

# **DB1.8 10hm Class D Monoblock Subwoofer 12v Power Amplifier 7200w Verified RMS Power Output**



## **Instruction manual**

Thank you for choosing Bassface. From the simplest connector to our top of the range amplifier - every element of these products has been designed to give you the best possible performance for your money. Please take the time to read these instructions carefully as they contain useful and important information. Modern high power audio systems can generate voltages at the speaker similar to mains operated equipment - for some reason everyone seems to ignore or forget this. Your wiring needs to be good to be safe. Please remember this and take your time. Please exercise caution when setting volume levels - powerful audio equipment can easily produce enough sound to permanently damage hearing. Remember that audio competitors use ear protection when operating and competing. Do remember that incorrect installation or abuse is not covered under warranty - please make sure that your installation and any partnered product is suitable and compatible. If you are unsure please seek qualified advice before proceeding. Always use appropriate hand and eye protection when working with tools, and always work within your capabilities as an installer. We offer a 12 month manufacturer warranty via your distributor or retailer. Please retain your purchase receipt as proof of purchase. Please note that Bassface operates a policy of continuous product development and we reserve the right to change specification without prior notice. You can follow our process on our website by reviewing the version history information.

Please note that we sometimes include information inside these manuals which we feel is of potential value to the client on related subjects such as conversion charts, capacitance values or wiring diagrams. Please feel free to copy any of this information since it is in the public domain.



DB1.7 and will most likely not fit other iterations of the product.



The first step when installing an amplifier is to lubricate the terminals. The reason for this is that sometimes, the plating applied to the screws can rub off slightly in the threads, causing binding. This can then result in damaged threads and/or rounded screw heads. We recommend the use of a medium thickness general purpose oil. In the UK there is a product known as "3 in 1" oil which we like to use in the workshop, but any reasonably thick, decently penetrating oil will work. We do not recommend the use of spray lubricants for this job because they are too thin, won't penetrate the threads and can contaminate the cosmetic surface of the product. Also, whilst it might sound like a simple and obvious thing to say, please make sure that you use the correct allen key or screwdriver when operating the amp terminals. The screws are made from relatively soft material, and can very easily become rounded and damaged over time. We see this ALL the time in our repair centre, so we KNOW that some of you don't read these manuals! Thanks for being one of the careful ones.



## Location and Cooling

Locate the amplifier unit in a perfectly dry part of the vehicle. Ensure this location takes account of temperature and offers sufficient air exchange to keep the unit cool. Depending on how hard you will be running the unit it might be necessary to employ additional external cooling. Do not allow the unit to be "hot boxed" or to overheat even at peak load periods because it is not good for the components to bake in their own extra heat. We

recommend using temperature probes during the initial setup to monitor the core temperature. We like to try to hold the core temperature to no more than 50 degrees Celsius as this ensures optimum performance. Baked DB1.8's are NOT covered under warranty.



### Physical Mounting

When physically securing the unit to the vehicle you **MUST** ensure that the chassis of the amplifier is isolated from vibration. The DB1.8 uses a sliding PCB design, which means that the circuit board of the amplifier is held in place by the heat sink. This offers great stability for such an enormous board but it means that all the vibration caused by your subwoofer system will be transferred directly into the fragile PCB if you just bolt the amp to the floor of the car. We recommend the use of some simple soft rubber feet, at least an inch tall, to create a safe installation. Under **NO** circumstances can the DB1.8 be mounted directly to the woofer enclosure! Cracked circuit boards are **NOT** covered under warranty.



## Wiring Notes - Earth

As you'd expect the DB1.8 uses some serious power. You need to use 2x4AWG inputs for the power and 2x4AWG inputs for the earth. Keep the earth short (aim for <12 inch), and use separate bolts (NOT self tappers!) down to the bare metal of the chassis for the connections. Tie these off with a decent strain relief and paint over the finished install to protect the metal and preserve the integrity of the electrical joint. Always meter off the finished earth job prior to hookup and do not accept anything worse than 0.05 ohms of resistance in the cables to the floor. You're aiming for zero really at this level. Also please take time to check: Car battery to chassis earth. Alternator to chassis earth. Any additional engine to chassis earth straps. These things are also important when you are about to suck 200A out of the system. The power chain is as strong as the weakest link! Blown circuit boards caused by resistance in the earth path are NOT covered under warranty.



