



December 2008 Issue

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The desktop ISA One mic/instrument preamp with stereo cue facilities and optional A/D converter uses the same microphone pre-amplifier section found in Focusrite's acclaimed ISA 110, and the channel strips in the million-dollar Forte studio console. However, with the ISA One, Focusrite improves upon those designs with a slightly different range of mic gain settings and variable input impedance circuitry.

The unit measures 11.25 D X 9 W X 4.5-inches H and comes ready for the road in an attractive foam-lined flight case. Sloped for easy access, its front panel is dominated by bright backlit push-buttons and a large, lighted Nissei VU meter. A microprocessor-based logic board controls Sunhold relays with silver contacts for dead-quiet audio switching and a safety Lock Out feature that disables the High Gain mode whenever the Main input source is changed.

Dual Input

The ISA One has two input sections. The Main input section has rear panel XLR and TRS connectors for mic and line level inputs. The front panel Instrument (DI) input has a second 1/4-inch jack for throughput out to an amp, as well as EXT I/P-- a rear panel, external 1/4-inch input. Both the Main and Instrument inputs can be used at the same time with separate analog

outputs, such as recording a direct guitar and vocal or a bass guitar--both DI and amp.



The Main input has a four-position rotary switch that changes mic and line gain in coarse 10dB steps. Mic gain range can be switched between low (0 to 30dB) or high (30 to 60dB) ranges. The line input has a -20/-10/0/+10dB gain positions. Both mic and line inputs have up to 20 dB of additional gain available from a smooth-working pot for up to 80 dB of mic gain. The Main input features switchable mic impedance (600/1.4k/2.4k/6.8k ohm); 48-volt phantom power; phase (polarity) flip; switchable 75 Hz, 18 dB/octave highpass filter; and an insert in/out jack for connecting an outboard processor.

The Instrument input has 470k/2.4M ohm input impedance settings and a +10 to +40dB gain-control knob. By selecting the Instrument input on the Main input section, its signal is routed to both line outputs.

My review unit had the optional stereo 24-bit/192kHz A/D converter using AKM's highly touted AK5394A chip. An optional DB9 fanout cable (\$69.99) supplies AES/EBU in either single- or double-wire formats. Optical Toslink and ADAT ports output S/PDIF, while BNC connectors handle external clock in/out.

Versatile Metering, Cue

The VU meter measures the Main section output, defaulting to 0 VU = +4 dBu. An alternate calibration knob can "re-range" it from +11 dBu to +26 dBu. The adjacent LED peak meter also reads Main output as the level going to the A/D. It has a default calibration of 0 dBFS = +22 dBu but is variable from +18 to +26 dBu. The second LED meter reads the Instrument input or the level of the signal coming into the EXT I/P jack. The meters can also be switched pre/post the insert path.

The ISA One's cue system is switchable between a stereo feed connected to the rear 1/4-inch jacks, and a local, "fixed mix" of audio from the Main input and Instrument section. For zero latency, feeding a mono mix into the EXT I/P jack replaces the Instrument section in the fixed mix scenario. Unfortunately the fixed mix can't be played with the stereo mix at the same time.

In the Studio

I recorded a Martin D-28 acoustic guitar using a Violet Wedge condenser mic without EQ or compression, using the ISA One's High Gain position, and added +10 dB of additional gain. I compared that sound to the same mic and guitar/player with my RTZ 9762 mic preamp (a high-quality unit based on a Neve 1272) running into my Benchmark ADC-1 A/D converter. I externally clocked the ISA One from the ADC-1 to neutralize any sonic differences from clocking. With the highpass filter on, the sound was virtually the same and (with the Wedge) I found no sonic difference using any of the impedance choices.

The ISA One is exactly like using the original ISA 110, except that it's easier to ride gain on-the-fly with the ISA One's 20 dB of fine gain control and larger knob. Like the 110, I found that the ISA One is less likely to overload while producing a smoother, cleaner sound as compared to a vintage Neve 1272 preamp. The ISA One is also quieter and has more dynamic range. The meter recalibration keeps the VU from slamming the pin with the hot analog levels required for full 24-bit resolution into Pro Tools HD's I/O calibrated at -18 dB.





I used both channels to record bass and guitar — direct and miked amp. The Instrument input's low-Z setting “loaded” the P-90s on my guitar, dulling the sound. If you don't want this, use the High Impedance position; otherwise the direct guitar and bass sounds were crystal clear.

For the amp, I placed a Royer R-121 ribbon mic directly on the center of the speaker. There was no sonic difference between any of the different input impedance choices except the 600-ohm position. Rated at 1,500 ohms, the Royer was mismatched, producing less output and a sound without much life, although I liked this for heavier, thicker guitar parts--making them more sludge-like. At the 1.4k-ohm position, the mic was more or less matched to the preamp, so the sound was spot on--exactly what I expect to hear. My only wish was for mute buttons--one for each section so I could audition each of the ISA One's inputs individually.

I monitored much of my testing through the unit's headphone system. The sound that it produced was clean and super quiet; it drove my 55-ohm AKG

K271 headphones as loud as I could stand.

All Business

The ISA One is a first-class piece of studio gear, whether you use it in a high-end studio with a large console or with a laptop-based portable rig. Its Main and Instrument channels, headphone system, flexible metering and built-in A/D converter offer a unique combination of great-sounding tools that perform and work together flawlessly.

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