

PHOENIX GOLD



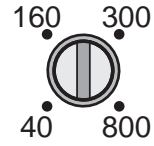
Octane Limited Edition Amplifier

FEATURES

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

- One-of-a-kind carbon fiber cosmetic finish forms the unique racing theme.
- Limited production of the amplifier ensures it as a collector's item for years to come.
- Large capacitor bank built-in on the rail voltage to allow for unmatched internal voltage stiffing during demanding musical dynamics.
- Built-in Basscube allows 15 dB of parametric boost and subsonic filter for low pass section of the amplifier.
- TCCH™ Thermal Convection Cooled Heatsink. This proprietary design uses two variable speed fans to ensure that the Octane keeps its cool when the music gets hot!
- High-current Triple Darlington output stage. This tried and true topology is the standard for outstanding dynamic peak output performance.
- TAIM™ Timed Acoustically Integrated Muting. Insures dead silent turn on & off, no clicks, pops or buzzes.
- 24dB per octave, high pass and low pass crossover. Continuously variable from 40Hz to 800Hz.
- Twin-T™ bass boost circuit provides up to 18dB of boost at 45Hz.
- Superbrite™ Tri-LED power-on indicator.
- Optional LPL44™ Low Pass Level controller allows the driver to adjust bass volume from the driver's seat.
- Optional RDDP™ Remote Diagnostic Display Panel allows the driver to monitor the amplifier's battery voltage, power-on, thermal and overload status with use of the SDT™ or RDDP™ kit.

CROSSOVER FREQUENCY Controls the high and low pass crossover point symmetrically for the high and low pass speaker outputs. The crossover is always engaged with a frequency adjustable from 40Hz to 800Hz with a 24dB per octave slope.



HIGH PASS SPEAKER OUTPUTS Used to connect the high pass section of 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.

INPUTS Connect preamp signal cables from the headunit to these terminals. To maximize noise rejection, we recommend using Phoenix Gold ZEROpoint Musical Reference, ZEROpoint Pro, ZEROpoint QLX, ZEROpoint TRX, XS560 or XS460 series twisted pair interconnects.

BYPASS OUTPUTS Provides a full range signal for an additional amplifier or signal processor. The output is always Full Range.

LPL CONTROL PORT This port is for connecting the optional LPL44™ Remote Lowpass Level Control knob. The LPL44™ allows up to 20dB of subwoofer volume adjustment from the driver's seat of the low pass section of the amplifier.

STEREO/MONO SWITCH The low pass section of the amplifier will receive a mono signal when the button is set to the IN position and a stereo signal when set to the OUT position.

LOW PASS POWER LED When lit the low pass section of the amplifier is on indicating it is grounded through the B- terminal and is receiving voltage through the B+ and remote turn-on terminals.

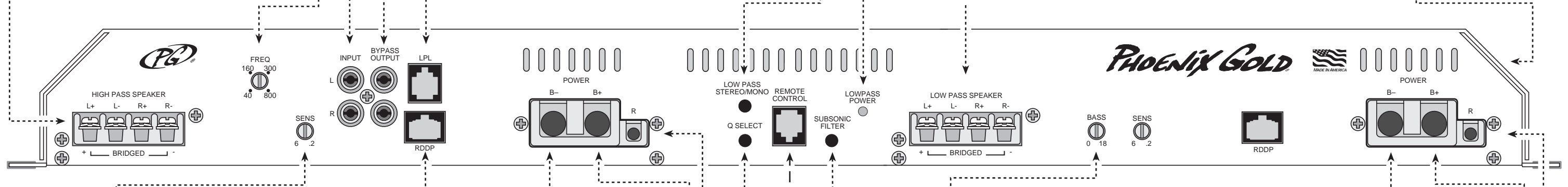
LOW PASS SPEAKER OUTPUTS Used to connect the amplifier to low pass speakers. Use the left + and right - terminals for bridged mode. Minimum speaker cable size is 16 gauge (PG# SS162 or QS162). Use 12 Gauge for bridged operation (SS122 or QS122). Minimum impedance is 2 ohms bridged or 1 ohm stereo.

STATUS LEDS

BLUE: Three Superbrite™ blue LEDs on top of the amplifier light when the high pass section of the amplifier is turned on indicating it is grounded through the B- terminal and is receiving voltage through the B+ and remote turn-on terminals.

