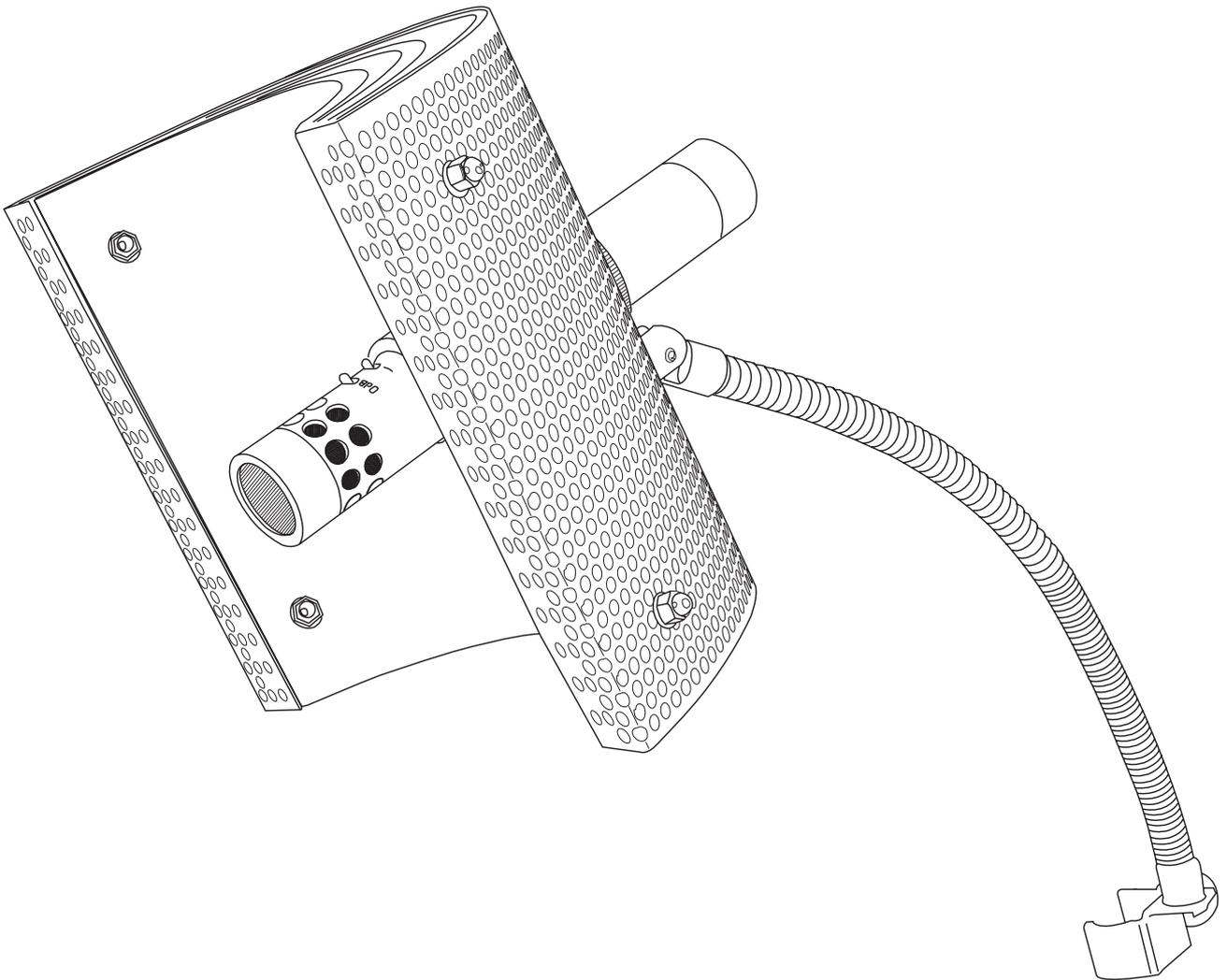


# Instrument Reflexion Filter

## Manual





# SE Electronics Instrument Reflexion Filter Manual

Thank you for buying the sE Electronics Instrument Reflexion Filter.

