QX900.1d and QX500.1d

Class D Mono Block Amplifiers

SPECIFICATIONS

The QX Series Amplifiers are designed with an emphasis on exceptional power, superior sonic excellence, high performance features and unmatched cosmetics.

Continuous Output Power at 1% THD (watts):

QX900.1d

Into 4 ohms @ 12.5(IASCA) /14.4 VDC . . . . . .150/475 x 1
Into 2 ohms @ 14.4 VDC . . . . . .900 x 1
Into 2 ohms @ 14.4 VDC (Dynamic Power) . . . . . .1100 x 1
Recommended Fuse Size . . . . . .2 x 40 amp ATO
Chassis Dimensions . . . . . .16.75L x 9.5W x 2.0H

QX500.1d

Into 4 ohms @ 12.5(IASCA) /14.4 VDC . . . . . .75/275 x 1
Into 2 ohms @ 14.4 VDC . . . . . .500 x 1
Into 2 ohms @ 14.4 VDC (Dynamic Power) . . . . . .600 x 1
Recommended Fuse Size . . . . . .2 x 40 amp ATO
Chassis Dimensions . . . . . .14.5L x 9.5W x 2.0H

Frequency Response . . . . . .±1dB 20Hz to 330Hz
Signal to Noise Ratio (20Hz to 330Hz) . . . . . .>90dB
Signal Input Sensitivity . . . . . .200 millivolts to 4 volts
DC Input Voltage Range . . . . . .10 Vdc to 15.5 Vdc
Typical current draw at idle . . . . . .<1.5 amps
Bass Boost . . . . . .0 to 15dB @ 45Hz
Crossover Slope . . . . . .18dB per Octave
Crossover Range . . . . . .30 to 300Hz
Subsonic Filter Slope . . . . . .18dB per Octave
Subsonic Filter Range . . . . . .20 to 55Hz
Minimum Load Stability . . . . . .2 ohms

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.

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Class D Mono Block Amplifiers

FEATURES

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

- High Efficiency Class D Design
- Variable 18dB per octave lowpass crossover from 30 to 300Hz
- Variable 18dB per octave subsonic filter from 20 to 55Hz
- Adjustable 0 to +15dB Twin-T™ 45Hz bass boost
- Remote Monitoring Display output connects to optional RMD voltage display
- LPL Ready: optional LPL44 allows the subwoofer level to be adjusted from the dash
- Crossover configured Auxiliary Outputs provide signal for additional amplifiers
- TAIM™ Muting circuitry for soft turn-on and turn-off
- Advanced overload and thermal protection circuitry
- High current buss bars for all high current/high voltage stages
- PWM MOSFET power supply
- Gold plated high current power and speaker terminals
- Gold plated signal input jacks
- Unique black anodized heatsink with fly cut fins
- Optional QLink/2 available for seamless installation of multiple amplifiers

Operational Details

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

STATUS LEDs

BLUE - Lights on top of heatsink to indicate power on.

❶ *RED* - Lights if the amplifier shuts down due to overheating. If the internal heatsink reaches 90 degrees Celsius, the amplifier shuts down until the internal temperature falls below 90 degrees.

❷ *RED* - Too low of an impedance or a direct short is present on the speaker outputs.

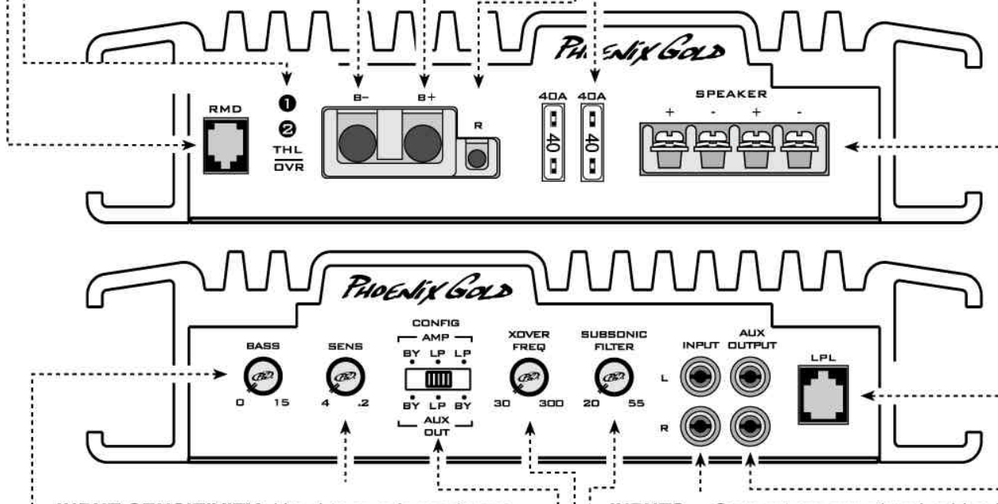
B- TERMINAL (CHASSIS GROUND) Connect to a clean, solid chassis ground. Remove all paint and dirt from the chassis connection point. ***Minimum cable size is 4 gauge.*** Keep the cable as short as possible.

