



Tantrum 200.2 and 250.2 Amplifiers

SPECIFICATIONS

Continuous Output Power at 1% THD (watts):

Tantrum 200.2

Into 4 ohms Stereo @ 12.5 Vdc (IASCA/USAC)20 x 2
Into 4 ohms Stereo @ 14.4 Vdc50 x 2
Into 2 ohms Stereo @ 14.4 Vdc100 x 2
Into 4 ohms Bridged @ 14.4 Vdc200 x 1
Recommended Fuse Size25A ATO style
Dimensions without Endcaps8.4L x 10.0W x 2.35H
Dimensions with Endcaps13.4L x 10.0W x 2.35H

Tantrum 250.2

Into 4 ohms Stereo @ 12.5 Vdc (IASCA/USAC)25 x 2
Into 4 ohms Stereo @ 14.4 Vdc65 x 2
Into 2 ohms Stereo @ 14.4 Vdc125 x 2
Into 4 ohms Bridged @ 14.4 Vdc250 x 1
Recommended Fuse Size25A ATO style
Dimensions without Endcaps8.4L x 10.0W x 2.35H
Dimensions with Endcaps13.4L x 10.0W x 2.35H

Common Specifications

Frequency Response±1dB, 20Hz to 20kHz
Signal to Noise Ratio (A-weighted)>100dB
Input Sensitivity100 millivolts to 4 volts
High Pass Crossover Frequency125Hz Fixed
Low Pass Crossover Frequency90Hz Fixed
Crossover Slope18dB per Octave
Bass Boost0 to +18dB @ 45Hz
DC Input Voltage Range10 volts to 15.5 volts
Typical Current Draw at Idle<2 amps
Minimum Bridged Load2 ohms
Minimum Stereo Load1 ohm
Maximum Power Load4 ohms bridged or 2 ohms stereo

Due to ongoing research and development, features, specifications and availability are subject to change without notice.

LIMITED WARRANTY

Phoenix Gold International, Inc. (or "Phoenix Gold") warrants its products against defects in materials and workmanship for a limited period of time. For a period of one (1) year from date of original purchase, we will repair or replace the electronic product, at our option, without charge for parts and labor. The limited warranty period is EXTENDED to three (3) years from date of original purchase if the product was originally installed by an authorized Phoenix Gold electronics dealer and accompanied by a valid sales receipt showing a charge for installation. Customer must pay all parts and labor charges after the limited warranty period expires. The limited warranty period for factory refurbished products expires after ninety (90) days from date of original purchase. This limited warranty applies only to purchases from authorized Phoenix Gold Electronics/Speaker retailers.

This limited warranty is extended only to the original purchaser and is valid only to consumers in the United States. Consumers are required to provide a copy of the original sales invoice from an authorized Phoenix Gold dealer when making a claim against this limited warranty. This limited warranty only covers failures due to defects in materials or workmanship that occur during normal use. It does not cover failures resulting from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, modification, service by anyone other than Phoenix Gold, or damage that is attributable to Acts of God. It does not cover costs of transportation to Phoenix Gold or damage in transit.

This warranty will become void if the serial number identification has been wholly or partially removed, altered or erased. Repair or replacement under the terms of this warranty does not extend the terms of this warranty. Should a product prove to be defective in workmanship or material, the consumer's sole remedies will be repair or replacement as provided under the terms of this warranty. Under no circumstances shall Phoenix Gold be liable for loss or damage, direct, consequential or incidental, arising out of the use of or inability to use the product. There are no express warranties other than described above.



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PHOENIX GOLD



Tantrum 200.2 and 250.2 2 Channel Amplifiers

FEATURES

* For complete manuals, technical tips, FAQ's, system diagrams and new product information visit us @

- Aluminum alloy cast heatsink with fly cut fins
- Superbrite™ blue power-on LED
- Defeatable 18dB per ctave high or low pass crossover: fixed at 125Hz high pass or 90Hz low pass
- Auxiliary output provides a full range signal to an additional amplifier
- Remote monitoring display output connects to optional RMD voltage display
- Adjustable Twin-T™ bass equalization with +18dB of boost centered at 45Hz
- Tri-Linear™ capability allows simultaneous stereo and bridged mono operation
- Optimized muting circuitry eliminates turn-on and turn-off noises
- Advanced thermal and overload protection
- 2 layer, 2 ounce, copper G10 glass-epoxy printed circuit boards
- Features surface mount technology
- Audiophile grade capacitors and resistors
- Gold plated power and speaker terminals
- Gold plated signal input and output jacks
- Linkable using the optional Tantrum link to connect multiple amplifiers together
- Pictured Endcaps sold separately



