



## THORENS TD-170

It's amazing how many models this turntable company offers, from a (very) few hundred dollars up to deep into five-digit territory. The TD-170 is not quite the lowest-priced of the line (that would be the appropriately-labelled Mini), but it costs no more than what can frankly be called junk turntables. And it is a few steps above that sorry category.

Surprisingly enough, the TD-170 is a *three-speed* table, able to play 78's. Of course you'll get best results by using a cartridge with a larger stylus meant for shellac, but that feature alone may attract some purchasers. The motor is a direct-current type, electronically controlled. The power supply is a wall wart. Some belt-driven tables, it should be said, have somewhat shaky speed stability. Not this one.

The problem most audiophiles have when they buy a turntable is finding someone to set it up. At one time every hi-fi store had people who could deal with the intricacies of a table, its tone arm, and its cartridge. After the dawn of the Compact Disc there was diminishing demand, and the few who didn't retire could name their price...if, of course, they could find a job at all. Odds are you don't know anyone who can help you, unless you're prepared to buy a plane ticket.

Turntables like the TD-170 are, therefore, designed to keep adjustments

to a minimum. The turntable itself has no suspension. Like tables such as those from Rega, its soft rubber feet are what isolate the plinth from the rest of the planet (and quite effectively too). The arm already has a cartridge, an Ortofon OM-10, mounted in it and correctly aligned. All you need to do is unpack the turntable, level it, put the counterweight on the back of the arm, and adjust the stylus pressure and the anti-skating ring. The counterweight includes a calibration ring which can allow you to set the pressure about right without investing in a pressure gauge.



We used our gauge anyway, because, as it turned out, you'll need a little more pressure than the cheerfully optimistic values in the instruction booklet. The booklet recommends 1.6 grams. Ortofon

is even more optimistic, recommending 1.25 to 1.5 grams. Any of these values results in mistracking, which actually inflicts more damage on an LP groove than the pressure itself. We settled on a pressure setting of 2.25 grams, and that's what we recommend.

The aluminum platter is covered by a felt mat. The post is very short, precluding the use of a clamp.

Anyone who is used to a fully manual turntable may be puzzled by the semi-automatic operation of the TD-170. You can pretty much run it on auto-pilot, pushing the "on" lever and letting the stylus find the start of the groove (another lever has settings for 45 rpm singles). Of course the arm will pick up at the end of the disc. You can select manual operation if you prefer, and still get the auto shutoff.

For this evaluation, we chose four particularly revealing recordings, and connected the TD-170 to our Alpha reference system. We did the comparison using our Audiomeca J-1 turntable and SL-5 arm, with its Goldring Excel MC pickup.

The first recording was an especially challenging one, from Reference Recordings. We played the *Scherzo* and *March* from Prokofiev's *Love for Three Oranges* (from *Fennell Favorites*, RR-43). This lively wind band piece includes lots of brash brass, playful woodwinds, and percussion that — with our reference turntable — goes down to bedrock.

Of course we didn't expect that kind of performance with this economy turntable, and it was when we first heard what it did to the brass that we realized that the Ortofon cartridge would need extra pressure. That solved at least some of the problems.

Whatever the pressure setting, however, this cartridge is not ideal for the Thorens tone arm, as the technical tests would later confirm. The large bass drum had a hollow sound that suggested power but didn't deliver it. Like all but the best moving magnet cartridges, the OM-10 maintains high-frequency response only by a strategically-placed resonance, which stores energy to supplement what is missing. You can hear that effect in the brass, of course.

We didn't get the great depth we

could hear with our reference turntable, but the stereo image was satisfyingly broad.

We got similar results with our second piece, an excerpt from Tchaikovsky's *Swan Lake* (London CS 6218), with Fistoulari conducting the Concertgebouw. The woodwinds and the brass sounded very good, though without the seemingly bottomless bass we got with our reference. However the strings — especially the violins — had the “hi-fi” sound we associate with older cartridge designs.

It was time to listen to a couple of human voices, and from here on things would go much better.

Barbra Streisand's version of *Send in the Clowns* (from her *Broadway Album*) remained delightfully expressive, and its bittersweet message was downright moving. There were, to be sure, some differences: syllables that were not as effortless, and sibilance that was more prominent, but the performance was a satisfying one.

The same was true with *Master's Plan*, from Doug McLeod's Blues recording *Come to Find* (Audioquest AQ1027). His voice remained clear and lively, and the very important lyrics were easy to follow, even when McLeod dropped an



occasional syllable, as he is wont to do.

We then pulled out a recording that is more a test piece than something you would listen to for pleasure, because hardly any turntables can play it perfectly. It's Alexander Russell's organ piece *Bells of St. Anne de Beaupré* from the direct-cut M&K LP, *The Power and the Glory* (RT-114). What makes it nearly impossible to reproduce is that the melody is overlaid — or perhaps we should say *underlaid* — with a pedal note of 16 Hz! Of course hardly any speakers can reproduce that anyway, but that's not the issue. The sound of the big pipe modulates the melody, and makes it waver unpleasantly. Some tables can't track it at all.

The TD-170 did quite well with it, letting us follow the melody with little difficulty. There was still some vibrato, of course, and we were trying to remem-

ber whether we have *ever* heard it any other way.

Finally, we turned to our *Vinyl Essentials* test disc (Image HiFi LP003). As we had suspected, the combined resonance of the arm and pickup was a very high 16 Hz, and not very thoroughly damped even so. That confirms that the OM-10 is too stiff for the light arm, and it explains the rather light bottom end (though too *low* a resonance isn't a barrel of laughs either).

Like most MM cartridges, the OM-10 negotiated the Vinyl Essentials tracking bands well, though (as noted) only with higher-than-recommended stylus pressure. A very small amount of mistracking was noted on the 80 $\mu$  band, but it got only a little worse on the top (100 $\mu$  band). Few moving coil cartridges could match that.

The TD-170's shortcomings are evident, but most of them are connected to the choice of pickups. Of course the pickup can be changed, though that would sacrifice the turntable's appealing plug-and-play functionality. The very good speed stability is what we would consider to be a non-negotiable requirement, and it allows this to be, for music lovers, an entry — or a re-entry — into the world of analog.

