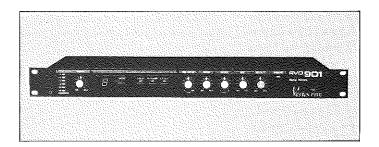
DIGITAL REVERB

RVD-901



OWNER'S MANUAL



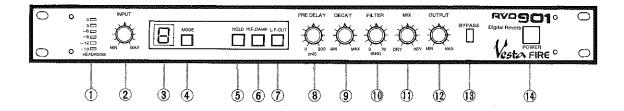
Introduction

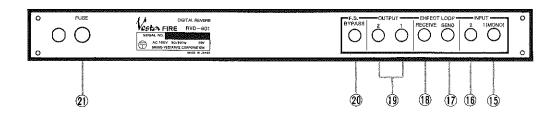
Thank you for purchasing the Vesta FIRE RVD-901 Digital Reverb.

In order to use this unit efficiently and safely, we advise you to read this Instruction Manual carefully.

- This unit is a high-performance digital reverb incorporating 8 basic reverb algorithms (called "modes") and 5 controls, allowing for limitless variations.
- Both Mono-in/Stereo-out and Stereo-in/Stereoout operations are possible, enabling you to give a stereo effect to monaural output instruments and to apply reverb to stereo sources without losing the original stereo sound.
- Reverb time can be controlled through Pre
 Delay and Decay adjustment. High Frequency
 Dump and Filter functions enable you to
 change the sound characteristics. Moreover,
 special effects can be attained using the Hold
 feature.

Controls and Functions





(1) INPUT HEADROOM Display

Shows the input level. Adjust the INPUT LEVEL Knob (2) so that the uppermost LED (OdB) flickers now and then.

This represents the best input level.

② INPUT LEVEL Knob

Adjusts input level.

③ Mode Display LEDs

Indicates which of the RVD-901's 8 algorithms is being used.

4 MODE Button

Mode changes in succession each time this button is pressed. Modes are described below.

Mode 1 : Large Hall

Simulates reverb in a very large hall. Low frequencies are emphasized. By selecting a long decay time, it can be used as a typically digital sound effect.

Mode 2 : Loft

Simulates reverb in a relatively large loft. Sound iteration increases as decay time is turned up.

Mode 3: Large Room

Simulates reverb in a relatively large room. Decay envelope contains an iterative sound longer than in Loft Mode.

Mode 4: Gate Reverb

This is a reverb well known for it application to drums, etc., cut by a gate.

Mode 5 : Small Hall

Simulates reverb in a mid-size hall.

Mode 6 : Small Room

This mode is normally used with a short decay time. It sounds metallic if a long decay time is used.

Mode 7: Plate Reverb

Simulates plate-type reverb. Normally, you can obtain a natural reverb by using this mode with music sources.

Mode 8: Reverse Reverb

The reverb envelope is reversed to obtain a special effect.

(5) HOLD

This switch can be used to hold the reverb sound except in modes 4 and 8.

⑥ H.F. DAMP (High Frequency Damp)

Press this button to increase high-frequency sound attenuation. Normally, high frequencies are absorbed by curtains, clothing, etc. This button simulates that condition. The sound becomes centered on the low frequencies, giving a warm feeling.

① L.F. CUT (Low Frequency Cut)

Cuts down the lower frequencies. Use it if the bass sound becomes a hindrance when applying long reverb.

® PRE DELAY

Adjusts pre-delay time continuously from 0 to 200 msec.

It helps to improve sound "expansion" by controlling the time from dry sound generation to reverb start. Dry sound can be given resolution, improving overall brightness, by increasing the pre-delay time.

DECAY (Decay Time)

Decay time depends on the mode used. The DECAY control enables you to change this parameter within each mode.

10 FILTER

Removes unnecssary high-frequency elements. It can be adjusted continuously from 3kHz to 16kHz. Select the position best suited to your music souce's higher frequencies.

① MIX

Adjusts the dry sound/effect sound output rate. A 1:1 rate is obtained at the center position. Set to REV when using the unit connected to a mixing console effect send/receive jacks.

