



Model DB 359 Tube Bass Head

Congratulations on purchasing Aguilar Amplification's DB 359 Tube Bass Head! The DB 359 is an integrated preamp and amp in a convenient 2-rack space unit. Seven vacuum tubes generate 200 Watts of harmonically rich tone. Custom designed toroidal transformers provide an ultra-wide frequency response.

In addition to sounding great with any active or passive four string bass, the DB 359 will musically and accurately reproduce the extended range of modern five and six string basses.

All Aguilar products are hand made in N.Y.C.

<http://www.aguilaramp.com>

Specifications and features:

All noise measurements are “A” weighted.

Output Power: 200 watts RMS. This is into 4 or 8 ohms.

Noise: -80 dB

Fuses: 1 external 7 amp for 100 – 200 VAC operation.
(3.5 amp for 220 – 230 VAC operation).

1 internal 2 amp Fast blow

Power tubes: Four premium Aguilar AG6550C power tubes.

Preamp tubes: Two 12 AX7 and one 12 AU7.

Transformers: Custom designed toroidal output transformer for ultra-wide bandwidth. Power transformer is also toroidal.

Outputs: 2 ¼” speaker outputs. One 4 ohms, one 8 ohms.

Inputs: One active input 39K ohm, one passive input/1meg ohm.

EFX Send: Variable send level.

EFX Return: One return with –20 db to 0 db compatibility.

Cooling: Ultra-low noise fan regulates the operating temperature of the amp.

Weight: 50 lbs.

Chassis: Steel construction provides sturdiness without excessive weight. Access to tubes is provided through rear of unit for convenience and is isolated from any dangerous voltages.

Components and workmanship: Only the highest quality components and workmanship are used in Aguilar products.

Preamp section features:

Active/Passive inputs:

Start by using the passive input. If your bass's output distorts the input section, switch to the active position. In the active input, a 12 db pad in the signal path will remedy the situation.

Volume pot:

This pot controls the gain of the preamp section. Clean sounds are usually achieved by setting the input gain around 11 or 12 o'clock. A little bit of musical distortion will occur if set past one or two o'clock.

Tube EQ:

Treble:

Tube driven shelving type, boosts up to 12 db. The center frequency is set at 4 kHz.

Bass:

Tube driven shelving type, boosts up to 12 db. The center frequency is set at 40 Hz.

Midrange:

Tube driven shelving centered at 400 Hz.

Deep Switch:

The deep switch adds 3db of broadband boost at 30 Hz.

Bright Switch:

This switch is a passive RC pre-emphasis circuit at 5-7 kHz. The bright switch will add a brighter timbre to the entire range of your bass.

Effects Loop:

Send is push/pull for line or instrument level. This allows you to use a studio effects unit (line level) or a stomp box (requires instrument level) in the FX loop.

In the parallel mode affected signals are mixed to the dry sound. When it is set at 100% your entire bass sound is being processed by the effect in the loop.

In series mode, the effects in the loop process the entire sound of your bass. If you pull the return pot out for series operation without any effects in the loop, the loop will be open and no sound will result.

Master Output Control:

This controls the output level of the power amp.

Output Interfaces:

Front Panel:

XLR Balanced Output

Use the -40db pre-eq setting in a concert situation where the house mixer is taking a signal into the house-mixing console. The house mixer is now getting his feed after the preamp stage, but can use appropriate eq for the venue. The eq on stage will still be controlled by your settings. If the house mixer wants your eq settings included in the mix, set the control to -40 post eq. The -40 level is correct output level for going into a preamp on a mixer. Our balanced output uses the highest quality Jensen output transformer. If you hear any ground noise, change the position of the ground lift switch under the output.

Rear Panel:

Speaker Outputs

¼" outputs: 4 ohms and 8 ohms are provided

For a proper connection 12 gauge or larger speaker cable is recommended

The DB 359 provides full power at 4 or 8 ohms impedance. It is required that you take care to use the proper impedance output for your speaker load. If your speaker cabinet is 8 ohms (this information is usually on the jack plate of the speaker cabinet) simply use the 8 ohm output. For a 4 ohm cabinet use the 4 ohm output.

If you are using two 8 ohm cabinets in series (one is connected to the back of the first speaker cabinet), the impedance value is halved, and you should use the 4 ohm output. If you are using two 4 ohm cabinets and need a 2 ohm output, the DB359 can accept this load with a factory modification.

BIASING PROCEDURE:

Without an input (bass or signal generator):

1. Turn the unit on with speaker or resistive load connected to appropriate output jack.
2. Put the standby switch in operate position and allow unit to warm up for 30 minutes
3. Using a voltmeter (a digital one is helpful), measure the output tube current draw as follows:
 - Place common (black) probe of meter on black test terminal located on the rear of the unit. Place the positive (red) probe on the yellow test terminal. Take a reading and adjust using the yellow trim-pot to 60mVolt or .060 Volts
 - Keeping the common (black) probe of the meter on black test terminal of the unit, place the positive (red) probe on the green test terminal and adjust using the green trim-pot to 60mVolts or .060 Volts.
 - Place the common (black) probe on the yellow test terminal and the positive (red) probe on the green test terminal. This should read 0 Volts. If not, trim out by turning the yellow trim-pot until 0 Volts is obtained

Now the amp is properly biased. What we have done here is actually measure how much current each pair of power tubes is drawing. Each pair should draw 60 milliamperes. Since there are 1 ohm sensing resistors inside the unit, we can actually measure the corresponding voltage drop across these resistors that correspond to the current draw.

Normally, the amp should not require re-biasing unless the power tubes have been replaced. However, if the sound quality seems to have changed as the power tubes receive more use, then adjusting the bias may be necessary.

Limited Warranty

Aguilar Amplification's DB 359 tube amp is warranted to the original owner for a period of ten years from the date of purchase against defects in materials and workmanship. Tubes are covered by the warranty for a period of six months.

The warranty period starts from the date of purchase from an authorized Aguilar dealer. Your sales slip or purchase invoice is necessary for warranty service.

Before sending your unit to Aguilar for repair, you must receive a return authorization number from us. Contact us via phone, fax, or email (techsupport@aguilaramp.com) with a description of the problem. We will then issue to you a return authorization number.

You are responsible for all shipping charges. You must ship the unit to us freight prepaid. We will return the unit to you freight collect. If the unit is being sent from outside the United States you will also be responsible for customs brokerage, if applicable. Please check with your freight forwarder for assistance.

Aguilar Amplification LLC is not responsible for shipping damage, either to or from our service center. Claims must be filed with the carrier.

The only company authorized to perform work under this warranty is Aguilar Amplification LLC of New York, NY.