

Millennia Music & Media Systems HV-37 Microphone Pre-Amp



Millennia Music & Media Systems' HV-37 is a 1U rack cabinet that contains two, hardwired HV-35 microphone pre-amp circuit boards--the same boards that go into modules designed to fit the 500 Series 'lunchbox' racks. So the HV-37's performance is identical except it's more cost-effective than buying two HV-35s for your rack because the HV-37 includes a built-in switching power supply--it's a self-contained system.

The HV-35 module is a direct-couple amplifier design that uses no transformers in the audio path.

Input and output transformers used in microphone pre-amps offer reliable, galvanic isolation and protection from the vagaries of the input microphone sources coming into them (faulty grounding, power line noise etc.) and also of the output line the pre-amp drives. But this protection comes at a cost. The transformer's extra expense, size, bandwidth-limited frequency response, non-linear operation and distortion--particularly at high operating levels "color" the pre-amp's sound.

If the goal of the recording engineer is a pristine recording that is true to the acoustical source, the microphone's character and its placement to capture it, microphone pre-amps with direct couple designs like Millennia Music Media's HV-3C, HV-35 and HV-37 would be ideal because their meticulous design does not permit any inherent sonic coloration. The HV's design specifies components carefully so as to minimize distortion and any change of the audio signal as it passes through it. This is in an effort to obtain the "Holy Grail" of the small signal amplifier design: "a straight wire with gain".

Here at my [Tones 4 \\$ Studios](#), I have several microphone pre-amps to choose from when recording music but this is my first direct-couple model to evaluate and compare. I built a special [4-way mic splitter](#) box with a [Jensen JT-MB-E](#) transformer inside. With the splitter, a single microphone can drive up to four mic pres at the same time each presented with the same 150-ohm source impedance. For this evaluation, I connected two outputs of the splitter to the HV-37 and my [RTZ Professional Audio 9762 Dual Combo Mic Preamp](#). The RTZ has input/output transformers, uses a Neve 1272 circuit with premium components and is built to mil-spec. I chose it because it also has, like the HV-37, a 1/4-inch direct input path.

I recorded vocals, percussion, DI electric guitars and bass with both units. While the RTZ's sonic coloration is welcomed for many contemporary recordings I do, in all comparisons the HV-37 was truer to the source with better definition in the bass and it had a significantly more open top end.

The RTZ had just a little more overall gain--until I discovered the HV-37's ribbon mic gain boost button--for 10dB extra. I liked this feature because the HV-37 has just a single, continuously adjustable gain knob whereas setting record level with the RTZ is always a juggling act between its gain rotary (5dB steps) and its variable output control.

I also liked the lighted push buttons on the HV-37 as compared to a lot of mic pre-amps--you instantly know how it is configured from anywhere in the control room! The HV-37's HPF knee at 80Hz is effective and the signal present (-46dBu) and peak (+22dBu) LEDs are helpful although small and not very bright. If I had a suggestion for an otherwise excellent piece of gear, it would be a VU meter that extends the width of the controls knobs--although these days everyone reads record level back in the DAW!

So I am glad to hear and compare the HV-37 in my world of what I've gotten used to with microphone pre-amps. At about \$1,600 MSRP for two channels with power supply, it makes a great alternative to the transformer and/or tube microphone pre-amps in my recording signal chain when I am looking for super clean, pristine and accurate amplification!

Check: www.mil-media.com for much more!