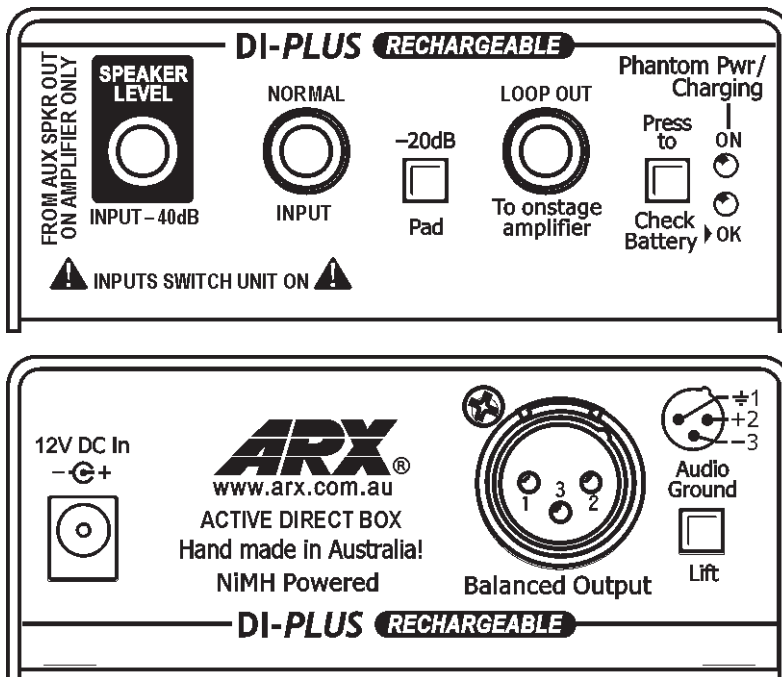


DI-PLUS-RC



Single Channel Rechargeable Active Direct Box

PHANTOM, EXTERNAL DC AND NIMH BATTERY POWERED
IN A RUGGED STEEL CHASSIS



Working with the pedigree of our industry standard DI Plus and DI Plus 2 Direct Boxes, we've redesigned and updated our circuitry and packaging, and the end result is our new DI Plus RC Direct Box.

• Rechargeable battery

As a manufacturer, ARX is well aware of the problems of disposing of batteries in an environmentally friendly way so we've powered the DI Plus RC with an internal long life NiMH rechargeable battery that can be charged off either the phantom power on the mic line, or via the 12V DC input, removing battery "throw away" as an issue.

NiMH batteries exhibit no memory effect and a long life recharge cycle.

The new DI Plus RC also features a low noise high impedance input buffer with switchable 20dB Pad, and a low distortion high current output stage able to drive the longest cable runs. It represents another major step forward in active direct boxes. Packaged in a sin-

gle channel stand-alone format, the DI Plus RC represents a unique approach to active D.I. concepts.

• Precision engineered

Ultra quiet, ultra clean circuitry delivers maximum headroom whatever the signal. Premium grade components, plus an all-steel chassis gives excellent hum and noise specifications and superb audio quality in a tough, roadworthy package. The DI Plus RC features two high impedance unbalanced inputs (see below) on the front panel, running to a balanced XLR output on the rear.

• Level control

The DI Plus RC features a Normal gain high impedance unbalanced input on the front panel, as well as a separate -40dB Speaker Level input for signal coming from the External (auxiliary) speaker output of an amplifier. A global Pad switch drops both the normal input and the speaker input by a further 20dB, making it suitable for all applications, from the softest keyboard

to the hottest broadcast levels.

• Rugged all-steel case

A lot of direct boxes are fitted into brittle cast alloy cases. Not this one! The tough all-steel inner and outer chassis of the DI Plus RC provide excellent RF/EMF shielding while making it a sturdy, heavy duty unit that is hard to dislodge, and hard to leave behind.

Whether you're a Studio or Live Sound engineer, installation contractor, or broadcast engineer, you want all the dynamics and clarity of the original sound source transferred to the mixing console. The ARX DI Plus RC provides a rugged, no-compromise solution to all direct injection and signal balancing requirements.

ARX also manufacture the indispensable **DI-6SM**: a 19" 1 RU AC powered unit that has 6 independent Direct boxes, each with high impedance Input and Loop out jack connectors, an infinity to +15dB level control, clip LED, balanced XLR output and individual audio ground lift switches.

It can also function as a 6 into 1 line mixer **at the same time!** A switch on the rear also changes it from a 6 into 1 mixer to a 1 into 6 mic or line splitter, each split's level being controlled by the six individual channel controls.