Operational Details

FUSE

Used to protect the amplifier. If replacement is necessary, use the same size and type. T250.2 and T200.2: 25 amp ATO. The fuse located on the right or closest to the power terminals is used to protect the amplifier, while the fuse located to the left or closest to the speaker terminals is a spare replacement fuse. *Never use a fuse with a higher amp rating.*

RMD PORT

Connect the optional RMD Voltage Display to this terminal. This allows the amplifier's operating voltage to be monitored from anywhere in the vehicle.

SPEAKER OUTPUTS

Used to connect the amplifier to speakers. Use the left + and right - terminals for bridged mode. Minimum speaker cable size is 16 gauge (PG# SS162 or QS162). Use 12 gauge for bridged operation (SS122 or QS122). Minimum impedance is 2 ohms bridged or 1 ohm stereo.

B+ TERMINAL (Battery Positive)

Minimum 8 gauge wiring. Connect directly to the positive battery terminal. Minimum cable size is 4 gauge. Remember to properly fuse this cable within 18 inches of the amplifier and positive battery terminal.

Amplifier Fuse size

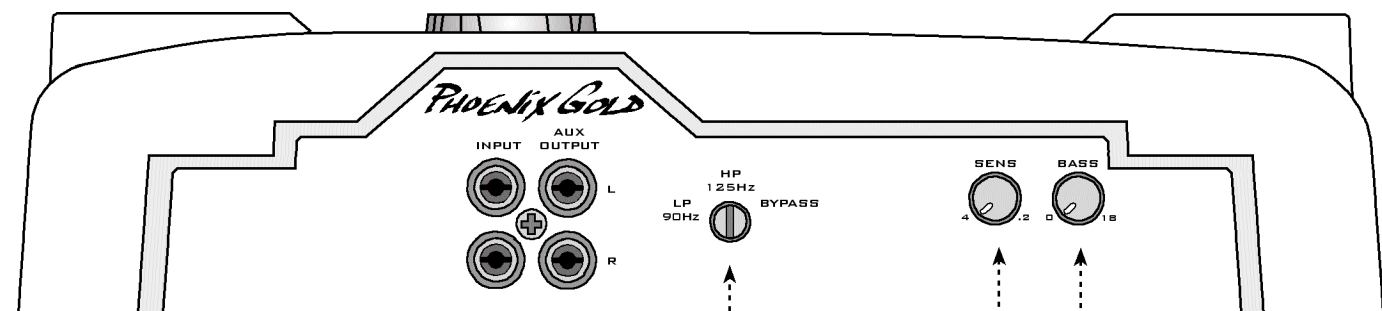
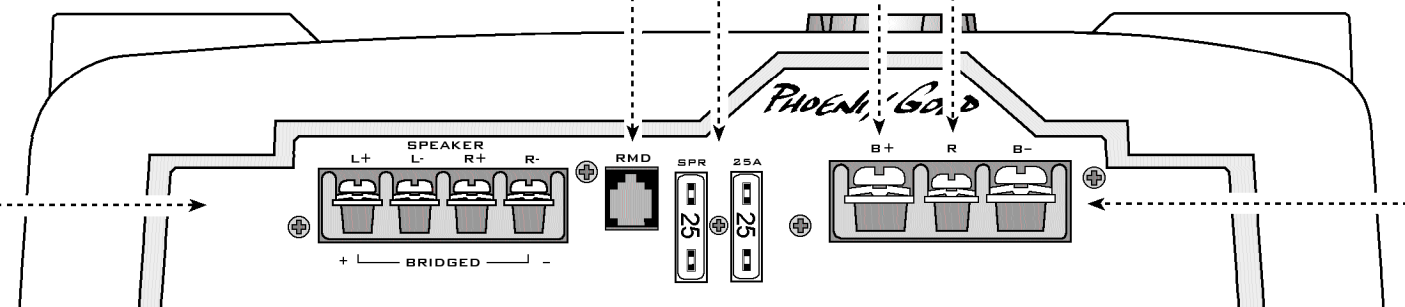
T250.2 25 amp
T200.2 25 amp

B- TERMINAL (Chassis Ground)

Minimum 8 gauge wiring. Connect to a clean, solid chassis ground. Remove all paint and dirt from the chassis connection point. Keep the cable as short as possible.

