DB1.2 1Ohm Class D Monoblock Subwoofer 12v Power Amplifier 1010w 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 capabilties 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.

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, wont 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.

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. If applicable don’t forget to fit the amplifier remote control wire and any speaker wires running forwards at the same time.

The amp should be mounted on a solid surface such as a boot floor. 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.

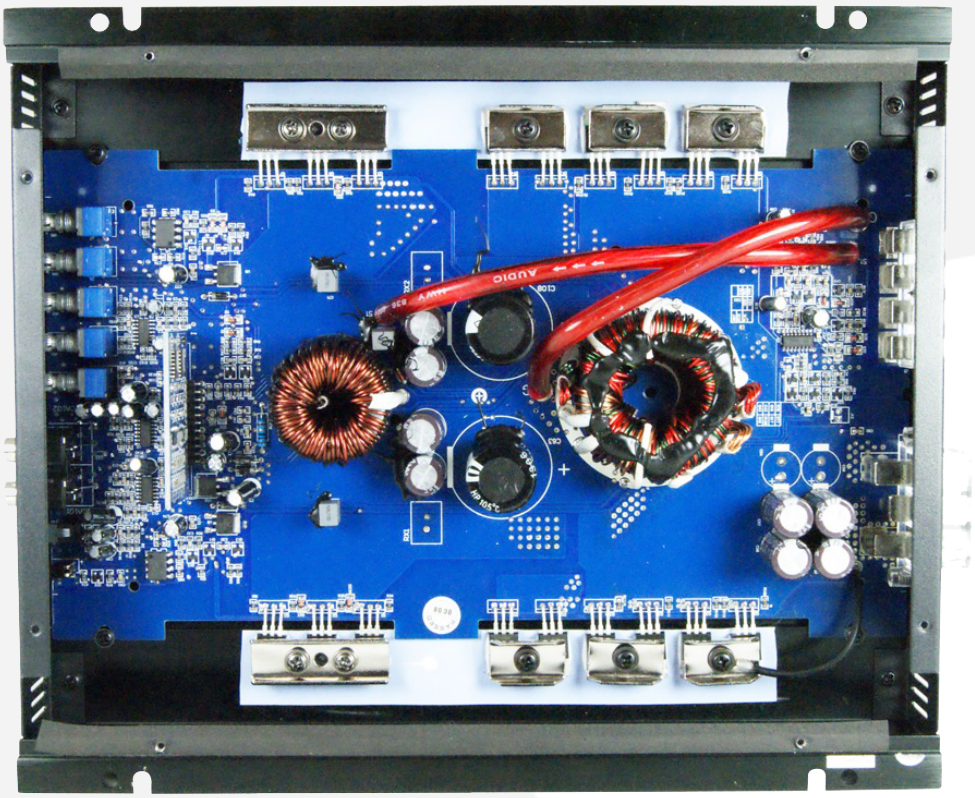
You need to ensure that the load you subject your amplifier to is within specification and of a sensible nature and that you have the appropriate cooling where applicable. It is your responsibility to ensure the amp is kept at a sensible working temperature. Vertical mounting or “hot boxing” can cause severe damage to the amplifier. Also take care mounting an amp onto a board that has been covered in carpet. This can restrict airflow under the amplifier, limiting the amount of convection cooling that can be achieved and insulating the amplifier underneath which can build up heat inside the amp. For installations that are space compromised the installer can add small PC style fans to circulate air.

When choosing a speaker impedance remember that bridging a pair of output halves the impedance – So a 4 ohm woofer bridged the amp sees 2 ohms per side. Thus to run a 2 ohm load on a bridged amplifier it must be capable of seeing only 1 ohm per side.

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 sound controls on the amplifier. This description covers the principles of operation – for specific instructions refer to the set up notes for the exact model you are working with.

It's also worth mentioning at this point that running audio into the amp but no speaker attached can seriously damage your amplifier.

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.



Crossover settings

If you have an active crossover elsewhere in your system (such as the head unit) then you may wish to set the crossover switch on the amp to OFF/FULL RANGE. Otherwise, in most cases, this must be set to ON and the controls adjusted appropriately.

For subwoofer installation and setup we recommend a LPF of about 100hz initially as an excellent starting point for most car woofers. Try 80Hz and 120Hz too – you will notice the sound change. If you are running a 15 inch woofer then you will want to be looking at a lower crossover frequency (like 80Hz) – if it's an 8 inch driver then you may want to go up to 120, 150 or even higher.

For other speakers if you are using a woofer, try to keep the HPF the same as the woofer LPF. If you are using no woofer then a full range setting might be more appropriate. A typical six inch driver will play from 100Hz and up. A four inch driver around 200Hz and up.

Once your crossover settings are set up, you can move on to the gain or "Level". Before you do anything else, please ensure that any bass boost controls on the head unit or amplifier are set to 0 / flat / switched off. We also suggest you turn the bass remote level to a mid setting to allow adjustment later to taste.

Subsonic Filters (Subwoofer only)

Next, for woofers, you need to learn about the subsonic filter. This is a crucial part of the setup. When the music frequency goes lower than that which the subwoofer system can reproduce with any guts you are wasting a lot of energy asking the amplifier to create those parts of the music. Worse still, your woofer will try its best to create them and find itself moving backwards and forwards at very large levels of excursion and distortion from the overstretched amplifier. Many bass amplifiers do not have subsonic filters – this is MADNESS and results in a lot of burned out woofers and amplifiers. Many bass amplifiers DO have subsonic filters that their owners do not understand – this is MADNESS and results in a lot of burned out woofers and amplifiers!!!

As a rule of thumb you should set your subsonic filter to about 30Hz – this is a generalization because obviously different subwoofer setups can play to different low frequencies. Something like an 8 inch sub in a ported box designed to be very punchy will struggle to get below 50Hz – in which case inch up the subsonic to that level to improve all round performance and protect the components. If you have a 15 inch woofer in a well sized sealed box that is designed to sound low and atmospheric then you may be able to come down to 20Hz with the filter. As you turn the filter up you will hear it stopping the low bass from being played – but you will notice that you can play the music louder with less distortion. You need to set this to optimum balance later.

Gain / Level adjustment

Now it is time to disconnect all other subwoofers or speakers so that you can hear only the speakers powered by this part of 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 from the driver. 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 driver(s) are just about to distort. If they do start to distort, turn back down till they sound perfectly clear.

One thing that you need to learn is how to actually hear a speaker "distort"; you may hear a cracking, a metallic slapping sound or a rattle as well as just that thrashing distorted tone. It is CRITICAL that you detect this sound and back the amp off to stop it NOW before you damage something/everything.

Boost Controls

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.

Treat the bass remote with similar caution. It is effectively an overdrive gear – designed to allow you to fine tune the sound to your preference. It cannot, however, make the system more powerful than it already is! So yes, as you drive slowly with little tyre noise you might want to reduce the setting on the cockpit knob to reduce the bass level. And yes, if you are listening to a track with a low recording level and you fancy a bit more output you might increase the setting. But it is your responsibility to listen for "dynamic compression" (where you are turning the system up on the knob and yet the actual volume is not increasing) since this is an indicator that the limits of the power available have been reached and over-reached!

Phase Control

The Phase switch on an amplifier is there so you can quickly flip the phase of the connected driver(s), instead of taking out the wires and changing the + and – around. This can be very useful if you are trying to get a specific sound or if you have wired your door speakers and subwoofer out of phase to each other by accident.