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Cj( ) THFIRC
Owner's Manual

GT4-400

## INTRODUCTION


It is a state - of - the - art product carefully designed and manufactured for vehicle use and has been thoroughly tested to ensure consistent reliable performance.

Pawer facaustik Amplifiers provide high-performance sound reinforcement for your mobile audio equipment. Its versatility enables compatibility with Frequency Dividing Crossover and other audio processors in a customized system. The Multimode bridging capabilities allow flexibility in hosting several different speaker configuartions.

To achieve optimum performance \& longevity, it is highly recommended that you read and apply the advice in this Owners Manual before beginning installation.


## FEATURES

## GT4-400

- Three-way Protection Circuitly
- Low Level Input Sensitivity : $250 \mathrm{mV} \sim 6 \mathrm{~V}$
- Frequency Response : $10 \sim 35 \mathrm{kHz}$
- Total Harmonic Distortion : $0.05 \%$
- 4 Gauge Power/Ground \& 8 Gauge Speaker Terminals Connection
- High Level Input w/Signal Sense
- Damping Factor: 250
- Signal-to-Noise Radio : 100 dB
- Channel Separation : 65dB


## SPECIFICATIONS

MODEL CHANNEL RMS@4Ohms RMS@2Ohms

Bridged @4Ohms

Max Power
DIMENSIONS (W) $\times(\mathrm{H}) \times(\mathrm{L})$
GT4-400 $4 \quad 45 \mathrm{~W} \times 4 \mathrm{CH} \quad 75 \mathrm{~W} \times 4 \mathrm{CH} \quad-\quad 400 \mathrm{Watt} 9.75 \times 2.375 \times 4.75^{\prime \prime}$

## CONTROLS \& FUNCTIONS GT4-400



## 1. Don't misuse the Level Control!

Do not mistake the input level control for a volume control! It is designed ONLY to match the output level of your audio source to the input level of your amplifier.
Do not adjust this input level to maximum unless your input level requires it.
Ignoring these instructions will result in an input overload to the amplifier, and excessive audio distortion. It can also cause the protection circuit to engage.

## 2. Hi-Input Connector

Do not connect at low input and high input and on same time
Because the sound is very bad.
If your installation by using a high level, you do not need to connect to the remote wire, because a high-level input by detecting the audio signal amplifier is turned on.

To hear a better sound quality, you must be a high level of the ground shall be connected to your Head-unit Ground.

## 3. B+ Terminal (Battery positive)

Due to the power requirements of the Amplifier, this connection should be made directly to the positive(+) terminal of battery. For safety measure, install an in-line fuse holder (not included) as close to the battery positive(+) terminal as possible with an ampere rating : not to exceed total value of fuses on AMP.
4. Remote Power ON

In between the power and ground is remote turn on terminal. This terminal must be connected to a switched +12 Voltage source. You need to use at least 18 gauge to connect remote turn on.

## 5. B-Terminal ( Chassis ground)

To avoid unwanted ignition noise caused by ground loops, it is essential that the Amplifier be grounded to a clean, bare, metal surface of the vehicles chassis.
Note : GROUND WIRE SHOULD NOT BE EXTENDED MORE THAN 3FT (1METER) IN SOMECASES !

## 6. Speaker Terminals

You need to use at least 12 gauge to connect speaker.

## PLANNIGN \& MOUNTING YOUR SYSTEM

The mounting position of your Amplifier will have a great effect on its ability to dissipate the heat generated during normal operation. Under normal conditions, the heatsink will dissipate sufficient heat to avoid thermal shutdown. However please do not install the amplifier in a wooden box or similar device, as this will prevent heat dissipation into the atmosphere.

Temperatures in car trunks have been measured as high as ( $155^{\prime} \mathrm{F}$ ) in the summer time. Since the thermal shut-down point for the amplifier is ( $158^{\prime} \mathrm{F}$ ) it is easy to see that it must be mounted for maximum cooling capability. To achieve maximum advantage of convection air flow in an enclosed trunk, mount the amplifier in a horizontal position.

Cooling requirements are considerably relaxed when mounting inside the passenger compartment since the driver will not often allow temperatures to reach a critical point. Floor mounting under the seat is usually satisfactory as long as there is at least 1 inch of clearance $(2.54 \mathrm{~cm})$ above the Amplifier's fins for ventilation.
A. Select a suitable location that is convenient for mounting, is accessible for wiring, and has ample room for air circulation and cooling.
B. Use the amplifier as a template to mark the mounting holes. Remove the Amplifier and drill holes. Use extreme caution, inspect underneath surface before drilling!
C. Secure the Amplifier using the screws provided.

## Self-Tapping Screw ( $4 \times 20$ )



## GT4-400

4channel mode (only)


Note : " Do not connect bridge output "

## TURNING ON THE AMPLIFIER

The amplifier automatically turns on a few seconds after you turn your vehicle's ignition switch to ACC or ON or turn on your auto sound system, depending on how you wired the system. The POWER Indicator on the top of the amplfier lights when the amplifier is on.
Important :Your amplifier requires 30 amps or more of power from your vehicle's battery during operation. To protect your battery from discharging, do not operate the amplifier unless your vehicle is running.

## ADJUSTING THE AUDID LEVEL

For the best performance, you must set GAIN(MIN/MAX) on the side of the amplifier to adjust the level of the audio signals that enter the amplifier.

