

## **AR-133**

### **Active DI Box - Hugh Robjohns Reviews for SPL Magazine**

**Roundup:** The BSS AR-133 is a work of art and industrial design to look at. To listen to, it is pretty much the cleanest and most reliable DI box you are ever likely to come across. A proven track record and well placed facilities make this a sure winner. Quiet, distortion free circuitry with battery or phantom powering modes, and with an optional buffered output on the front panel in addition to the direct link, this unit can cope with anything you care to throw at it. An excellent all-round general purpose DI box and a worthy successor to the AR-116.

"DI boxes fall into the category of essential rigging equipment, as far as I am concerned. Dig one out of the toy box, plonk it on the guitar amp or keyboard mixer, wire it in and worry about something more worthy!

Everyone properly has their own pet DI box, which they know and trust, and would be loath to replace, but as with all things, there are alternative designs available, each offering individual blends of characteristics and qualities. The new DI box evaluated here is a successor to the ever popular AR-116 from BSS.

The AR-133 is a stunningly attractive and most distinctive design. The slightly banana-shaped turquoise cast case is protected and supported by two full length chunky rubber side pieces which leaves a neat route for cables to run under the box if necessary. The unit measures a compact 145 x 59 x 125 mm (WHD) and the internal circuitry is mounted on a single circuit board which pretty much fills the available internal volume of the enclosure. A FET input operational amplifier performs the buffering and amplification duties and provides an input impedance of up to 1 MegOhm.

A broadly symmetrical layout of a quarter-inch input jack socket features on the front panel, with a female three-pole XLR socket in the centre and then a second jack socket on the right. The XLR is an unbalanced output hard-wired to the input jack-socket, whilst the second quarter-inch socket may either be configured as a second hard-wired link or (by breaking one circuit board link and making another) as a buffered output. A three-position toggle switch activates a pad on the input in 20dB steps, providing maximum input levels of +9dBu, +29dBu, and +49dBu.

The rear panel features a three-pole XLR socket which is transformer balanced and isolated from the rest of the electronics in the unit. Two toggle switches provide an earth-lift and power on-off. A removable battery cover reveals a void which will accept a PP3 sized 9V battery, although the unit will run quite happily on phantom power from the sound desk. Should, by some strange quirk of fate, the phantom power fail without taking out the rest of the sound desk, and you remembered to install a fresh battery in the AR-133 before the show, the BSS will automatically revert to battery until phantom is resumed. By altering some solder links inside the machine, it can be configured to operate on phantom power regardless of the setting of the rear panel power switch if so desired.

It's everything you would expect of a BSS DI box. The case work is sufficiently strong to become an effective block if you need to change the tyres on the truck, and you could play football with the thing without fear of damage to its internals! In use, it always sounded bright, crisp and clear, seeming to manage to extract every nuance of sound from the source without adding or taking away anything. The BSS is clean and clinical, and delivers to the sound desk everything it should in as trouble-free and accurate a way as possible.

With acoustic guitars, it captured the most subtle of harmonics with consummate ease and even a jangly 12-string presented no problems at all.

The common tendency to make piezo pickups sound "plasticky" was avoided and the true combination of wood and wire strings was routed directly to the sound desk. Sustain was superb on solid bodied guitars and electronics sources like keyboards and mixers were equally well handled.

I liked the BSS a lot because it did exactly what I want a DI to do.

It is very quick and easy to install, working happily from phantom power up the mic cable. It interfaces easily and reliably with any source and provides a very accurate rendition of what the music is all about. This is properly one of the best stand-alone DI boxes on the market, and its looks alone are worthy of the highest commendation. Being descended from the well-known and loved AR-116, the AR-133 is very much a known quantity and will be the unit of choice to many engineers."