A true Pro Audio toolbox!

Specifications

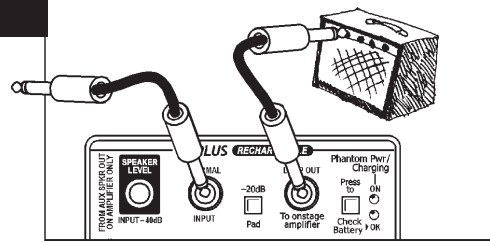
Max Input Level	+13 dB Phantom powered +6 dB Battery powered
Input Impedance	1 Meg Ohm
Max Output Level	+12 dB 600 Ohm load Battery or Phantom powered
Output Impedance	680 Ohms Balanced
Output Signal to Noise	-100 dB unweighted -104 dB A weighted
Dynamic Range	112 dB 10K Ohm load
Distortion	100 Hz .0027% 1KHz .0028% 10KHz .0037%
Frequency Response	20Hz to 20KHz, \pm 0.2 dB
Gain through Unit	6dB (Normal Input, Pad switch out)
Pad Switch	-20 dB attenuation
Speaker Input	-40dB attenuation, equivalent to 100:1 decrease in input level; -60db attenuation available with Pad switch
Input and Loop Out Connectors	Insulated jack
Output Connector	3 pin XLR, wired Pin 1 Ground, Pin 2+ Hot, Pin 3 - Cold. Global Audio Ground (Pin 1) lift or soft Ground switch
Construction	All-steel chassis, fibreglass PCB
Battery	Rechargeable 9V DC NiMH



Our policy is one of continuous improvement, and therefore designs may change without notice. However, unless otherwise stated, specifications will always equal or exceed those previously given.

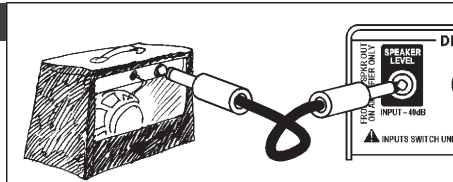
Normal Connections

A high impedance source (instrument, unbalanced line or similar) plugs into the Normal Input. If the signal needs monitoring, eg. an onstage amplifier, then connect a lead from the Loop Out to the amplifier. Pushing the Pad switch IN will reduce the input level by -20dB if required.



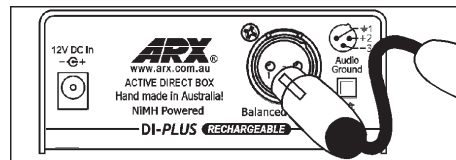
Connection from amplifier

For applications where the sound of the instrument/ amplifier combination is required, connect a lead from the Aux (or External) speaker output on the rear of the amplifier to the Speaker Level Input (-40dB) on the DI-Plus-RC. If the signal is still too hot, then switch the Pad switch IN as well to reduce the input by a further -20dB.



Note: Be sure to always use the Aux or External speaker output on the amplifier. **Never disconnect the speakers on a valve/tube amplifier.**

Output connections



Connect a balanced microphone lead from the 3 pin XLR connector on the rear of the DI-Plus-

RC to an input channel of the mixing console. Pushing the Audio Ground Lift switch IN will isolate Pin 1 to stop Ground Loops if required.

The Direct box shall be a single channel unit in a stand-alone steel chassis.

It shall have both a Normal High Impedance input and a -40dB High Impedance input jack, plus an output loop jack. There shall also be a corresponding electronically balanced XLR output connector on the rear panel, with an audio ground lift switch.

A switch on the front panel shall provide an additional -20 dB pad throughout the unit, and another switch shall check battery condition, and indicate such with an LED.

Another LED shall indicate whether Phantom power is active.

The input connectors shall have an Input impedance of 1 Meg Ohms, and the input headroom shall be

+13dB when Phantom powered, and +6dB when battery powered.

The frequency response shall be 20 Hz to 20 KHz, \pm 0.2dB and the Output impedance shall be 680 ohms balanced. Maximum output levels shall be +17dB, with a 10K Ohm load with Phantom power, and +12dB, with a 10K Ohm load with NiMH Battery power.

The unit shall have a Signal to Noise ratio of -100dB unweighted, and -104dB A weighted). Distortion @ 1 KHz shall be .0028%.

The unit shall have a dynamic range of 117dB with a 10K Ohm load on Phantom power, and 112 dB with a 10K Ohm load with Battery power. Gain through the unit shall be 6dB. The direct box shall be the ARX DI-PLUS RC.

Latest updates always available on the ARX website - www.arx.com.au

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