1. Use a screwdriver to turn GAIN(MIN/MAX) fully counterclockwise to MIN.
2. Turn the auto sound system's volume control to about one-third of its full range.
3. Adjust GAIN(MIN/MAX) to a comfortable listening level.
4. Turn up the auto sound system's volume control until the sound begins to distort.

Then immediately turn the volume down to a point just before where the distortion began.
Caution : Never turn up the auto sound system's volume control more than needed to adjust the audio level, more than two thirds of its maximum volume.
5. Adjust GAIN(MIN/MAX) until the sound is at the maximum level you want the amplifier to produce.
6. Adjust the auto sound system's volume control to a comfortable listening level.

| SYMPTOMS | CHECK | REMEDY |
| :---: | :---: | :---: |
| NO SOUND | Is the power LED illuminated? (NO) | Check all fuses to amplifier. Be sure Turn-on lead is connected Check signal leads. Check gain control. CheckTuner/Deck volume level. Clean contacts on fuse holders. |
|  | Is the Diagnostic LED illuminated? (YES) | Check for speaker short or amplifier overheating. |
| AMP NOT SWITCHING ON | No power to power wire | Repair power wire or connections. |
|  | No power to remote wire with receiver on | Check connections to radio. |
|  | Burnt or broken fuse | Replace fuse |
| NO SOUND, ON ONE CHANNEL | Check Speaker Leads | Inspect for short circuit or an open connection. |
|  | Check Audio Leads | Reverse Left and Right RCA inputs to determine if the problem is occurring before the amp. |
| AMP <br> TURNING OFF <br> MEDIUM/ HIGH VOLUME | Check Speaker load impedance | Be sure proper speaker load impedance recommendations are observed. <br> (If you use an ohmmeter to check speaker resistance, please remember that $D C$ resistance and AC impedance may not be the same.) |
| PROTECTION LAMP ON | Shut down | Turn radio down Wait for AMP to cool |
|  | Speaker wires shorted | Separate speaker wires and insulate |

## WARNING

Investigate the layout of your automobile through before drilling or cutting any holes. Take care when you work near the gas tanks, lines, or hydraulic lines, and electrical wiring. Don't use power amplifier without securely mounting it. Attach this system securely to the automobile to prevent damage, particularly in the event of an accident. Don't mount this system so that the wire connections are unprotected or are subject to pinching or damage from nearby objects. The +12 V DC power wire must be fused at the battery positive terminal connection. Before making or breaking power connections at this system power terminals, disconnect the +12 V wire at the battery end. Confirm your radio/cassette player and/or other equip is turned off while connecting the input jacks and speaker terminals. If you need to replace the power fuse, replace it only with a fuse identical to that supplied with the system. Using a fuse of different type or rating may result in damage to this system which isn't covered by the warranty.

## Please Keep This Information For Your Record s

Model Number: $\qquad$
Serial Number: $\qquad$
Date Purchased: $\qquad$
Dealer Name: $\qquad$
Dealer Address: $\qquad$

City: $\qquad$ State: $\qquad$ Zip: $\qquad$

Power Acoustik<br>1550 S. Maple Ave. Montebello, CA 90640<br>Attn. Customer Service

## CONSUMER LIMITED WARRANTY

PowerAcoustik Electronics. (The Company) warrants to the original retail purchaser of its products that should this product under normal use and conditions, be proven defective in material or workmanship within 1 Year from the original date of purchase and professional installation or 90 Days if self installed. Those items with manufacturerís defects will be repaired or replaced at our option with without charge for parts and repair labor.

To obtain repair or replacement within the terms of this warranty, the product or products are to be returned with proof of warranty coverage (e.g. a copy of the receipt for your purchase and installation), Specific information of the nature of the defect(s), all transportation costs are to be paid by the sender including a cashieris check for $\$ 15.00$ to cover the return freight and packing.

This warranty does not extend to the elimination of externally generated static or noise, or to cover installation costs for initial installation, removal or reinstallation of the products or to damaged, media sources (DVDís, VHS tapes, Speakers, Amplifiers, Car stereoís or Electrical System Failures).

This warranty does not apply to any product or part thereof which, in the opinion of the company, has been abused or damaged through alteration or modification, improper installation, mishandling, misuse, neglect, accident, or by the removal of the unit. The Extent of the companyís liability under this warranty is limited to the repair or replacement provided above and, in no event, should the companyís liability exceed the purchase price paid by the purchaser for the product.

This warranty is in lieu of all other express warranties or liabilities. Any implied warranties, including any implied warranty of merchantability, shall be limited to the duration of this written warranty. Any action for breach of warranty hereunder including any implied warranty of merchantability must be brought within a period of 48 months from the original date of purchase. In no case shall the company be liable for any consequential or incidental damages for breach of this or any other warranty, express or implied, whatsoever. No person or representative is authorized to assume for the company any liability other than expressed herein in connection with the sale of this product.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damage so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

PowerAcoustik Electronics,
1550 S. Maple Ave. Montebello, CA. 90640
Phone \# 1-800-832-4647

## Owners Registration Card.

Please complete and return immediately to the address on the reverbse side

Name: $\qquad$
Address: $\qquad$
City: $\qquad$ State: $\qquad$ Zip: $\qquad$
Vehicle Make/Model:

## Product Model:

$\qquad$

Serial Number: $\qquad$
Date Purchased:
Name of Dealer:
Dealer Address: $\qquad$
$\qquad$
City:
State:
Zip:
Phone: $\qquad$ Website: $\qquad$


