



## The Black Hole effect

Identifying how, where, when and to what extent you mitigate un-wanted noise in a whole system context is the key. To consider these aspects and arrive at a balanced solution, we have undertaken a comprehensive 'top down' analysis of Audio and Visual systems in the operational, quiescent and shutdown modes. This included:

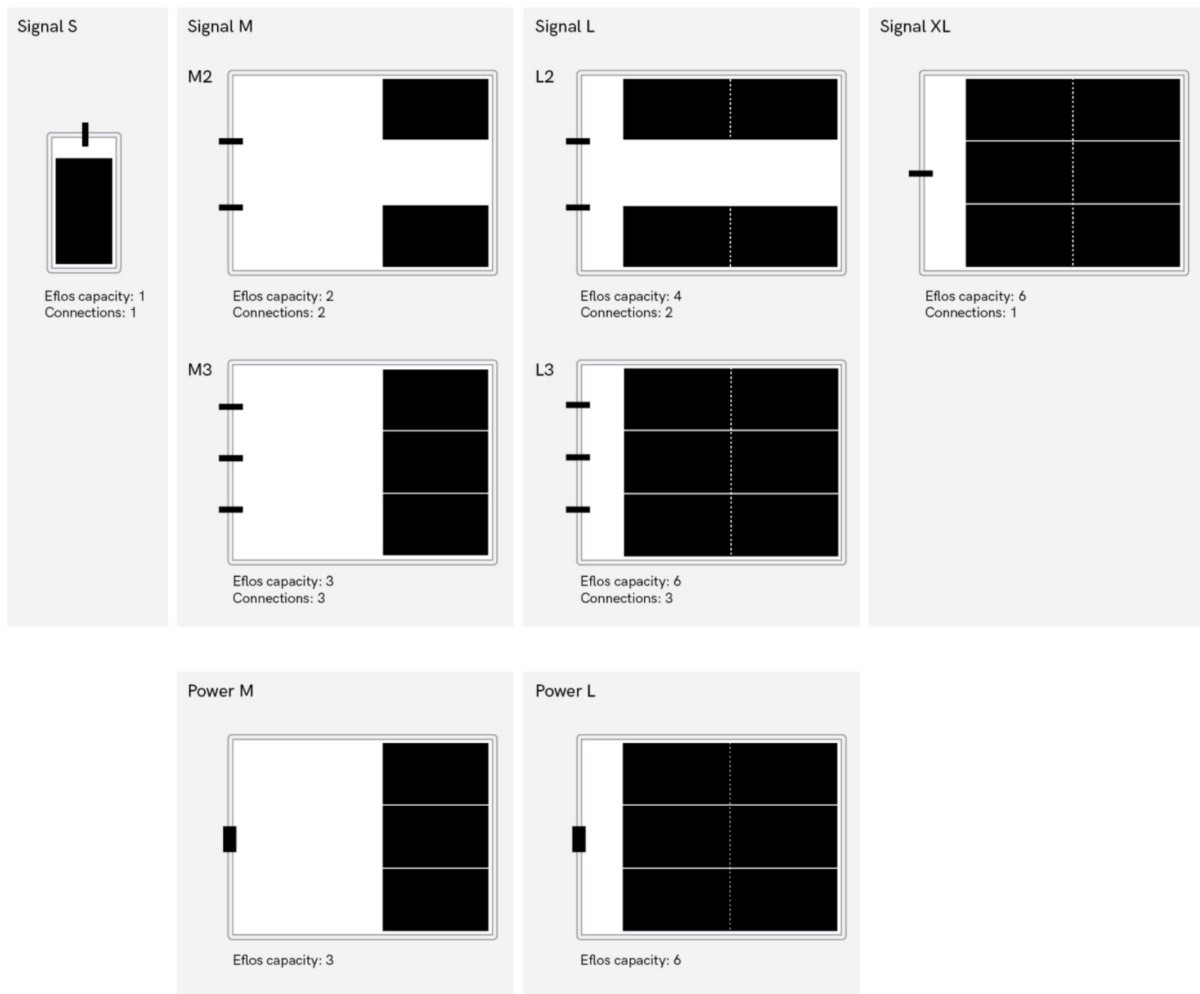
- Establishment of a set of events to an appropriate level
- Assessment of the events for the three modes of operation, and
- The derivation of specific system requirements for each mode.