Although the main idea behind this product is to facilitate 'dry' and 'separated' instrument recordings we'd be very interested to hear about novel applications from you, so please do contact us with your ideas; we are always glad to listen as it helps us improve and develop the product, and the information we can supply to other sE users.

Your Instrument Reflexion Filter carries a 2 year manufacturing warranty, with free replacement of parts in case of mechanical failure due to faulty components. This warranty does not cover failures deemed to be as a result of misuse or abuse of the Instrument Reflexion Filter.

You can extend your free 2 year warranty to three years by registering your product at [www.seelectronics.com](http://www.seelectronics.com) <<http://www.seelectronics.com/>> so please visit the site and leave your details. You can also subscribe to the sE newsletter which we email out once every few months (don't worry, we won't pass your details on to anyone else, and we won't bombard you with SPAM!)

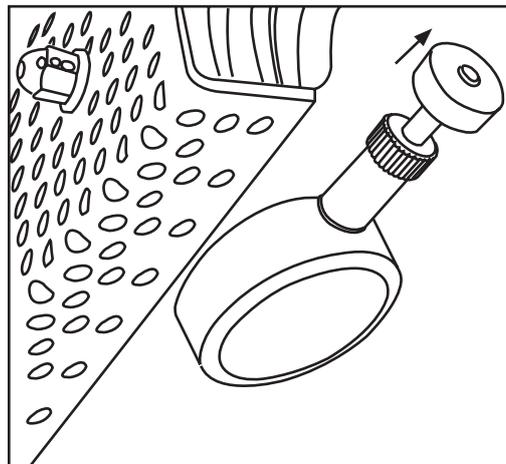
## How it works

The sE Instrument Reflexion Filter or IRF works on the same principle as our highly acclaimed Reflexion Filter, which was initially developed to assist in vocal recording. The Reflexion Filter system works in two ways: by shielding the rear and sides of the microphone from off-axis sound, such as room reflections, and by reducing the amount of vocal sound spilling out into the room. In most small studios, the room reflections often colour the sound in a destructive way that is impossible to remedy using EQ or by adding additional artificial reverb, so minimising these reflections at the recording stage makes it possible to achieve professional sounding recordings in an acoustically imperfect room. In reality the Reflexion Filter acts as a localised recording booth that eliminates the need to treat the entire room. Our unique multi-layer absorber technology allows the Reflexion Filter to be made much more compact than acoustic foam or mineral wool panel absorbers offering a similar level of performance and our new Instrument Reflexion Filter takes this well proven concept and adapts it for instrument use.

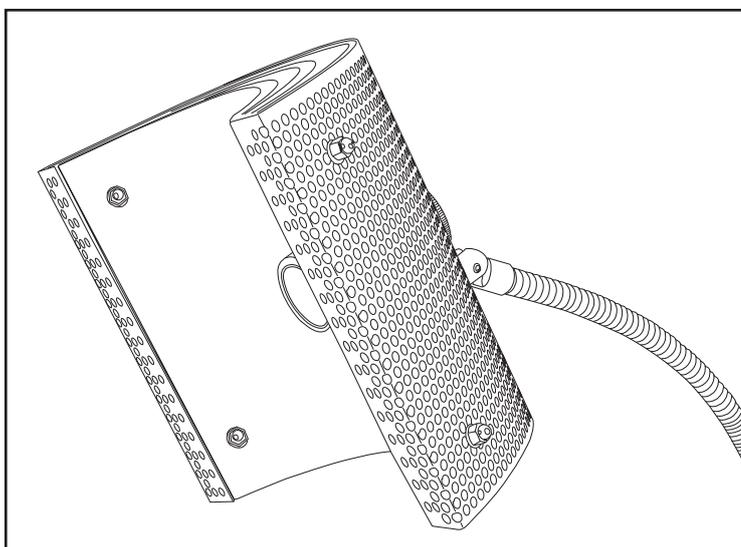
The SE Instrument Reflexion Filter is a scaled down version of the original with a versatile gooseneck mounting system and a central tube to allow 'end fire' microphones, such as the SE2A, to be set back into the IRF so that the acoustic screening can work as effectively as possible.

