Millennia TD-1

Marco Migliari investigates the ultimate DI box and discovers the Millennia Media TD-1 has more than one ace up its sleeve.

The TD-1 is a DI box on steroids. Tightly packed with a wealth of quality analogue electronics, it offers superb connectivity and an excellent preamp in a portable package. In addition, a few unusual features make this small but sturdy unit very desirable.

Straight out of the packaging, the TD-1 means business. What a box! The steel is so thick that I could (and did) stand on it without even slightly bending it. Sizing at 2U high and half-rack wide, two TD-1s can be joined into a rackmountable dual-mono unit. It is supplied (but not fitted) with a set of feet and a handle which would attach to the top for easy carrying.

The shiny, black front panel features illuminated push switches and machined knobs and is solidly bolted onto the steel chassis, thus adding to the military ruggedness of the whole assembly.

On the rear panel, a handful of XLR and jack sockets provide the necessary connections to and from the unit. The power supply is built-in, and the demo TD-1 was set for European voltage (200-240V), so if you happen to purchase or use one in the USA, you must remember to change the voltage selection block and the fuse accordingly.

Socket to 'em!

The first surprise came when I realised that the XLR on the front panel is not, as I assumed, a microphone input, but instead it's a line/transport input! The TD-1's mic input appears on the rear panel.

The only other input on the front panel is an instrument jack socket, which also doubles up as a speaker input, or 'soak' — yes, you can actually connect the output of a guitar amp to this box, so long as a speaker cabinet is also connected in parallel. Failure to do so will likely cause your amp to fry the TD-1's guts — an expensive oversight!

Two push switches under the front XLR let you select three impedance settings for the instrument input: default is 10Mohm, and if either switch is pressed then the input impedance is changed to 2Mohm or 47Ohm. If they're both pressed, the 47Ohm setting takes over, which I found slightly confusing.

Next is a vertical row of four buttons, from the top: +48V switch for the mic input, a useful input ground lift switch to isolate the jack input ground from the internal audio ground and a phase reverse switch.

Lastly comes a switch that enables the soak. This latter one must be enabled before a power amp is connected to the jack input, and it's recommended that both the power amp and the TD-1 are turned off before you plug in.

A gain knob, shared by all inputs, will boost the mic input by up to 65dB and the line input by 45dB, and also will deal with gaining the DI stage when selected.

Next to the right is a small but very comprehensive EQ section, with 2 fully parametric bands. The frequency range of each section can be multiplied by 0.5 with a...
TD-1 Outputs

THE TD-1 HAS a wealth of output options, previously unseen even in the most exotic gear. First, there's a balanced solid state output that delivers the same quality of Millennia's top of the range HV-3 preamps when used in conjunction with the mic or line amp. The XFRM balanced output runs through a high quality, custom wound transformer and sports a dedicated ground lift. A separate unbalanced output, on paralleled XLR and jack, is also available. The TD-1 can simulate Fender Stratocaster single coil or Les Paul hum-bucking pickups (other emulations are currently being developed). Try to reamp a clean guitar from your recorder into the front panel XLR and drive a guitar amp from the Reamp Type I or Type II jack outputs – it will sound the same as if you plugged in a real guitar. Choruses on the pie are the illuminated earth lift switch and the headphone output with level trim.

To business...

I used the TD-1 micamp on piano and acoustic guitar, and the sound was crystal clear. I’m not usually a fan of transformerless micamps, but I must admit that the TD-1 delivers the goods – I really enjoyed the extended top end and found that the bottom end was solid.

Line level material can be very effectively reamped – I processed loops, samples and synths to give them a different tonality. REAMP II was my favourite output for its bold, loud tone, while REAMP I was definitely sounding like a Fender. The DI input also performs rather well, while the tube stage adds considerable warmth, although sometimes I thought it maybe sounded a bit too mellow.

On the other hand, I really didn’t like the idea of sharing the instrument input with a speaker level input! A separate socket and circuit would have been a much safer choice.

The EQ section delivers an honest sound and it’s good enough for an overall gentle tone correction, but I would have preferred not to have individual bypass switches and have a filter section instead.

Conclusion

The TD-1 is not only a remarkable piece of engineering, but also a very good sounding box. It’s an analogue cure for most recording headaches in a single, portable unit.

When it comes to instruments and microphones, only the best analogue can make digital sound good, and the TD-1 effortlessly delivers a great sound. Comes highly recommended.

VERDICT

MILLENNIA TD-1

BUILD QUALITY
VALUE FOR MONEY
EASE OF USE
VERSATILITY
QUALITY OF RESULTS

5 5 5 5 5

A solid, portable recording channel for demanding and quality applications.

ALTERNATIVES

AVALON DESIGN 95 PURE CLASS A PREAMPLIFIER £1,025
This is a classy micamp and DI box. It doesn’t have EQ but only a filter, no level and fixed 500kOhm instrument input impedance. Class A design, very clean sound, superb mic pre.

www.avalon-design.com
www.asapeurope.com

AVALON DESIGN US MONO INSTRUMENT AND DI PREAMPLIFIER £75
The GR-33 is a floor unit, hence you don’t have to splash out on all the pedals necessary when using a guitar synth live. On board are 364 sounds, dedicated chorus and reverb processing, plus 40 multi-effects, including rotary speaker and overdrive. A 46-3B bass pickup is also available.

www.avalon-design.com
www.asapeurope.com

SUMMIT AUDIO INC. TD-100 PREAMP & DIRECT BOX £499
A small DI box (no micamp) with mixed solid state and tube circuitry. Continuous impedance adjustment from 10KOhm to 2MOhm and the possibility to drive the tube. Dual mic and line level outputs.

www.summitaudio.co.com
www.hhh.co.uk

An almost unheard of level of connectivity, even at this price point.