

**ROGER MAYER D1
ACTIVE DIRECT INTERFACE**



In the modern recording environment it is increasing popular to use direct methods of recording. The first step is to use the best possible sounding DI that adds no artefacts and is as transparent as possible. Our unique no compromise innovative design features triple shielding from a 6 layer PC Card and uses only the best quality components available and is 100% Handbuilt in the U.K.

The D1 Box incorporates our pioneering custom ultra wide band transformers that are hand wound and tested in house by Roger. These are exactly to the same performance and design standards that are also used in our new studio recording products.

A proprietary unique Class A transformer driver circuit using selected low noise semiconductors has performance parameters that set new benchmark standards for transparency and detail capture. Designed for massive input headroom working together with our custom low impedance balanced transformer it interfaces perfectly with modern DAW recording systems. The exceptional wide band frequency and phase response can be appreciated when making comparisons. 180 degree phase reversal as well as Ground Lift are provided and selected by two push button switches.

The Instrument THRU Output plus an additional Instrument Buffered Output used to drive long cables brings full flexibility for studio and live applications.

The Input Range of the Instrument Mode can handle professional line level sources up to the maximum DAW output level. Overvoltage protection is provided. No need for extra input pad electronics.

The Speaker Monitor Mode enables the D1 to capture the overall signal and tone from any power or guitar amplifier output by monitoring the amplifier speaker output. The D1 can handle the full output from 1200 watt amplifiers to enable another interesting variation of direct signal capture.

A push button switch selects the use of an External 48V power source. The default PHANTOM POWERING is deselected and results in a voltage free Balanced Low Impedance XLR Output for many other tasks such as RE-AMPLIFYING together with the other THRU and Buffered Outputs.

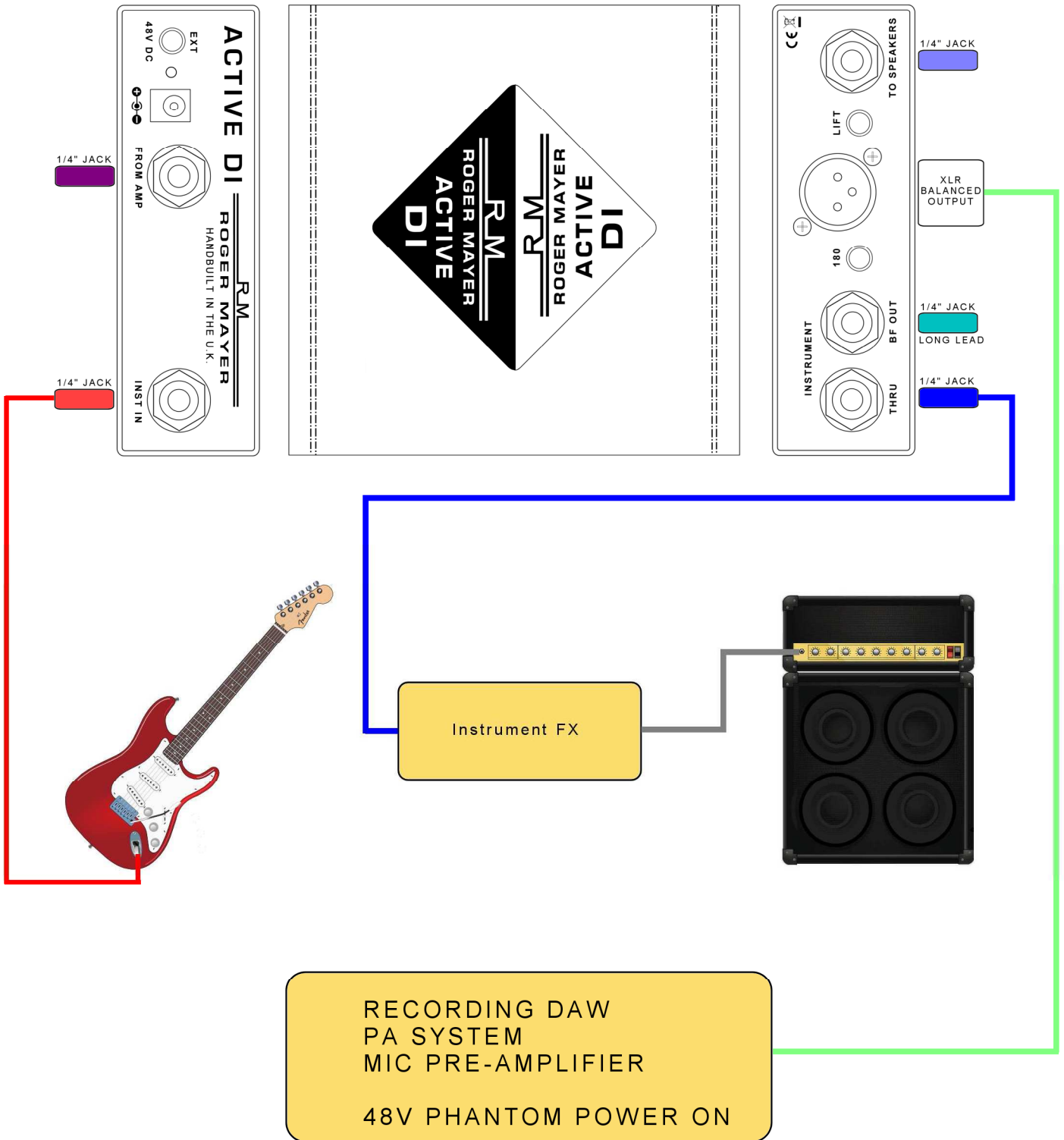
Obviously if you don't have PHANTOM POWER available this is very useful and we offer a 48V DC REGULATED - UNIVERSAL WORLD AC/DC - SWITCHING ADAPTOR as an accessory.

