

# Breakthrough In Thyroid Testing

Announcing

## TRIOSORB<sup>Trademark</sup> T-3 DIAGNOSTIC KIT\*

An in vitro test unmatched in accuracy, speed & convenience

Triosorb represents a major breakthrough in thyroid testing because it replaces the red blood cells in the test. Triosorb sponge is a polyurethane foam in which is embedded a pre-measured ion exchange resin.

**ACCURACY:** Because only serum is used (instead of red blood cells) and there are only 3 washings, accuracy is greatly increased. Triosorb also permits accurate evaluation of thyroid function under certain circumstances where other standard methods may not be applicable. For example, it may be used following the administration of iodine-containing compounds or during the course of treatment with thyroid medications.

**SPEED:** Triosorb sponge can be washed quickly. The 3 washes can be completed in one or two minutes—compared to the red cell technique requiring 5 time-consuming washes and centrifugations. Triosorb does not require an incubator or shaker.

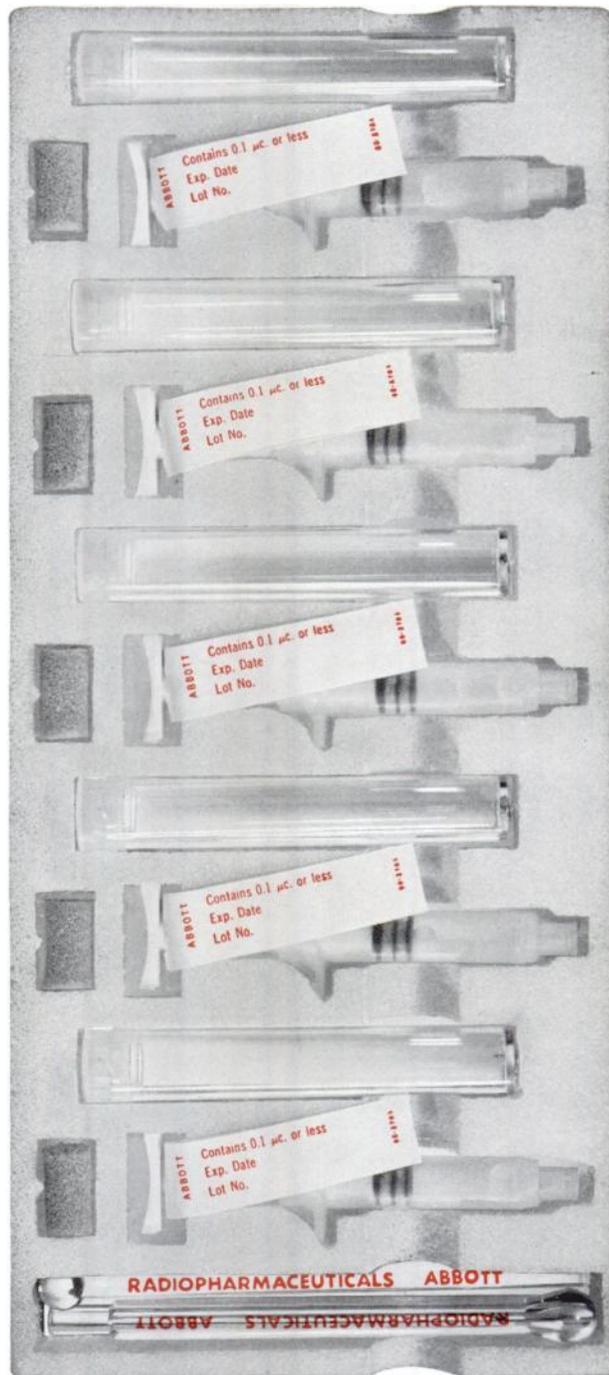
**CONVENIENCE:** It is in a disposable kit form ready for immediate use at room temperature (25° C.). Correction factors are available if room temperature varies.

**SAFETY:** No dilution or pipetting of radioactive material is necessary. Since the patient receives no radioactive material, the test can be used in children, pregnant women, or in adults who fear ingestion of even tracer doses of radioactivity. Each syringe contains only 0.1  $\mu$ c. or less of  $I^{131}$  activity—an amount so minute that no special licensing is required by the AEC for its use.

