

Specifications

OCTANE-R SERIES R4.0:2 and R2.5:2 CLASS A/B 2 CHANNEL AMPLIFIERS

CONTINUOUS OUTPUT POWER RATED AT 14.4 VDC AND 1% THD (WATTS):

R4.0:2

MAXIMUM POWER OUTPUT

INTO 4 OHM STEREO	.125 X 2
INTO 2 OHM STEREO	.200 X 2
INTO 4 OHM BRIDGED	.400 X 1

CONTINUOUS POWER OUTPUT

INTO 4 OHM STEREO	.75 X 2
INTO 2 OHM STEREO	.125 X 2
INTO 4 OHM BRIDGED	.250 X 1

RECOMMENDED FUSE SIZE

CHASSIS DIMENSIONS	.1 X 25 AMP ATO
	.11.75L X 10.875W X 2.25H

R2.5:2

MAXIMUM POWER OUTPUT

INTO 4 OHM STEREO	.80 X 2
INTO 2 OHM STEREO	.125 X 2
INTO 4 OHM BRIDGED	.250 X 1

CONTINUOUS POWER OUTPUT

INTO 4 OHM STEREO	.50 X 2
INTO 2 OHM STEREO	.75 X 2
INTO 4 OHM BRIDGED	.150 X 1

RECOMMENDED FUSE SIZE

CHASSIS DIMENSIONS	.1 X 20 AMP ATO
	.8.75L X 10.875W X 2.25H

FREQUENCY RESPONSE

SIGNAL TO NOISE RATIO	±1dB 20Hz TO 20kHz
	>110dB

SIGNAL INPUT SENSITIVITY

DC INPUT VOLTAGE RANGE	.200 MILLIVOLTS TO 4 VOLTS
	.10 VDC TO 15.5 VDC

TYPICAL CURRENT DRAW AT IDLE

BASS BOOST	<1.5 AMPS
	0 TO 15dB @ 45Hz

CROSSOVER SLOPE

CROSSOVER RANGE	.12dB PER OCTAVE
	.40 TO 400Hz

MINIMUM LOAD STABILITY

	.2 OHM STEREO / 4 OHM BRIDGED
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DUE TO ON-GOING CONTINUOUS PRODUCT 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. Customer must pay all parts, labor and shipping 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.

GARANTIE LIMITÉE

Phoenix Gold International, Inc. (ou "Phoenix Gold") garantit ses produits contre tous défauts matériels et de fabrication pour une période de temps limitée. Pour une période d'un (1) an, comptée à partir de la date d'achat original, nous réparerons ou remplacerons le produit électronique, à notre choix, sans frais de pièce ou de main-d'œuvre. Le client doit payer pour toutes pièces, main-d'œuvre et frais d'expédition une fois la période de garantie limitée expirée. La période de garantie limitée pour des produits remis à neuf en usine expire après quatre-vingt-dix (90) jours comptés à partir de la date d'achat original.

Cette garantie limitée s'applique seulement aux achats provenant de détaillants PG d'Électronique/Haut-parleurs autorisés. Cette garantie limitée ne couvre que l'achat original. Au moment de faire une demande pour faire valoir cette garantie limitée, il peut être exigé des consommateurs de fournir une copie de la facture de vente originale provenant d'un concessionnaire PG autorisé. Cette garantie limitée ne couvre que les défaillances dues aux défauts matériels ou de fabrication qui surviennent lors d'usage normal. Elle ne couvre pas les défaillances survenant par accident, mauvais emploi, abus, négligence, fausse manœuvre, démontage, altération, installation défectueuse, modification, entretien par personne autre que PG, ou dégâts attribuables à une catastrophe naturelle. Elle ne couvre pas les frais d'expédition à PG ou les dégâts survenus en transit.

Cette garantie sera annulée si l'identification du numéro de série a été complètement ou partiellement enlevée, changée ou effacée. La réparation ou le remplacement selon les termes de cette garantie ne prolonge pas les termes de cette garantie. S'il était prouvé qu'un produit a un défaut matériel ou de fabrication, les seuls recours offerts au consommateur seront la réparation ou le remplacement selon les termes de cette garantie. En aucune circonstance PG ne sera responsable pour la perte ou de dégâts directs, indirects ou accidentels, survenant par l'utilisation ou par l'impossibilité d'utilisation du produit. Il n'y a pas de garantie expresse autre que celle décrite ci-dessus.

