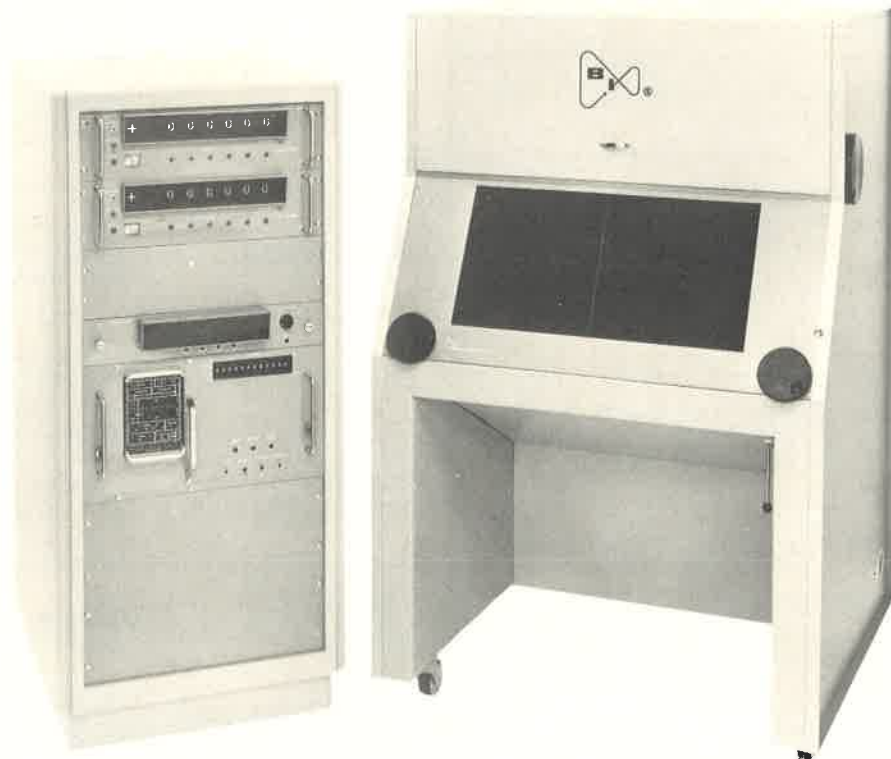


BROOMALL INDUSTRIES

DIGITIZING SYSTEMS

Model 17-C



DESCRIPTION

The 17C Universal Reader is designed as a general purpose record reader for records on film or hard copy, accommodating all record sizes from 16mm to 12-inch, sprocketed or unsprocketed records, and providing maximum flexibility for the data reduction center with a "mixed" load.

Three interchangeable projection lenses (2x, 4x, 11x) allow image magnification to suit the record being read. Magnification is quickly and easily changed by swinging the selected lens into place by its swing-type mounting bracket. The crosswire alignment system is engineered to insure that linearity of the image is maintained over the entire screen within the measuring accuracy limits of the crosswire system, regardless of the magnification power being used.

Direct X-Y axis record reading is accomplished by positioning the crosswires in relation to the data point to be measured. The traversing cursors are directly communicated to the two 15A Magnetic Read Heads

which convert the cursor movement to a digital value. Digital position conversion is automatically displayed on two banks (X and Y) of Nixie readouts located on the front of the Telecordex. Output may be direct to punched cards, punched paper tape, electric typewriter, or to magnetic tape.

OTHER FEATURES INCLUDE . . .

- Solid State Bi-directional counters with Nixie Display
- Instant Format Control with Removable Patch Panel
- Two Decade Channel Counter and Four Decade Time Accumulator
- 250 Watt Mercury Vapor Lights for Opaque Records
- Guaranteed Non-Obsolescence with the Telecordex Electronics System

17C UNIVERSAL READER

STANDARD FEATURES

OPTIONAL FEATURES

| | |
|-------------------------------------|------------------------------------------------------------------------------------------------------------|
| reading area | 12½" wide by 6½" high measured at the record; 12½" high by 24½" wide measured at the viewing screen. |
| reading accuracy | 0.0019 (2X lens), 0.001 (4X lens), 0.00037 (11X lens). |
| output | 024/026/029 Key punch or 523 Summary Punch. |
| visual readout | 5 digit display and readout (Nixie), indicating the sign and 5 digits in each axis. |
| storage | ±999,999. |
| resolution | 208, 416, and 832 counts per inch with a 1000 counts per revolution 15A Magnetic Read Head. |
| counting rate | 50,000 counts per second. |
| identification | 12 fixed data digit switches are provided for entering fixed data following readout. |
| format control | Removable operator's programmable patchboard allows formats to be generated to suit the specific problem. |
| optical system | Magnification: 2X, 4X, 11X Focal Length: 14", 10", 5" Resolving power in lines per mm: 20, 40, 60 |
| motor driven paper transport | Bi-directional, variable speed paper advance for roll type records. |
| cursors | 0.0035" diameter crosswires traversing in the same plane as the image. |
| viewing screen | Backlighted viewing screen with variable lighting intensity. |
| environment | +40°F to +85°F. |
| power requirements | 115V ±10V, 60 cycle, single phase, 8.3 amps. |

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|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| output | Punched paper tape, Electrotyper, Magnetic tape using 282M Telecordex and 556 bpi incremental tape transport. |
| readout | 4 digit event display (Nixie) counter. Displays a running count of recorded readouts, and may be set to advance in selected increments of 0 thru 9 with each readout as an accumulator for card sequence control. |
| visual readout | 6 digit display and readout (Nixie), indicating the sign and 6 digits in each axis. |
| multi channel | Two decade channel counter and Four decade time line counter, mounted in its own case. |
| mercury vapor lights | Two 250 watt Mercury vapor lights for backlighting opaque records. |
| 70B Light Source | Provides increased illumination and improved film handling. |

MECHANICAL SPECIFICATIONS

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|---------------------|-------------------------------------------------------------------------------------|
| size | 17C: 58" tall; 36" wide and 34" deep. 282E: 53.5" tall, 23" wide and 29.5" deep. |
| weight | 17C: 450 pounds (approx.) 282E: 350 pounds (approx.) |
| construction | Double wall, welded sheet steel with brushed aluminum trim. |
| color | Light blue with gray trim. |

WARRANTY

The 17C Universal Reader includes installation by a factory trained field engineer and a 90 day warranty from date of installation.