**FLEXIBILITY:** The test does not require the presence of the patient for the determination of the radioactivity. The serums can be frozen and saved until a sufficient number has been collected to run a rack full of tubes at one time.

**SUPPLIED:** Each Triosorb Diagnostic Kit is made up of two trays (such as the one pictured to the right) containing: 10 syringes filled with Triomet®-131 [Iodine-131], 10 Triosorb Sponges, 10 plastic test tubes with caps, 2 plungers, and 2 aspirator tips.

Triosorb is available to all physicians, hospitals and clinical laboratories—AEC licensing is not required.



**ABBOTT LABORATORIES**  
PIONEERS IN RADIO-PHARMACEUTICALS  
North Chicago, Illinois / Oak Ridge, Tennessee  
\*Patent applied for.

305227

**Product Quality  
begins  
INSIDE\*  
the  
bottle**

**NEOHYDRIN Hg-203**  
(chlormerodrin Hg-203)

A new stabilizing agent,  
*theophyllin\**,  
suggested  
by Dr. D. L. Tabern,  
*improves the stability*  
of Volk Neohydrin  
*to light and heat.*  
Decomposition in the  
bottle is not a problem  
with the Volk product.

**SODIUM  
RADIOIODIDE  
I-131  
SOLUTION**  
(sodium iodide I-131)

New stabilizing agent,  
*ascorbic acid\**  
(0.5%), added to  
solutions effectively  
*maintains the iodide*  
*state, and is more*  
*palatable to the patient*  
than cysteine which  
forms H<sub>2</sub>S.

**HIPPURAN I-131**  
(sodium iodohippurate I-131)  
**DIODRAST I-131**  
(iodopyracet I-131)  
**ROSE BENGAL  
I-131**  
(rose bengal I-131)

The *Silver Saddle\** is a  
*continuously active*  
*purifying agent for the*  
*removal of free iodide.*  
It is an exclusive Volk  
agent added to these  
products where free iodide  
is released on storage.  
A silver salt contained  
within the porous porcelain  
saddle binds iodide  
in an insoluble form.

**RADIOTRIOLEIN**  
(triolein I-131)  
**AND**  
**RADIO-OLEIC I-131  
ACID**  
(oleic acid I-131)

*Chromatographically pure*  
*radioiodinated lipids\**  
*for meaningful*  
*results in*  
*absorption studies*  
through the use of chemically  
pure starting materials and an  
exclusive microtechnique  
for removing  
free iodide yields.



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# 8-INCH CRYSTAL RADIOISOTOPE SCANNER



More than a year ago Ohio-Nuclear *delivered* its first 8-inch crystal radioisotope scanner. It was our standard Model 54 Scanner except for the heavier shield and the scanning head beneath instead of over the patient.

The spectroscopy grade crystal in this scanner is 8 inches in diameter by 2 inches thick with a 2-inch thick inactivated sodium iodide light pipe. The crystal assembly is stainless steel.

The scanner has a massive 2000-pound shield mounted within the scanning table; a scanning area 60 x 16 inches; an electrically powered, adjustable height detector assembly to accommodate collimators of different thicknesses; and a Bucky beneath the patient.

The maximum scanning speed is 100 inches per minute.

The data plotter provides both a dot record as well as a photoscan. It is driven with sychros and may be located where it is most convenient for the operator.

This scanner is in almost continuous use in research programs and special clinical studies. For example: as part of a current study, brain scans of extraordinary resolution are being obtained at scanning speeds of 50 inches/minute.

If a similar scanner would interest you, call us. The price is \$19,950 complete with transistorized electronics, ready to scan in your laboratory, *120 day delivery guaranteed.*



**OHIO — NUCLEAR, INC.**

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621-8477



# ARMAC<sup>®</sup>

for rapid, accurate  
measurement  
of radioactivity

The Packard Model 445 Armac Scintillation Detector is an extremely sensitive, large sample-volume (up to two liters) well-type detector designed for measuring radiation from gamma-emitting isotopes.

Because its high counting efficiency and sensitivity permit shorter counting times, the Armac Detector enables the research scientist to quickly and accurately determine the presence of low levels of radioactivity in bulk samples including meat, milk, water, blood, feces, soil, or tissue with little or no sample preparation.

