



Complete
PBX
Services
by **Stromberg-Carlson**

*Here's help in making the **right** choice
for each Commercial customer*



STROMBERG-CARLSON
A DIVISION OF GENERAL DYNAMICS CORPORATION





FOREWORD

Many Types Available

This book presents a full line of Stromberg-Carlson PBX equipment. It helps you make the *right* choice for each of your subscribers. The Index on the facing page shows the breadth of this line: quality equipment backed by over a half century of experience in serving the Independent telephone companies.

Engineering Service Available

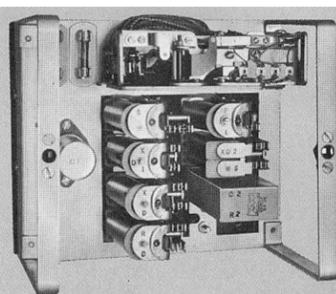
Field Sales Engineers will be glad to assist you in making surveys and recommendations for those subscribers requiring engineered systems. Contact should be made through your Stromberg-Carlson branch office.

Improve Customer Relations

The choice of Stromberg-Carlson PBX leads to improved subscriber relations, coupled with extra revenue. PBX Service has come into the spotlight as a major area of merchandising for Telephone Companies in a position to take advantage of this added source of income.

Telephone Company is the Expert

Your commercial subscribers look to you as communications expert. A business organization needs and expects efficient business telephone service. As local firms grow, their communication requirements change; in many instances the customer is unaware of the more complete services available today.



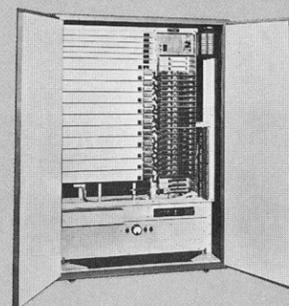
2-LINE, 3-LINE KEY TELEPHONES

Efficiency with economy—Inexpensive multi-line pick-up service that's flexible . . . fast . . . positive, all in modern "500" type instruments. Readily tied in to existing PBX, or used as trunk connection with dial intercom units.



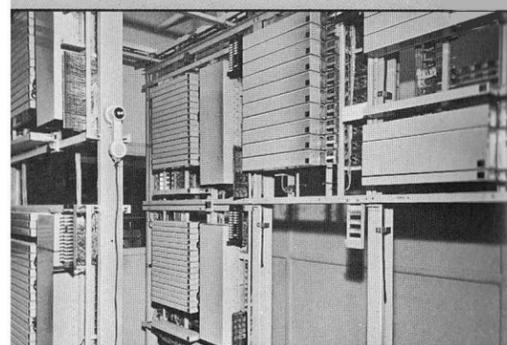
6K-1 KEY SYSTEMS

Key telephone is switchboard on desk—Flexible PBX service for small office or departmental system. Multi-line key system in modern instrument features: Hold and Transfer . . . various signaling options, including Dial Selective Intercom . . . Busy Lamp indication . . . Intercom Flashing . . . Executive Right-of-Way . . . Tie Lines to other 6K-1 systems.



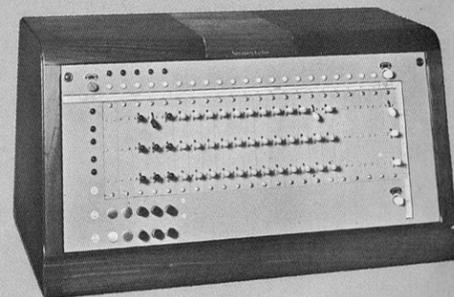
F-40A F-80 XY DIAL PBX

XY Dial Units in compact package—Type F-40A has 40-line capacity, 8 combination trunks, 12 private conversations . . . 24-hour service . . . efficient desk-top cordless turret. The F-80 has all these features plus double capacity. For organizations with calculated requirements.



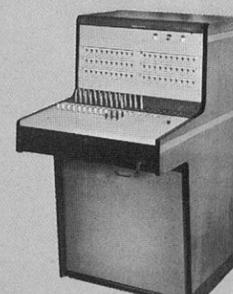
TYPE H XY DIAL SELECTOR SYSTEMS

Unlimited services, unlimited capacity—Built up from the same basic componentry as engineered for central office systems. Grows with customer's requirements . . . flexible . . . versatile . . . wide selection of auxiliary services can be installed initially or as needed. Engineered to suit present needs, with complete "growth insurance" for the future.



CORDLESS MANUAL SWITCHBOARDS

Table-top Turret—Space-conscious, easy-to-operate . . . ideal in medium-size office where operator doubles as receptionist. Beautiful, modern two-tone walnut veneer cabinet . . . Sun-Tan key panel. Attended service for 12, 16, or 20 inside lines, 5 trunks, 5 connecting circuits.



LARGER MANUAL SWITCHBOARDS

Full-feature floor models—Operator switchboards with greater capacity . . . look well in any office. Designed for greatest efficiency in "moving" heavy telephone traffic where majority of calls should have operator assistance. Types available for single or multiple position installations. Wide variety of auxiliary services.

Elements to consider

in recommending

PBX Service

to your customers

Present Size

The starting point in a survey of a commercial prospect is the number of stations, trunks and connecting circuits which will cover his present needs adequately. There is mutual advantage in demonstrating that a service *better than "minimum"* will increase efficiency.

Growth Potential

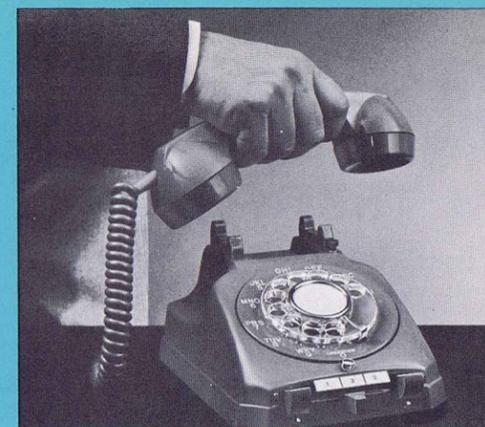
A PBX installation, especially a "cabled" system, represents a considerable investment of funds. The normal pattern today is toward increased telephone usage; therefore, the survey should take into account the growth forecasts, and where possible make allowances for cable expansion beyond this estimate. One approach sometimes used is to see if the total communication requirements can be broken down into inter-connected sub-systems serving peak-traffic departments or outlying buildings.