YELLOW: Lights if the amplifier shuts down due to overheating. If the internal heatsink reaches 115 degrees Celsius, the amplifier shuts down and continues to run the fan at high speed until the internal temperature falls below 115 degrees.

RED: Lights if the amplifier shuts down due to excessive output current. Common reasons for excessive output current are chafed speaker cables touching the vehicle's chassis, speaker leads touching each other or a damaged speaker voice coil.



INPUT SENSITIVITY This control adjusts the amplifier's sensitivity to incoming signals. Clockwise increases sensitivity. Counterclockwise 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 PLD1 Professional Line Driver or its equivalent. The High and Low Pass sections have separate sensitivity levels.

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 4 gauge. Keep the cable as short as possible.

B+ TERMINAL (BATTERY POSITIVE) Connect directly to the positive battery terminal. Minimum cable size is 4 gauge. Remember to properly fuse the High Pass B+ input cable within 18 inches of the amplifier and positive battery terminal.

Section	Outputs	Fuse size
High Pass	4 ohms stereo	50 amp
High Pass	2 ohms stereo	60 amp
High Pass	4 or 2 ohms bridged	60 amp

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

TWIN-T™ BASS EQ This control allows up to 18dB of boost at 45Hz for the speaker outputs. It cannot affect the bypass outputs. Use this control sparingly. Every 3dB of boost requires double the power at 45Hz.

BASS CUBE INPUT and CONTROLS Connect the remote control unit for the bass cube to the telephone style input. For more information on the functions and specifications for setup and functions refer to the included bass cube manual.

***Notes Prior to Installation:** The bass cube will only effect the low pass section of the amplifier. Both power terminals must be wired to the appropriate sources for the both sections of amplifier to operate correctly. The crossover for High and Low Pass speakers is always activated. The internal capacitor bank automatically charges and discharges, so there is no need for external charging.

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 4 gauge. Keep the cable as short as possible.

B+ TERMINAL (BATTERY POSITIVE) Connect directly to the positive battery terminal. Minimum cable size is 4 gauge. Remember to properly fuse the High Pass B+ input cable within 18 inches of the amplifier and positive battery terminal.

Section	Outputs	Fuse size
Low Pass	4 ohms stereo	50 amp
Low Pass	2 ohms stereo	60 amp
Low Pass	4 or 2 ohms bridged	60 amp

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

REMOTE DIAGNOSTIC DISPLAY PORT This port is for connecting the optional RDDP or SDT remote monitoring kit. The RDDP display indicates the amplifier's condition and voltage with tri-color LEDs. While the SDT includes a DC voltmeter and a tri-color status LED.



Octane Limited Edition Amplifier

SPECIFICATIONS

Continuous Output Power at 1% THD (watts):

OCTANE

Into 4 ohms Stereo @ 12.5 Vdc (IASCA/USAC) . . . . .	.37 x 4
Into 4 ohms Stereo @ 14.4 Vdc . . . . .	.100 x 4
Into 2 ohms Stereo @ 14.4 Vdc . . . . .	.200 x 4
Into 4 ohms Bridged @ 14.4 Vdc . . . . .	.400 x 2
Minimum Speaker Load, Bridged . . . . .	.2 ohms
Minimum Speaker Load, Stereo . . . . .	.1 ohm
Chassis Dimensions	13.00L x 29.00W x 2.50H
Overall Dimensions	13.00L x 30.00W x 2.50H

Bass Cube

Bass Boost Center Frequency . . . . .	.20Hz to 110Hz
Bass Boost Characteristic, switch selected:	
Wide . . . . .	.Q = 2
Narrow . . . . .	.Q = 6
Bass Boost Level . . . . .	.0 to 15dB
Subsonic Filter:	
Slope . . . . .	.18dB per octave
Tracking Freq. . . . .	.1/3 octave below Boost Freq.
Fixed Freq. . . . .	.25Hz

Common Specifications

Typical Total Harmonic Distortion	<.02%
Signal to Noise Ratio (A-weighted)	>.100dB
Frequency Response	±1dB, 20Hz to 20kHz
Bass Boost . . . . .	.0 to +18dB @ 45Hz
Crossover Frequency Range . . . . .	.40Hz to 800Hz
Crossover Slope . . . . .	.24dB per octave
Input Sensitivity . . . . .	.200 millivolts to 6 volts
Input Impedance	>.30 kohms
Power Supply Operating Range . . . . .	.10.0 Vdc to 15.5 Vdc
Typical Current Draw at Idle	<.3 amps

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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