Indy XM10/4 10" 25cm 4Ohm 320w RMS Professional High SPL Component 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.

Before tackling the installation of the speaker, it is CRITICALLY important to follow at least a basic break in procedure for the speaker. This operation will loosen up the moving components of the speaker which will prepare it for heavy use. Failure to run a proper break in can be responsible for failures such as ripped spiders, surrounds or tinsel leads. We advise to feed the speaker with a range of tones from a clean power source at gradually increasing amplitudes. Before you start, gently press on the cone - you will feel that it is very stiff, and not compliant. You can imagine the forces at play if you try to run that speaker like that in anger before break in. Start off by using the approximate resonant frequency of the speaker (the FS), and run the speaker on the bench. Observe the speaker carefully as you run the process - remember that the speaker will not have any power handling as it is not in a box or baffle plate. Just run it up so that the spider, surround and leads gradually get exercised. Don't overdrive the speaker - you DO NOT want to hear ANY bad noises from it during this process. It's gentle exercise to loosen it up. Once you have run the speaker for, say, an hour, recheck by switching everything off and pressing the cone. You will feel that it is much softer. You should then run for another hour to complete the initial break in. From here many more experienced people will wish to adopt their own preferred break in procedure which is of course fine. From our perspective and from a warranty point of view the minimum requirements are to run the driver as described for at least 2 hours before installation in the final environment. Failure to carry out this process will result in NO WARRANTY support on the speaker. If you have a failure of the speaker you will be asked the warranty question to prove that you have read this manual and adhered to the break in procedure. The answer to the warranty question is "BREAK-IN FOR THE WIN!" Please repeat this phrase if you are asked to answer the warranty question. Later in this manual we may reference specific break in procedures for this particular model. They are recommended to be followed but not as mission critical as this initial period.

Indy XM is an outstanding midrange driver that is optimised for installation into car stereo. They are often used in large door builds. They are designed for use as free air drivers. They can be used in enclosures but it is important to rememeber that this is not a subwoofer. Excursion is limited as it is a cloth roll surround and as such, care needs to be taken in the design of the crossover and enclosure as well as an eye to power input to make sure that the limits of the driver are not exceeded. Installation into a sealed enclosure is possible and will yield good results at good levels of power handling when sub-bass frequencies are excluded. Use in a ported box can also give good performance but is advised only for experienced users, since the cone excusion goes very high below the tuning frequency, which can easily lead to damage of the driver with broken tinsel leads, bottomed coils and other non warrantable damage. Of course, an experienced user will install a high pass filter to offset this effect and so there is no good reason a ported box can't be used but in general we would not recommend it unless you know exactly what you are doing.

I’d like to make a point about the wiring of the speakers. It is preferable to rewire the system with excellent quality OFC cable (obviously we recommend our own) but it is NOT a critical factor for getting a good sound. Much more important is the careful physical installation as I have detailed above.

Finally I want to introduce you to the concept of time alignment and stereo. This is a complicated subject but an overview is that for the best stereo you should design your speaker system to offer the most equal path lengths between the listener’s left ear and the left speaker and the listener’s right ear and the right speaker. If you think about the design of most cars, with either left or right hand drive and then speakers in their common locations this is potentially a difficult brief. Delving further, however, we can start to recognise that the lower down and further away we can position the speakers (such as footwells or floor panels) the more equidistant the two measurements become. The trade off when designing a no compromise install is that the lower down the speakers are mounted (and this is especially true if you expect the speakers to produce high frequencies such as tweeters) the more the sound stage suffers at the edges. A sound stage is an imaginary stage – like at a concert – in front of you in the car. If there is a violin on the left of the stage how well is that replicated to listen to? Is the violin “there” or is it on the passenger’s left foot? If the singer is centre stage is she coherent, together and placeable? Or is she singing at you from everywhere like in a disco? Placing the higher frequency speakers physically higher helps lift the “level” of the sound stage but can harm the coherence of the sound – known as “imaging and staging”. I hope the paragraphs above help to create some interest in working to optimise the setup and design of your installations. It can be really helpful to have the tweeters (if applicable) on a pair of fly lead extension cables and then you can blu-tak them to the car in various positions pending test to help selection of the best location.

PROFESSIONAL GRADE HIGH SPL MIDRANGE OPTIMISED FOR CUSTOM INSTALLATIONS
BASS FACE
IndyXM 10/4
320 WRMS 4 Ohm