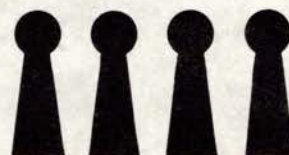


**Key-ABXTM
CAN OPEN
DOORS
TO NEW
BUSINESS**



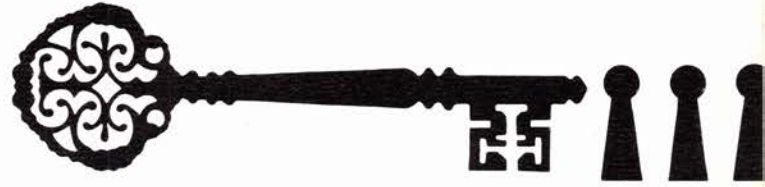
SMALL BUSINESS



SCHOOLS



HOMES



Key-ABX WHAT IT IS

Key-ABX Systems are designed to handle the broad spectrum of subscriber communication needs ranging from a single outside line and internal communications to rather complex systems involving many outside lines and internal stations.

Key-ABX Systems are characterized by their ability to handle inside as well as outside calls by multiline telephones. Single-line telephones, restricted to interior communication only, can be served by the same Key-ABX System. Your customer does not have to depend on a less stable source for his interior communication requirements, nor does he have to worry about the accompanying maintenance cost.

Key-ABX enables you, the operating telephone company, to provide complete, highest quality, inside and outside communications, for any business, school, office, or home requiring less than a PABX System.

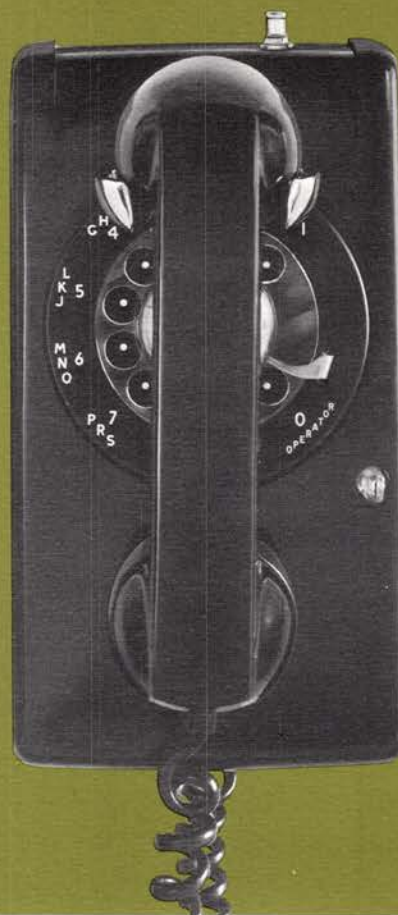
Key-ABX HOW IT WORKS

To provide Key-ABX Service, one or more outside lines are brought into the same telephone set, and the lines can be bridged to as many telephones as required. Each line is associated with a key on each telephone, and the lines are selected and controlled by the operation of the keys. When only one or two outside lines are required, they are brought directly into the telephone sets; when three or more outside lines are required, they are brought into the telephone sets through switching equipment (S-C 1A2 Key Telephone Equipment). Switching equipment packages for small and large systems are available.

Every Key-ABX System provides complete call handling capability. Outside calls can be held while the inside line is used for consultation or to inform another party that a call is waiting on the outside line being held. If a 3-way conference is desired, both inside parties can pick up the outside line.

The inside lines can be arranged to provide an extensive range of intercom services such as: preset conference or meet-me conference, add-on conference, camp on, executive right-of-way, paging, code call, tie-line service, line hunting, and party-line service. Interior communication systems that provide a single common-talking path or that provide one or more private-talking paths are available.

S-C 550B 2-LINE TELEPHONE



S-C 575B 2-LINE TELEPHONE



3-LINE TELEPHONE

3-Line Telephones are available in Beige, Green, Gray, and Black.

S-C 554B SINGLE-LINE TELEPHONE

Key-ABX 2-LINE SERVICE

One outside line and one inside line on the same phone.

Outside line is brought directly into 2-line desk or wall telephones—no switching equipment required.

Hold button provides for holding calls.

Combination twist key and pushbutton—twist key provides for switching from one line to the other—pushbutton provides for extra service such as secretarial signaling, door release, emergency alarm etc.

Inside line can be arranged to provide an extensive range of intercom features by providing Series 2, 3, 7, or 5 dial-selective intercom system.

Intercom only phones provide restricted service; prevents outside calling yet permits inside calling.

2-Line telephones are available in Beige, Ivory, Green, Gray, White, Red, Blue, Yellow, Pink, Turquoise, and Black.

Key-ABX 3-LINE SERVICE

Two outside lines and one inside line on the same phone.

Outside lines are brought directly into 3-line telephones—no switching equipment required.

Keybutton operation—three line buttons provide for accessing lines; three hold buttons provide for holding calls.

A neon lamp is associated with each line button. Lamps are actuated by ringing current, illuminating line button during ringing cycle.