Attended or Unattended

Some business organizations, regardless of size, find it desirable to have a switchboard attendant intercept calls. This is especially true if the number of calls incoming from the central office is high in relation to outgoing or internal calls. For many such applications, manual equipment is the most practicable answer. As the relationship shifts toward a preponderance of outgoing and internal calls, the applicability of dial switching becomes increasingly apparent.

Services Desired

The survey should reveal the type of extra (auxiliary) services wanted. All services in current commercial usage are available in one or another of the systems made by Stromberg-Carlson. In this complete line is a PBX for the subscriber who requires the ultimate in variety of services, as well as the subscriber who places principal emphasis on low rental costs. *It is important to emphasize that auxiliary services can be added after installation, but should be specified when placing the order for a PBX.*



Key Telephone Systems

A system for each Key prospect

Stromberg-Carlson has a complete line of key telephone systems, all in modern "500" type instruments, designed to meet the varying needs of your commercial prospects, whether . . .

1. Trunk-connected, with two, three, four or five lines that may be held, signaled, and transferred—with or without intercom service . . . or
2. PBX-connected, as a departmental sub-system, in the same capacities and with the same features.

The pages immediately following give a fuller description of:

- A. The 1573 2-Line Telephone
- B. The 1576 3-Line Telephone
- C. Combinations of the 1573 Telephone with dial intercom
- D. The 6K-1 System

Features affecting choice

1. **Appearance**—Just as Stromberg-Carlson was the first to offer its customers the extended number plate, the modern contour of the housing, the smaller handset, the dust cover protecting the dial mechanism—it is the first to offer the *full* line of key telephones in one modern instrument of the "500" type.
2. **Choice of colors**—Stromberg-Carlson provides these key telephones in the most popular colors as well as the traditional black or office gray.
3. **Lower installation costs**—Design of these key systems was approached from the operating company's viewpoint to achieve the lowest installation cost—system for system—in terms of man-hours on the job.
4. **High-efficiency transmission**—These instruments use only high-efficiency, balanced network components—the "500" type—for equalized transmission characteristics under varying loop conditions.

Two-Line and Three-Line Telephones



Stromberg-Carlson offers Two-line and Three-line Telephones to operating companies for limited PBX service, or as outlets from a full PBX. Both instruments have a 3-line capacity. The Two-line (1573) Telephone provides a key holding feature on two trunk lines as standard. The third-line may be used as an intercom line or, with a simple replacement package assembly to give the holding feature, as a third trunk line. The Three-line (1576) Telephone provides three lines without this hold feature, where it is not required.

Both instruments are of the "500" type design, and available in all the popular colors.

Reasons for selecting the 1573 Two-Line Telephone

Versatile—May be used in a number of ways, including:

- 2-lines with hold feature on both lines.
- 2-lines, both with hold feature, and intercom, either tied in to a dial selective intercom unit or by manual signaling.
- 3-lines with hold feature on each line.

Modern—No other single telephone offers all these features in a "500" type design.

Easier to install—No complicated wiring. Simply attach line cord to terminal box and strap as necessary for desired applications.

Reasons for selecting the 1576 Three-Line Telephone

Economical—This is the basic version of the Multi-line Telephone. The 1576 Telephone provides access to any of three trunk lines in a single instrument. To reduce investment, the hold feature is omitted. Otherwise, it is the same high quality instrument in modern design, available in full choice of colors.

Versatile—May be arranged in a variety of ways:

- 2-lines without hold feature
- 3-lines without hold feature
- 2-lines without hold feature, third line strapped to a dial selective or manual intercom unit.

Easy to install—May be installed as quickly and easily as the Two-line Telephone.

Holding a connection is simple: accomplished by depressing the HOLD key in a standard Two-line Telephone, or pulling up the knob in the plunger when the standard instrument is converted to 3-Line operation.



Combination systems based on the Two-line and Three-line Telephone plus some form of dial intercommunication

Economical Dial Selective Intercom System

When these instruments are connected to a 10-station Dial Selective Intercom Unit, a highly effective PBX can be offered at a very attractive tariff. This arrangement is ideal for a small businessman who wants a PBX trimmed to his budget.

This combination offers positive, private and fully-selective intercommunication between stations. Individual buzzers placed at each station and wired to the intercom unit will sound when their specific digits are dialed.

The intercom unit can be placed in any convenient out-of-the-way location. Installation is greatly simplified through pre-wiring at the factory. A 17-conductor cable should be specified when all stations are served from one cable; otherwise an 8-conductor cable will suffice if each station is wired directly to a distribution box, and then to the intercom unit.

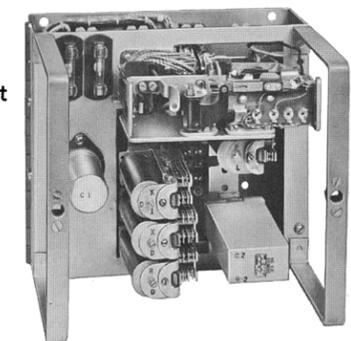


Relay Dial Full PBX Systems

Up to 60 stations (including extensions) can be accessed when these two-line and three-line telephones are combined with a 2-10 or 4-20 Relay Dial interior system to form a trunk-connected PBX. All conversations are private and selective.

The 2-10 Relay Dial System provides service for 10 stations (30 with extensions) and two simultaneous talking path. The 4-20 Dial System offers twice the capacity of the 2-10 System. Both are pre-wired at the factory.

10-station Intercom Unit

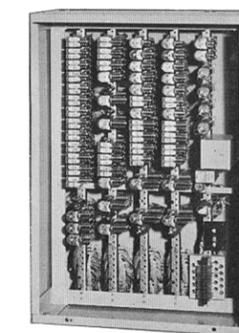


Dimensions

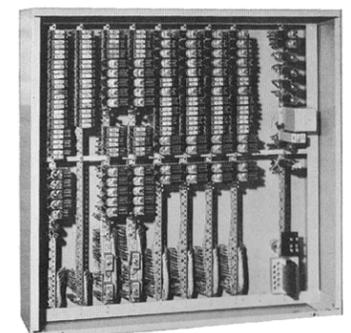
The 10-station Dial Selective Intercom Unit is only 7 $\frac{3}{8}$ " wide, 6 $\frac{5}{8}$ " high and 6 $\frac{1}{8}$ " long.

