# Reverb 2016 — by Princeton Digital

The Eventide Reverb 2016 by Princeton Digital recreates the legendary reverbs from Eventide's SP2016 - Stereo Room, Room Reverb and High Density Plate - and contains 3 new algorithms that provide updated variations on each of the original reverbs. It features two channels of 24 bit audio I/O.

With dedicated function knobs and an intuitive user-interface, the 2016 is designed for easy operation live or in the studio – and all the instructions you'll ever need are contained in this Quick Reference Guide.



#### I/O Controls and Indicators

Dig In toggles selection of analog or digital source for the effect, and lights a yellow LED when digital is selected.

The LED will flash to indicate digital selection without a valid signal present at the S/PDIF input.

Algorithms which run in mono sum the inputs before processing, and light the yellow front panel Mono LED.

Set Output Level to the hottest signal that does not cause clipping of your input device.

Use the Headroom indicators to set Input Level so that the clip LEDs rarely

Press Kill to mute the input to the reverb.

Press Bypass to remove the 2016 from the signal chain (just as when Power is

### **Algorithm Selection**

Press Algorithm repeatedly to cycle selection of one 6 reverb effects.

Colored LEDs indicate selection of Stereo (red), Room (yellow), Plate (green), or one of the 3 New (blue) effects: New Stereo, New Room, or New Plate.

### **Program Select, Load, Save** and Bypass

Turn Preset to select any of the 99 stored programs.

Press Preset to load the selected program.

To store the currently running program and its parameter settings, press Save. Turn Preset to select a location, then press Save again to commit.

Press Bypass to hear the audio without the effect. Press Bypass again to resume listening to effected audio.

#### **Presets**

The Reverb 2016 contains 99 user-definable preset locations. We've organized the factory presets into the banks shown here, with the presets generally progressing from small to large spaces within each bank.

#### 100% Wet

1-9 Stereo Room 10-19 Room 20-29 Plate

30-39 New Stereo Room

40-49 New Room 50-59 New Plate

#### **Wet/Dry Mixed**

Stereo Room 60-64 65-69 Room 70-74 Plate

75-79 New Stereo Room

80-84 New Room 85-89 **New Plate** 90-99 **Blank Presets** 

#### **Parameter Adjustment**

Each of the Reverb 2016's 7 parameters has a dedicated control knob/switch. Press any knob to display the current parameter value. Turn to adjust the value. Parameter settings are shown on the numerical display during adjustment.

Mix adjusts the wet/dry ratio from completely dry to 100% effect. Use in conjunction with some Predelay.

Predelay introduces a stereo delay (0-999 ms) before the reverb effect. Press while turning for coarse adjustment.

**Decay (RT-60)** sets the time (in seconds) for a full amplitude signal to decay by 60 dB. (The maximum varies with the selected algorithm.)

Position adjusts the arrival time, energy, frequency response and diffusion of the early reflections to give the impression of being close to the source (Front), far away (Rear), or anywhere in between.

Diffusion alters the character of your space - from the sharp reflections of flat, hard surfaces (Low) to the diffused reflections from rough, irregular ones (High).

**EQ** – **Low** Turn to cut or boost the low frequency portion of the reverb. Press and turn to select the roll-off frequency.

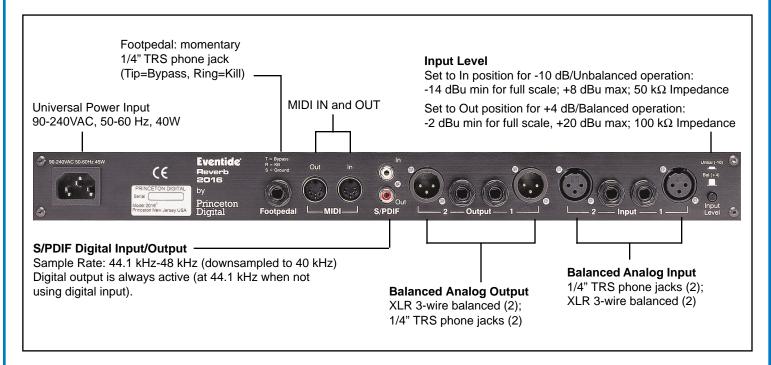
Be careful – boosting the low frequency with a long Decay time can cause the effect to run away.

**EQ – High** Turn to cut the high frequency portion of the reverb. Press and turn to select the roll-off frequency.

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## Princeton Digital

#### **Rear Panel Connections**



#### **System Parameters**

Press **System** repeatedly to cycle through the System parameters.

#### **MIDI Channel**

Use Preset to select Off, 1-16 or All.

#### **Dump Current Program**

Press the flashing **Save** button to execute a MIDI dump of the current program.

#### **Dump All Programs**

Press the flashing **Save** button to execute a MIDI dump of all stored programs.

#### **Software Version**

Displays the System Software Version.

#### **PLD Software Version**

Press System from this display to exit.

#### **Specifications**

#### **Audio**

#### Frequency Response:

Wet 20 Hz-16 kHz, ±1 dB

#### **Dynamic Range:**

> 98 dB; 20 Hz-20 kHz, non A-weighted

Sample Rate: 40.0 kHz

Conversion: 24 Bits A/D, 24 Bits D/A

**Throughput Delay:** 1.55 ms **THD:** < .006, full bandwidth

Crosstalk: < 86 dB below 1 kHz@Full

Scale

Output Impedance: 125  $\Omega$  each side,

balanced

Output Level: +24 dBm max, Full Scale,

balanced/unbalanced

#### **Controls and Indicators**

Power: On/Off

Potentiometers for Analog Input and

**Output Levels** 

Rotary Encoders with momentary pushbutton control for Preset selection/loading, and Parameter display/control

Pushbutton Controls for Digital In, Kill, System Bypass, Effect Bypass, Algorithm Select and Program Save

LEDs indicate Digital input selection, Algorithm selection, Input signal level, audio clipping and DSP overflow, and Mono processing by certain algorithms

3-Digit Numerical Display indicates preset selections or parameter values

#### Physical/Environmental

**Dimensions:** 1.75" Hx 19"W x 8"D

**Temperature:** Operating: 32 to 104°F (0 to 40°C); Storage: -20 to 170°F

(-30 to 75°C)

Relative Humidity: 95% non-condensing

Specifications subject to change without notice.

For more information on the Reverb 2016, visit www.princetondigital.com
For more information on this and other Eventide products, visit our website at www.eventide.com

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