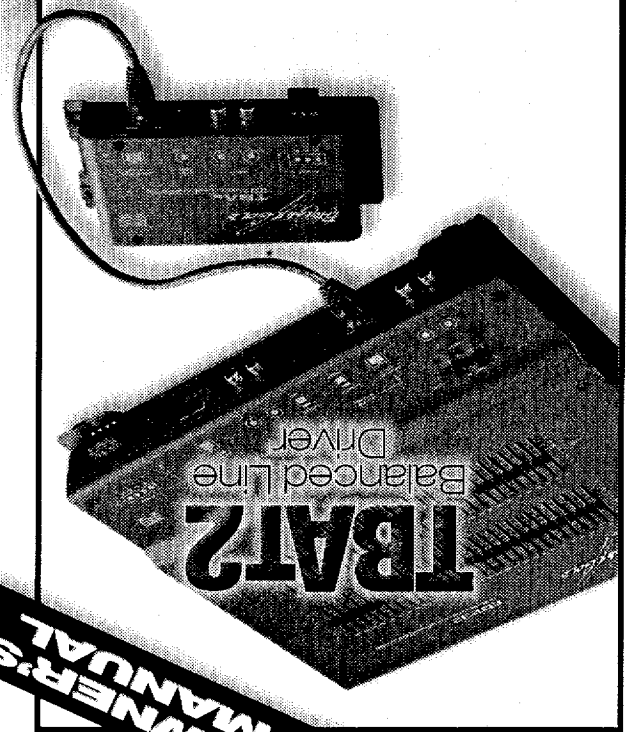


PHOENIX GOLD
NO LIMITS!



OWNER'S
MANUAL

Phoenix Gold
PHOENIX GOLD INTERNATIONAL, INC.
9300 North Decatur • Portland, OR 97203
Tel: 503.288.2008 • Fax: 503.978.3380

FEATURES

- Positive Locking Balanced Signal Connectors
- 24kt Gold Plated RCA Jacks
- Isolated Power Supply for Noise Free Performance
- +20 dB Input Gain Control
- Capable of 11 Volts RMS Output
- Power-On LED Indicator
- Quick Disconnect Power Plug
- 2 Layer Copper G10 Glass-Epoxy Printed Circuit Board
- Audiophile Grade 1% Metal Film Resistors

SPECIFICATIONS

Frequency Response	±1dB, 10Hz to 30kHz
S/N Ratio (20Hz to 20kHz, A-weighted)	> 105dB ref. to 8VRMS
Total Harmonic Distortion plus Noise @ 1kHz/1VRMS	< .02%
Maximum Input Signal Voltage, RMS/peak	8/11
Maximum Output Signal Voltage, RMS/peak	8/11
Input Impedance	5kΩ
Output Impedance	50Ω
Input Gain	0dB to +20dB
DC Operating Range	10 volts to 15.5 volts
Typical DC Current Draw	0.2 amp
Internal DC Power Fuse	1 amp GMC
Dimensions, chassis	5.3"L x 3.0"W x 1.125"H
Dimensions, overall	6.0"L x 3.5"W x 1.125"H

Due to continuous product development, features and specifications are subject to change without notice.

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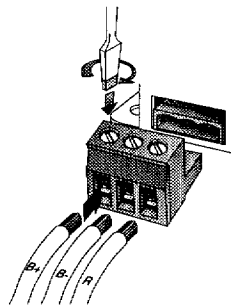
MOUNTING

Mount the TBAT near the headunit. There are only a few precautions to observe.

1. Never mount the TBAT where it can get wet. The limited warranty does not cover water damage.
2. Never mount the TBAT where debris or cargo can physically damage it. The limited warranty does not cover physical damage.
3. Make sure the mounting surface is flat so the TBAT's base does not bend.

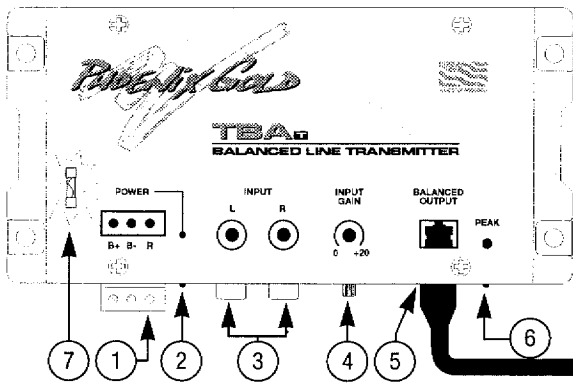
ELECTRICAL

Make all power connections with the removable power connector. Strip ¼" of insulation from the end of the wire and "tin" the tip with solder.

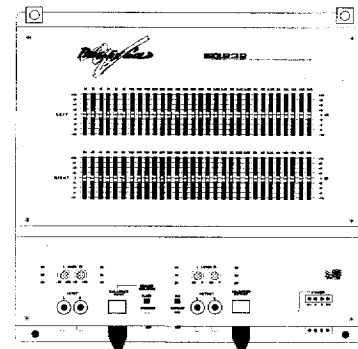


Insert each wire into the power connector and tighten the set screw with a flat blade screwdriver.