The 2-10 relay cabinet is 26 $\frac{1}{2}$ " high, 18 $\frac{1}{4}$ " wide and 10 $\frac{3}{8}$ " deep. The floor stand which houses the battery eliminator measures 27" high, 18 $\frac{1}{4}$ " wide and 20" deep.

The 4-20 relay cabinet is 33 $\frac{1}{8}$ " high, 32 $\frac{1}{8}$ " wide and 10 $\frac{3}{8}$ " deep; its floor stand measures 27 $\frac{1}{8}$ " high, 32 $\frac{1}{8}$ " wide and 10 $\frac{3}{8}$ " deep.



2-10 Relay Dial Unit



4-20 Relay Dial Unit

6K-1

a miniature switchboard right on your desk!
Finger-tip switching in the standard instrument.

The 6K-1 Multiple-line Key Telephone System especially
for the smaller office or departmental system.

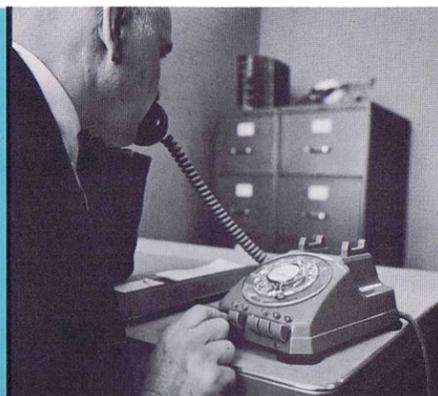
Components of the 6K-1 System

The 1575-A1 Multi-Line Key Telephone is arranged for use with the dial selective intercom feature. Identical in general size and appearance with all Stromberg-Carlson desk instruments, keys may be arranged to suit any of the options previously listed. The 1575-B1 is arranged for use with manual intercom signaling.



The Stromberg-Carlson 6K-1 Key Telephone System provides a means for efficiently sharing from one to five trunk connections between a number of telephones. Up to five calls—in any desired combination of trunk or PBX lines—may be handled at one time. Options such as Intercom reduce the external line capacity correspondingly.

The complete Key System for Business



Make or receive outside calls on any telephone in the system. Each instrument can have up to 5 outside lines or, as shown above, 4 outside lines plus dial intercom.

Hold calls and transfer them without cutting off the outside party. This feature increases efficiency, eliminates "lost" calls and improves customer relations.

Lamp signals show status of line at a glance. Selective signal flashing from intercom gives called station a flashing lamp; all others glow steady to indicate line in use.

Operation

Lamp signals associated with each line (or Intercom circuit) clearly indicate the progress of calls. An incoming trunk call appears on all instruments as Incoming Flash (lamp dark for approximately 450 milliseconds in a 1 second cycle). When answered, lamps burn steady, indicating a call in progress. When the line is placed in Hold condition, lamp changes to "Wink" (dark for a shorter period of approximately 75 milliseconds per second) easily distinguishable from Incoming Flash.

Basic Unit

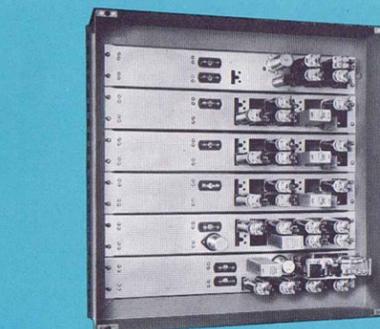
The basic 6K-1 System consists of a relay cabinet, a power supply, distribution cables and telephones as required. The stock system provides for three line circuits, factory-wired and equipped, with basic wiring included for the two vacant spaces available as additional lines, intercom signaling, tie lines or other options to fit the needs of the installation.

Optional Features

- Dial Selective Intercom**—10 or 15 station, with or without Signal Flashing. (Note: The 1575-A1 Telephone is used when this option is specified.)
- Automatic Tie-Line**—providing an interconnection between two 6K-1 Systems so that any telephone in one system may call into the other system.
- Manual Exclusion feature**—raising a button in hook-switch plunger gives privacy by excluding other telephones from the line in use for the duration of the single call. Replacing the handset automatically removes the exclusion option—restores line to normal.
- Power Failure Circuit**—a kit which may be added without change to the Common Circuit provides a means for placing *outside* calls during commercial AC power failure.
- Manual Intercom**—an option which permits coded manual signaling over the intercom circuit. (Note: The 1575-B1 Telephone is used when this option is specified.)
- Audible trunk signal**—provides audible common signaling on incoming calls either by an extension bell or a buzzer associated with one or more telephones in the system.

Economy in Installation

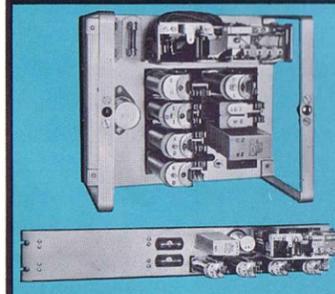
A feature of the 6K-1 System greatly appreciated by operating companies is the saving in man-hours at installation. The 1575 Telephone is furnished completely wired to its terminal box; needs only to be connected to distribution cable.



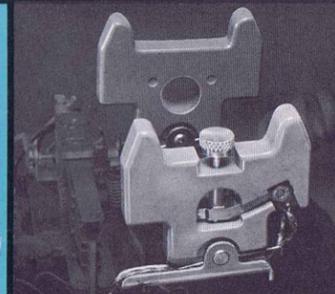
The Relay Cabinet is 21" square and 7" deep. The cover is removable and the circuit plate frame is hinged to allow access to the wiring side.



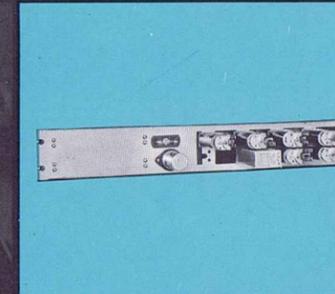
The Power Supply is 11 3/4" high, 10 1/2" wide, 7 5/8" deep. Plugs into any convenient 105-125 volt AC outlet, supplies both AC and DC voltages required.



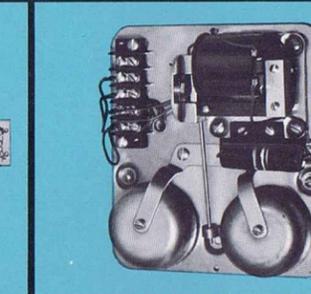
Dial Selective Intercom: (Top) 10-Station, (bottom), 15-Station.



