BASS FACE

Instruction Manual

MODEL DB2.2

!Warning!

Bass Face products can produce sound pressure levels that can permanently damage your hearing. Please exercise extreme caution when setting volume levels. Also be mindful of other listeners, they might not enjoy listening at the same levels as you. We will not be held in any way responsible for injuries caused by the misuse of our products.

Please take care when attempting any alterations or installations with the electrical system of the car. ALWAYS disconnect the positive terminal at the battery.

Bass Face operates a policy of continuous improvement and reserves the right to update and alter the content and design of both product and instructions as it sees fit. Although the information contained in the instruction manuals is given in good faith based on extensive testing and experience the final responsibility for the installation and operation of your system must rest with the installer and the operator. If you are installing your equipment yourself please be realistic about your abilities and seek professional advice if you are unsure about any aspect of the task that you are undertaking.

If you face a particular problem with your installation or product we will be happy to answer your questions. Please email info@bassfaceaudio.co.uk - please note that our response time is 2 to 3 days, and that we are closed over the weekend. For more urgent help please contact your country distributor. In the UK this is Thompsons Ltd (www.thompsonsltd.co.uk)

Please note that Bass Face is unable to process warranty support directly. For warranty support you MUST contact your distributor.

Introduction:

Firstly, thank you for your purchase. Every element of this product has been optimised to give you the best possible performance for your money. We think that Bass Face represents the highest quality to price ratio available on the market today.

Please take the time to read these instructions carefully. You will need to follow them to have a successful install and get the most from the product.

Do remember that incorrect installation or abuse is NOT covered under warranty – it is YOUR responsibility to make sure that your installation and partnered product is suitable and compatible.

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The Bass Face DB2.2 amplifier is a very high power 2 channel amplifier designed for running high power full range, midbass and subwoofer systems. The amplifier output exceeds 500w RMS per channel at 4Ohms. The DB2.2 is capable of running at 2Ohms per channel with over 800w RMS output. Though, when using the amp in this way heat build up will occur due to the Class A/B topology of the design. If you are going to run at this impedance for extended periods we recommend provision of forced cooling through the use of fans.

Before you even get the amplifier out of the box (realistically, you will have done this already and boy it looks sweet doesn't it!) you will need to install a suitable wiring kit in your vehicle. We recommend 0 AWG wiring, this is what the amps power terminals are designed to take. If you are planning to run multiple amplifiers you will need to up the gauge of the wiring accordingly. Do bear in mind that many manufacturers offer wiring kits that actually come up smaller in true wire gauge than advertised.

To begin, disconnect the car battery, taking note of any required precautions suggested by the vehicle manufacturer such as alarm or radio codes, or on board computer or AGM battery requirements.

You need to find a suitable point on the firewall (bulkhead) to run the power wire through. If you have to drill a hole, you will need to fit a rubber grommet to ensure the wire does not get damaged as a short will ruin the whole setup and can be very dangerous. The positive wire needs to go to the + positive terminal on the battery. A fuse of appropriate size to protect the cable, this needs to be fitted in line and no more than 18" from the battery.

Once you have the cable in the car, run it back to the boot or to where you intend to fit the amplifier. When you do this, be aware you will need to run the remote cable and the RCA's from the headunit back to the amp too, along with any speaker cables going back the other way FROM the amplifier. A common mistake is to forget that a car amplifier needs the remote 12V turn on cable to see power for it to even work! If you only fit power and ground you're going to get…. Nothing!

If the wires you are running have to run over or go alongside other looms of the car, try to cross them at right angles to avoid unwanted interference in the signal, and try not to run them parallel with other cables either. If you can, run the power and the signal cables down opposite sides of the car. This isn't essential but if you do get any interference once the job is complete the first thing to look at will be separating these wires so if you can do it first it makes a lot of sense!

The absolutely most important aspect of the power install is the earth wire. This wants to be very securely bolted to the chassis of the car. We recommend drilling a hole (take care not to drill

through your spare tyre, brake lines or anything else!) in the boot floor and sand off any paint to the bare metal where the wire will be connected. A bad earth is a very common flaw in installation and can cause a number of headaches later down the line so be sure to take care in doing this. Do NOT use a self tapping screw to try and screw the earth down, as it will come loose and impair performance. Other common disasters include trying to earth to rear light mounting bolts, boot lock mountings and other ways to "trap" the cable in the vein hope you might get a good earth. For every volt the amplifier doesn't see it requires TWICE the power to create the same output. That means poor performance and a possible broken amplifier…. DO THE EARTH RIGHT!

Once your power cable, RCA and remote lead are all securely running through the car to where you want the amp and the earth wire is fastened securely, somewhere close to the amp, you can fit the amplifier.

The amp needs to be mounted on a solid surface, favorites are boot floors, backs of seats etc. Wherever you do choose to mount the amp, it needs sufficient ventilation; 2-3" around will be enough. We do not recommend mounting an amplifier on a bass box as the vibrations can cause damage to the internals of the amplifier over time.

You are now ready to connect your speakers! Take care that the positive on the speaker is going to the positive on the amplifier. If your speakers are connected "out of phase" then it will severely affect bass output as the 2 speakers will cancel each other out acoustically.

