

BASHTM 500 Watt Digital Subwoofer Amplifier

The BASH 500 watt digital subwoofer amplifier is a high-performance amplifier module that is designed to offer high power output and excellent efficiency. Thanks to its patented digital architecture, it can produce as much power as a traditional class AB amplifier, without the bulk, weight, and excess wasted heat.

Connections and Controls

Auto/On Switch Set to Auto to allow the amplifier to automatically turn on and off as a signal is sensed. Phase Switch 0° or 180° selectable, 0° is normal phase, 180° will reverse the polarity of the subwoofer output Crossover/LFE Enables or disables the on-board low-pass crossover. LFE will typically be used only when an

Switch external processor is involved Freq Sets the low-pass crossover frequency, adjustable from 50 to 150 Hz Vol Adjusts the output level of the amplifier Line Level Inputs Connect a stereo full range signal to both the left and right inputs. Mono subwoofer or LFE

input may connect to either left or right input Line Level Outputs Provides an unprocessed loop-through of the line level input for connection to another amplifier Hi Level Inputs Allows connection of the speaker level output from a stereo amplifier or receiver AC Mains Input Fused IEC input with 5 amp 250V GMA-style slow blow fuse; accepts standard male IEC cord On/Off Switch Turns master power on and off

Modifying Bass Boost

- 1 Locate R17 and R18 on the pre-amp board, the default values are R17=25K5 and R18=68K1. R17 and R18 are located on the short vertical PC board adjacent to the crossover adjustment knob.
- 2 Remove the existing resistors by using a low wattage soldering iron and desoldering braid. Be careful not to apply too much heat to the PC board traces.
- 3 Using the charts below, determine the proper resistor values to achieve the desired boost. New resistors can be any wattage 1/4 watt or greater, but 1/4 watt will physically fit best. Note: values are in k Ohms.
- 4 Install the new resistors and solder in place making sure you put the correct resistor in the proper component location.

1dB of Bass Boost				
Boost Freq.	R17	R18	Filter Fc	Filter Q
(Hz)	(k Ohms)	(k Ohms)	(Hz)	
20-24 Hz	27	100	13.9	1.0
25-30 Hz	20	75	18.7	1.0
31-35 Hz	18	68	20.7	1.0
36-40 Hz	13	56	26.8	1.0

2dB of Bass Boost				
Boost Freq.	R17	R18	Filter Fc	Filter Q
(Hz)	(k Ohms)	(k Ohms)	(Hz)	
20-24 Hz	20	100	16.2	1.1
25-30 Hz	15	75	21.6	1.1
31-35 Hz	13	68	24.3	1.1
36-40 Hz	10	56	30.6	1.2

3dB of Bass Boost				
Boost Freq.	R17	R18	Filter Fc	Filter Q
(Hz)	(k Ohms)	(k Ohms)	(Hz)	
20-24 Hz	15	100	18.7	1.3
25-30 Hz	12	75	24.1	1.3
31-35 Hz	10	68	27.7	1.3
36-40 Hz	8.2	56	33.8	1.3

4dB of Bass Boost				
Boost Freq.	R17	R18	Filter Fc	Filter Q
(Hz)	(k Ohms)	(k Ohms)	(Hz)	
20-24 Hz	12	120	19.1	1.6
25-30 Hz	10	100	22.9	1.6
31-35 Hz	8.2	75	29.2	1.5
36-40 Hz	6.8	68	33.6	1.6

5dB of Bass Boost				
Boost Freq.	R17	R18	Filter Fc	Filter Q
(Hz)	(k Ohms)	(k Ohms)	(Hz)	
20-24 Hz	10	150	18.7	1.9
25-30 Hz	9.1	120	21.9	1.8
31-35 Hz	7.5	100	26.4	1.8
36-40 Hz	5.6	75	35.3	1.8

Note: Do not attempt to connect amplifier to test equipment, doing so may result in a hazardous situation