



- Jensen Transformer
- Resonance-Free Response
- Optimal Impedance Match
- Switched Ground Lift
- Switched 10 dB Pad
- Switched HF Roll-Off Filter
- Rugged Mechanical Construction

THE NEED – Modern recording practice requires ever-increasing attention to faithfulness of acoustical pick-up at the source. For a variety of instruments successful microphone technique has been mastered by many professionals. Certain instruments, notably the amplified guitar, present somewhat unique problems.

A popular solution has been use of a "direct box", permitting straight-line connection of guitar pick-up to a console microphone input. For versatility, most high-quality "boxes" provide facility for connection to either pick-up directly, or to an electronic instrument output or speaker.

Essentially a simple device, the direct box must be carefully configured for top performance. Adequate attention to impedance matching, grounding options, level management and quality of parts are essential for consistent results. Rugged construction is mandatory if the unit is to hold up on the road.

THE BOX – The WESTCAM DB-IE has been painstakingly designed to meet the needs of the professional user. The key to optimum performance is the use of the JENSEN JE-DB-E transformer, which exhibits outstanding characteristics.

Connectors used are compatible with all common consoles and electronic instruments. Two paralleled phone jack inputs permit simultaneous console connection and instrument use. When desired, a 10 dB pad may be switched in to allow use with the output of the guitar amplifier or an electric instrument. If the DB-IE is used directly from the pick-up, a filter may be switched in to simulate the high-frequency roll-off characteristics of a typical guitar speaker. This feature avoids clipping and distortion products quite often presented by conditions of guitar amplifier overload.

Provision for defeat of the inveterate enemies, hum and buzz, is made several ways. First, only the box itself is connected to input ground, usually resulting in lower noise when the guitar pick-up is also connected to the input of a guitar amplifier. Second, the output connector "floats", mounted so that it is insulated from the box. A ground from pin 1 of the output connector to the box is accomplished by closure of the ground switch, providing the required connection between the guitar ground and recording equipment ground, when a guitar pick-up *alone* is used. Third, double Faraday shields utilized in the JENSEN transformer guarantee significant reduction of noise products in the recording equipment input channel. This technique provides excellent primary/secondary isolation as well as a high degree of common-mode rejection. Fourth, 30 dB of mu-metal shielding prevents hum pickup in the transformer itself.

THE CONSTRUCTION – WESTCAM has used a "super-stout" approach, realizing that prime specifications mean little if the unit will not withstand realistic handling in actual use. Mechanically, the box itself is fabricated from aluminum extrusions, carefully fitted for clean appearance. Finish is a deep bronze anodize, with all legends prominently machine-engraved for legibility and permanence. End-mounted components are well recessed in the housing to minimize potential damage.

Connectors and switches feature gold-plated contacts for reliable "dry-circuit" conditions. Resistors are 1%, ½ watt metal film types for ruggedness and stability. A high-quality non-polar electrolytic is used for input coupling, and a polystyrene capacitor for the H.F. roll-off function.

The heart of the WESTCAM DB-IE direct box is the JENSEN JE-DB-E transformer, specifically optimized for direct box application. Special attention in the transformer design is given to proper impedance management, low distortion, extended frequency response, and excellent shielding. The present "E" version represents subtle, but noticeable, improvements in performance over previous models, and is recognized as the best available.

WESTCAM boxes have been used in the field for over three years, with no failures to date. *Customers say our DB-IE is the best.* Custom finish or-labeling is available. Quantity pricing upon request.

SPECIFICATIONS

Input Impedance

100 kilohms nominal

Secondary Source Impedance

250 ohms nominal

Total Harmonic Distortion

Less than 0.1% below 50 Hz

Less than 0.01% at 1 kHz and higher

Input Level (dBv Re 0.775v)

+18 dBv max. at 20 Hz

+24 dBv max. at 50 Hz and higher

Frequency Response (Re 1 kHz)

± .25 dB, 20 Hz to 20 kHz

(No resonance peaks)

Common-Mode Rejection Ratio

> 80 dB @ 1 kHz

> 60 dB @ 10 kHz

Overall Size

3 In. Wide x 2 In. High x 4½ In. Deep

(Add ¾ In. To Height For Feet)

Tare Weight

1 Lb.

Shipping Weight

1½ Lb.

Input Connectors

¼ In. Phone Jack - Industry Standard

Output Connector

3-Pin Male Audio - Industry Standard

Price: \$150.00 (In Calif. Add 6½% Sales Tax)

Delivery: Stock

Terms: C.O.D. To User - Shipping Prepaid
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