Our D1 is housed in a rugged stainless steel enclosure and has 2 easily erasable chrome finish side panels to identify its designated purpose in a crowded studio environment.

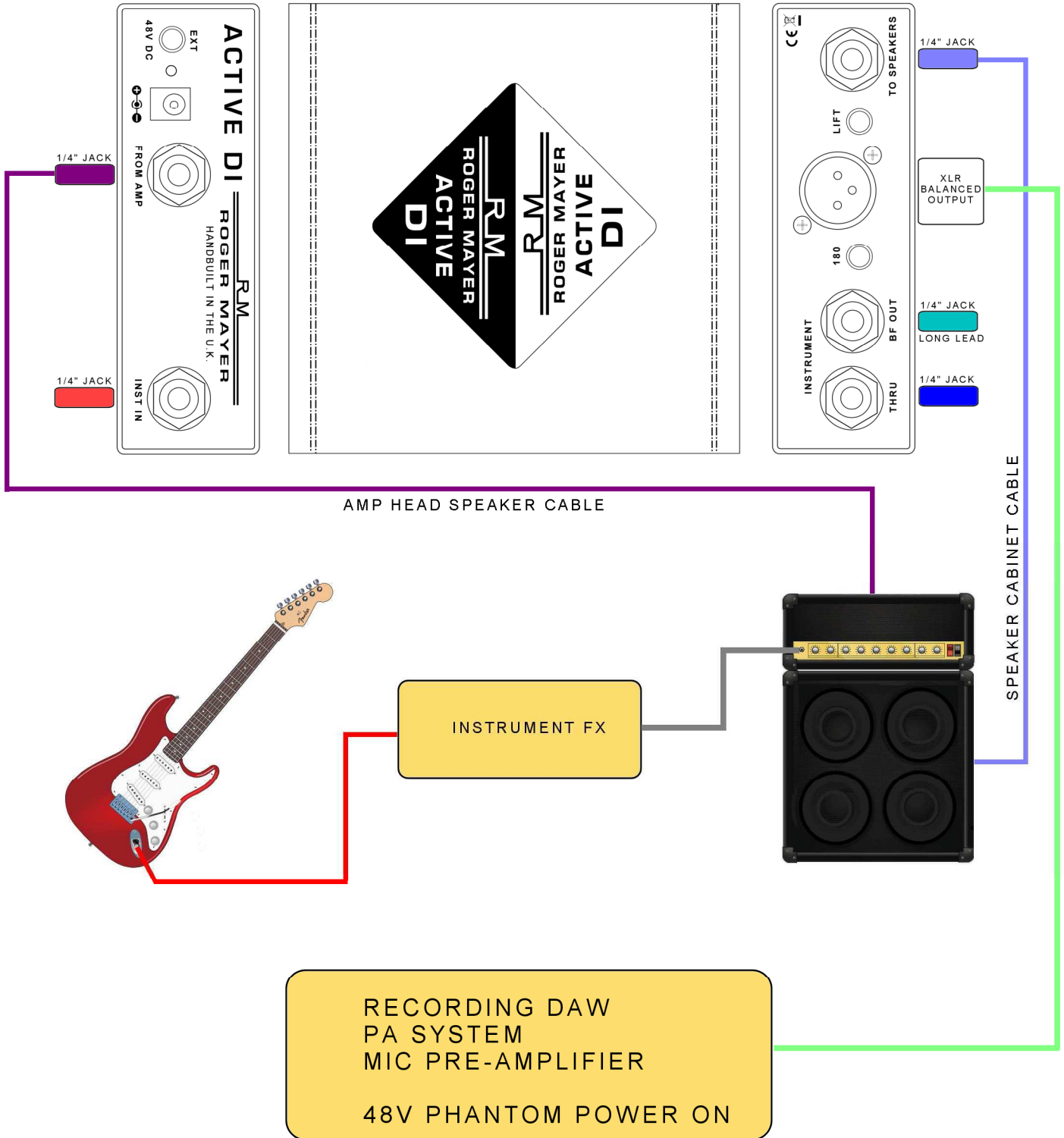
D1 Technical Features:

