

DRP-15

High-Quality Reverb Processor



- Superb reverb and effects quality
- Internal 24-bit processing ensures excellent signal-to-noise ratio (>90 dB) and low distortion (<0.03% THD)
- Very easy to use
- 228 program memories

SPECIFICATIONS

Conditions:

1. 0 dBu = 0.775 volts rms.
2. 0 dBm = 1 mW into 600 ohms.
3. 120-volt ac line voltage unless otherwise noted.
4. Output levels measured with +4-dBu input at 1,000 Hz, with input level switch in the line position and input control full clockwise.

OVERALL SPECIFICATIONS

Frequency Response (direct):

20-20,000 Hz, +0.5/-1 dB

Frequency Response (effect):

20-20,000 Hz, +0.5/-2 dB

Data Format:

16-bit linear analog to digital and digital to analog; internal 24-bit processing

Total Harmonic Distortion,

Direct:

< 0.003%

Effect:

< 0.03%

Signal-to-Noise Ratio,

Direct:

> 104 dB

Effect:

> 90 dB

Channel Configuration:

Mono or stereo signals accepted; stereo signal mono summed for stereo reverb/multi-effects output

Front-Panel Controls (see Figure 2):

Input gain control; endless rotary encoder with center push-to-enter button; program edit button; effects structure configuration change button; compare button; program store button; MIDI program button; option-select button; two up/down parameter/program select buttons; factory/user

program select button; effects on/off button; power on/off switch

Front-Panel Displays:

10-segment LED input-signal VU meter, switchable to read average, peak or peak hold; three-digit LED display that indicates factory or user program and number; 2 x 16-digit alphanumeric display; seven LED's that indicate the active effects structures; edit mode indicator; MIDI signal indicator; effects on/off switch

Grounding:

Ground-lift switch disconnects ground from chassis to eliminate hum

Chassis Construction:

Painted steel

Colors,

Front Panel:

Gray with white nomenclature

Top and Sides:

Gray

Input and Bottom Panel:

Black with white nomenclature

Power Requirements:

90-250 volts, 50-60 Hz ac, no changes required, 15 watts maximum

Overall Dimensions (see Figure 1),

Width:

483 mm (19.0 in.)

Height:

43.6 mm (1.73 in.)

Depth:

225 mm (8.85 in.)

Net Weight:

3.5 kg (7.7 lb)

Shipping Weight:

5.0 kg (11 lb)

INPUT SPECIFICATIONS

Rated Input Voltage,

Line:

1.23 volts (+4 dBu)

Instrument:

390 mV (-6 dBu)

Maximum Input Voltage,

Line:

9 V (+21 dBu)

Instrument:

390 mV (-6 dBu)

Input Impedance,

Line:

10 kilohms

Instrument:

500 kilohms

Input Connectors (see Figure 2):

Two 1/4-inch phone plugs with Hi/Lo range switch

OUTPUT SPECIFICATIONS

Rated Output Voltage,

High Range:

2.45 volts (+10 dBu)

Low Range:

730 millivolts (-0.5 dBu)

Maximum Output Voltage:

9 volts (+21 dBu)

Rated Output Impedance:

120 ohms

Output Connectors (see Figure 2):

Two 1/4-inch phone plugs with Hi/Lo range switch

MIDI Connectors:

In; out; through

DESCRIPTION

The EV/Dynacord DRP-15 is a high-quality digital reverb/multi-effects processor. The DRP-15 provides numerous effects in its 100 factory preset programs and 128 freely programmable memory locations. The reverb programs encompass many different reverb types including room simulations, plates, gated reverbs and early reflections. The DRP-15 also