The BR.Black Hole products are designed to address a representative operational scope and offer a flexible, structured and effective solution at system level.

The modules do mirror some features of grounding boxes, however, they address much more than an alternative signal ground path and are designed to perform in a more discreet and sensitive way, to address a whole range of events that apply to system level operation per se.

The module designs apply diversity using separation and segregation to ensure that first, they do not introduce a single point of failure, which could potentially damage your system. Secondly, to mitigate the potential for feedback into your system. Feedback has a detrimental effect on both your system and the process to remove the un-wanted energy by presenting resistance. In the extreme it could stop the process all together by cancelling the flow.

In respect of the above, the BR.Black Hole system is quite different to systems that have one large common dissipation volume, or active components. It is better considered as a System Energy Drain, which has been engineered to address defined requirements.



The modules are designed to connect to your equipment and components via an approved interface.

- For signal paths you can connect from the BR.Black Hole modules to spare USB, HDMI and RCA inlets on your equipment, plus available ground plane earth terminals and 4mm or spade speaker connections.
- For mains supply, you can connect using a certified mains cable from the IEC connection on the BR.Black Hole Mains module, to certified mains outlets either on the wall, or to the first socket of a mains extension box.

The BR.Black Hole modules have been assessed both individually and in the context of a representative system. When correctly applied this will not present a threat to your equipment, or its operation. Their application can be as little as one single signal module, through to greater numbers to achieve specific volumes throughout your system, for both the signal and mains domains.

There is no precise rule as to what configuration of modules works best, since it is a function of the individual equipment and available capacity to mitigate the noise. To resolve this aspect the BR.Black Hole modules are designed to ensure the available performance from each connection relates to the capacity aligned to it. This allows connections to be assigned as required to specific aspects of the system, allowing the adjustment of the effective capacity to achieve a balanced system response. In grounding boxes that have a common dispersion configuration, the effective volume is arbitrary across the available terminals.



## Our goal is to get you further into every performance

As a general rule, in the first instance, we advocate applying BR.Black Hole Signal modules to the source end of your system e.g. digital programme capture and process, before pre-amplification and amplification. You can use the USB, HDMI and SPDIF(RCA) interfaces for this phase. Then expand the cover with spade modules on available signal ground terminals. The speakers being the last point of application.

At any time during the above, you can also apply BR.Black Hole Power modules to the mains supply, as described previously. So that every piece of equipment in the system is interfaced to both signal and power. Following this rule should also bring benefit to other equipment bounded by the same power supply configuration. Televisions, computers and NAS drives are all candidates in this respect. Equally, any piece of individual equipment will contribute to maintaining a lower system noise threshold within the shared configuration providing it is on load, or on standby. The establishment of this 24/7 effect will be dependent on the eflos capacity that is available and the time of exposure.

The cables supplied with BR.Black Hole signal modules are specified not just for their overall response, but also to be very efficient at low levels in order to account for the 24/7 feature, when in standby operation.

Connection of BR.Black Hole modules to power amplifiers is not endorsed and should not be attempted.

The connection of BR.Black Hole modules to equipment casings and spare Pre-amplifier RCA outlets, is also an option. However, assessment and trials suggest that the perceived benefit can be better gained by the application of modules as described above.

## Seeing and hearing is believing

The whole reason d'être of the BR Pads and BR.Black Hole modules is to help you release the full capability of your audio or visual system.

Perception is quite personal and to claim any benefit in terms of specific subjective aspects is missing the point. We believe experience of the Black Hole products first-hand in your own home is the only way to understand the benefit to your system, and a [30 day money back guarantee](#) allows you to enjoy that experience.