BASS FACE

Instruction Manual

MODEL

POWER8.I

!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.

The Bass Face POWER8.1 active subwoofer enclosure is a high quality product designed to add bass fill in a car audio environment. It is designed primarily for installation under a car seat but can also be used in other applications.

Before you even get the unit 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. You can use either a 10AWG or 8 AWG kit for this product. 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 (for a quality 8 AWG kit we suggest 25A) 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 location point for the box. 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. Obviously, if you don't have RCA's on your head unit you will also need to run a pair of speaker cables from your source instead. If you don't have a remote on your head unit then the POWER8.1 does have an auto turn on facility which will detect line level output and automatically switch on and off. Whilst you are running these cables you will also want to locate the remote adjustment box and run the cable back too.

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. Try to pick a solid chassis bolt and remember to sand off any paint to the bare metal where the wire will be connected. If there exists an opportunity to drill a new hole and create your own earth point then this is probably the optimum. 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, seat belt securing points 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, gain adjustment box cable and remote lead are all securely running through the car to where you want the box and the earth wire is fastened securely, somewhere close to the amp, you can fit the unit itself.

The box is deliberately designed to be of heavy construction. This gives the woofer something to kick against for the best possible sound. If you can mount the unit securely to a solid surface then you will further improve the performance. Silicone sealant can be used to effectively stick the unit in place if you have metal to bond to but obviously don’t do this until everything is working perfectly and all settings are done. If you can actually use the provided feet to physically screw the unit to the floor of the vehicle then you will get the very best from the product in terms of output. If you are installing the unit under a seat then obviously the woofer will be close to the seat above it – this will create some acoustic loading on the unit which will help to add to the cone control. If you are installing in another location such as the boot, then before you commit to screwing or sticking the unit in please give consideration to facing the woofer into a solid surface such as a boot floor or corner. As an initial starting point, allow approx 3” clearance between the woofer and the side of the vehicle. You can experiment with moving the woofer closer and further away from the side. As you do this, you MUST be listening sat in the driver’s seat as you won’t hear the effects of phase change if you are stood over the unit. If you cannot hear any difference or you can’t “load” the box in this way then don’t worry – it will work fine “free field” in the boot.

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!) If you are not using RCA connections then connect in the high level inputs to the Molex plug provided (Black line is always negative, so; White is R + White with Black line is R – . Grey is L + and Grey with Black line is L-) Take care to make sure you get positive and negative the right way round. If you get one side wrong then you’re not going to get much output at all from the unit. One good tip here is to connect in one side, get the subwoofer working and then test connect the other side. As you do that you will hear that when connected one way round you get LESS output than you did with only one side connected. With it connected the correct way round you will of course get slightly MORE output than with only one side connected. Make sure you have this right.

Quickly make sure the auto turn on button is set correctly (ie “off” if you are using a

hardwired remote turn on cable or “on” if not.) Set the phase button to 0 degrees. You’ll leave the phase button at 0 degrees until everything else is done. At that point you might want to press it and switch to 180 degrees just to try it. When listening from the drivers seat you MAY notice a difference in output level with the 0/180 setting.

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 knob is set to minimum (0). Next, set the crossover (low pass) knob to approximately 100Hz as a starting point. Set the subsonic filter knob to about 35Hz

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

Before we begin in earnest you need to be realistic about how much bass it is possible to create from a small active enclosure with an 8 inch driver. The output will be tight and punchy, with reasonable low end extension. This woofer box is not going to be a substitute for three 15 inch woofers in a ported box – and we urge you to keep this in mind as you work through the setup process.

The first step is to work out just how loud the rest of your system can go. It is likely that previously you have had just your head unit (car radio) and standard speakers. In this configuration the limiting factor has been the car radio amplifier, which has a restricted amount of ability to produce bass notes cleanly. The first job, then, is to turn up the radio with the subwoofer OFF (pop a fuse out) and have a listen. First set the bass and treble to 0 or flat – no adjustment, and ensure any loudness controls are off. You will notice that as the level climbs up to around half way or just over (the more modern cars are better!) you begin to hear distortion. Go into the head unit menu and reduce the bass setting to a negative value and re-try. What you will begin to learn is that as you reduce the bass, the rest of the sound can be played cleanly at a louder level, and that it sounds sweeter. You can also try nudging in some extra treble at this point to get the sound exactly as you want it. Try to ignore the fact that you now have a thin and tinny sound. You’re going to fix that in a moment! Take a note of the new maximum volume level that you can play to cleanly, and average that across 2 or 3 different different songs (to take account of different recording levels) – you want to know for sure that at the level you agree on in your head you KNOW your system is totally clean regardless of the song you listen to. We are going to call this your SET POINT.

Now, disconnect all other speakers and put the fuse back into the subwoofer. Next, turn the level on the bass box all the way down. Set the remote knob to a point

somewhere in the middle of the range.

Before we do this please learn to hear distortion from a woofer, because it is slightly different from a conventional speaker. On a woofer, distortion makes itself known as an unclean bass note – you may hear a cracking, a metallic slapping sound or a rattle. It is different for each setup and song but to do this setup properly you will need to learn how to detect it. As you work it is acceptable to swing on the controls and let the system distort for a second or so as you learn to recognize the sound as it goes bad. Don't be too scared of this – but as soon as you hear those bad sounds just make sure you immediately back off into normal operation. If you do not understand how an unhappy woofer sounds then you risk becoming 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!

Now, go to your head unit and gradually turn up the volume until either you begin to hear distortion from the woofer or you reach the set point. REREAD THAT SENTENCE. If you hit distortion first, then keep turning down the remote bass knob on the woofer until you can get to the set point cleanly. If this is the case then you are done here – your woofer is set up. This is unlikely – what will most likely happen is that you will reach the set point and you won't be getting that much out of the woofer….

Now, with the head unit at the set point turn up the level control on the woofer until it begins to distort. Then back the level off a bit to a point at which the bass sounds clean and tidy no matter what song you throw at it. You can now reconnect the rest of your speakers and have a listen.

It will likely be the case that with your setup done in this way the integration and balance of the amount of bass vs the rest of the sound is not perfect right away. The way to deal with this is to fine tune the levels now. If you have too much bass, it is a simple matter to turn down the woofer on the dashboard knob. If you have too much midrange and treble then you need to lower your set point and turn up the woofer on the dashboard knob, being careful to re-check the output at this lower set-point in the same way as before. If you choose a lower set point and are happy with that lower output level than your head unit is capable of then you will be able to put back some of the bass that you took out of the head unit previously which will be helpful.

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 car/woofer combination 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!