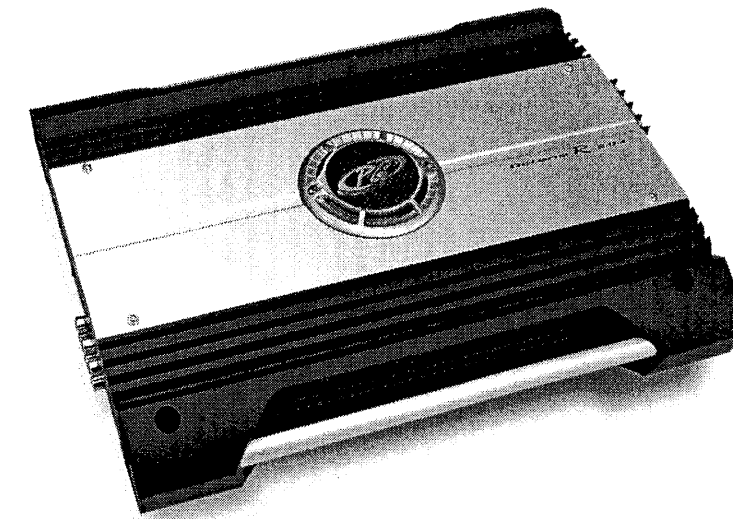
Octane **R**

2 Channel Amplifiers

PHOENIX GOLD

Product Manual

R4.0:2 and R2.5:2



2 CHANNEL POWER AMPLIFIER
AMPLIFICATEUR DE PUISSANCE À 2 CANAUX

ALUMINUM INSERT AND ILLUMINATED CARBON FIBER BADGE
INSERTION EN ALUMINUM ET ÉCUSSON ILLUMINÉ EN FIBRE DE CARBONNE

12dB CONTINUOUSLY VARIABLE HP/LP CROSSOVER (40-400Hz)
FILTRE HP/LP VARIABLE DE 12dB (40-400Hz)

FULL RANGE THRU OUTPUT
SORTIE AUXILIAIRE PLEINE FRÉQUENCE

TWIN "T" BASS EQ CIRCUITRY
CIRCUIT BASSE EQ TWIN "T"

REMOTE MONITORING DISPLAY (RMD) PORT
PORT DE BRANCHEMENT POUR UN AFFICHEUR DE STATUS

OPTIONAL NEON KITS
TROUSSES FACULTATIVES DE NÉON

OPTIONAL REMOTE MONITORING DISPLAY (RMD)
ÉCRAN FACULTATIF POUR CONSULTATION VOLTAGE

OPTIONAL TUNER INSPIRED BLUE OR RED ANODIZED POWER DISTRIBUTION BLOCKS AND AUDIO INTERCONNECTS
BLOCS DE DISTRIBUTION POUVOIR ET CABLES CONNECTENT D'AUDIO FACULTATIFS EN BLEU OU ROUGE ANODISÉ

OPTIONAL TUNER INSPIRED BLUE OR RED ANODIZED TOP-PLATE AND NEON RAIL REPLACEMENT KITS
TROUSSES DE REMPLACEMENT, EN BLEU OU ROUGE ANODISÉ, DE BARRE DE NÉON ET DE LA PREMIER PLAQUE

PHOENIX GOLD

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9300 North Decatur • Portland, OR 97203 • Tel: 503.286.9300 • Fax: 503.978.3380 • www.phoenixgold.com



Operational Details

System Examples

BADGE The badge will light blue to indicate the amplifier has turned on. By removing the two mounting screws the badge can be rotated 90 degrees for additional mounting options.

STATUS LEDs

RED - If the internal heatsink reaches 90 degrees Celsius, the amplifier shuts down until the internal temperature falls below 90 degrees. It also lights if a direct short is present on the speaker outputs.

REMOTE TURN-ON TERMINAL Connect to a switched 12 Vdc source such as the headunit's "remote" or power antenna wire.

B- TERMINAL (CHASSIS GROUND) Connect to a clean, solid chassis ground. Remove all paint and dirt from the chassis connection point. Minimum cable size is 8 gauge. Keep the cable as short as possible.

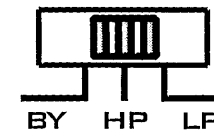
B+ TERMINAL (BATTERY POSITIVE) Connect directly to the positive battery terminal. Minimum cable size is 8 gauge. Remember to properly fuse this cable within 18 inches of the positive battery terminal.

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 4 ohm bridged or 2 ohm stereo.**

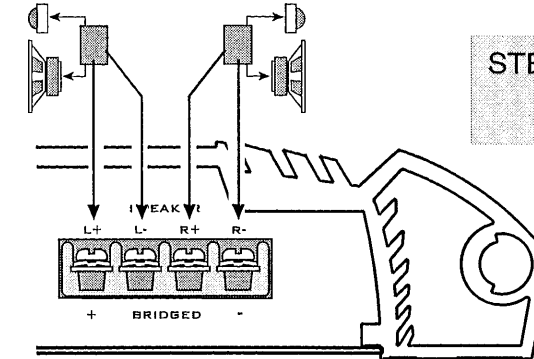
FUSES Used to protect the amplifier. If replacement is necessary, use the same size and type indicated on the endpanel. **Never use a fuse with a higher amp rating.**

REMOTE VOLTAGE DISPLAY INPUT Connect the optional RMD Voltage Display to this jack.

