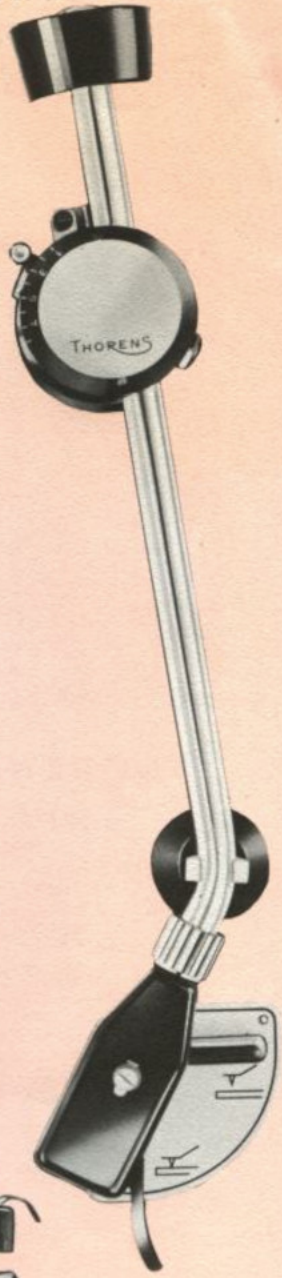
THORENS BTD-12S Professional Tone Arm

with exclusive cueing control for lowering and raising arm



The THORENS BTD-12S tone arm is a classic example of Swiss craftsmanship. Designed for lowest possible inertia and friction, in both horizontal and vertical planes, the BTD-12S is ideal for pickup cartridges of the highest lateral and vertical compliance. The low inertia minimizes force on the stylus from warped and off-center records, assures positive contact between stylus and record groove, and reduces distortion as well as record and stylus wear to a minimum.

Despite its very compact size, the BTD-12S has less tracking error than many 16" arms (only 0.5° per inch). Special pivot design eliminates another source of distortion found in ordinary arms by keeping stylus perpendicular to the record at all times. The knob adjustment for stylus force (calibrated in grams) and the record-saving, stylus-saving are unequaled for convenience.

OUTSTANDING FEATURES

- **Cueing device**—A built-in precision cueing device raises and lowers the arm over the record when a knob is turned. When lifted, the arm is given a slight braking action to keep the stylus over the groove. When lowered, the arm is completely free of any interference from the cueing device.
- **Tracking error** — Only 0.5°/inch maximum with optimum stylus overhang.
- **Bearings**—Precision ball bearings on both axes reduce friction (lateral and vertical) to the order of 1/10 gram.
- **Exclusive pivot design** — Ideally, the stylus axis should remain in a vertical plane, defined by the stylus and the tangent to the record groove, for all up-and-down movements of the arm. In ordinary arms, this is impossible because the axis of the bearing for up-and-down motion is set at right angles to the straight part of the arm. This causes the ordinary arm to "cant" or lean the stylus to one side when in any position other than perfectly horizontal. The BTD-12S eliminates this source of distortion by setting the bearing at an angle to the straight part of the arm. The stylus in the BTD-12S thus never leans to either side for any height adjustment, any warped record.
- **Balancing**—With stylus force adjustment set to 0, the counterweight will balance the arm, with a 5-19 gram (.18-.67 oz.) cartridge installed, in both horizontal and vertical planes. Then, since stylus force is applied by a spring at any other setting of the adjustment, the arm remains in balance and is insensitive to out-of-level tables or floor vibrations.
- **Stylus force adjustment**—Calibrated in grams on a large, engraved scale for 1 to 8 grams with zero position for balancing.
- **Low-frequency resonance** — Below audible range. Damping material isolates counterweight to prevent other undesirable resonances in audible range.
- **Plug-in shell**—An aluminum plug-in shell accommodates any standard cartridge and comes with mounting hardware. A 4-pin (plus ground) connector provides electrical connections. A screw-secured slide on the shell permits easy, precise adjustment of stylus overhang.
- **Cables** — Two shielded cables 39" (one meter) long, with standard phono connectors, and a separate ground wire are supplied. No soldering is necessary.

DIMENSIONS AND GEOMETRY

- Overall length: 12⅝"
- Height: 5⅜" overall; 1⅛" max. above playing surface
- Distance, pivot to table center: 7½"
- Optimum stylus overhang: 11/16"
- Range of overhang adjustment: ½"
- Height adjustment range: 1⅝"