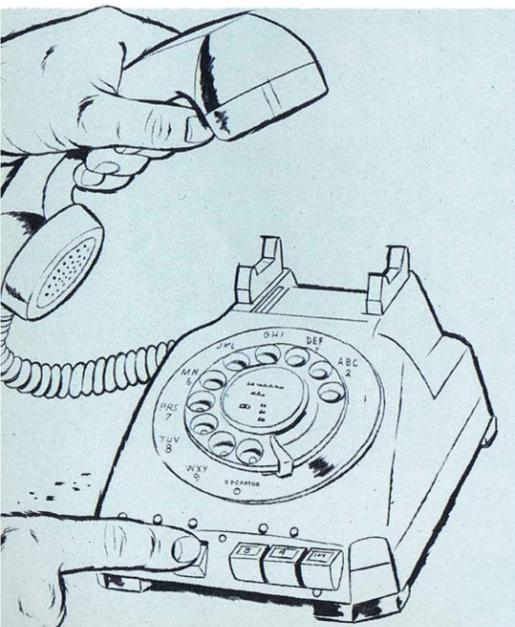
Manual Exclusion Plunger may replace standard plunger.



Automatic Tie Line circuit links two 6K-1 Systems.



Extension Bell is optional audible trunk signal.



XY Step-by-Step Dial PBX Systems

XY Dial PBX Systems use the same principles and components as XY Dial CDO's and MDO's providing central exchange service for telephone companies in well over 2,000 offices. The features that have led to the tremendous acceptance of this equipment are well known to every manager.

Dial PBX Systems based on the XY Universal Switch, dust-free vertical wire banks, plug-in cir-

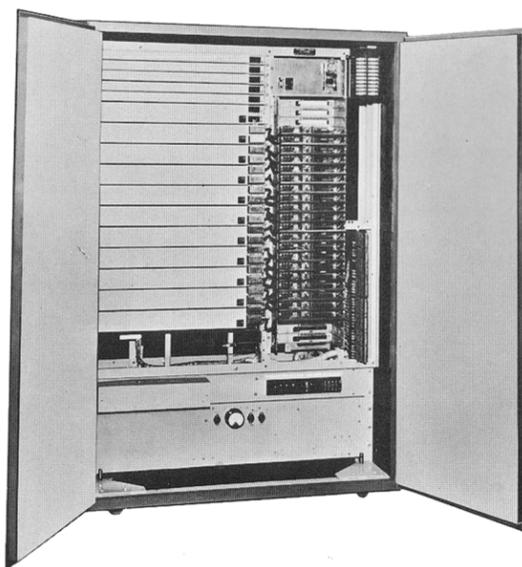
cuit plates with twin contact relays, and a wide variety of auxiliary services available on an optional basis, are furnished in 3 types:

1. The F-40A—a compact, mobile package
2. The F-80—larger capacity, shelf mounted
3. The Type H—unlimited capacity



Compact Package: the F-40A XY PBX

40 Line Capacity, 8 Combination Trunks, 2 Information Trunks, 12 Connecting Links



Cabinet is only 6' 4" high, 4' 1" wide and 2' deep

The F-40A is a single-party finder-connector system having an ultimate capacity of 40 lines and 10 trunk circuits, with one level for combination central office trunks and one level for information trunks. Provision is made for an ultimate of 12 finder-connectors, 8 combination central office trunks and 2 information trunks.

All equipment is shelf mounted on a single bay frame. The compact unit is factory wired so that the only connections required are the house cable leads and AC power leads.

The unit is enclosed by an acoustically treated cabinet to minimize normal equipment noise, resulting in a noise level *less* than that of a standard typewriter. Full opening doors front and back make equipment completely accessible for routine inspection. Doors are provided with locks. Cabinet, finished in office gray and attractively trimmed, is mounted on casters for ease in handling; may be placed anywhere in an office in the same manner as filing cabinets or office machines. Floor hold-downs inside the cabinet prevent unauthorized movement. May be furnished without cabinet; more economical where sound proofing not required.



F-40A Attendant's Cabinet

A cordless turret, with each system, is arranged and equipped for eight central office trunks—the first five equipped for night switching — and two information trunks.

Incoming central office calls are answered by the attendant and transferred by dialing the desired extension. Night switching keys connect central office trunks to predetermined extensions when attendant is off duty. An audible night alarm and a fuse alarm are provided, together with keys to cut off either alarm.

Modern and compact in design, the turret is finished in office gray, attractively trimmed in colors which make the various operating components self-identifying. Only 6" high, 14½" wide and 14½" deep, the typewriter-size turret fits neatly on any table or desk. With cover removed, hinged key panel may be lifted for complete accessibility to parts.

Features of the F-40A PBX

Compact—Takes only 8 square feet; rolls easily through standard doors—on and off passenger elevators. (Equipment without cabinet available if desired.)

Quiet—Thick Fiberglass acoustical insulation inside doors and sides make unit practically free from noise.

Efficient—Twenty-four hour service, with or without attendant.

Dependable—Time-proven components assure uninterrupted performance of dial system.

Mobile—Large rubber casters permit exact positioning anywhere. Flexible . . . push it against wall, pull out for inspection . . . lock in place.

Single Party Lines—provide fast service.

Restricted Service—provided on a per line basis.

Directory Numbers—simple, two-digit numbers for stations, single digits for trunks.

Call Distribution—calls are distributed over the finder-connector links by a single rotary switch type alloter circuit.

Night Switching—permits predetermined stations to be connected with central office trunks.

Transfer Service—permits incoming call to be answered at any station simply by dialing into circuit; call may be extended once. Especially useful at night for watchmen or at any time during attendant's absence.

Emergency Operation—emergency service to central office by switching to the night trunk connection in the event of a temporary AC power failure.

General Features—dial tone, busy tone, machine ringing, immediate ring trip, and ringback tone are standard.

Special Features—Conference Service, Code Call equipment and Executive Right-of-Way may be supplied as extras.

