Indy SPL10M/4 10" 25cm 4Ohm 400w RMS Pro Audio/Car Midrange Speaker

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.

This speaker comes equipped with Copper Shorting Rings installed inside the mechanism. This improves the impedance profile of the speaker, and gives better transient response. Compared to running without you may find that you need to use slightly increased gain levels on the amplifier.

IMPORTANT NOTICE ABOUT SPL10M.1 (NON "S" MODELS) - The SPL10M.1 basket is made from standard gauge steel. Although the voice coil and motor is capable of handling very large power levels the basket is the limiting factor. Use of excessive power beyond 75RMS per speaker can result in the basket cracking.

During installation of your SPL10M.1 we recommend that you have music playing as you tighten the speaker into the enclosure or panel. This will allow you to listen and make sure that the basket is not distorted during installation which can result in voice coil rub. It is absolutely essential that the mounting surface for SPL10M.1 is ABSOLUTELY FLAT.

Generally, separate mid bass and mid range driver units are considered to be specialist products, in that they are supplied as raw driver units without crossover network. The intention is that the unit will be installed in conjunction with an existing crossover unit or active crossover and a pair of tweeters which you supply. These speakers are designed to offer the finest in sonic imaging and staging, as well as delivering excellent levels of output. A careful installation will pay dividends in terms of performance.

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 speaker. If you do not have the clearance behind to allow operation of the vehicle windows or other functions you may need to make or 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 plastic ring.

When you mount the speaker with screws it is really important to make sure that you do not damage the speaker 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.

We strongly advise that you consider sound proofing the car at least around the 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 and most output possible.

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, lower the resonance and give the speaker something solid to kick against.

When you install the amplification please ensure that you maintain the same phasing setup throughout your installation. So it's either "stripe to positive" or "stripe to negative" right the way through.

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.

We do recommend the use of an external amplifier to drive our midbass and midrange speakers. If you are going to power your new speakers off your head unit then please remember that head unit manufacturers insist on producing products 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 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. Remember that it's easy to burn out speakers with distortion and this isn't part of the 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 its, or to re-write the rules of physics and create sub bass out of a speaker that is not designed to do that.

When you look to tune the crossover frequency we would advise that you start with around a 5Khz high pass roll off to the tweeters. This is an excellent starting point. Depending on the location of the tweeters and the type of the tweeters you may be able to run a lower crossover point, which will enable more of the sound to come out of the tweeters and often this creates a better sound image, as well as tightening up the midbass.

If you have the facility available on your head unit or amplifier it will be beneficial in most cases to also set a high pass crossover point, to limit the amount of bass that is being fed in to your speakers. We would recommend the use of a 60, 80 or 100Hz crossover in most situations.

For advanced installers where there is no room to work it is possible to experiment using mid woofers to function as compact enclosure subwoofers. To get the best performance in these circumstances you would look to run them in a sealed enclosure of approximately 0.5

cubic feet for the pair. Alternatively, you can run them infinite baffle without a box using a solid thick board to mount them. If you are using the speakers as woofers please set the crossover frequencies to give a subsonic filter at approx 35Hz. For the low pass we recommend starting at 200Hz for this application. You can use Dacron to stuff the enclosure to mimic a slightly larger box than you physically have.