- Roger Mayer designed and personally hand winds, manufactures and tests each custom exclusive Ferrite Core Transformer himself to ensure that ultimate quality is maintained. The Ferrite Cores are manufactured in the EU by the leading World manufacturers.
- Discrete Class A amplifier optimised for overall performance with exceptional low noise and distortion.
- Dual powering modes from Phantom or External Power. Internal extra filtering ensures low noise performance is maintained.
- Wire free construction using direct component and socket PC mounting with ultimate shielding from internal 6 layer PC ground planes. Vibration friendly.
- Very Low Harmonic Distortion comprising of 80% 2nd Harmonics. 0.01% from 50 - 50Khz and 0.97% at 16Hz at +10dBu input level. This gives great musicality to the circuit with no cross- over distortion or other artefacts present.
- Noise output better than -120dBu A-weighted - source impedance 200-10K Ohm
- Sub Low Frequency response -0.6dB at 10Hz ref 1Khz.
- Ultra Flat Frequency Response +/- 0.1dB from 50 - 50kHz
- High Frequency Response -3dB at 200kHz. Giving great transparency and detail capture
- High Input Headroom of +21dBu
- Input overvoltage protection
- Phase performance -3° at 50Hz to +6° at 20Khz ensures best possible recording performance
- 180° Phase Shift Push Button
- Ground Lift Push Button
- Speaker Mode
- Re-amplifying from low impedance transformer balanced output
- Size: 135 W x 130 D x45 H Weight: 850g