Measuring 6.5 inches by 8 inches, the IRF is light enough to be supported on a conventional microphone stand using the clamp assembly at the end of the gooseneck. The gooseneck is packed with the IRF but not fixed to it. A simple thumbscrew system holds this in place but take care not to lose the fibre washer as this helps keep the joint tight.

A spring-loaded plunger in the side of the central tube is used to secure stick-type microphones and a good starting position is to get the microphone capsule roughly level with the front edge of the filter. The easy way to do this is to put the IRF face down on a table, adjust the microphone position by pulling the spring plunger to release the microphone, then lower it so that the microphone capsule end is also touching the table. If the microphone is placed further into the IRF, you may get slightly better sound isolation but at the expense of a small amount of tonal coloration. If on the other hand you have the microphone protruding further than necessary, the amount of sound isolation will be reduced.

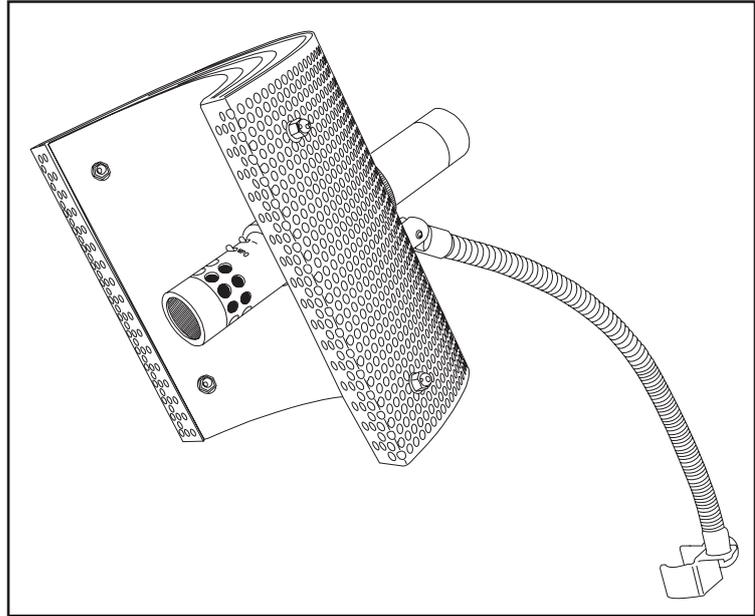


In situations where you wish to use a side-address microphone, such as our sE2200A, the central tube can be plugged using the foam bung provided. You can still use a single mic stand to hold both the microphone and the IRF. Where the instrument being recorded has a reflective wall or other surface directly behind it, a further improvement can be made by improvising a screen from blankets hung behind the performer to further reduce the level of reflections entering the front of the microphone.



In smaller studios, drum recording is often a problem because of the intensity of ceiling and wall reflections, which in the main affect the overhead microphones as these are furthest from the kit. By setting up an IRF to shield the rear and sides of the overhead mics, the level of these unwanted reflections is significantly reduced resulting in a cleaner recording. Also keep in mind that adding compression to your recording later will increase the effect of any room resonances or coloration so the drier you can make your original recording the better.

The IRF is also invaluable on acoustic guitar recordings, particularly if you prefer to use omni or figure-of-eight pattern mics rather than cardioids as these are very sensitive at the rear — the direction looking away from the instrument. By shielding the rear of the microphone with an IRF, the amount of spill from other instruments, as well as reflections from walls, is again reduced by a very worthwhile amount. Similarly the IRF is well-suited to recording electric guitar or bass cabinets, especially if using ribbon mics (which have a natural figure-of-eight pattern), but even if you are using cardioid mics, the extra screening is worthwhile, especially if the microphone is some distance from the amplifier.



Other applications include violin and viola recording where the normal position of the microphone above the instrument offers similar challenges to the drum overhead mic. Similarly, a stand mounted cello mic will benefit from the extra isolation afforded by an IRF. In fact the IRF can make an improvement in any acoustic instrument recording scenario situation where either sound reflections or crosstalk from other sound sources pose a problem.

