



# **BASS FACE**

## **Instruction Manual**



**MODEL**

**SPL5C1**

# !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](mailto: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](http://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.

Before installation, please take the time to review your chosen fitment location and to check on mounting clearance both behind and in front of the midbass speaker. If you do not have the clearance behind to allow operation of the vehicle windows or other functions you may need to obtain spacer rings to move the unit forwards. You need to ensure that the cone and surround will not touch anything during playback. Remember that the cone will move a good few mm forwards during operation. Should you need to make your own spacer rings, we suggest MDF or similar, since the additional solidity and lower resonance goes a long way towards eliminating vibrations when compared to a standard plastic ring.

When you mount the speaker with screws it is really important to make sure that you do not damage the rubber surround with tools or any retaining washers. If you need to drill new holes for mounting the speaker into the steel of the panel then make a small pilot hole first to ensure accuracy, after first marking the points with a felt tip pen.

Crucially, you also need to ensure that there is no gap between the speaker framework and the door panel – as leaks like this will ruin the bass response. Additionally it is vital that the chassis of the speaker is tightly mounted and perfectly flat. If you do not have a flat surface then you can use a combination of washers and long screws to install without putting the cast chassis of the speaker under tension. A cast chassis has a low resonance and keeps the cone under the best possible control but is very rigid and brittle, and damage can be done by a mounting plane that is not flat. You must then ensure that any leaks are totally plugged with silicone sealant.

We strongly advise that you consider sound proofing the car at least around the midbass speakers themselves to ensure that the sound produced does not get lost in the vibrations created in the panel. This will allow your speaker to be more rigid, giving you the best sound quality possible. It will also improve the output of the driver considerably, with no downsides!

When installing sound proofing it normally helps to warm the material before use. Try to double up the layers close to the speaker itself. You are trying to increase the weight of the panel and give the speaker something solid to kick against.

The next task is to run cables from the midrange speakers and to locate the crossover boxes. These must be fitted away from moisture and vibration. You can install them in the doors, but they **MUST NOT** be fitted behind the water membrane in the outside space of the panel. Please note there is **NO** warranty for wet and mouldy crossovers! Installation must take place **INSIDE** the membrane, just behind the door card. (The arm rest is a favourite place.) At this time we don't recommend that you permanently fix the crossovers since there is a switch inside that allows adjustment of the level of the tweeter.

Once you have decided on a location for the tweeters (generally keeping them close to the midrange speakers results in superior sound imaging in the centre stage area but mounting them on the dashboard, higher up results in a loftier and more defined width of stage.....) you can run the cables for the tweeters back to the crossover boxes.

It is of critical importance that you use the crossover boxes! You ABSOLUTELY CANNOT just cut off a standard vehicle tweeter and replace it with our tweeter. If you do this the tweeter will receive full range sound and will be destroyed in a few seconds of playback. Again, there is NO warranty for tweeters that have been pulled apart by full range input.

Finally, connect the tweeter and midrange speaker cables to the crossover box. A common mistake is to accidentally reverse the positive and negative connections somewhere in the car. This can result in poor bass response and out of focus vocals. This condition is known as connecting “out of phase” and is a common mistake!

Now you can connect the input cables from the audio source. Most likely these will be the original wires that were previously going to the standard door speaker. You might have to extend them - if you are indeed connecting directly to the factory cables from the head unit, then you can sometimes have a tricky job because the colours and markings of OEM cables are inconsistent from side to side. The easiest way to get this right is use a simple multi meter. Firstly, set the multi meter to volts. Then, connect the ground wire of the multi meter to a ground point of the car and play some music through the head unit, testing each wire as you go. The multi meter will show either a positive figure or a negative figure as the music plays. The wire that goes into positive voltage is the positive cable. Connect this to the positive side of the speaker and connect the other wire to the negative side of the speaker.

If you are connecting via an amplifier your task becomes a lot easier. All you have to do is remember which wire is positive coming from the amplifier by identifying the stripe on the wire and keeping that convention consistent throughout your installation. So it's either “stripe to positive” or “stripe to negative” right the way through.

Now your installation is basically complete you can temporarily reassemble the car and have a preliminary listen. When it comes to setting up your system for sound, please remember that the single most common cause of speaker failure is distortion. And the single most common cause of distortion is an amplifier set at too high a level.

The most annoying aspect of car audio is that the car radio manufacturers insist on producing head units that actually distort at about three quarters the way up their volume scale. If you add a little bass to the settings this critical point can be as low as half the way up the volume level! The result of this is that the hapless owner of the system blames the speaker for the distortion. The comment is usually “the speakers are not powerful enough to take the sound.” In reality, you need to ensure that you play the system within the scope of the capability of the amp you are using. If this is a simple head unit then consider adding a subwoofer if you need more bass – or add an amplifier to the speaker outputs if you need to drive your new speakers harder. Whatever you do, don't sit there distorting your sound and then expect us to dish out replacement speakers under warranty.

With your BassFace speakers you are going to experience a much finer tonal balance and a superb stereo experience. What you are not going to do is to make your amplifier or head unit more powerful than it already is, or to re-write the rules of physics and create sub bass out of a speaker that is not designed to do that.

Once the levels are nicely set up and you have your system performing at its best you will want to try switching the tweeter level selector control inside the crossover boxes. The settings are full, -3db and -6db. If the tweeters are mounted in the kickwells or with the mids in the doors then you will most likely leave the switch in full mode. With the tweeters up on the dashboard reflecting off the windscreen you may find that the sound is slightly "bright" – in which case the -3 or even -6 setting may be preferable. Once these adjustments are made you can securely fix the crossover units and re-assemble the car finally.

If you have the facility available on your head unit or amplifier it will be beneficial in most cases to set a crossover point, to limit the amount of bass that is being fed in to your speakers. For the SPL5C.1 we would recommend the use of a 100Hz crossover in most situations, and on the SPL6C.1 we would suggest 80Hz as an excellent starting point.

For advanced installers, it is of course possible to use the tweeters and midrange speakers as an active setup. If you wish to do this, look to a 5000Hz crossover frequency at 12db/octave. Clearly if you have the electronics to achieve a steeper slope than this then you can come down lower than this – we recommend 4000Hz as a realistic minimum even at 24db/octave but the tweeters do still sound fantastic down to 3500Hz. Please note that playing the system in this way makes it much easier to damage the delicate high frequency drivers and will void your warranty.