

**DIAL-X[®]
AUTOMATIC
SWITCHBOARD**

Model TDX-20A

DESCRIPTION AND APPLICATION

The STROMBERG-CARLSON DIAL-X Model TDX-20A Automatic Switchboard was designed specifically for any business, institutional, or factory operation where maximum internal communication efficiency and economy are desired. The switchboard is designed for low operating cost, requiring less current at peak loads than a 200-watt light bulb. It offers the user many important features:

AUTOMATIC SIMULTANEOUS SERVICE, 100% linkage (trunkage) assuring that all telephones may call and be called by any other telephone in the system, and that all telephones may be in use simultaneously without any peak-load difficulty due to linkage limitations.

AUTOMATIC INTERMITTENT SIGNALLING, with no buttons to push.

UNLIMITED MULTIPLE CONFERENCE FACILITY, with automatic signalling and complete privacy.

"MAGIC MEMORY" CIRCUIT, (automatic signal-after-busy) assuring immediate communication with called busy station when line is free.

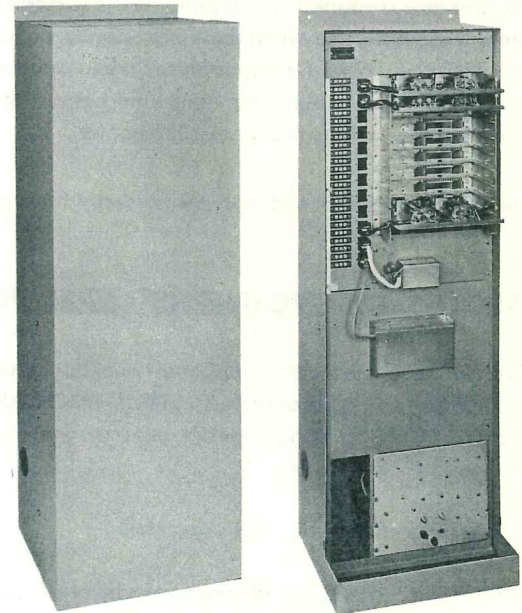
EXECUTIVE RIGHT-OF-WAY FACILITY, (optional) permitting the override of a busy signal for prompt handling of priority calls and without invasion of the privacy of the existing conversation.

DIRECT VOICE PAGING FROM ANY PHONE, (optional) permitting direct voice paging through the handset of any telephone in the system over an existing or subsequently installed voice paging system.

The switchboard is housed in a compact steel enclosure with a pleasing fine-wrinkle grey finish. This cover provides dust-free protection for the switching equipment.

The TDX-20A Automatic Switchboard requires no more space than a standard 4-drawer file cabinet. It measures only 54" high, 19" wide, 15" deep, and can be either wall or floor mounted.

(See reverse side)



- Complete Telephone Privacy
- Automatic Dial Operation
- Automatic Signalling
- Automatic Simultaneous Service
- "Magic Memory" (Ring-After-Busy Circuit)
- Unlimited, Multiple Conference Call Facility
- Executive Right-of-Way (Optional)
- Voice Paging From Any Phone (Optional)
- Economical Operation
- Easily Expandable
- Compact Space-Saving Design
- Dependable, Long Life
- 100% Linkage

STROMBERG-CARLSON

A Subsidiary of General Dynamics

DIAL-X[®] TELEPHONE SYSTEMS

The modular "building block" design of the switchboard permits simple and economical expansion of the system from two prime telephones up to a capacity of 20 prime telephones. One STROMBERG-CARLSON Model TX-2 Dual Selector is required for each two telephone lines added to the system. All switching circuits have bifurcated self-cleaning contacts to assure positive operation of the circuits year after year.

To simplify installation and maintenance, all components are designed as plug-in units. Receptacles are provided, within the completely pre-wired switchboard, to accept all related components. Screw terminals are provided in the cabinet for quick and convenient connection of the wiring from each telephone.

The DIAL-X switchboard operates directly from regular

105-125 volt, 50-60 cycle power source and can be plugged into any convenient electrical outlet. The rectifier power supply is mounted in the switchboard cabinet. This power supply is designed for long trouble-free life with all parts operating well below normal ratings. The ring-interrupter unit provides interruption for automatic signalling of telephones.

The Dial-X Telephone Models TD-4500, TD-4510, TD-91, etc., desk and/or wall type are used with the TDX-20A Automatic Switchboard.

The TDX-20A Automatic Switchboard and telephones incorporate the same long life, heavy duty components as used nationwide by telephone utilities. Many Dial-X systems are providing reliable service 24 hours per day, year after year.

ARCHITECT-ENGINEERS' SPECIFICATIONS

The intercommunicating telephone switchboard shall be the compact, self-contained STROMBERG-CARLSON Model TDX-20A, or approved equal. It shall meet the following specifications:

TYPE: Fully automatic, dial operation.

CAPACITY: Wired for ultimate capability of 40 prime lines. Install one dual selector assembly for each two telephone lines.

SELECTORS: Dual type, simple plug-in, completely interchangeable with one another. All switching circuits shall have bifurcated self-cleaning contacts.

LINKAGE (trunkage): Unlimited simultaneous service; no shared equipment; no busy signal unless the station being called is actually in use.

SIGNALLING: Entirely automatic and intermittent. Automatic signal-after-busy tone shall permit calling party to wait out busy tone and shall signal desired party as soon as the called station is free.

CONFERENCE FACILITIES: Progressive type unlimited, multiple, conference facility; station A calls B, B calls C, etc. Complete privacy; only stations actually dialed into the conference shall be a party to that conference. Several conferences may be in progress simultaneously.

PRIVACY: All conversations fully private. Only the calling party and called party shall be connected. It shall not be possible to eavesdrop, as all other stations are, locked-out. (Exception—Executive right-of-way.)

EXECUTIVE RIGHT-OF-WAY: Optional on two lines. This shall permit operation of pushbutton switch for connection to a busy station, but only after activating a warning signal which shall automatically signal the parties conversing that a priority call will intercept, thereby insuring the privacy of the existing conversation.

VOICE PAGING FACILITIES: Optional possibility to assign one line to a paging operator who accepts calls for voice paging. It shall be possible to have voice paging directly from any telephone in the system by simply dialing the paging number and talking into the telephone handset. Zoned voice paging shall be possible to more than one area by assigning individual line numbers to each zone and all call.

POWER SUPPLY: Rectifier providing 48 volt DC current from a 105-125 volt, 50-60 cycle AC source. Standby power consumption, 75 watts; maximum power consumption, 200 watts, with all telephones operated simultaneously.

WIRING: Standard triplex telephone wiring between each telephone station and centrally located switchboard. Use No. 22 AWG to 750 feet; No. 19 AWG to 1500 feet; No. 18 to 2000 feet. Over 2000 feet use larger wire or long-line adapter.

CABINET: Angle iron frame with outside housing of steel finished in fine-wrinkle grey.

SIZE: 54" high, 19" wide, 15" deep. Can be wall or floor mounted.