① OUTPUT

Adjusts output level. A 1:1 input/output rate is obtained at the "2 o'clock" position.

(13) BYPASS

When this switch is pressed, input signals are output unaltered.

1 POWER

Turns power on and off.

(5) INPUT 1

Connect the input signal lead to this standard phone jack. When splitting a monaural source into two stereo channels, connect it to this input.

16 INPUT 2

Use it together with INPUT 1 for connection of stereo sources.

(17) EFFECT LOOP SEND

18 EFFECT LOOP RECEIVE

Use this control when performing effect processing on the signal before it enters the reverb circuit.

(9) OUTPUT 1 OUTPUT 2

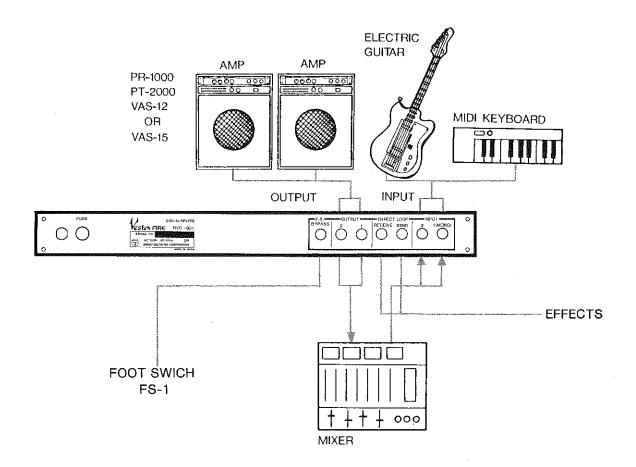
Standard phone jacks.

F.S. BYPASS (Foot Switch Bypass)

For bypass remote control. Bypass can be turned on/off by the FP-1 Foot Switch or similar devices.

② FUSE

Connection Diagram



Setting Chart

	Mode	Decay Time	Filter	High Damp
Garage	5	12 o'clock direction	16k	OFF
Cave	6	"	8-9k	ON
Living room	3	8-11 o'clock direction	3k	ON
Closet	6	7-9 o'clock direction	8-9k	ON
Church 1	5	10-12 o'clock	4-7k	ON
Church 2	1	11-1 o'clock	4-7k	ON
Vocal 1 (lead)	3	12 o'clock	16k	OFF
Vocal 2 (lead)	5	12 o'clock	8-9k	ON
Vocal 3 (back)	5	7-9 o'clock	11k	OFF
Vocal 4 (back)	2	12 o'clock	8-9k	ON
Synthesizer 1	5	7-9 o'clock	10k	OFF
2	6	12 o'clock	12-16k	ON
3	2	8-9 o'clock	8-7k	OFF
Lead Guitar	5	12 o'clock	10-14k	OFF
Bass	6	12 o'clock	8-9k	ON
Brass 1	3	9-10 o'clock	16k	OFF
2	2	9-10 o'clock	8k	OFF
Strings 1	1	8-12 o'clock	16k	OFF
2	1	12 o'clock	7-10k	ON
Tom 1	5	12 o'clock	8-10k	OFF
Bass Drum 1	6	12 o'clock	3k	OFF
2	1	5 o'clock	3k	ON
Snare Drum 1	5	12 o'clock	3k	OFF

Specifications

Frequency Response : Reverb 30Hz \sim 16kHz \pm 2dB

: Dry 20Hz \sim 25kHz \pm 3dB

S/N Ratio : 87dB (IHF-A, W. T. D)

Distortion : Reverb 0.05 %

: Dry 0.01 %

Room Size Program : 8 simulations

Predelay Time : 0.01 \sim 200ms

Decay Time : 1 \sim 15sec.

Sampling Rate : 39kHz 16bit. PCM

Hi Cut-Filter : $3kHz \sim 16kHz$ (12dB/Octave)

Input Level Impedance : $-10 \sim -20 \text{dB}$ (470K Ω)

Output Level Impedancs : +12dB ($1K\Omega$)

Block Diagram

