### The new ADC-XLM

Superb performance.
Lowest mass.
Unbeatable price.
And it's guaranteed for 10 years.

If you're like most audiophiles, you've probably spent a great deal of time, effort and money looking for the "perfect" cartridge.

We know what you've been through. After all, we've been through it ourselves.

That's why we're especially enthusiastic about our newest cartridge, the ADC-XLM. It does everything a well designed cartridge should do. It may not be perfect, but we don't know of any that are better, and few that even come close.

Now, we'd like to tell you why.

### The lighter, the better.

To begin with, it is generally agreed that the first consideration in choosing a cartridge should be low mass. And as you may have guessed by now, the LM in our model designation stands for low mass.

Not only is the overall weight of the ADC-XLM extremely low, but the mass of the all-important moving system (the stylus assembly) is lower than that of any other cartridge.

Translated into performance, this means effortless tracking at lighter pressures with less distortion.

In fact, used in a well designed, low mass tone arm, the XLM will track better at 0.4 gram than most cartridges at one gram or more.

### A new solution for an old problem.

One of the thorniest problems confronting a cartridge designer is how to get rid of the high frequency resonances common to all cartridge systems.

Over the years, various remedies have been tried with only moderate success. Often the cure was worse than the disease.

Now thanks to a little bit of original thinking, ADC has come up with a very effective solution to the problem. We use the electromagnetic forces generated within the cartridge itself to damp out these troublesome resonances. We call this self-correcting process, "Controlled Electrodynamic Damping," or C.E.D. for short.

And if it seems a little complicated, just think of C.E.D. as a more effective way of achieving lower distortion and superior tracking, as well as extending frequency response.

Naturally, there's much more to the new ADC-XLM, like our unique induced magnet system, but let's save that for later.

### Guaranteed reliability plus.

At ADC we've always felt that reliability was just as important as any technical specification. That's why we now guarantee every ADC-XLM, exclusive of stylus, for a full ten years.

But this unprecedented

guarantee\*involves something more than just an assurance of quality. It is also an expression of our conviction that the performance of this cartridge is so outstanding that it is not likely to be surpassed within the foreseeable future.

### And something more.

In addition to the superb ADC-XLM, there is also a new low mass ADC-VLM, which is recommended for use in record players requiring tracking pressures of more than one gram. The cartridge body is identical for both units, and so is the guarantee. Only the stylus assemblies are different. Thus you can start out modestly and move up to the finest and still protect your investment.

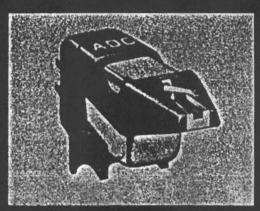
And that brings us to the important question of price, which we are happy to say is significantly lower than what you might reasonably expect to pay for the finest. The suggested list price for the incomparable ADC-XLM is \$50 and the runner-up ADC-VLM is only \$40.

But no matter which low mass ADC you choose, you can be certain that they share the same outstanding characteristics... superb tracking, very low distortion and exceptionally smooth and extended frequency response.

We guarantee (to the original purchaser) this ADC cartridge, exclusive of stylus assembly, to be free of manufacturing defects for a ten year period from the date of factory shipment. During that time, should a defect occur, the unit will be repaired or replaced (at our option) without cost. The enclosed guarantee card must be filled out and returned to us within ten days of purchase, otherwise this guarantee will not apply. The guarantee does not cover damage caused by accident or mishandling. To obtain service under the guarantee, simply mail the unit to our Customer Service Department.



## The ADC-XLM"...in a class by itself."



That's the way Stereo Review described our XLM. High Fidelity headlined their review, "Superb new pickup from ADC" and went on to say, "...must be counted among the state of the art contenders." And Audio echoed them with, "The ADC-XLM appears to be state of the art."

With the critics so lavish in their praise of the XLM, there's hardly any necessity to add anything. Far better to let the experts continue to speak for us.

