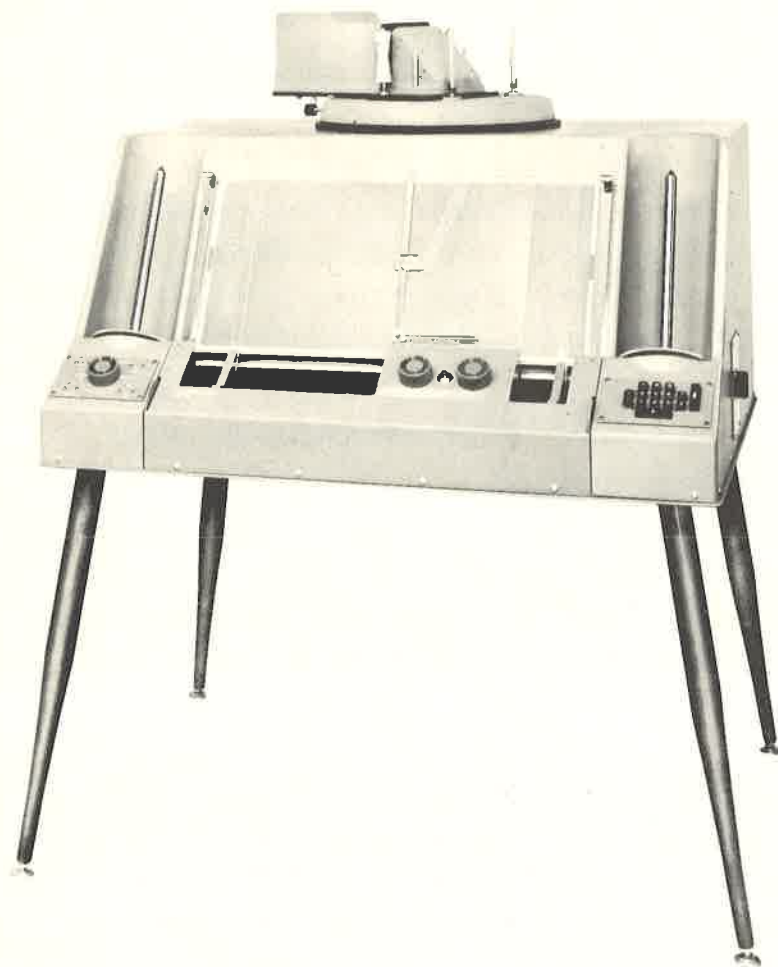


BROOMALL INDUSTRIES

DIGITIZING SYSTEMS

Model OSCAR-F



OSCAR Model F
(Shown with projector)



Decimal Converter Model F

OSCAR MODEL F SYSTEM

The OSCAR Model F is a reading machine designed to expedite the analysis of various continuous trace records appearing either on film or paper. Records up to 12½" in width may be accommodated in the unit. While the actual

alignment of the traces is performed manually, the machine automatically applies either linear or non-linear calibrations to the amplitude measurements and furnishes a resistance output proportional to the calibrated amplitude.

OSCAR MODEL F

1. The machine has a back-lighted field of view 13" high and 26" wide. Variable control of light level is provided for convenience of reading traces of various densities. Film and paper records, either opaque or translucent, can be analyzed.
2. The manual record transport will accommodate records up to 12½" in width and partly-filled spools can be interchanged without unspooling.
3. Two alignment references are provided (one at each extreme of the horizontal field of view) for the alignment of the entire measuring system with the oscillograph reference trace, thereby aligning the machine to the paper instead of the paper to the machine. The record is positively secured by two rollaway magnetic clamps.
4. A movable time reference can be positioned at any point over a distance of approximately 16" across the horizontal field of view.
5. A movable carriage incorporating two independent outputs for amplitude measuring (Y-axis) and two independent outputs for time interpolation (X-axis), provides for the mounting of either linear or nonlinear calibration traces which are to be introduced in the trace reading.
6. The origin of the calibration overlays can be positioned anywhere on the record and can be adjusted to compensate for channel zero drifts of scale changes. Provision is made for mounting several non-linear calibrations for the reading of adjacent multiple channels. Special overlays make possible slope reading, reading the sine, log, etc., of the amplitude, or translating curvilinear to rectangular coordinates.
7. The accuracy of the measuring unit is $\pm 0.1\%$ of full scale deflection, although the actual system accuracy will always be a function of the quality of the record and the operator's ability.
8. As an optional feature projection of 16, 35 and 70mm film is available (see front page illustration).
9. The power input to the reader is 115 volts ± 10 volts, 60 cycles.