# HTGBD1

Panzar eritolog

Digital Audio Bass Enhancer Driver with Remote Control

TGBE



## **FEATURES**

#### **Bass Driver**

The **HTGBD1** contains a Bass Driver circuit that accurately recreates and injects Low frequency information back into the signal path.

What that means in everyday terms is that the **HTGBD1** will give more bass impact to your best compact discs or even your old tapes.

#### **Bass Equalization Circuit**

The **HTGBD1** has a unique equalization circuit that contours the restored bass to your speaker systems.

#### **Dash Mount Remote Control**

The **HTGBD1** comes with a Dash Mountable Remote Control that allows you to enjoy the effects of the **HTGBD1** without having to leave the driver's seat. The **Dash Mount Control** has a LED indicator, this LED will grow brighter as you add more bass or dimmer when you decrease it.

#### **Bass Maximize Indicator**

Not only does The **HTGBD1** provide good music to your ears, but it also gives you some visual enjoyment as well. On the Chassis of the **HTGBD1**, there are three LED indicators that flashes when the bass maximization circuit is activated.

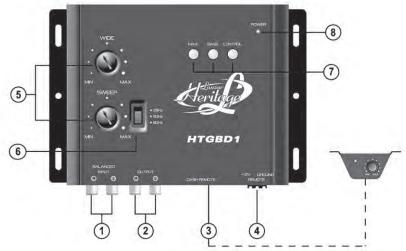
#### **PFM Subsonic Filter Switch**

This unique feature is legendary with its ability to fine tune the bass response of any system. Why waste power on nasty subsonic information when **PFM** Subsonic Filter Switch can help you to clean things up?

#### **Bass Output Control**

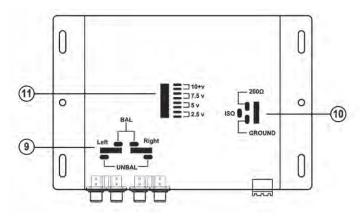
The **HTGBD1** has the ability to produce large amount of deep, mind shattering bass without damaging your speakers. The Bass Output Control circuit allows the **HTGBD1** to maximize the bass output of any auto sound audio system while restraining destructive bursts.

## FUNCTIONS THE OUTSIDE



- Inputs: The inputs of The HTGBD1 use a balanced input circuit to help minimize induced noise. They are also designed to handle very high signal voltages up to 15 volts.
- **2. Outputs:** These RCA connectors should be connected to the next component after the **HTGBD1**, such as a crossover, equalizer, or amplifier. Just remember, the **HTGBD1** should go inline before a crossover.
- 3. Dash Remote Control
- 4. Power Connector
- 5. Para-Bass Controls: These 2 knobs control the Para-Bass functions of the HTGBD1. The SWEEP knob allows you to pick the center frequency that you want the HTGBD1 bass restoration circuit to maximize. The WIDE knob abjusts how wide of a frequency range the HTGBD1 will effect.
- 6. The PFM Subsonic Filter Switch: The HTGBD1 utilizers a PFM Subsonic Filter Switch which will help with speaker control and amplifier power management. This PFM Subsonic Filter Switch comes with three frequencies selections 35Hz / 50Hz / 80Hz. On most systems, setting the switch at 33Hz is fine. If you want to protect your speaker system even more, you should try a higher frequency. Often a higher frequency actually sounds louder and cleaner.
- **7. Bass Maximize Indicator:** These three LED indicators flashes when the bass maximization circuit is activated.
- 8. Power On LED

## FUNCTIONS THE INSIDE



- **9. Input Grounding:** For most systems you can leave this jumper set in the **BALANCED** position. In some systems, the source unit may look for a ground through the RCA connectors. In this event, you should go ahead and change the jumpers to the **UNBALANCED** position.
- **10. Ground Isolation Jumpers:** Occasionally alternator whine may appear in a system because the source unit and amplifier may use different grounding. To help in this situation, we have provided alternative grounding connections. Made sure your system is turned **OFF** before you move these jumpers.
- 11. Bass Output Control Jumpers: Not all systems are designed the same, some systems are designed strictly for SPL (sound pressure level) while others are a little more tame. The Bass Maximize circuit can either increase or decrease the signal voltage of the Bass Restoration Circuit. Depending upon your system, you may opt to change these jumpers to a higher or lower setting to maximize your bass output and protect your speakers. In most systems the factory setting will suit you fine. We recommend you try the factory setting first.

## **ELECTRONIC CONNECTIONS & WIRING**

#### **Power connection**

• B+(12V)

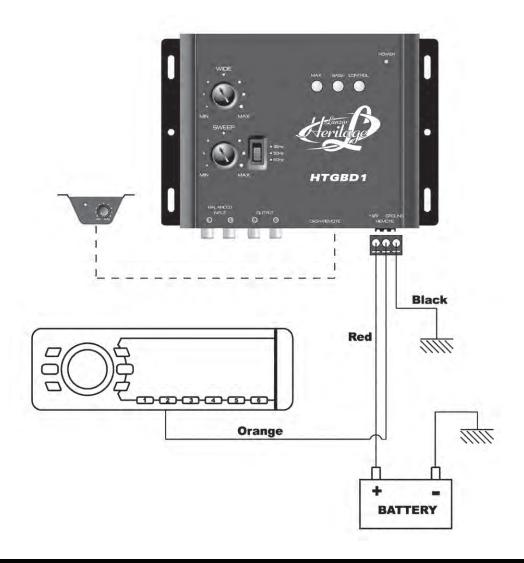
Connect a red wire to the car battery or other power source.