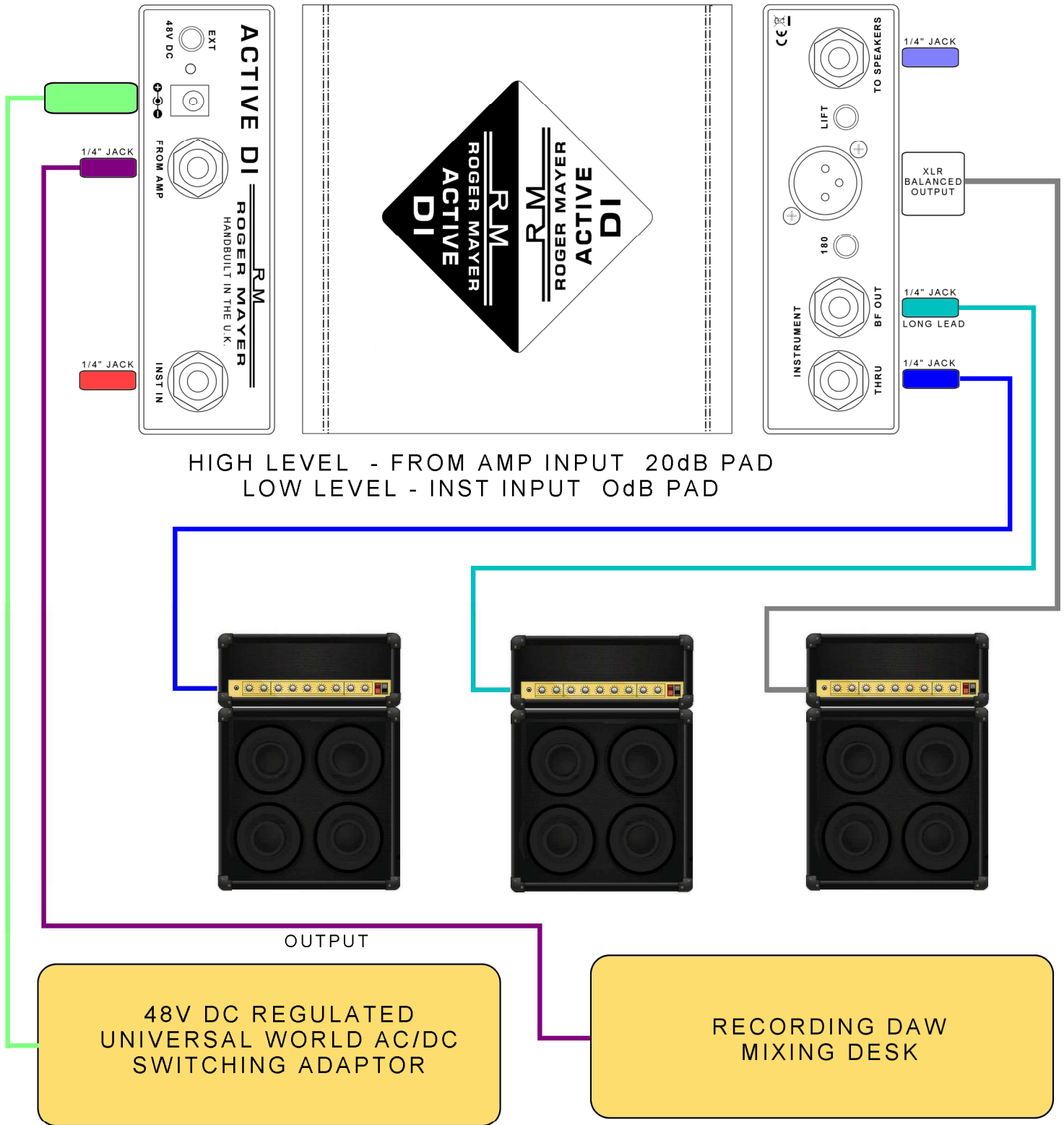
STANDARD DIRECT MODE PHANTOM POWERED



**AMPLIFIER SPEAKER CAPTURE MODE
 PHANTOM POWERED**



RE-AMPLIFYING MODE WITH EXTERNAL POWER USING LOW IMPEDANCE TRANSFORMER OUTPUT + THRU OUT + BUFFERED OUT



HIGH LEVEL - FROM AMP INPUT 20dB PAD
 LOW LEVEL - INST INPUT 0dB PAD

OUTPUT

48V DC REGULATED
 UNIVERSAL WORLD AC/DC
 SWITCHING ADAPTOR

RECORDING DAW
 MIXING DESK

Application Information for Operating Modes

STANDARD DIRECT MODE:

The INSTRUMENT INPUT is normally used which has an 1Meg Ohm Impedance and very low capacitance to duplicate that of a typical tube amplifier so Guitars will not be loaded down by plugging into the D1. The THRU OUT is exactly that and is in fact a straight wire connection between the jack sockets. If you are using a long lead to the amplifier please use the BUFFERED OUT to eliminate cable loading by excessive cable capacitance.

Phantom Powering is obtained from the XLR OUTPUT when connected to a mixer or DAW which has this feature enabled. External Power can also be selected and used. We offer a suitable World AC/DC Adaptor as an accessory.

AMPLIFIER SPEAKER CAPTURE MODE:

The ability to actually record what is going to the loudspeaker whilst in normal circuit configuration gives another possibility for a direct recording path. It also provides this XLR OUTPUT easy phase reverse using the 180 switch when also using Microphones to record your setup.

Please use proper speaker cables to the D1 Unit as you would if you were using the Amp Head and Cabinet. The Input Impedance of the FROM AMP INPUT is 240K Ohms and also provides a 20dB Pad to the D1 Direct Outputs.

RE - AMPLIFYING MODE:

This can be easily accomplished by connecting the output of a professional DAW /Mixer to the FROM AMP INPUT which provides a 20dB PAD in circuit to reduce the level or if you are not at professional line levels use the INSTRUMENT INPUT which does not reduce the input level.

You have a choice of 3 outputs:

Low Impedance Balanced XLR OUT with 180° Phase reverse Switch.

Low Impedance Buffered Out. Good for long leads to studio or amplifier.

Thru Output. Straight cable performance.

You may need to use the XLR OUT if the amp is a long way away or is giving Hum problems.

When using 2 or more Amplifiers please try the XLR Balanced output for 1 Amplifier to eliminate ground loop issues if present.