (LxDxH)	360x207x55mm

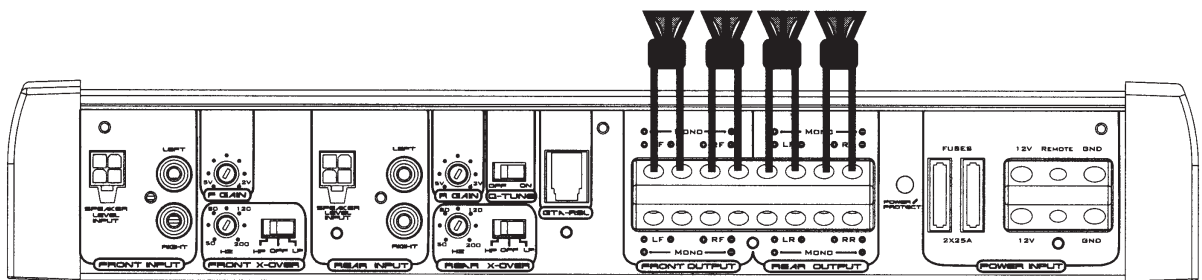
### System Examples

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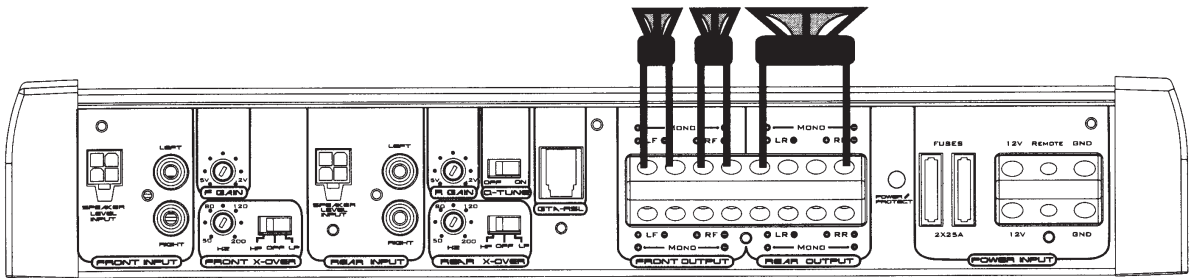
Be sure to have the positive wire from the speaker connected to the speaker terminal of the amplifier.

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

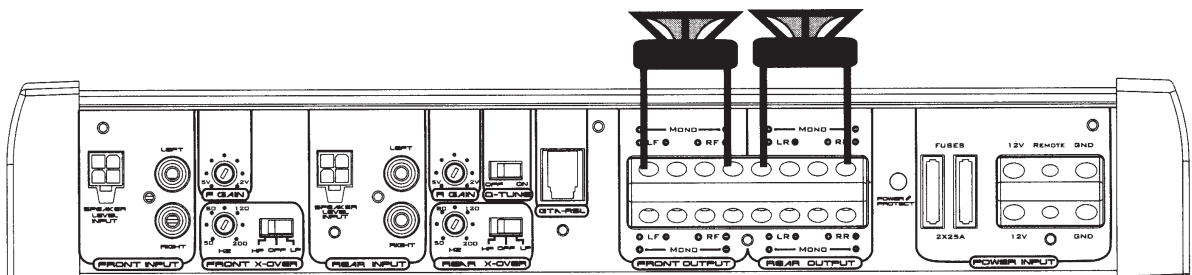
### 4-Channel Configuration



### 3-Channel Configuration



### 2-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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