This bit is VERY IMPORTANT. You need to ensure that the load you subject your amplifier to is within specification and of a sensible nature. This particular amplifier is suitable for running a stereo pair at minimum of 2 ohms per side, or a bridged mono load at 4 ohms. Just as important is to remember that as well as the actual physical impedance you need to consider the type of load you are going to subject your amplifier to. While this amp will be more than happy running 2 12" or 15" subwoofers, running multiple heavy coned subwoofers per channel will result in reduced performance.

Time to lay on some power. Connect the earth first. Then 12V power, then remote. Then connect in the RCA cables and you can move onto setting up the gain and sound controls on the amplifier (the fun bit!)

Setting the "Gain" or "level" on the amp is a crucial aspect and needs to be done with care, otherwise you can easily damage your equipment. Before we move onto this we need to be sure the crossover settings are right for the application.

Firstly, make sure the bass boost control is set to minimum (0)

If you are running Coaxial or Component speakers you first need to check the "HPF/FULL/LPF" switch is set to HPF and that the HPF knob is set as described below. This High Pass Filter will stop any very low frequencies from getting to the speakers, as these will damage the speakers, especially at high volumes. As a rule of thumb look to use 200Hz for 4" speakers, 120Hz for 5" speakers and 80-100Hz for 6" ones. As usual rules are there to be tested but these figures will set you on the right track to a good setup.

If you are not running a subwoofer with your full range speakers, you may want to set the crossover switch to FULL this will send the full spectrum of sound to the speakers. However, it is likely that in most cases this will result in your not being able to listen to the system without

obvious distortion at even fairly modest levels (depending on your speakers, installation and source unit) although below the distortion threshold in this situation it will sound as sweet as possible.

If you are running a subwoofer the switch needs to be on “LPF” or Low Pass Filter, as it describes, this will let the low frequencies pass through. We recommend a LPF of about 100hz initially for most car woofers. Try 80Hz and 120Hz too – you will notice the sound change.

Once your crossover settings are set up, you can move on to the gain or “Level”. This bit is REALLY important!

First, disconnect all other subwoofers or speakers so that you can hear only the speakers (or woofer) powered by this amplifier. Next, turn the level on the amp all the way down. Choose some music that you’re not particularly keen on that has a good range of bass, treble and vocals (helps not to get lost in the music whilst you work on the system.)

Then go to your head unit and gradually turn up the volume until you begin to hear slight distortion. This is normally about ¾ the way up the scale. This is the maximum setting that you will EVER use from now on – make a mental note of it. Next, turn the head unit down from here by around ¼. This builds in a little bit of “headroom” so should you have a track that is recorded quieter than the others or is at a lower bit rate, you can boost the volume without pushing anything into distortion.

Once the volume is set on the head unit, go to the amplifier and slowly start to turn the “Level” knob up, keep going till it is at a level you are happy with (that isn’t going to deafen you!) or until your speakers are just about to distort. If they do start to distort, turn back down till they sound perfectly clear.

If you are setting up a subwoofer the procedure is exactly the same, except that rather than hearing distortion in the conventional sense you will hear it as an unclean bass note – you may hear a cracking, a metallic slapping sound or a rattle. It is CRITICAL that you detect this sound and back the amp off to stop it NOW. If you do not perform this step you will become another sad statistic in our “rejected warranty” book – you will be ringing up in about a week wondering why your woofer is toasted. Don’t be this sad individual!

You will notice that earlier in the text we set the bass boost to off. This is because more often than not this EQ control is misunderstood and can cause damage. The bass boost control ramps a range of frequencies in the bass region that will cause more bass to be created than the signal coming in from the head unit expects. It will also consume more power and can push a system into distortion if the settings are not made carefully. An example of a valid use of bass boost might be where your woofer system has an uneven response – as you turn up the gain the upper region of the output becomes strained and begins to distort but yet with low frequencies you are able to turn up the bass without distortion. In this case, you would go back to the beginning of the setup instructions, get the woofer playing at a modest level and then swing in some bass boost until the distortion happens at the same volume level, regardless of the music you are playing. Then, you would set the gain with the bass boost control in THAT position – to take account of that level of boost. You ABSOLUTELY cannot increase the bass boost once you have already set the gain level – you’ll overdrive the amplifier and burn something out.

You have done it! Enjoy your system!

Earthing Instructions

As explained in the previous instructions, getting a good quality connection on the earth is critical for getting your equipment working correctly. If you get it wrong, it WILL fry your amp and WONT be covered under warranty! These pictures give you very clear examples of good and bad practices.

To the left you can see what is commony percieved to be a good earthing point. It is not, there will not be enough pressure on the ring terminal and oxidisation will occur on surfaces.

To the right here is a complete fail, the earth has been attached to painted metal and held with a washer and a self tapping screw, this will most definitely cause serious resistance and while the amp may appear to function correctly initially, at higher output levels, the amp will strain and a component within will fail very quickly. DO NOT DO YOUR EARTH LIKE THIS!!! PLEASE! :)

To the left, we see a hole drilled directly into the chassis, big enough for a bolt and with access to the nut from behind. The area has been prepared by sanding off all the paint down to the bare metal. on the contact side of the hole. Although you do not need to sand off as large an area as you see here, this was done for illustration purposes.

Here you can see the finished product, as you can see there will be ample contact between the ring terminal and the chassis of the car. The bolt is the correct size to clamp down only on the ring. It's worth mentioning at this point, a quick blow over with primer will stop the metal rusting too!