

PS.40RDT – the modern day classic for 2022

Continuing in the spirit of the PS.40RDT SE and a whole new chapter in the Whest Audio phono stage design range, comes the new 40 Series – the PS.40RDT

Getting more resolution from vinyl isn't easy and it certainly isn't about the 'KISS' (keep it simple, stupid) principle. Getting higher resolution from a phono stage and vinyl is much like getting higher resolution from an MRI scanner used in the medical field. The reason why today's MRI scanners are so much better than their early cousins is because of more processing power/ more electronics. A modern MRI machine has hundreds of times the processing power of its distant cousin. The same goes for our phono stages.

The new 40 Series pushes the boundaries of what is capable at this price level. No other phono stage in the world at this price range has the abilities of the 40 Series thanks to their biggest brother – The TITAN Pro

The Chassis

Starting with the chassis w430mm x d290mm x h78mm – is manufactured using the same precision computer controlled machining technique, hand-welded and finished seams to give it high rigidity as the TITAN Pro and MC REF V MK4. Internally the chassis incorporates the suspension system used in the MC REF V Mk4. The combination of this suspension system and ultra strong chassis means that all unwanted vibrations from airborne or structure sources are very well damped.



Ultra Low noise Copper circuitry

The 40 Series circuit board uses ultra low impurity copper throughout and its copper weight is 4 times that used in nearly all audio electronics. Small signal integrity is of the highest importance and with this in mind a new regulator system has been designed and employed for the 40RDT Special Edition. The new discrete input stage for the 40RDT Special Edition is based ENTIRELY on the MC REF V MK4 input stage but has been 'trimmed' for the 40RDT Special Edition. The input stage of the 40RDT uses an ultra low noise/ hand-matched monolithic amplifier. Because all of the major amplifying and filter sections of the 40 Series are channel matched, they are capable of incredible realism.

RIAA Hybrid Active Filtering

The hybrid RIAA filters have been kept in the 40 Series design because not only is it used throughout the full Whest Audio range, but in the 40 Series it is now trimmed to a far tighter tolerance for both curve and channel matching. Channel matching now is to within 0.12dB and RIAA curve accuracy to 0.15dB. Both these figures are across a bandwidth with spans from 9Hz and 62KHz. Any non-Whest Audio phono stage would be at least 4-6dB down at these extremes, but having experience in pro-audio, vinyl cutting and mastering means we at Whest Audio know what it takes to get the very best from playing back the vinyl format at al price levels.

Gain and load

The selection is accessed under the chassis like all Whest Audio phono stages. Maximum gain is 72dB and with the internals' ultra low noise levels it means you will never be stuck for gain ever again! All units are setup for standard low output moving coil (65dB/100ohms with 91pf of input capacitance) but if you do want to experiment it just takes 30secs to change over.

Signal inputs and outputs

These are on 'audiophile grade' RCA and XLR connectors identical to that used in the MC REF V MK4. Because Whest Audio phono stages are used in archiving both professionally and domestically we have included a second set of RCA outputs to allow the user to send the output to their computer for transfer while 'monitoring' the output through their main audio system. This also means that the 40 Series can be permanently connected to the computer system and main audio system at ALL times, ready to transfer.

Tech stuff...

40RDT – **R**eference **D**ual Transformer with an ultra low noise/ hand-matched monolithic input amplifier.

40RDT Special Edition – As above but with is an ALL discrete transistor design, further channel matching of critical transistor pairs and filter components, higher operating voltage throughout and power transformer matched pairs.

Ultra matching critical components in the audio and DC paths (40RDT Special Edition). The **matching** is by channel so that each channel behaves EXACTLY LIKE the other. This is translated in far better stable, realistic and etched images with far far better musicality.

The **internal cabling** borrowed from the TITAN Pro is high performance Pro-Audio grade OFC type designed for high-frequency stability and phase performance.

High Voltage and elevated voltage rails means better dynamic range and contrasts.

The new input stage **Zero Voltage Float** means far better signal transfer tracking and a higher resolution signal into the discrete output stage.

For testing and listening we used the following cartridges:

Ortofon MC Anna
Ortofon MC A90/A95
Lyra Atlas
EMT JSD6
Ortofon Cadenza Black
Lyra Kleos
Audio Technica 50ANV
Audio Technica ART 9
Transfiguration Proteus
Dynavector DRTXV-1T
Van Den Hul The Condor