• REMOTE

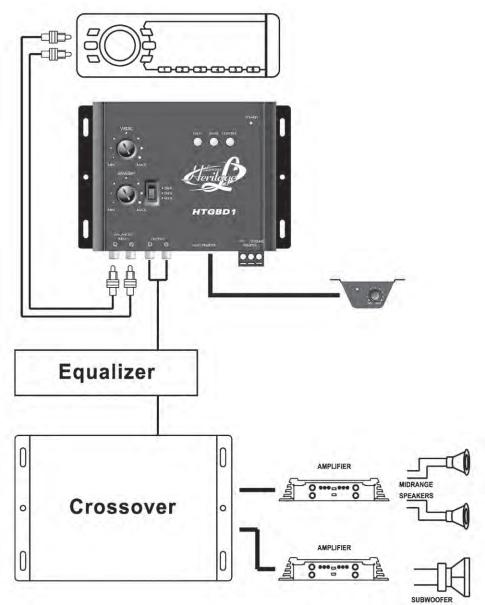
Connect an orange wire to remote activating (12V DC) wire of car stereo or equalizer.

• GND

Connect a black wire to the car chassis for ground connection.



## SIGNAL CONNECTIONS



#### NOTE

For signal connection, the output **RCA** connectors should be connected to the next component after the **HTGBD1**, such as a crossover, equalizer, or amplifier. Just remember, the **HTGBD1** should go inline before a crossover.

## **ADJUSTING THE PARA-BASS CONTROLS**

#### The bass response in a system is affected by four factors:

- 1. The acoustics of the vehicle
- 2. The locations of the speakers
- 3. The music on the tape
- 4. Speakers and speaker enclosures

Because of the variations in the recording process, we developed **HTGBD1** to help restore any low frequencies lost during the recording process, however, the acoustics of various environments are different.

The Sweep control allows you to select a center frequency (the frequency most affected) between 27 and 63Hz. The Width control then allows you to control the shape of the filter centered around the Sweep frequency.

## SETTING THE BASS OUTPUT CONTROL

The **HTGBD1** is the most powerful bass component. This device equipped with several different Bass Output selections. If you should need to change the settings, please use the chart below for guidance. It is recommended: listen to the factory setting before changing your Bass Output settings.

#### **Recommended Settings**

Setting	Amplifier Input Voltage	Minimum Speaker Size
2.5 Volt	3Volt or less	8"
5 Volt	5 Volt or less	10"
7.5 Volt	7.5 Volt or less	12"
10 Volt		

#### **SPECIFICATIONS**

15V RMS 13.5V peak 10Hz - 100KHz; +/-1dB 0.003% 130dB >60dB 10K Ohm 150 Ohms High headroom PWM 150mA 1 Amp

## **TROUBLESHOOTING GUIDE**

# If the Unit does not turn-on, or the power indicator LED is NOT illuminated, do this:

- 1. Check and make sure that **B+** and **GND** are **NOT** reversed
- 2. Check that all power wires are properly connected and has the appropriate potential (11-16 volts)
- 3. Check that the fuse is intact.

#### If you experience high audible distortion or low output volume:

- 4. Check that the input and output levels are set correctly. Input should match the source and output should match the sensitivity of the host.
- 5. Check the crossover settings; make sure they are correct; for high "Q" systems, set the crossover half an octave above the desired point and for low "Q" systems, set it 1 octave or more above.

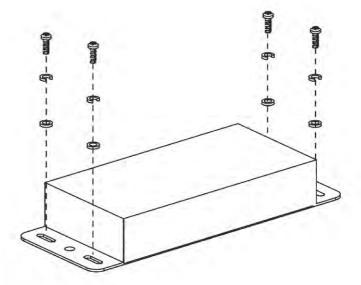
#### If you experience whining or engine noises:

- 6. Verify that the **GND** connection is secure, the conductor (wire) is not too thin and unnecessarily long.
- 7. Check that the **B+** wire is not too thin and unnecessarily long.
- 8. Change the power source; try taking power from a different point.

## **INSTALLATION**

TAPPING SCREW

PLAIN WASHER



### **Features**

- Digital Bass Reconstruction Processor
- Wired Remote Control
- Bass Restoration Lighted Display
- Parametric Bass Control
- PWM High Head Room Power Supply
- Bass Reconstruction Processor
- Selectable grounding mode (balanced, unbalanced)
- LED Bass maximize indicators
- Light-up display for easy viewing

#### What's in the Box:

- Digital Audio Bass Driver
- 4 Phillips-head Screws
- Remote Unit
- Remote Wire
- Power Red Wire with 1A Fuse

#### **Technical Specs:**

- Technical Specs:
- Peak Maximum Output Level:13.5V
- Maximum Input Level: 15V
- Bass Output Jump: 2.5V / 5V /7.5V / 10+V
- PFM Subsonic Filter: 35Hz / 50Hz / 80Hz
- Frequency Response: 10 30 KHz
- Distortion: 0.05% THD at 1V output level
- S/N Ratio: 130dB
- Separation: >60dB
- Voltage: 11V-15V
- Product Dimensions (L x W x H): 7.5" x 5.4" x 1.1" -inches

## California Prop 65 Warning

This product contains Nickel carbonate which is known to the state of California to cause cancer birth defects and other reproductive harm. Do not ingest.

For more info go to: www.P65warnings.ca.gov



## **Questions? Issues?**

We are here to help! Phone: (1) 718-535-1800 Email: support@lanzar.com