Frequency response The CBS STR-100 test record showed less than ± 1.5dB variation up to 20.000Hz. Stereo Review

...response is within ±2dB over the entire range. Audio Frequency response is exceptionally flat. High Fidelity

Tracking This is the only cartridge we have seen that is really capable of tracking almost all stereo discs at 0.4 grams. Stereo Review

The XLM went through the usual torture test at 0.4 grams (some top models require more than a gram). High Fidelity

The XLM is capable of reproducing anything found on a phonograph record. Audio

Distortion Distortion readings...are without exception better than those for any other model we've tested. High Fidelity

The XLM has remarkably low distortion in comparison with others. *Audio* 

At 0.6 grams the distortion was low (under 1.5 per cent). Stereo Review

Hum and noise The XLM could be instrumental in lowering the input noise from the first stage of a modern transistor amplifier. Audio
The cartridge had very good shielding against induced hum. Stereo Review

Price This would be a very hard cartridge to surpass at any price. Stereo Review

We found it impossible to attribute superior sound to costlier competing models. *High Fidelity* Priced as it is, it is a real bargain in cartridges. *Audio* 

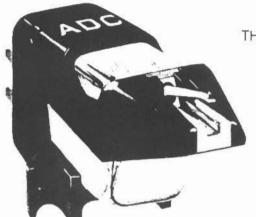
## The Pritchard High Definition ADC-XLM



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a superior electronics subsidiary

Direct Response Card 3 on Page 19



## THE CONSUMER'S GUIDE NEW Equipment TO HIGH FIDELITY EQUIPMENT TENORTS

# Superb New Pickup from ADC

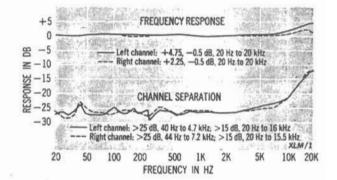
The Equipment: ADC XLM, a magnetic stereo phono cartridge with elliptical diamond stylus. Price: \$50. Manufacturer: Audio Dynamics Corp., Pickett District Rd., New Milford, Conn. 06776.

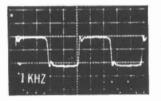
Comment: Perhaps the agonizing upward surge of prices for top-grade phono cartridges has been reversed. The XLM, which certainly must be counted among the state-of-the-art contenders now on the market is pegged at a lower price than most. Yet the XLM will, we believe, bear A/B comparison with the best of them.

The findings at CBS Labs are, over-all, the most impressive we've seen. Distortion readings approach those for the B&O SP-12, which established a record in this respect, and are almost without exception better than those for any other model we've tested. Frequency response is exceptionally flat; channel separation is at least on a par with that of other top-quality models. Square-wave reproduction is among the very best we've seen.

In some ways the lab findings suggest those for ADC's own Model 25. Intermodulation measurements are identical at 0.8% in the lateral plane, 4.0% measured vertically. Output in both cases is slightly lower than that from some comparable models; the XLM's left channel measured 3.0 millivolts from the standard test cut, the right channel produced 3.3 millivolts. Compliancewhich was spectacularly high in the Model 25-is merely extremely high in the XLM: 65 (x 10-6 cm/dyne) in the lateral plane and 50 vertically. Minimum tracking force required for the XLM is likewise unusual, though not as spectacular as that for the Model 25. The XLM went through the usual torture test at 0.4 grams (some top models require more than a gram), and the lab chose 0.6 grams-including a normal allowance so that the cartridge will not be working at the borderline of optimum performace-for the remaining tests. Under the microscope, the tip displayed good geometry and was measured in the lab as a 0.25-by-0.9-mil ellipse. Vertical angle was measured at 21 degrees. Low-frequency resonance measured in the SME arm occurred at 5.5

When we listened to the XLM we felt that we had a \$50 cartridge that sounded at least as good as some costing





Square-wave response

more. As we've had cause to point out in the past, pickup cartridges are becoming so good that differences between them often are exceedingly subtle. In A/B comparisons, a listener might occasionally say he heard a slightly silkier sound at the high end in listening to other competing models or perhaps a slightly clearer, more natural sound on such "difficult" instruments as cymbals, for example. But in general we found it impossible to attribute superior sound to costlier competing models.

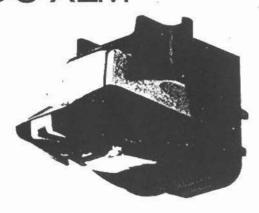
If you plan to replace your present cartridge with the XLM, note that the contact pins on the latter are thin and rectangular in cross section, rather than round. Contact sleeves in our cartridge shells that had previously been used with round-pinned pickups did not make good contact with the XLM's pins, and even fell off in some cases. The sleeves can easily be tightened with a small pair of pliers however. When we did so and then replaced the sleeves on the XLM's contact pins we had no further trouble.

