

3

**PIONEER  
PL-7  
TURNTABLE**

**Manufacturer's Specifications**

**Speeds:** 33 $\frac{1}{3}$  and 45 rpm.

**Motor:** Direct-drive, Hall type, PLL quartz controlled.

**Platter:** Aluminum alloy, diecast.

**Wow & Flutter:** Less than 0.035% (DIN), 0.025% wtd. rms.

**Rumble:** Better than 78 dB (DIN B).

**Tonearm:** Static-balance type, 8.7 in. (221 mm) long.

**Overhang:** 0.61 in. (15.5 mm).

**Facilities:** Repeat, record-size selection.

**Dimensions:** 16 $\frac{1}{2}$  in. (41.65 cm) W x 14 $\frac{1}{2}$  in. (36.69 cm) D x 4 $\frac{1}{4}$  in. (10.75 cm) H.

**Price:** \$200.00.



Although we live in an age of inflation with the prices of homes, cars, medical services, food and clothing on a seemingly endless, upward spiral, the costs of many electronic products actually have decreased. The first transistors cost several dollars apiece and I well remember paying \$20 for small, ordinary devices. But now, microcircuits containing the equivalent of several thousand transistors can be bought for only a few cents! Indeed, radio and television sets are less expensive than they were 10 years ago.

Another example bucking the tidal price wave is the modern turntable with its precision, quartz-controlled drive system. Pioneer's new PL-7 sells for about \$200 and yet it works better than many models costing twice as much only five years ago.

The PL-7 is fully automatic with a better-than-average tonearm, considering the price, made from polymer graphite. This sturdy tonearm is of a straight, tubular design, measuring 8.35 inches from pivot to stylus and is finished entirely in black. Etched into the rather elaborate base for the tonearm are the words, "Low-mass, high-tracking-ability tonearm." The anti-skating dial, calibrated from 1 to 3 grams, is to the right of the pivot. Located immediately in front of the clearly legible dials is a cue lever. Installed behind the tonearm rest is a small, red indicator light which is activated when the motor starts.

With the exception of the aforementioned cue lever, the remainder of the controls are all at the front of the base where they are easily accessible even with the dust cover closed. At the extreme left lies the two-position speed switch for 33 $\frac{1}{3}$  or 45 rpm discs. Roughly in the middle of the controls is a quartz-lock indicator light. To the right of the light is a record-size switch for 7- or 12-inch discs. The next control is for repeat, and at the extreme right is the start and stop switch. These controls are all in the form of polished metal bars, clearly labeled, and the entire panel is slightly angled for convenience.

The diecast platter is neatly recessed into the base. Only 2 $\frac{1}{2}$  inches high, the molded base is handsomely finished in champagne gold. The styling of the black tonearm and its base, along with the sleek lines of the rest of the unit, creates an attractive, low profile.

A Hall-effect drive motor is used in a conventional PLL quartz-controlled circuit. Both motor and arm are isolated from the top panel by springs. The four flexible mounting feet also help to inhibit acoustic feedback.

#### Measurements

For test purposes, an ADC Astrion phono cartridge was mounted on the low-mass shell. A considerable plus was that it locked tightly to the arm by means of a screw. Tracking force and anti-skating bias were both set to 1.6 grams, a combination which seemed optimum for this particular cartridge. The tracking force calibration accuracy was within 5% down to 1.5 grams, while the anti-skating dial provided good matching. Using a Cart-A-Lign protractor, the tracking error was reduced to +1.5°, -2.0°. Both vertical and lateral arm bearing friction were insignificant, and there was no noticeable looseness or "play."

Arm resonance occurred at 8.5 Hz with a rise of 4.0 dB. Wow and flutter measured 0.03% (DIN 45-507), while rum-

ble was 62 dB, using the ARRL standard. These last results are both excellent.

I had just received the Thorens rumble test unit, which rejoices in the name "Rumpelmesskopler." This ingenious device clamps on the turntable spindle and is more accurate because the record itself is eliminated. Testing the PL-7 with it, I was not surprised to measure a figure of 68 dB, or 6 dB better than the figure obtained using the test record.

The automatic arm return appeared to be faster than usual, requiring less than four seconds from the run-off groove to the rest position. As the arm moves from its rest, the indicator at the base lights up and the motor starts. The quartz control LED on the front panel lights up after the platter has turned half a revolution.

#### Use and Listening Tests

The unit struck me as less prone than most to problems of acoustic feedback, and its general performance makes this Pioneer turntable an excellent value for the money. The only fault I find is the position of the cue lever; it is not accessible with the dust cover closed. However, it must be said that the only way to avoid this problem would be a complicated linkage system or separate control motor, necessitating a price increase of \$50 or more.

*George W. Tillett*

Enter No. 92 on Reader Service Card



### the perfect combination...

The musical accuracy of Bryston components is a revelation. Every note emerges with perfect clarity from a background of silence, then vanishes. The progression of musical events seems real, tangible, almost visual in its presentation...

Bryston believes there is a need for reference standards of musical accuracy. That is why we designed our Models 2B, 3B and 4B power amplifiers, and our Model 1B preamplifier. Their only reason for existing is to provide the most faithful electronic rendition of a musical signal possible within the bounds of available technology. Write to us and we'll tell you how we do it, and where you can listen to our perfect combination.

IN THE UNITED STATES:

**BRYSTON VERMONT**  
RFD#4, Berlin, Montpelier, Vermont 05602  
(802) 223-6159

IN CANADA:

**BRYSTON MARKETING LTD**  
57 Westmore Dr., Rexdale Ont., Canada M9V 3Y6  
(416) 746-0300

Enter No. 3 on Reader Service Card