SET CONFIG SWITCH: HP



OCTANE-R 6.5 COMPONENT SPEAKERS
4 OHM STEREO

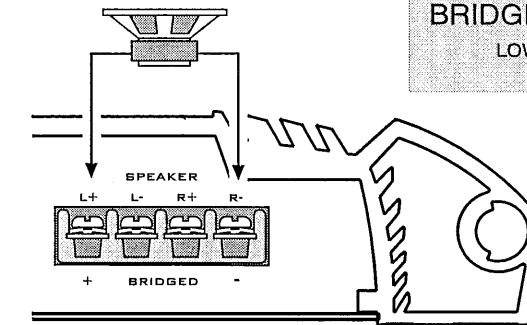


STEREO HIGH PASS SYSTEM
LOWEST RECOMMENDED LOAD
2 OHM STEREO

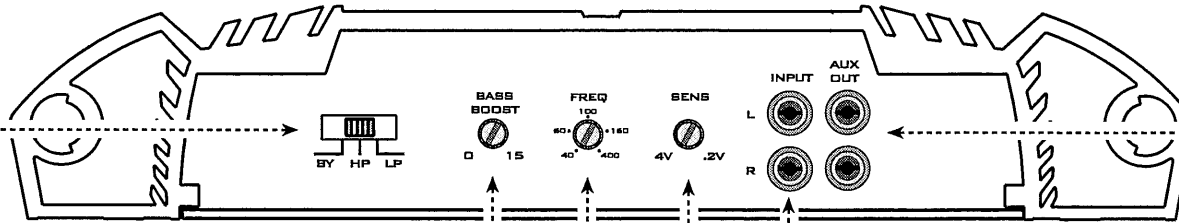
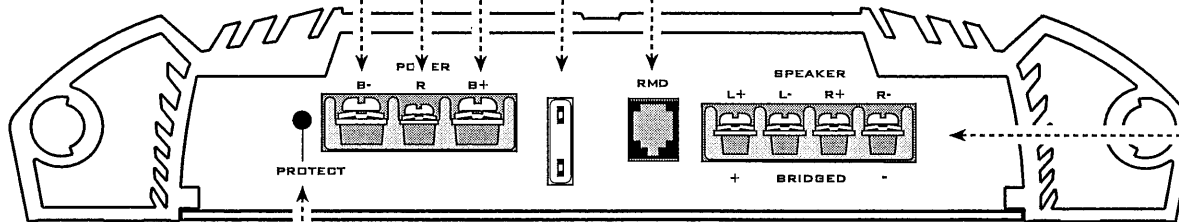
SET CONFIG SWITCH: LP



OCTANE-R 12 INCH SUBWOOFER
4 OHM BRIDGED



BRIDGED LOW PASS SYSTEM
LOWEST RECOMMENDED LOAD
4 OHM BRIDGED



TWIN-T™ BASS EQ Allows for up to 15dB 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.

CROSSOVER FREQUENCY Adjusts the crossover point for the speaker outputs. The crossover frequency is adjustable from 40 to 400Hz with a 12dB per octave high and low pass slope.

CROSSOVER CONFIG SWITCH This switch controls the type of signal that reaches the speaker outputs. For a high pass signal set the switch to HP. For low pass signal set the switch to LP. For a full range signal set the switch to BY.

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.

INPUT SENSITIVITY This control is used to reach maximum amplifier power with a wide variety of headunits. The amplifier is more sensitive to input signal when set to .2 and less sensitive when set to 4.

AUXILIARY OUTPUT Provides a full range signal for an additional amplifier.

Tuning Your System

1. Set the config switch according to your system setup.
2. Set the amplifier input sensitivity control to minimum (full counterclockwise).
3. Set the crossover control to the 11 O'Clock position or 90Hz. This is a starting point for the crossover, you may need to fine tune this setting later.
4. Turn the headunit on with the volume set to minimum.
5. Set the headunit's tone controls, balance and fader to the center (flat) position and turn off any loudness features or other processing effects.
6. Play a CD that represents what type of music you usually listen to. Set the volume control of the headunit up to about 90% of total volume or until you hear distortion if you are using the headunit's internal amplifier.
7. Increase (turn clockwise) the sensitivity control for the amplifier until you hear distortion then slightly decrease the sensitivity control until the distortion is not audible. The volume level should still be very loud, but free from nearly all distortion.
8. With all speakers in the car playing, listen to the CD at this same high volume and make sure all channels blend properly. For example, if the front speakers overpower the subwoofer then slowly balance the system so all channels reach maximum output without distortion at this volume level.
9. Remember the volume level on the headunit set on step 6, and haven't

changed since. This is now the maximum volume level for your system. If you exceed this level the onset of distortion will become very noticeable.

HIGH PASS TUNING TIPS

- You will probably want to fine tune the crossover points to get as much midbass out of the front speakers as possible without distortion. Hint: Achieve this by lowering the crossover point of your front speakers until you hear distortion or the speakers bottoming out.

LOW PASS TUNING TIPS

- For the bass heads looking for lots of bass slowly increase the bass boost to reach the desired bass level. The bass boost should only be used on subwoofers set to low pass.
- For the audiophiles, lowering the crossover point for the low pass channels will yield the effect that the bass is coming from the front of the vehicle, however this will sacrifice some overall output.
- If you change the crossovers a lot, go back through the level setting steps with the new crossover points. Just remember to go slow and use your ears as a guide to achieve the sound you are looking for.