#### IDEALLY SUITED FOR *IN VIVO* RESEARCH

The Armac's 4-pi counting geometry and high counting efficiency require that only very small doses of radioactivity be administered to small experimental animals during *in vivo* research on retention and excretion of various gamma-emitting isotopes. Sacrificing is unnecessary and the animal acts as its own control for repeated experimentation.

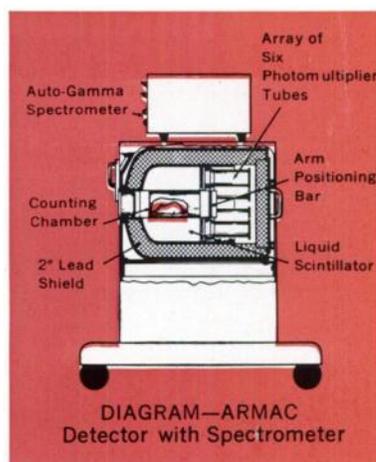
The Armac Detector is also useful in nutritional studies and clinical diagnosis where changes in the amount of circulating radioactivity in the blood can be directly related to other body functions. These changes can be measured accurately and rapidly using the blood-rich portion of the patient's forearm which can be accommodated in the Armac's counting chamber.

#### COMPLETE SYSTEMS

An Armac Detector System, comprised of the Model 445 Armac Scintillation Detector and any of several Packard Spectrometers and related control units, recording rate-meters, etc., can be supplied to meet your needs. Any Armac Detector System can be readily modified or expanded to meet changing research requirements.

*Ask your Packard Sales Engineer for complete details, or write for Bulletins.*

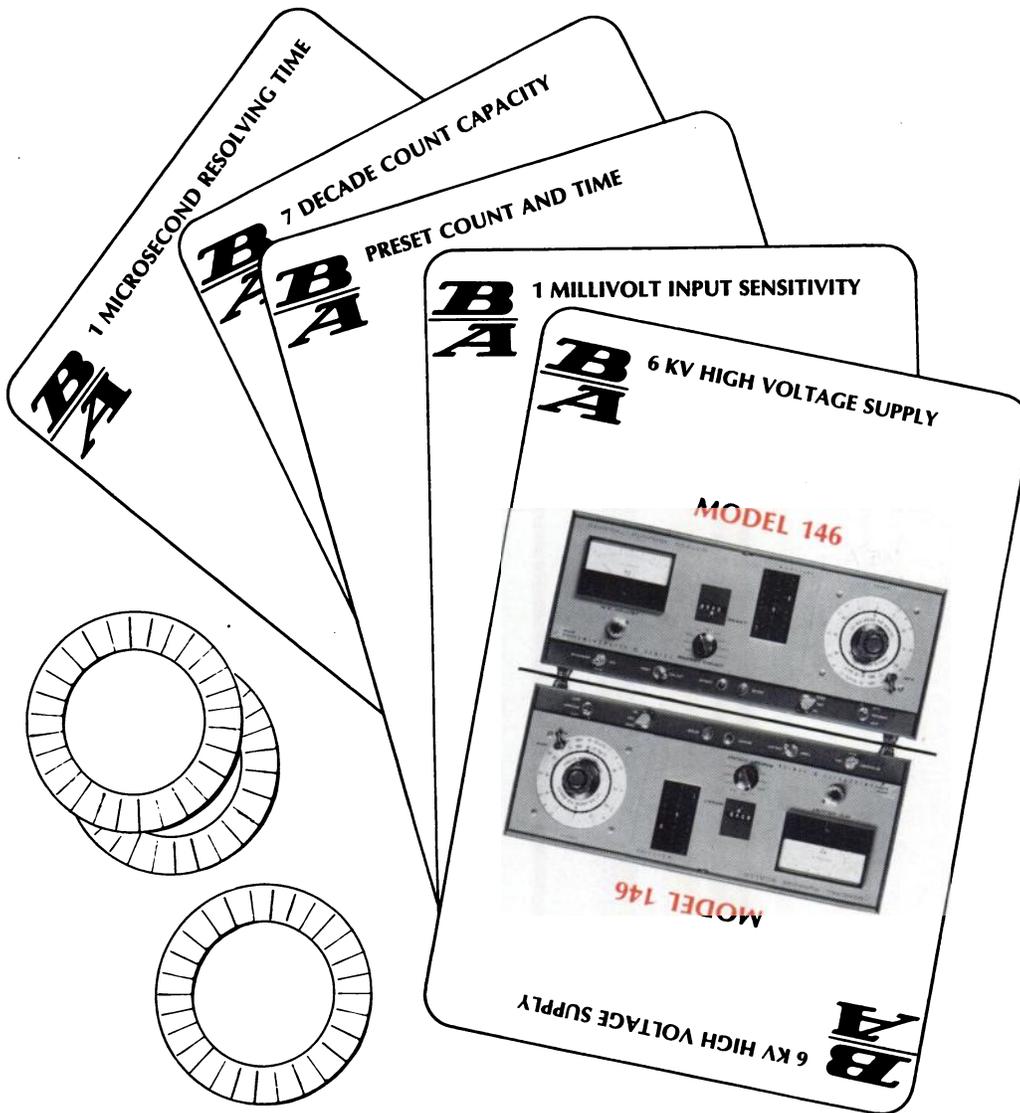
(Photograph) COUNTING LIVE FISH IN FLOWING STREAM WATER.  
Photo courtesy of Oak Ridge National Laboratory operated by Union Carbide Corporation for the U.S. Atomic Energy Commission.