CIRCLE 144 ON READER-SERVICE CARD

### REPORT POLICY

Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Laboratories, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc., one of the nation's leading research organizations. The choice of equipment to be tested rests with the editors of this FIDELTY, Manufacturers, are protigermitted to read reports in advance of publication, and no report, or portion thereof, may be reproduced for any purpose or, in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested; neither FIGH FIDELTY nor CBS Laboratories assumes responsibility for product performance or quality.

## Audio Dynamics ADC-XLM



For further information about this product or for the name and address of your nearest ADC dealer, plee contact Mr. Syd Goldstein at (514) 683-6331 or Direct Response Card 3 on Page 19. \*See Page 36.

The ADC-XLM is an improvement on the Audio Dynamics 10E mk IV cartridge and replaces it in the ADC line at the same price.

It is smaller and lighter than its predecessor and this should give it quite an advantage when playing warped records

My collection of the new undulating style of skinny discs seems to be growing daily. Improvements in this area are always appreciated.

All ADC cartridges work on the induced magnet principle. Most of the magnetic elements, coils, magnet and pole pieces are molded into the plastic body. A small, hollow soft iron collar is fixed to the stylus which is in turn mounted on the removable stylus carrier.

The permanent magnet induces magnetism in the collar, which moves between the pole pieces. This transfers the changing flux to the coils, producing the electrical output.

The nominal tracking force of the XLM is rated at between 0.4 and 1 gram, compared with the 10E mk IV figure of 0.7 gram.

The coils of the ADC-XLM have a very low inductance, making it tolerant of long connecting cables.

The main stylus resonance is controlled by using the damping effect of eddy currents induced in the housing surrounding the pole pieces. ADC states that this virtually removes the mechanical damping from the moving system and gives lower distortion and superior tracking capabilities.

### Laboratory Tests

Our usual procedure when assessing a cartridge (or any other item if Hi-fi equipment for that matter), is to listen first and measure later. One always seems to hear a fault after it has been shown to exist!

A wide range of recordings demonstrated that this cartridge tracked our most difficult records with ease and has phenomenally low cross-talk between channels.

Using the Shure "trackability" test record, we found that all bands except the quite impossible highest level of orchestral bells played perfectly at 0.75 grams, using the Thorens 125 mk II turntable.

## **Test Report**

The output from each channel was just over 0.8 mv/cm/sec., about 2dB better than the specification. This was maintained within ½ dB for vertical, lateral and both 45 degree directions.

The upper resonance was well damped, peaking about 1½ dB and only 2 dB down at 20 kHz.

Separation between channels was measured at well over 30 dB in the mid band. The extremely low recorded levels made low frequency measurements difficult, but we obtained better than 25 dB down to 50 Hz. Above 5000 Hz, separation started to decrease, but even at the stylus resonance, a frequency where control is less effective, the separation between channels is still 17 dB.

#### Conclusions

The Audio Dynamics ADC-XLM is an outstanding performer by any standard. It is also an interesting example of engineering evolution in action. The 10E mk IV is a fine cartridge too, but the ADC-XLM shows how excellence can be improved by shaving cartridge mass and reducing inductance.

We liked the way it tracked all normal records at less than half a gram, but we did all the measurements and serious listening tests at the more "liveable" weight of three quarters of a gram.

At this weight there was no hint of mistracking.

This cartridge is not exactly in the low price class, at \$75 but then its performance will be hard to match at any price •

#### **SPECIFICATIONS**

Stylus Tip Dimension

Sensitivity 3.5 mv. at 5.5 cm/sec. (nominal)
Suggested Tracking Force Prequency Response 10 Hz. - 20 kHz. ± 2 dB.
Channel Separation 25 dB 50 Hz. - 20 kHz. (nominal)

The VLM stylus assembly is suggested for playing weights greater than 1 gram.

0.0007" x 0.0003" elliptical

OUTPUT FROM LEFT CHANNEL

OUTPUT FROM LEFT CHANNEL

OUTPUT FROM MIGHT CHANNEL WITH
LEFT CHANNEL WITH
LEFT CHANNEL WITH