FIGURE 1 — DRP-15 Dimensions

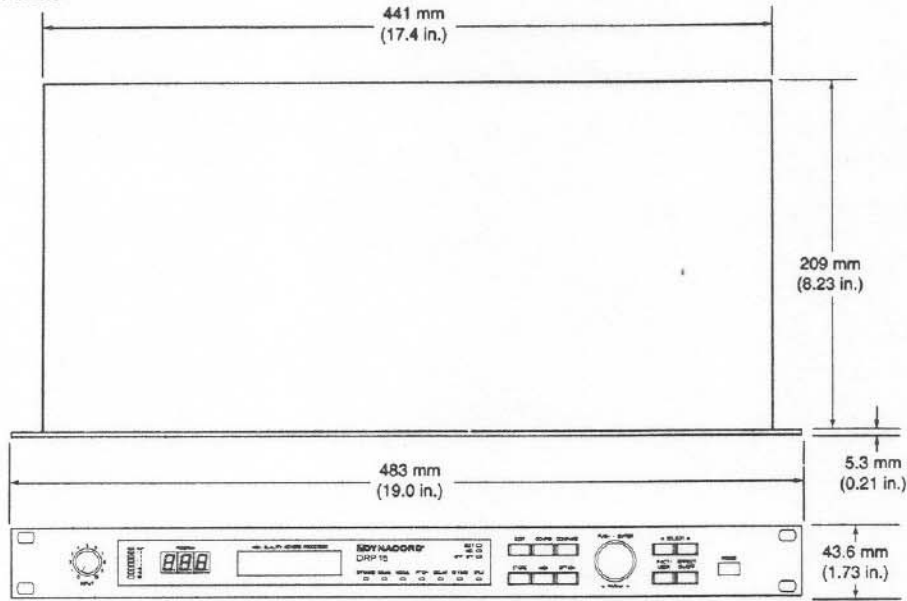


FIGURE 2 — DRP-15 Front and Rear Panel Views

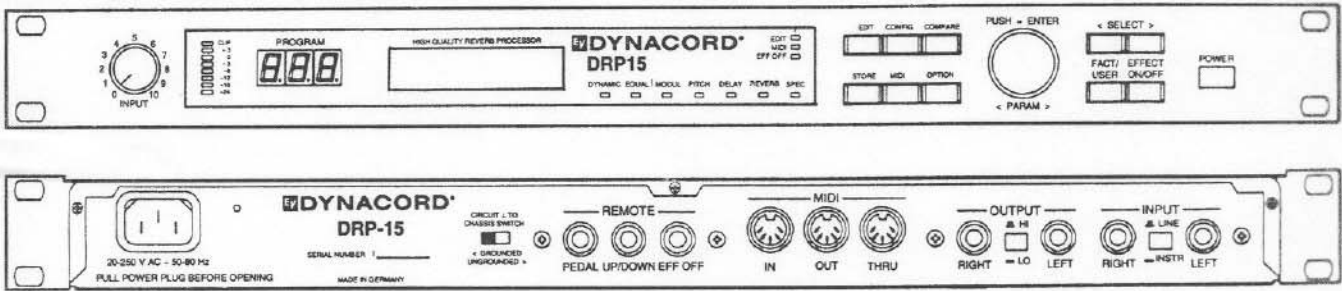
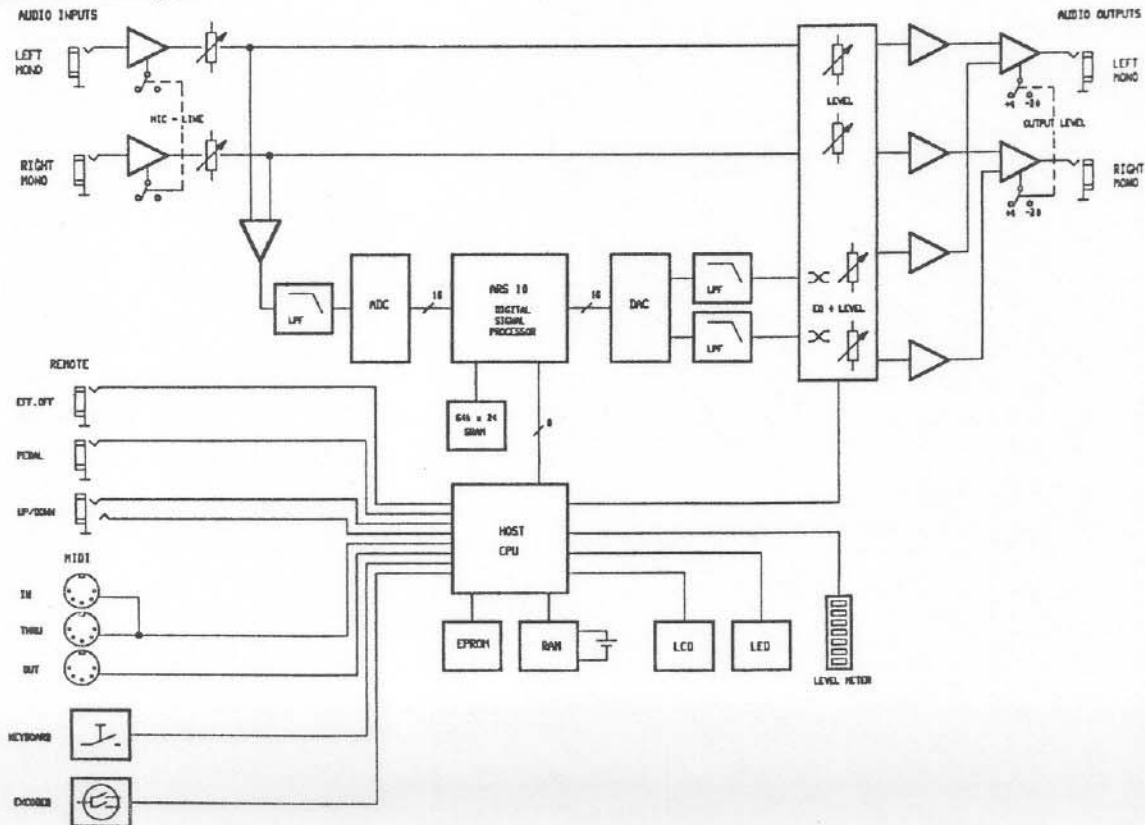


FIGURE 3 — DRP-15 Block Diagram



has echo effects such as delay line, stereo delay and ping pong; modulation effects (chorus, flanger, phaser, rotor and space) along with pitch-shifting, equalizer, voice-filter and distortion programs. A complete table of effects/parameters is shown in Figure 4.