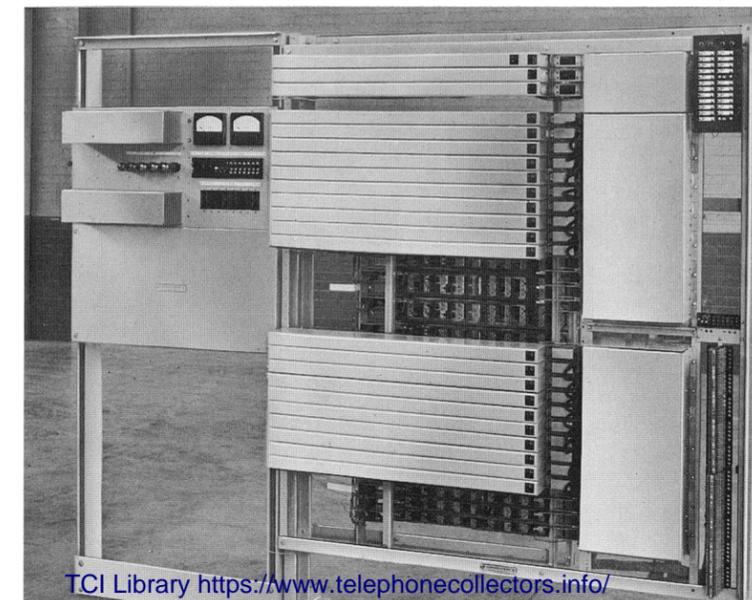
Power—48V DC is supplied from a 6-ampere battery eliminator. All power equipment is mounted within the cabinet.

Double Capacity Package: the F-80 XY PBX

80 Lines, 10 Combination Trunks, 4 Information Trunks, 14 Connecting Links

Similar in principle and operation to the F-40A, and with all its features, the F-80 Dial PBX has double the capacity—maximum of 80 lines, 10 central office trunks and 4 information trunks. Equipment is mounted on a standard bay frame. Dimensions, including equipment and power panel: 6' 0" high, 7' 4" wide and 1' 4" deep. Power is supplied by 48V DC batteries.

As an attendant's cabinet, a cord type switch-board with jack-ended trunks is provided with each system. It features an attractive veneered walnut cabinet with contrasting "sun tanned" face panel; blends well with office surroundings. Dimensions are 46½" high, 25" wide, 35" deep.



Type H XY Dial PBX:

The system that can't be outgrown

Type H XY Dial PBX is a one party or two party Finder-Selector system of unlimited capacity. Systems now in use vary from small (under 100 lines) PBX's where growth and special services were a factor, up to giant installations with thousands of lines equipped, and the full range of auxiliary features.

Growth and Traffic

A Type H installation may be made with full confidence that it cannot be outgrown. Ready-to-use circuit plates and associated switches may be added as needed without wiring change. Shelves may be ordered factory-wired, ready for mounting on 8 foot, 9 foot or 11½ foot multiplied-drilled bay frames. Circuit components are mounted on *both* sides—a distinct saving in building space and cabling.

Heavy traffic loads may be equalized by transferring circuit elements, reversing the multiple, slipping the multiple or introducing a grading panel.

Engineered to the job

The telephone company may use the services of Stromberg-Carlson sales engineers to work up a system that will be mutually satisfactory to the customer and the operating company. A following page contains suggestions for making a preliminary appraisal of requirements.

Hold Investment to a minimum

XY Dial System initial costs are fully competitive with any system providing equivalent services. The greatest comparative savings, however, are realized in the areas of expansion and maintenance. It is not necessary to "over-order" initially . . . the XY Dial system has no limit on expansion, and additions to pre-wired shelves may be made on a buy-as-you-earn basis. Service man-hours and down-time are lower than average through use of

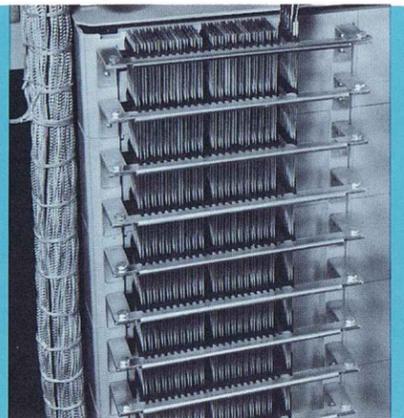
twin contacts on switch wipers and relay contacts, and dust-free vertical wire banks, eliminating periodic replacement of wipers, and interchangeable "building blocks" for both switching equipment and power boards.

Full range of "most-wanted" services

With XY Dial PBX Systems the full range of Auxiliary Services is available—to be installed initially or later. All these optional services, described in some detail below, use the standard XY PBX wiring, power equipment and, where applicable, appear at the attendant's cabinet regularly furnished. You and your subscriber can select those services which best meet his individual requirements.

Auxiliary Services

most often requested
with Type H XY® Dial PBX



Conference Service

On attended systems, conferences can be arranged by the operator at the switchboard. Depending on capacity, any number of stations may enter or leave the conference circuit at any time. "Meet Me" type conference service on unattended systems enables any group of stations to enter a conference circuit by dialing a special number at a pre-determined time. Conferees need not leave their desks.

Night Service

After hours or when the operator is absent from the switchboard, incoming calls may be connected directly to one or more designated stations, allowing an incoming call to be answered at any one of these telephones.

