The IBM 7404 Graphic Output Unit is a digital-to-analog device producing plotted points, inked lines, or printed symbols as output. The IBM 7634 Graphic Control Unit provides the necessary controls and power for the Graphic Output Unit. Input is provided by an IBM 729 IV or VI Magnetic Tape Unit.

Control, symbol, and X-Y coordinate data enter the Graphic Control Unit (GCU) as 10-character, coded orders. The decoded orders are sent to the Graphic Output Unit (GOU), where they are executed on a vertical, 31-inch x 31-inch plotboard. A servo-controlled carriage and arm assembly positions a solenoid-operated pen and printer mechanism.

### Functional Components
7634 GRAPHIC CONTROL UNIT
- Standard rack and panel frame.
- SMS circuitry.
- Operator and CE panels.
7404 GRAPHIC OUTPUT UNIT
- Vertical, backlit plotboard.
- Oven-controlled, digital-to-analog converters.
- Three separate, 400-cycle servo systems.
- Pluggable, solid state circuitry.

### Capacities and Speed
- Plotting area: 29 x 29 inches on 31 x 31-inch paper.
- Points per axis: 10,000.
- Maximum speed: 729 IV or VI — 8700 plots per minute. 2400 Series, Model 3 — 10,900 plots per minute.
- Point plot accuracy: ±0.015 inch of true X-Y coordinates.
- Line plot accuracy: 0.030 inch divergence from an ideal straight line.

### CE Features
7634 GRAPHIC CONTROL UNIT
- Indicator lights for order, line length, symbol, and X-Y coordinate data.
- Manual entry of order, symbol, and X-Y data.
- Loop feature for continuous execution of the orders contained in a record.
- Parity and order checking.
7404 GRAPHIC OUTPUT UNIT
- Pluggable component circuit drawers.
- All circuit adjustments and test points at front of unit.
Optional Features

1. Magnetic tape unit attachment options permit specifying a particular magnetic tape unit for attachment to the GCU. Four tape options are available:
   - IBM 729 II or V Magnetic Tape Units.
   - IBM 2400 Series Magnetic Tape Units (2401, 2402, 2403) — Model 1.
   - IBM 2400 Series Magnetic Tape Units (2401, 2402, 2403) — Model 2.
   - IBM 2400 Series Magnetic Tape Units (2401, 2402) — Model 3.

2. On-Line Attachment allows the Graphic Control Unit to be attached to the tape adapter unit of an IBM 7090/94/94 II or 7040/44 Data Processing System. This feature is available for GCU's with 729 tape unit options.

Standard Features

1. Draws straight lines up to 10 inches in length.
2. Prints 48 alphabetic and special characters.
3. Searches and skips input data.
4. Provides manually interchangeable pens for multi-color output.
5. Signals operator for pen or paper change.
6. Secures paper with vacuum-grid system.

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