**Packard**

**PACKARD INSTRUMENT COMPANY, INC.**

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**WITH THE MODEL 146 GENERAL PURPOSE SCALER  
YOU CAN COUNT ON A SURE THING!**

The model 146 General Purpose Scaler meets the needs of a broad range of counting applications — whether geiger, scintillation, or proportional. This instrument features one microsecond resolving time, count capacity to 9,999,999, and provisions for preset count and preset time. With the two input modes (voltage mode: 1 millivolt sensitivity; current mode: no preamp required) and the 6KV high voltage power supply, a wide variety of counting gases such as helium isobutane, argon methane, and methane can be used. The transistorized model 146 has plug-in card circuitry for reliability and ease of maintenance.

Service available through all Baird-Atomic sales offices, in the U.S. and abroad. Write to the Baird-Atomic Instrument Division for our detailed technical data sheet AT 146 or for a demonstration by a field engineer.

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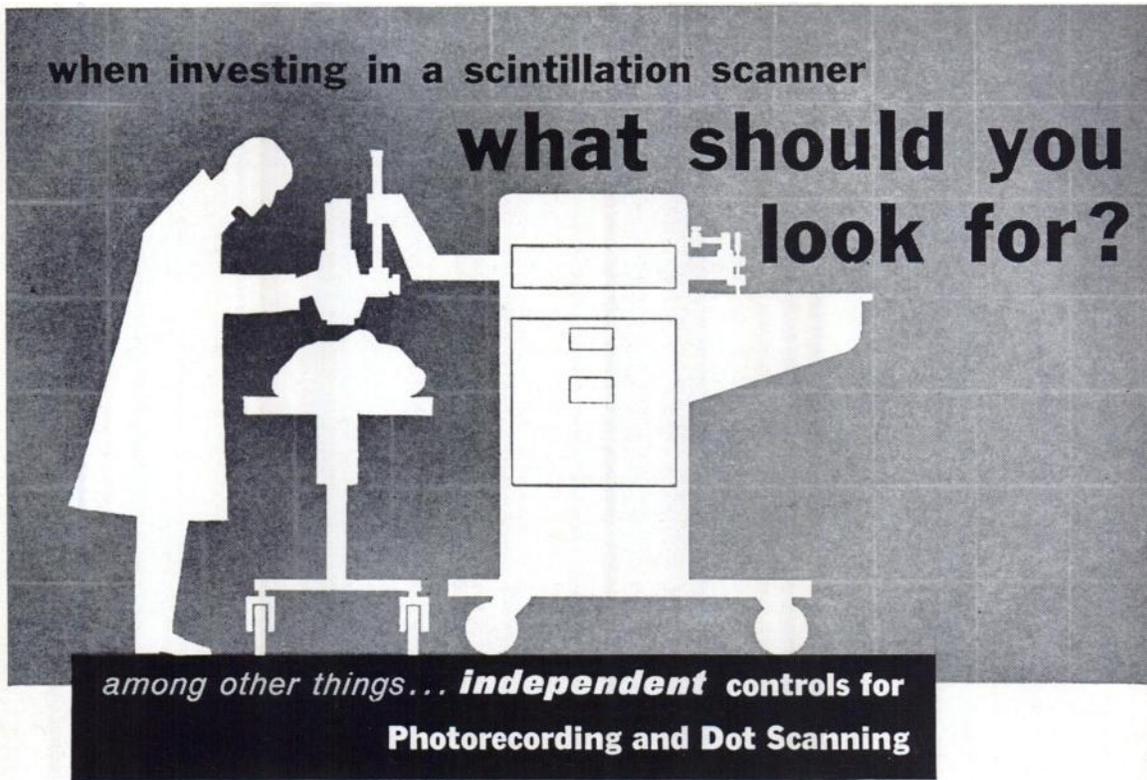
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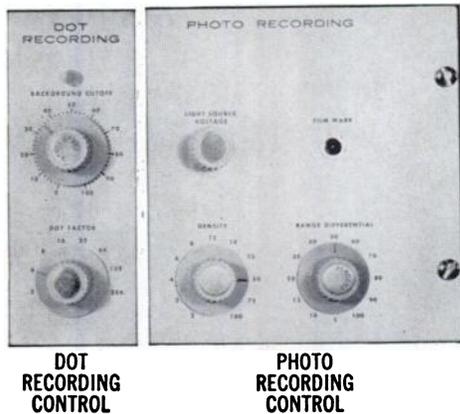
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To extract the most information out of both the scanning techniques routinely at your command, you should be able to vary background suppression on either separately.