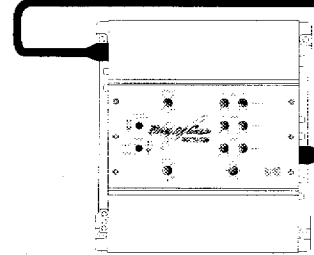
Note: Use 16 gauge cable for the B+ and B- connection. Use 18 gauge cable for the Remote connection.



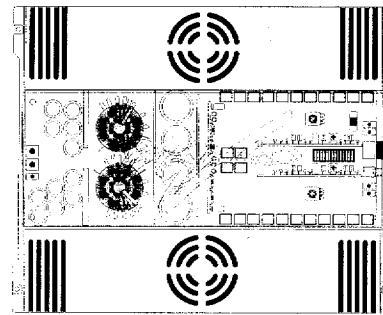
Phoenix Gold's exclusive XBC cables are available in 0.5, 1.0, 2.5, 5.0 and 6.0 meter lengths. These lengths should be adequate for most needs. Order custom made longer length cables through an authorized Phoenix Gold dealer.



EQ232 1/3 octave graphic equalizer with balanced input and output



ZPX2 24dB per octave crossover with balanced input and outputs



ZPA0.5 amplifier with balanced input

1. **Quick Disconnect Power Plug:** This connector unplugs for servicing wiring connections and contains the following terminals:
B+ Terminal (Battery Positive): Connect to the stereo's power distribution system that is connected directly to the positive battery terminal.
B - Terminal (Chassis Ground): Connect to a clean, solid chassis ground of the vehicle. Keep the cable as short as possible.
R Terminal (Remote Turn-On): Connect to a switched 12 volt source from the headunit. This connection allows the TBAT2 to turn on and off with the headunit.
2. **Power-On LED Indicator:** This LED lights up whenever the TBAT2 is on. The unit cannot turn on unless it is grounded through the B- terminal and receiving 12 volts at both the B+ and Remote Turn-On terminals.
3. **Input Jacks:** These inputs are for standard RCA style cables from the headunit.
4. **Input Gain Control:** This control allows up to 20dB of boost for the input signal. The amount of boost required depends on the headunit's output voltage and the input needs of the next component (see the ADJUSTMENTS section).
5. **Balanced Output Jack:** This output accepts an XBC balanced signal cable for connecting to another ZEROpoint PRO component.
6. **Input Peak LED Indicator:** This LED will light when peaks in the input signal are approaching 11 volts.
7. **Internal Power Fuse:** This fuse protects the TBAT2's power supply from reverse polarity or a short in the B+ cable. It should never blow from normal operation. If replacement is necessary, use a fuse of the same size and type (1 amp GMC). NEVER USE A FUSE WITH A HIGHER RATING.

ADJUSTMENTS

1. Install the system's power fuses after connecting all power, speaker and signal cables.
2. Set the TBAT2's Input Gain Control to minimum (full counterclockwise).
3. Set all other signal processor input gain controls and output level controls to minimum (zero boost or cut).
4. Set all amplifier input gain controls to minimum.
5. Turn the headunit on with the volume set to minimum.
6. Set the headunit's tone, balance and fader controls to the center (flat) position and turn off any loudness features or other processing effects.
7. Visually check the TBAT2's condition. The green Power-On LED should be on.
8. Set the volume control of the headunit for maximum undistorted output (on most headunits this is approximately 7/8 of maximum volume). Play a very clear and dynamic recording.
9. It is possible to send as much as 11 volts peak to the next component by turning up the Input Gain Control. Set the Input Gain Control according to the signal needs of the next component.
TBAT2 output going directly to a ZEROpoint PRO amplifier:
 a. Turn up the TBAT2's Input Gain Control until the Peak Indicator flickers on about once a second with peaks in the music.
- b. Turn up the amplifier's Input Sensitivity Controls until the speakers are playing as loud as possible without distortion. Go to step 10.
- TBAT2 output going to a ZEROpoint PRO signal processor:
 a. Turn up the TBAT2's Input Gain Control until either the TBAT2's Peak Indicator or the next component's clip indicator is flickering on about once a second with peaks in the music.
 b. Use the input gain and output level controls of each additional signal processor to maintain unity gain through the remaining components.
 c. Turn up the output level controls of the last processor until the speakers connected to the amplifier are playing as loud as possible without distortion. If this adjustment cannot distort the speakers, then use the amplifier's input sensitivity control to drive the speakers to maximum undistorted output.
10. Once the maximum undistorted output for each amplified channel is established, it will be necessary to listen to the overall balance of the system and readjust the level controls for some channels. For example: If the right channel sounds louder than the left channel, the right channel's output should be lowered until it is equal to the left channel. Compare front to rear, subwoofer to midbass, midbass to midrange, etc. until the system is properly balanced.
11. When all input gains and output levels are set correctly, the system will reach maximum undistorted output at the volume level set in step 8.