## Wiring Notes - Power

Ensure you have enough power at the distribution point to drive a pair of 4AWG feeds into the board. This will mean something like a 0AWG from the car battery, capacitor bank or supplementary battery. Don't overlook the increase in resistance over long cable runs. Installing a zero gauge power feed along the length of a vehicle is a considerable task - running a second cable at the same time nowhere near twice the work but this can be a very worthwhile exercise and brings enormous benefits in terms of power transmission and stable voltage levels. Blown circuit boards caused by low voltage at the input terminals are NOT covered under warranty.



## Wiring Notes - General

Safety is crucial during these installations. Firstly, please ensure that you protect every current carrying cable with an appropriate fuse. Remember that if you use a capacitor or supplementary battery you have the potential to be back feeding the main cable up the car FROM the back so you will need to use a fuse a short distance from these storage devices as WELL as a fuse at the front of the vehicle near the battery. Make absolutely certain that the insulation of the cable is not pressed up against sharp edges or anything that could gradually cut its way through. Always use cable grommets where wires pass through metal or other perpendicular surfaces. Finally, ensure that your wiring is protected from coming loose by using strain relief points on the cable. Please do not for one second dismiss the possibility of a badly installed amplifier causing a fire. Do it properly. Barbecued cars and owners are NOT covered under warranty ;-)



## Signal and Speaker Connections

Signal input is by means of a pair of RCA connectors at the speaker output end of the amp. There is also a helpful pair of RCA outputs, which mirror the inputs, to assist with onward signal requirements.

Fit the remote control knob and route the cable to a convenient place.

The speaker outputs are mono, obviously, so you can use either or both of each polarity to drive each woofer as required, or for bi-wiring in the case of a (big!) single coil single woofer. The unit is rated to 1 ohm stable. Destroyed DB1.8's that have been abused in competition to extract the absolute maximum power possible from the unit by running at less than 1 ohm of load are NOT covered under warranty. If you need more power, buy more amplifiers. Don't wreck the one you have and expect someone else to pay for it!



## Daisy Chain

If you are using 2xDB1.8 in a daisy chain configuration you must switch the master/slave control on each to choose which unit will be in control. Connect the two together using an appropriate 4 pin RJ45 style cable. Plug into the Master Output terminal FROM the master and Slave Input terminal TO the Slave. Please make this change BEFORE powering the units up. Failure to get this correct before power up for strapped operations can result in damage to the processor which is NOT covered under warranty.

## Setup

Once everything is perfect and you're ready to go set the gain to minimum and put the fuses in and apply power to the remote terminal. We recommend also setting the gain on the remote to zero as this control is a gain control with 18db of range.

Begin with the bass boost at 0db, the phase shift at 0 degrees and the subsonic set to a suitable value to save power below the real output floor of your woofer. Dial in the low pass filter (all these are 12db/octave) and ensure your source unit or processor is also appropriately set to zeroed.

We recommend a conservative gain structure, leaving headroom in the remote control to allow real world tweaking of the level to suit the recording from the cockpit. We don't recommend that you gain the amp up to the maximum level for the most dense music you



have because then the remote will result in over gain, dynamic compression and toasted woofers! (And I'm sure THAT isn't covered under warranty by your woofer manufacturer, either!)

Finally - the bass boost control is a parametric design which takes its centre frequency from the Bass Freq knob and applies gain as per the Bass Boost setting with a fairly wide Q. I recommend that you decide if you will need to use this from the outset, depending on the profile of your woofer system, and then you can build in gain headroom to accommodate the boost. (Otherwise you're into dynamic compression again).

Finally

The DB1.8 is a competition monster - we thank you very much for your purchase and feel certain that the product will blow you away. If you have any questions about setup or use please feel free to contact us and we will be pleased to assist.