On the Picker Magnascanner the controls for the photorecording system are completely independent of those governing the dot-writing stylus.

Some other scanning instruments arbitrarily restrict you to a single suppression control for both systems.

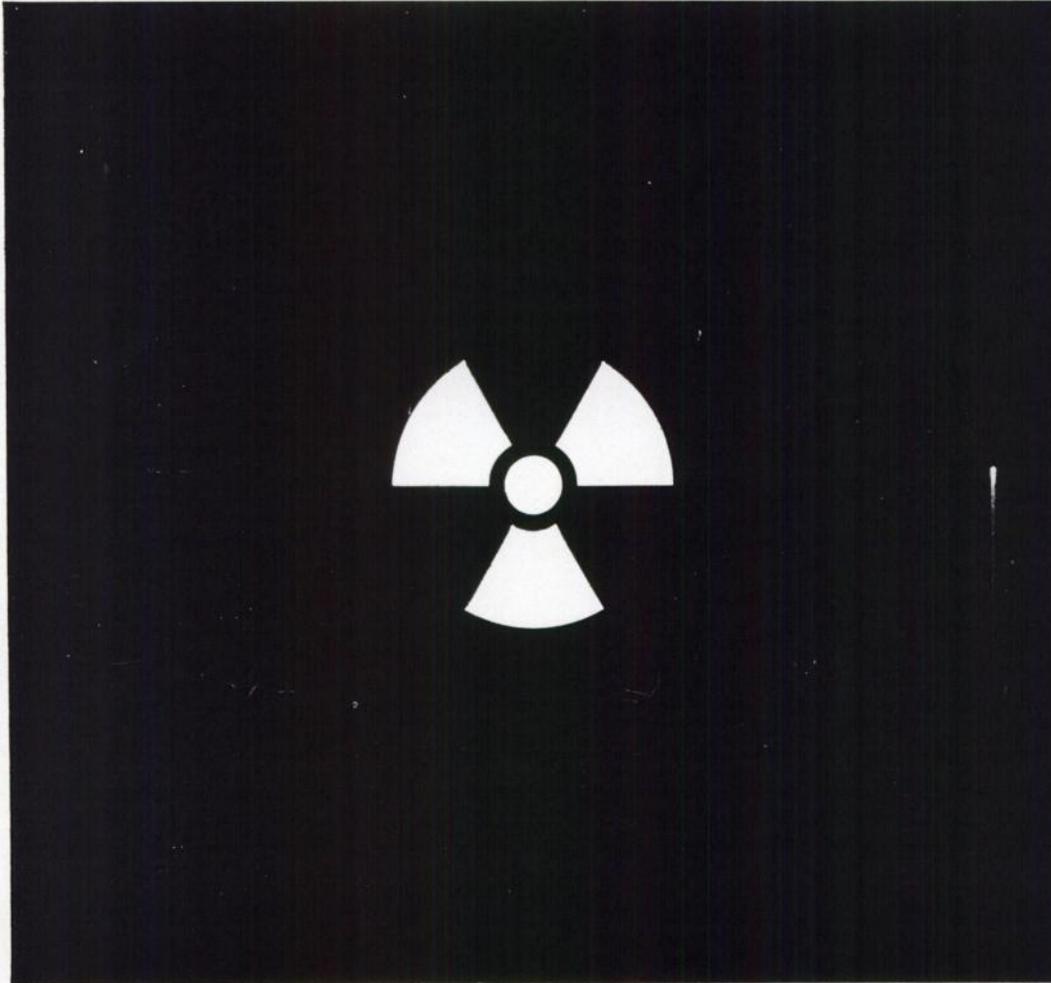


**PICKER**  
nuclear

# Magna Scanner

the *versatile* scanner / the *proven* scanner

PICKER NUCLEAR  
DIVISION / PICKER X-RAY CORPORATION  
WHITE PLAINS, NEW YORK



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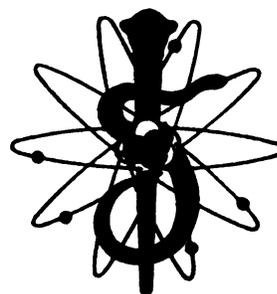
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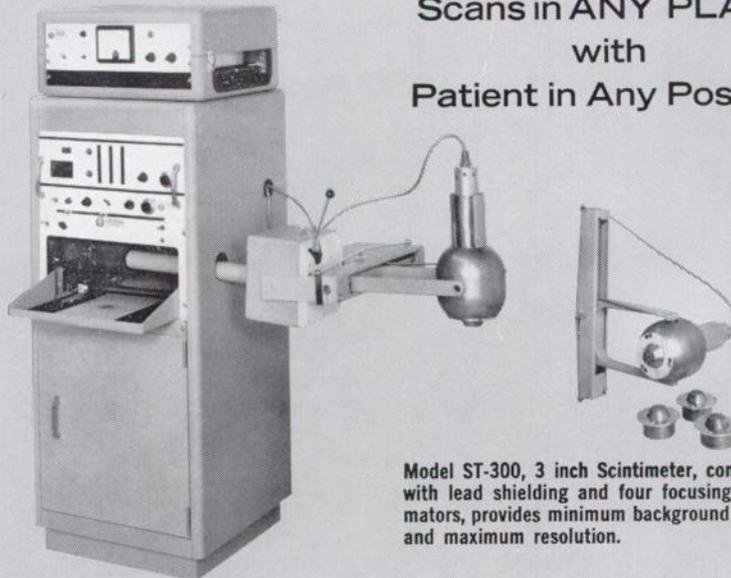
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# universal II scintiscanner

Shown with 3" Detector and Photoscanner

Scans in ANY PLANE  
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Patient in Any Position



Model ST-300, 3 inch Scintimeter, complete with lead shielding and four focusing collimators, provides minimum background count and maximum resolution.

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The only scanner that accepts both 2 and 3 inch detectors for scanning in any plane, Curtis Nuclear's Model SN-250 Scintiscanner is designed to scan the brain, heart, liver, kidneys and other vital organs with no discomfort to the patient. A one operator instrument, its modular construction permits its use with a wide selection of detectors, collimators, and counting and recording instruments. Features includes "joy stick" positioning, no large "over-the-patient" structure, illuminated outline of scan area, and universal head assembly that allows a multitude of tests in addition to scanning.