Selective Code-Call Equipment

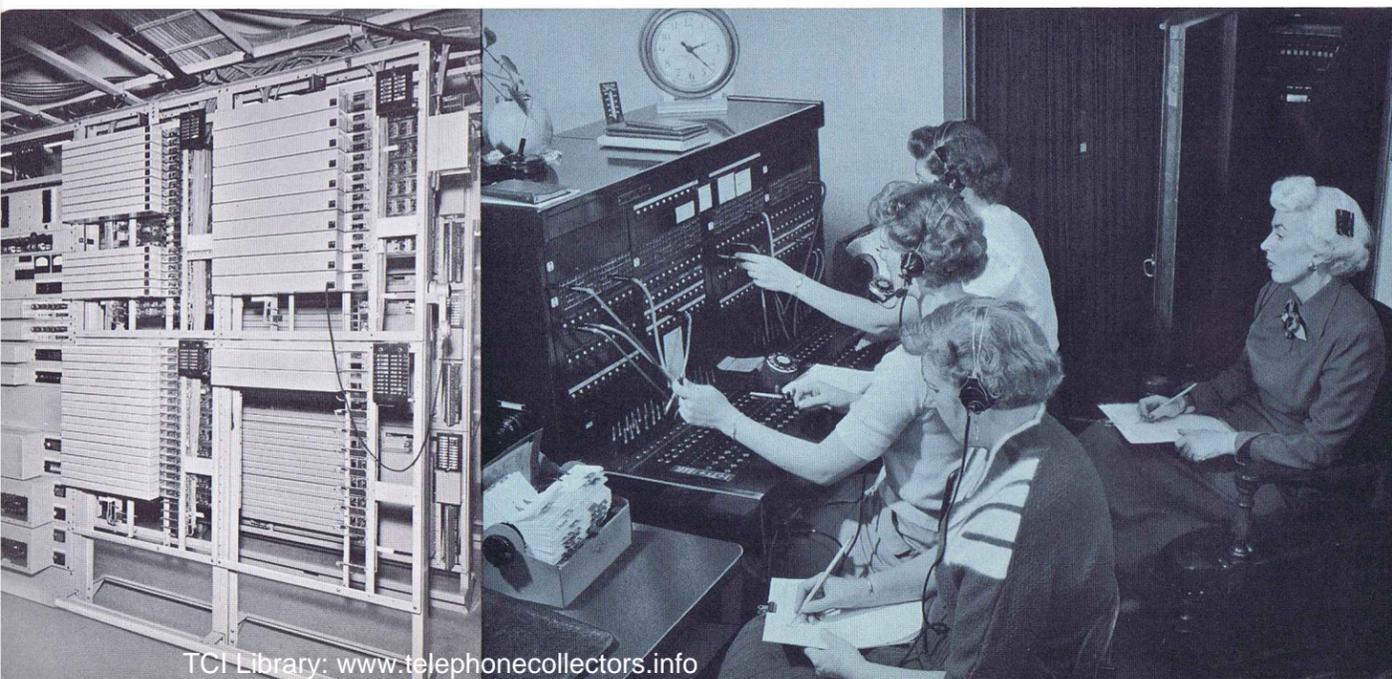
This selective-type paging system uses audible signals to tell a person he has a call; permits signaling from any internal telephone; is valuable in locating persons away from their desks and extending calls to them.

Two Party Service

This service allows two stations to share the same line. The desired station will have a single ring as the lines are equipped for divided circuit ringing. Neither station may dial the other. Available on selector type systems.

Restricted Service

Any telephone may be restricted to internal service through a minor wiring change. A busy signal responds if an attempt is made to dial outside. Incoming calls may be completed by the operator. Optional on selector type systems.



Transfer Service

Particularly helpful when the switchboard is unattended, this option allows roving employees such as watchmen to answer an incoming call at any one of several stations and extend the call to the desired station. Another method available uses common signaling equipment placed at strategic locations; anyone may answer at any station by dialing a code. Further extension is not possible with this latter option.

Watchman's Recording Service

Watchmen may make a permanent recording of inspections from specified telephones through non switch-through connector terminals. The time and point of origin will be recorded automatically. An alarm sounds if the watchman fails to report from any station before a certain time.

Code Call for Fire Alarms and other Emergencies

By connecting the code call equipment with fire alarm boxes, all locations will hear the alarm simultaneously. Fire alarms would have preference over a page call and would automatically "break" through.

Executive Right-of-Way

Sometimes requested for cutting delays (such as when a customer on Long Distance needs information quickly), certain "executive" lines may be equipped to call any station at any time, *even if busy*.

Additional Services Available

- Cut-in to Public Address System
- Paging Telephone
- Direct-line telephone for Executives
- Direct-line Service
- Executive Key-calling Service
- Automatic Tape Announcer Service
- Tie-Lines

Attendant's Cabinets used with Type H XY Dial PBX

Stromberg-Carlson has designed Attendant's Cabinets to provide maximum service efficiency in a single position, or with two or more positions in full multiple. Dimensions of a single section: height, either 4'3" or 4'8"; width (including both end panels) 25"; depth (including the keyshelf) 35".

Cord circuits are arranged for Manual Ringing on both cords, Hook-switch Supervision on both cords, Common Splitting, Busy Test, Operator Dialing to complete calls for those stations that require or request operator assistance, and Night Switching for through dialing.

Also, Blocked Supervision is usually supplied, so that hookswitch flash for transferring calls will appear before local PBX operator only.

A Conference Circuit (5 station maximum) is standard equipment.

Any of the conventional paging systems or the more efficient PAGEMASTER® Selective Radio-Paging System can be terminated here.

And, when necessary, the attendant can over-ride a busy connection.

Ordering Information: Type H XY Dial PBX

The wide choice as to type of services available with Stromberg-Carlson Type H PBX is one of the chief reasons for its wide acceptance. The information on this page, in questionnaire style, will make it easier for the telephone company to obtain the required data for supplying those services that best meet the needs of a particular commercial customer.

Dial Equipment Specifications—Standard PBX Service

(With XY Dial Equipment it is not necessary to give the ultimate capacity, since the system can be *expanded without limit*.)

- Lines:** Initially wired _____ Initially equipped _____
No. lines on Restricted Service (by line marking) _____
- Selectors:** No. with Inward Dialing to PBX station _____
- Trunks:** Combination _____ Information _____
Central Office now Dial _____ C.B. _____ Magneto _____
- Connector Circuits:** Initially equipped _____
Type: Individual _____ 2-Party _____ PBX _____
- Consecutive Number Hunting:** No. of line groups _____
Maximum lines per group _____

Building and Cabling Specifications

- Bay Frame Height:** 8' 0" _____ 9' 0" _____ 11' 6" _____
(Note: A clear height of 1½ ft. over the frame is recommended)
- Cable:** State length, attendant's cabinet to distributing frame _____
Type _____ (Braided cable normally furnished unless plastic or lead is specified.) Method of cable running _____.
- Floor Plan:** Show available area, utility outlets, lighting fixtures, ducts, etc. now in place.
- Distributing Frame:** Wall _____ Floor; Protected Terms _____
Unprotected _____.