A maximum of six effects can be used in multi-effects structures at one time. The DRP-15's 24-bit internal processing allows flat frequency response from 20 Hz to 20 kHz and insures that the clarity and dynamics of the original signal are uncolored.

The DRP-15 is equipped with MIDI interface. MIDI can be used to change programs via remote control, to alter parameters dynamically, to edit parameters, to transfer programs to other units and load them back to the DRP-15 again at any time. MIDI in, out and through jacks are provided.

The inputs and outputs of the DRP-15 can be switched to -6 dBm or +4 dBm as required, allowing for easy adaptation to any existing equipment setup. This allows guitars and other instruments as well as line-level signals to be accommodated. A front-panel VU meter with switchable characteristics allows easy signal-level monitoring.

The DRP-15 utilizes a rotary encoder to make program changes quick and easy. The encoder has a push-to-enter feature that keeps the unit on a program until the enter button in the center of the control is depressed. This control is also used to make adjustments when editing programs. A 2 x 16-digit alphanumeric back-lit LCD window displays the program number and delineates factory and user memory. In the edit mode, the DRP-15 has a "compare" function that allows program parameter changes to be made and easily compared to the original value. Seven LED's to the right of the LED display show which DRP-15 effects structures are being used at any time. The combination of the rotary encoder, the complete graphics display and compare function make operation of the DRP-15 very simple.

The DRP-15 is equipped with a switching power supply that allows operation at any line voltage from 90 to 250 volts at 50 to 60 Hz, without adjustments. The rear-mounted IEC connector allows easy adaptation to any type of ac socket. A separate ground-lift switch insures that any chassis-induced ac hum can be eliminated. The DRP-15 mounts in one EIA/IEC rack space. Mounting hardware is included.

The DRP-15 block diagram is shown in Figure 3.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The effects processor shall be a multi-effects unit employing high-quality single effects as well as multi-effects with up to six effects usable simultaneously. The effects shall be reverb, echo, modulation (chorus, flanger, phaser, space, rotor), pitch shifter, equalizer and distortion with voice filter. The unit shall have a delay-line mode with a maximum delay of 1,048 milliseconds. Both inputs shall be switchable from line level (input voltage 1.23 V (+4 dBu), 10-kilohms impedance) to instrument level (input voltage 390 mV (-6 dBu), 500-kilohms impedance). Both outputs shall be switchable from high (output voltage 2.45 V (+10 dBu)) to low (730 mV (-0.5 dBu)). The maximum output voltage shall be 9 V (+21 dBu) with an output impedance of 120 ohms. Input and output connectors shall be unbalanced 1/4-inch phone jacks.

The effects unit shall meet the following performance criteria: frequency response 20-20,000 Hz at less than 0.03% THD; signal-to-noise ratio "original" (dry) of at least 104 dB and "effect" (wet) of at least 90 dB. The effects unit shall contain 16-bit linear analog-to-digital and digital-to-analog converters with 24-bit internal signal processing.

The unit shall have a switched-mode power supply for operation at voltages from 90 V to 250 V, 50 to 60 Hz, without adjustments. The power consumption shall be 15 watts maximum. The unit shall be manufactured in accordance with all safety classes and fulfill all applicable interference suppression approvals (FCC, VDE and IEC specifications).

The unit shall be rack mountable in one EIA/IEC standard rack space. Dimensions shall be 43.6 mm (1.73 in.) high x 489 mm (19.0 in.) wide x 225 mm (8.85 in.) deep. Net weight shall be 3.5 kg (7.7 lb). The effects unit shall be the EV/Dynacord DRP-15.

WARRANTY (Limited)

Electro-Voice products are guaranteed against malfunction due to defects in materials or workmanship for a specified period, as noted in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option) without charge. The product will be returned to the customer prepaid. **Exclusions and Limitations:** The Limited Warranty does not apply to: (a) exterior

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Electro-Voice and EV/Dynacord Electronics are guaranteed against malfunction due to defects in materials or workmanship for a period of three (3) years from the date of original purchase. Additional details are included in the Uniform Limited Warranty statement.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (616/695-6831 or 800/234-6831).

Specifications subject to change without notice.



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