



ON THE DVD



Millennia TD-1

FutureMusic
PLATINUM
AWARD

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

DETAILS

PRICE

£1,110

CONTACT

Web: www.mil-media.com

UK Distributor:

www.hhb.co.uk

TECH SPEC

Instrument / DI Input

Amplifier Topology

Tube: Selected dual-triode vacuum tube (250V)

Soid state: All discrete J-FET amplifier (50V)

Frequency Response @ -0.5dB points 7Hz to 100kHz, typical. Varies with path & topology

Frequency Response, DI - Tube Path -1.0dB, better than 10Hz to 40kHz

Frequency Response, DI - SS Path -1.0dB, better than 5Hz to 100kHz

EQ

Boost & Cut +/-15dB

Q Range 0.4 to 4.0, swept

Dimensions

216 x 330 x 89mm

Net Weight 6.8kg

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/reamp 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 470KOhm. If they're both pressed, the 470KOhm 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 10 with a



So strong it can easily take the weight of one medium-sized sound engineer

switch is out, the instrument input feeds the preamp. If you also have the soak button enabled, you can now plug in your favourite guitar amp. If the selector switch is in, then both the mic input and the line input are connected to the gain stage. You cannot select one or the other as they both share the same audio path, and you should disconnect whichever one is unused to avoid interactions.

If you have instead selected the instrument input, then the 'Twin Topology' button allows you to choose between a discrete solid-state FET stage (button out) or alternatively a tube stage for a warmer, rounder sound.

A power on LED and two level meter LEDs (signal and clip) complete the front panel.

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

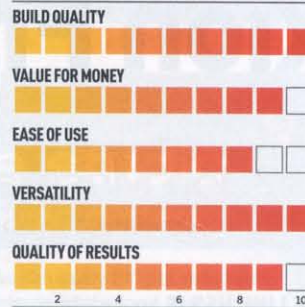
The TD-1 is not only a remarkable piece of engineering, but also a very good sounding box. It's an analogue cure for most recording headaches in a single, portable unit.

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 **FM**

ON THE DVD

Mono piano samples recorded with TD-1, Neve 1073 and Sutura Quadrapreamp. Ac gtr DI samples recorded with TD-1 and a Countryman DI box into Sutura pre.

VERDICT MILLENNIA TD-1



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

ALTERNATIVES



AVALON DESIGN M5 PURE CLASS A PREAMPLIFIER £1,025

This is a classy micamp and DI box. It doesn't have EQ but only a filter, no soak and fixed 500kOhm instrument input impedance. Class A design, very clean sound, superb mic pre.

www.avalondesign.com
www.asapeurope.com



AVALON DESIGN U5 MONO INSTRUMENT AND DI PREAMPLIFIER £375

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 384 sounds, dedicated chorus and reverb processing, plus 40 multi-effects, including rotary speaker and overdrive. A GK-3B bass pickup is also available.

www.avalondesign.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.com
www.hhb.co.uk

dedicated switch, and each band can be individually bypassed.

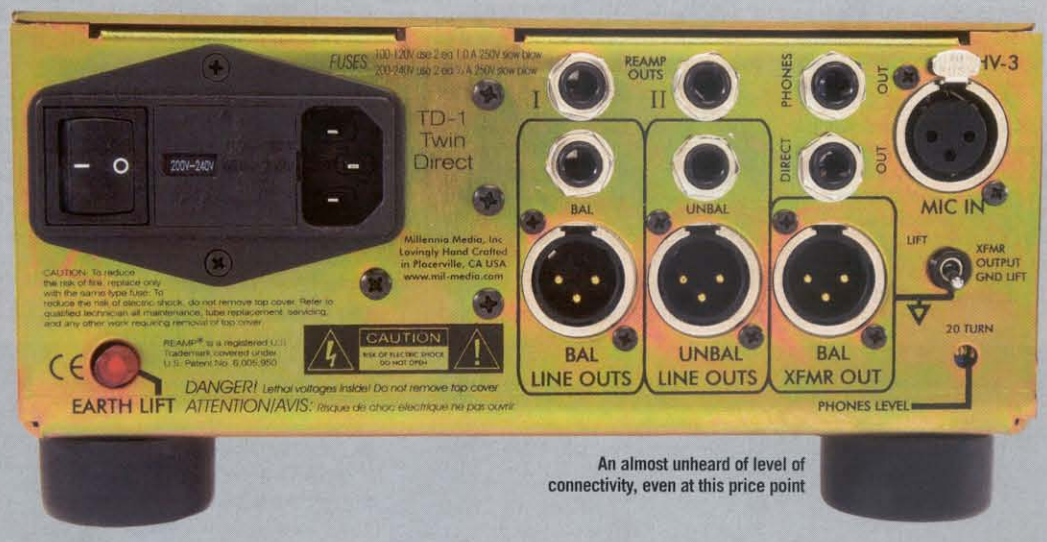
And last on the right is an overall EQ in/out switch, followed by two rather interesting buttons – a Twin Topology™ button and also an input selector.

First, let's have a look at how the input selector works. When the

TD-1 Outputs

THE TD-1 HAS a wealth of output options, previously unseen even in the most esoteric 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 XFMR 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. Cherries on the pie are the illuminated earth lift switch and the headphone output with level trim.



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