Power Board:

- Show location in relation to dial equipment.
- Battery:** Normally arranged for 23-cell operation. State if different arrangement is wanted.
- Battery Charger:** To operate from Volts _____ Cycle _____ Phase _____
- Standby:** (With Stromberg-Carlson "building-block" type power boards there is maximum flexibility in adding additional panels to meet unforeseen conditions)
Tone _____ Interrupter _____ Ringing _____

Attendant's Cabinet:

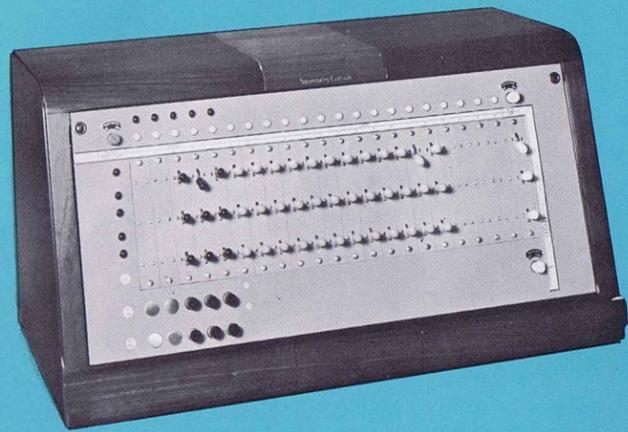
- No. of Positions _____
- Loop Resistance** of central office trunks: _____
- Cord Circuits:** Wired _____ Initially equipped _____

Auxiliary Services:

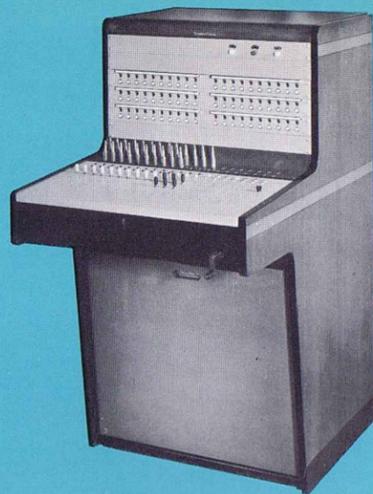
- (May be added later, but should be indicated in working up original specification)
- Tie Lines:** No. of lines _____ Resistance of each _____
Method of operation for each _____
- Conference:** Operator _____ "Meet-me" _____
No. of 5-station conference groups _____
- Intercept:** (Specify type) _____
- Night Answering:** _____ **Transfer:** _____
- Intercept and Type:** _____
- Code Call:** (36) _____ or (125) _____
- Paging:** _____ **Watchman's Reporting:** _____
- Executive Right-of-Way:** _____

Stromberg-Carlson sales engineers will assist in making surveys and recommendations as to the best method of providing efficient PBX service.





The No. 121 Switchboard



The No. 120 Switchboard

The Stromberg-Carlson No. 121 Cordless Switchboard provides complete PBX service in a compact desk turret. Stock boards for immediate shipment are wired for 16 lines and 5 trunks; equipped for either 12 or 16 lines, and 3 or 5 trunks. Both stock boards are equipped with 5 connecting circuits for answering, holding, transferring and extending trunk or inside calls.

The cabinet is handsomely finished in two-toned walnut. A Sun Tan key panel with contrasting colored keys makes it especially easy to identify trunk, line and signaling circuits.

Dimensions: 26³/₄" long, 14" high, 14⁷/₈" deep. Shipping Weight: Approx. 150 pounds.

Features

- All connections controlled by keys.
- Common Talking (Listening) circuit; when all five connecting circuits are busy the operator can answer further calls by depressing Listening Key.
- Balanced transmission over tip and ring.
- Three lamp supervision: white incoming call; green, holding on trunk; red, PBX station disconnect.
- Operator uses Stromberg-Carlson 1544-P desk type telephone.
- Conference calls can be arranged within transmission limits of local loop.

**The No. 121
Cordless
PBX Switchboard**

12 or 16 Lines,
3 or 5 Trunks,
5 Connecting Circuits

Manual Switchboards:

When personal service is important

Stromberg-Carlson Manual PBX Switchboards meet the two principal requisites for this type of service: efficiency in operation, and a distinctive styling that looks well "up front" in any office. Ranging in capacity from 12 to 100 lines (more, when two sections are tied together), these boards have become the *standard* for measuring quality in manual PBX installations.

The handy chart below serves as an index to capacity and circuit features for the several types of Stromberg-Carlson manual PBX switchboards, made up in stock models for quick delivery.

**Many Models
stocked for
Immediate Delivery**

This cordless type switchboard offers the same service as the No. 121 but to a greater capacity, 20 lines and 5 trunks. Five connecting circuits are furnished for answering, holding, transferring and extending trunk or local calls.

The cabinet is of dark walnut with a dark key panel. Colored Key Knobs identify line, trunk or connecting function.

This unit not stocked but will be furnished as specified.

Features

- Provision for extending connecting circuits to another position. This gives an operator access to 5 more trunks and 20 more lines.
- Operator's jack is provided for either headset or a plug-ended telephone.

**The 20-Line
Cordless
PBX Switchboard**

20-Lines,
5 Trunks,
5 Connecting Circuits

Comparison Chart—Stromberg-Carlson PBX Switchboards

	No. 121		Cordless		No. 120-FJ		No. 120-FP		No. 127-F		No. 128-F		No. 131	
	208093		208095		486208		486218		210572		486294		§	
	Wired	Eqpd.	Wired	Eqpd.	Wired	Eqpd.	Wired	Eqpd.	Wired	Eqpd.	Wired	Eqpd.	Wired	Eqpd.
Lines	16	12	16	16	‡80	20	‡80	20	100	^20	100	^40	100	^As Req.
Key Ended	5	3	5	5										
Trunks Jack Ended					15	3					15	5	12	^As Req.
Plug Ended							10	3	10	3				
Cords					15	5	10	4	10	4	15	10	15	†As Req.
Dial*	1	0	1	0	1	1	1	0	1	0	1	1	1	1
Common Listening	1	1	1	1	0	0	0	0	0	0	0	0	1	1
Insulated Gen.					1	0					1	0	1	1
Night Alarm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Battery Switch	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Conference					1	0					1	0	1	0

§No. 131 Board stocked wired, equipped to specification upon order

‡Individual Jacks

^Jacks 10 per strip

†Furnished in units of 3

*Dial and Dial Mtg. furnished only when specified

All cordless PBX switchboards will be furnished as indicated

Nos. 120, 127, 128 will be furnished as shown but can be modified up to their capacities

No. 106 and 20 Line Cordless switchboards will be equipped as specified on inquiry

These floor model, cord-type boards have a larger line capacity (maximum of 80) than the cordless board, yet carry over its distinctive styling. The two-tone walnut finish and the Sun Tan jack panel and key shelf make these boards ideal reception office furniture.