B+ TERMINAL (BATTERY POSITIVE) Connect directly to the positive battery terminal. ***Minimum cable size is 4 gauge.*** Remember to fuse this cable within 18 inches of the positive battery terminal.

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

SPEAKER OUTPUTS Used to connect the amplifier to speakers. The separate + and – terminals are internally wired in parallel. Minimum speaker cable size is 12 gauge (PG# SS122, SS212 or QS122). Lowest recommend impedance is 2 ohms. ***1 ohm operation or lower is not recommend.***

FUSES Used to protect the amplifier. If replacement is necessary, use the same size and type. *Never use a fuse with a higher amp rating. The amplifier uses two 40 amp ATO style fuses*



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

CONFIG SWITCH

This switch affects both speaker and auxiliary outputs. The top half of the switch indicates the type of signal fed to the speaker outputs. The bottom half indicates the type of signal fed to the auxiliary outputs. For Low pass signal set the switch to LP. To Bypass crossover, subsonic and bass boost features set the switch to BY.

CROSSOVER FREQUENCY Controls the lowpass crossover point for the speaker and auxiliary outputs. The crossover frequency is adjustable from 30Hz to 300Hz with a 18dB per octave slope.

TWIN-T™ BASS EQ This control allows up to 15dB of boost at 45Hz for the speaker and/or auxiliary outputs. Use this control sparingly. Every 3dB of boost requires double the power at 45Hz. The bass boost will not effect the signal if the config switch is set to BY/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.

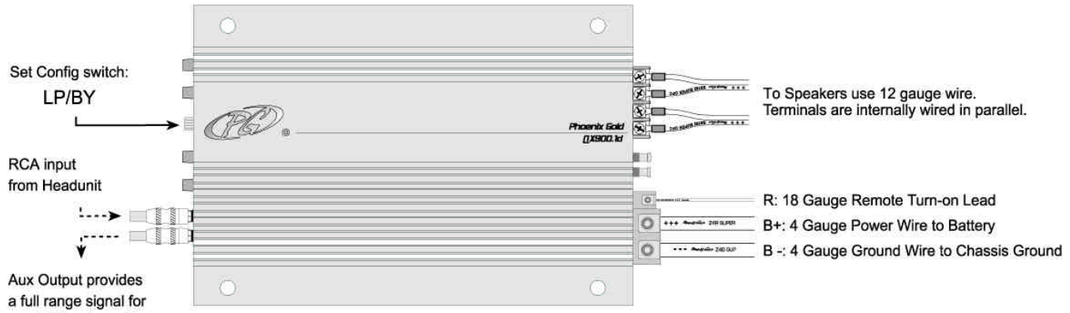
SUBSONIC FREQUENCY Controls the high pass crossover point for the speaker outputs. This eliminates extreme low frequencies from reaching the subwoofers. The crossover frequency is adjustable from 20Hz to 55Hz with a 18dB per octave slope. The subsonic filter is activated when the config switch is set to LP. It will effect the auxiliary output when the config switch is set to LP/LP.

AUXILIARY OUTPUTS

Provides a configured signal for an additional amplifier or signal processor. The CONFIG switch determines the state of the signal.

LPL44 PORT This port is for connecting the optional LPL44™ Remote Lowpass Level Control knob allowing up to 20dB of volume adjustment. The LPL44 will only work when the config switch is set to LP. It will also control the level of the auxiliary output when the config switch is set to LP/LP.

System Example



SPL System Example

The system below has a "master" QX900.1d amplifier that controls all the of signal processing for the "slave" QX900.1d amplifiers downstream. The LPL, bass boost, crossover and subsonic filter on the "master" amplifier will effect all "slave" amplifiers. Please keep in mind each amplifier must still have its own sensitivity level individually adjusted regardless if its a "master" or "slave" amplifier.