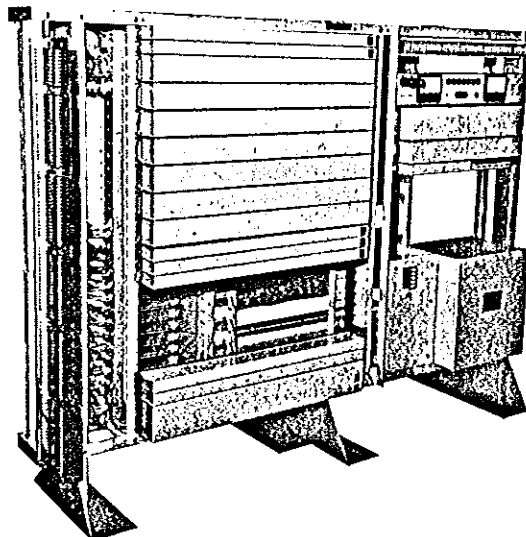


COMPAK I DIAL SWITCHBOARD



The Compak I is a low cost, universal package—an assembled and fully wired "off the shelf" XY System. You order equipment according to desired requirements.

This "off the shelf" system offers full C.D.O. features:

1. 2-5 numbering.
2. Normal access to outgoing toll.
3. Universal numbering with E.A.S. (Extended Area Service) exchanges.
4. No "stop-dial" necessary on incoming toll calls.
5. No "second-dial tone" necessary on incoming E.A.S. calls.
6. Multi-frequency ringing.
7. Intercept service.
8. Transistorized ringer source.
9. Integrated power and switching equipment.
10. "A type" frame included.

Capacity:

This switchboard provides facilities for 100 lines, 15 links including a maximum of 10 trunk lines. The maximum number of trunk groups is two (2) and unused line facilities in a line group used for trunks may be used for local lines.

Power:

The common power equipment (with the exception of the secondary cells and charging equipment) is an integral part of the switchboard.

- a. Batteries—Power for the switching equipment and the transmission circuits is supplied from a 100 AH, 23-cell storage battery.
- b. Charging Equipment—Charging equipment for charging the battery is supplied for operation from 110V 60 cps commercial power. It is of the constant-voltage type for charging batteries on a full float basis. Charger capacity is 6 amps. Charge failure alarm is provided.
- c. Metering and Control—A 20 amp circuit breaker distributes the switchboard current drain via a 50 amp interval shunt ammeter to a series of alarm type fuses feeding the individual circuits. The voltage is monitored with a 100V 1000 ohm/volt meter.

Operating Range:

- a. Battery voltage—44-54 volts.
- b. Dial Speed—8-12 pulses per second.
- c. Ringing Voltage—The ringing voltage does not drop below a minimum value of 65 volts with maximum ringing load.
- d. Subscriber Lines—
 - (1) Loop Resistance—1200 ohms maximum.
 - (2) Insulation Resistance—15,000 ohms minimum.
 - (3) Ringer Load—Not to exceed 10 bridged low-impedance ringers per line.
- e. Inter-Office Trunks—
 - (1) Loop Operation—
 - (a) Loop Resistance—2000 ohms maximum with battery and ground pulsing.
 - (b) Insulation Resistance—30,000 ohms min.
 - (2) Composite or Simplex Operation with Polar Duplex Signaling and Supervision. For this type of operation, polar duplex signaling equipment is used, and trunk limits are determined by the signaling set used.

Ringing and Interrupter:

- a. Ringing—The ringing source is a five-frequency transistorized ringing machine with an output of 25 watts per frequency. It is DC operated, therefore a standby machine is not necessary.
- b. Interrupter—A relay type interrupter, comprising standard fast operate, fast release "A" type relays driven from a transistorized $\frac{1}{4}$ second pulse source is used to supply ringing interruption cycles, PU, ECP, 60 and 120 IPM pulses.

Physical Features:

The over-all dimensions of the switchboard are:

- a. Height—5 ft. 2 in.
- b. Width—7 ft.
- c. Depth—1 ft. 6 in.

All supervisory, power distribution, interruption and metering equipment is built into the basic unit.