The No. 120 FJ switchboard employs jack-ended trunks and offers up to 15 trunk circuits. The No. 120 FP board employs plug-ended trunks with a maximum of 10 trunk circuits. Otherwise both boards are the same.

Dimensions of each board are: 3' 9⁵/₈" high, 2' 11¹/₈" wide and 2' 8" deep. Shipping weight is about 450 lbs. Both have circuits mounted on a swing-out relay gate for complete accessibility.

Features

- Wiring permits 4 combinations of Supervision: Through supervision, talking battery on cord; through supervision, talking battery from trunk; non-through supervision, talking battery on cord; non-through supervision, talking battery from trunk.
- Through dial and night switching.
- Double lamp Supervision.
- Connects with any type central office—either manual or dial.
- Front cord trunk connection.
- Instantaneous busy feature on all trunks.
- Cord splitting is possible.
- Individual cord ringing keys, ring-back key, listening key, and dialing key when required.
- Reverting ringing tone.
- Equipped to use Western Electric type headset.
- Bridged or divided ringing.
- Toll recall (if specified).
- Conference circuit.
- Battery Switch cuts battery from incoming lamps after operator leaves for the night.

**The No. 120-FJ
and
No. 120-FP
PBX Switchboards**

Up to 80 Lines,
10 or 15 Trunks and
Connecting Circuits



The No. 131 Switchboard

The No. 128 Switchboard



The No. 127-F and No. 128-F PBX Switchboards

Up to 100 Lines, 10 or 15 Trunks and Connecting Circuits

All the features of the 120 Switchboard plus greater line capacity are found in the 127-F and 128-F Switchboards. Both switchboards will work into any type of exchange—manual or dial, common battery or magneto.

The 127-F Switchboard employs plug-ended trunks and offers up to 10 trunk circuits; the 128-F Switchboard employs jack-ended trunks and offers up to 15 trunk circuits.

Cabinets have a pleasing contour tending to minimize their size; are finished in dark, rich-looking walnut. Non-glare face panels lessen eye strain, make signals stand out.

Overall dimensions are 3' 10¹/₈" high, 2' 1" wide, 2' 11" deep. Shipping weight is approximately 400 lbs.

The No. 131 PBX Switchboard

Up to 100 Lines, 12 Trunks, 15 Cord Circuits

Fast, efficient handling of a large volume of commercial traffic; big capacity with provision for growth; flexibility for the operating company through wiring options at the I. D. F.—these are the greatest advantages of the No. 131 Switchboard. While new to the line as a *stock* item, these switchboards have made an excellent record over the years for operating efficiency under severe traffic conditions in the areas where they have been placed in service.

The big capacity (100 lines, 12 trunk circuits, jack-ended) of one No. 131 Switchboard may easily be doubled by "tying" together two of these Switchboards—placing them side by side; "growth insurance" for subscribers.

Since jack strips for this switchboard are made up in units of ten, jacks are numbered 1 to 10 and 11 to 20 in any horizontal strip. Wiring is complete to all twenty trunk jacks.

Economical answer to different operating requirements

The operating company has complete choice in the arrangement of the 12 available trunk circuits over the 20 jack appearances by making quick, easy connections at a special distribution frame (I D F) within each 131 Switchboard. This flexibility in arrangement within the position is especially helpful when two 131 Switchboards are "tied" together. Connecting the jacks for the 9 and 10 plus 11 to 20 appearances (right side of the first 131 Switchboard), and the 1 to 10 plus 11 and 12 appearances (left side of second 131 Switchboard) concentrates the available circuits near the center portion of the two position board. One operator may then easily work both switchboards, since all jacks, including trunks, are within easy reach. Two operators can work together during busy periods.

The 131 Switchboard is available in the standard walnut finish, which will stay in good taste in any office for years to come; or in limed oak or natural finish, both at extra cost. Non-glare face panels are standard. Overall dimensions (one switchboard) are: 3' 10" high, 2' 1" wide and 2' 10⁷/₈" deep. Approximate shipping weight is 400 lbs.

Features

- Uses "A" and "C" type relays.
- Intermediate Distributing Frame permits in-service flexibility.
- Increased operating efficiency when two positions are "tied" together.
- Trunk circuits arranged as specified.

The No. 106 PBX Switchboard

180 or 300 Lines, 7 or 11 Trunks

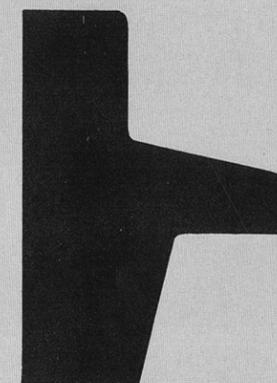
The No. 106 PBX Switchboard is the practical switchboard for situations where a larger number of lines in proportion to trunks is essential, such as found in hotel service. There are two standard No. 106 Switchboards; one with 180 lines, the other with 300 lines.

The cabinet is birch with walnut or mahogany finish. Dimensions are: 4' 3" high, 25¹/₄" wide, 20" deep (at base). The 180 line board weighs approximately 405 lbs., and the 300 line board weigh approximately 500 lbs.

The 106 PBX Switchboard is not stocked, but will be built to required specifications on order.

Features

- Plug-ended trunks.
- Choice of relay or lamp type line circuits.
- Triple supervision.
- Easily serviced keyboard.



The full line of STROMBERG-CARLSON PBX Equipment gives you widest choice for subscribers



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Sales Branches

Small Stores
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6K-1 in use

Doctors Offices
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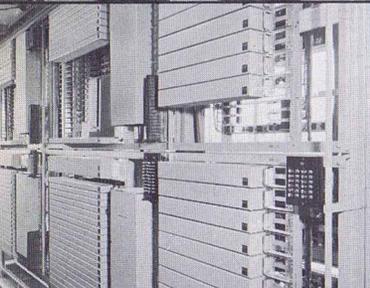
Small Factories
PBX Sub-system



F-40A in use

Medium-size Business
Airports and Terminals

Department Stores
Schools, Colleges



Type H XY

Large-scale Business
Medical Centers

Universities
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Manual

Motels, Hotels
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