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*Write for complete information and specifications to . . .*

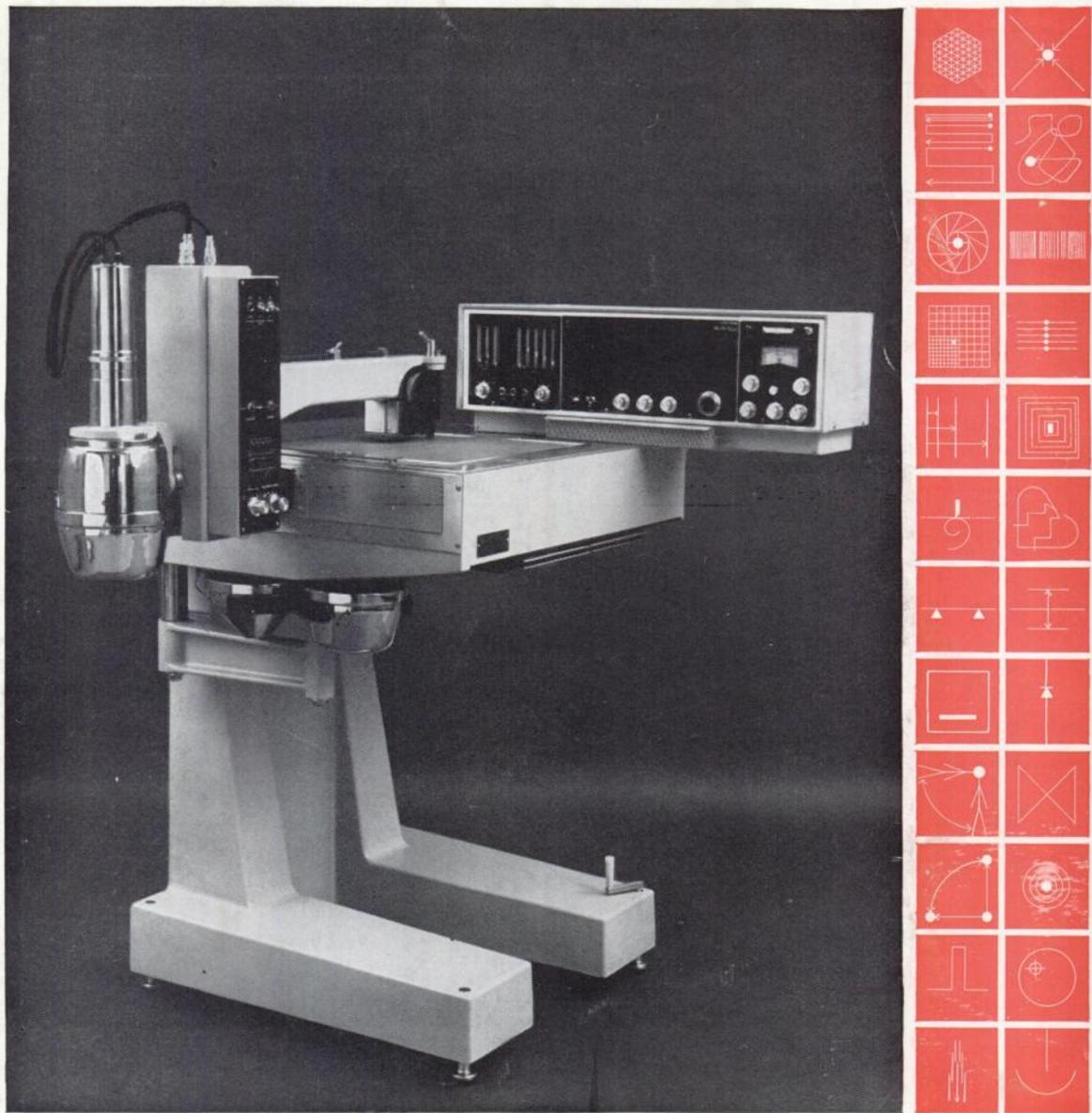


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*"first in scanning"*

THE ORIGINAL REED-CURTIS

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Nuclear-Chicago's Model 1735 PHO/DOT Isotope Scanner produces a superb display of the

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The instrument incorporates 24 significant advances in both human engineering and electro-mechanical design.

These advances are the key to PHO/DOT's increasing acceptance and are portrayed in red by the symbols above. They con-

tribute materially to simplified procedures and all but eliminate the chance of operator error.

Your Nuclear-Chicago sales engineer will be happy to review PHO/DOT for you in detail. Please consult him or write for our PHO/DOT brochure.



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