REMOTE TURN-ON TERMINAL

Connect to a switched 12 Vdc source such as the head unit's "remote" or power antenna wire.



INPUTS

Connect preamp signal cables from the head unit to these terminals. To maximize noise rejection, we recommend using Phoenix Gold ARx.800, ARx.700, ARx.600 or ARx.500 series twisted pair interconnects.

AUXILIARY OUTPUTS

Provides a full range range signal for an additional amplifier or signal processor. The CONFIG switch does not effect the Auxiliary Output's signal.

POWER-ON LED

One Superbrite™ blue LED on top of the amplifier lights when the amplifier is turned on indicating that the amplifier is grounded through the B- terminal and is receiving voltage through the B+ and remote turn-on terminals.

INPUT SENSITIVITY

This control adjusts the amplifier's sensitivity to incoming signals. Clockwise increases sensitivity. Counter-clockwise decreases sensitivity. Higher signal levels allow for a lower sensitivity setting and lower overall noise floor. Lower signal levels will require increased sensitivity to reach full power. To maximize performance, we recommend using a Tantrum Line Driver.

TWIN-T™ BASS EQ

This control allows up to 18dB of boost at 45Hz for the speaker outputs. It cannot affect the auxiliary outputs. Use this control sparingly. Every 3dB of boost requires double the power at 45Hz.

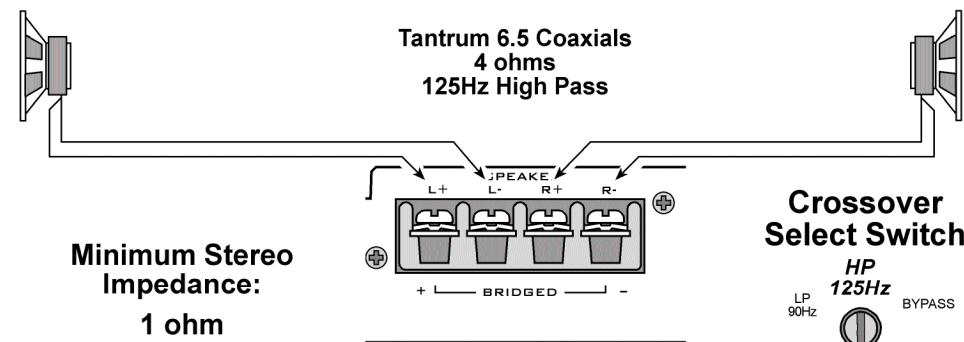
CONFIG SWITCH

This switch controls the type of signal that reaches the speaker outputs. For a High Pass signal fixed at 125 Hz set the switch to HP. For Low Pass signal fixed at 90 Hz set the switch to LP. To bypass the crossover for Full Range signal set the switch to BYPASS.

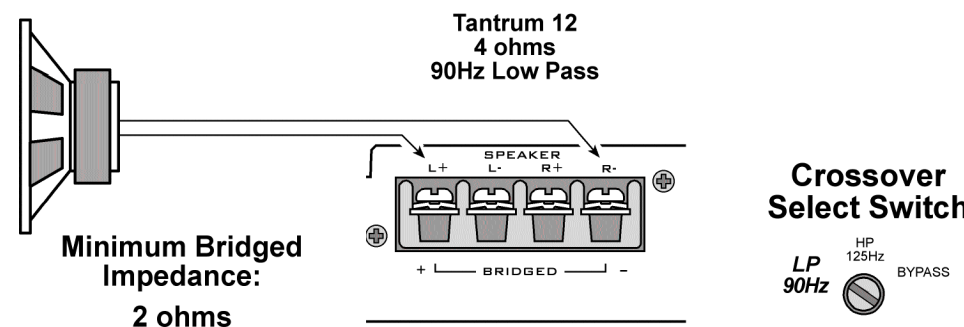


System Examples

SPEAKER OUTPUT	AUXILIARY OUTPUT
HIGH PASS	FULL RANGE



SPEAKER OUTPUT	AUXILIARY OUTPUT
LOW PASS	FULL RANGE



SPEAKER OUTPUT	AUXILIARY OUTPUT
FULL RANGE	FULL RANGE