Common audible signal can be mounted in the telephone.

An incandescent lamp (optional) can be associated with each hold button. When line is in use, lamp lights, illuminating hold button.

Recall pushbutton provides for operator recall or redialing. Especially useful when a call is held on another line.

Signal pushbutton provides for extra service such as secretarial signaling, door release, emergency alarm, etc.

One telephone can be equipped with an exclusion switch (optional) to provide for privacy on one outside line. Operating the switch disconnects all other telephones from the line. A second telephone can be equipped to provide privacy on the other outside line.

Inside line can be arranged to provide an extensive range of intercom features by providing Series 2, 3, 7, or 5 dial-selective intercom system.

Intercom only phones provide restricted service; prevents outside calling yet permits inside calling.



S-C 500D SINGLE-LINE TELEPHONE

Single-line telephones, restricted to interior communication only, can be used in conjunction with any Key-ABX System. They extend the convenience of Key-ABX to telephones not requiring connection to an outside line and prevent unauthorized outside calls. Single-line telephones are available in the full range of colors.



5-LINE TELEPHONE



11-LINE TELEPHONE

5- and 11-Line Telephones are available in Beige, Green, Gray, and Black.

Key-ABX 5- AND 11-LINE SERVICE

Outside lines are brought into 5- and 11-line telephones through switching equipment (S-C 1A2 Key Telephone Equipment).

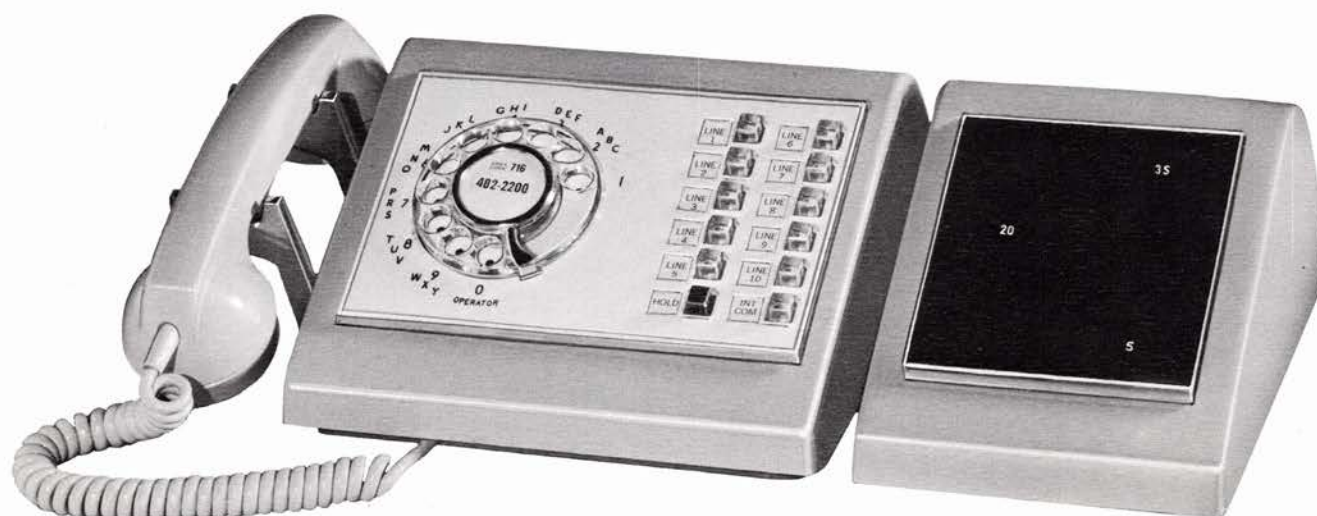
Each outside line is extended from the switching equipment to a button on the telephone. A lamp is associated with each button—lamp flashes on incoming call, lights steady when line is in use, winks when line is held.

A choice of audible signals is available: steady ringing, 15 IPM interrupted ringing, or external signaling. Automatic time-out feature provides for release of switching equipment on abandoned calls. Time-out is on an individual line basis.

A desk telephone can be equipped with an exclusion switch (optional) to provide for privacy on one outside line. Operating the switch disconnects all other telephones from the line. Other desk phones can be equipped to provide for privacy on other outside lines.

Inside line can be equipped to provide a full range of intercom features by providing Series 2, 3, S-C 1A2, Series 5 or 6 dial-selective intercom system.

Intercom only phones provide restricted service; prevents outside calling yet permits inside calling.



11-LINE TELEPHONE

Telephone shown with matching Busy-Station Number Display

Key-ABX 4-LINE UNIT

The compact S-C 550 4-line unit is ideal where outside line requirements and growth potential are low. This wall-mounted unit is prewired to make up a system with a capacity of up to four central-office or PBX lines. Line cards can be plugged in as needed. The over-all dimensions of the cabinet are 8 inches wide, 15 $\frac{1}{4}$ inches high, and 5 $\frac{2}{3}$ inches deep.

Central-office calls can be placed on hold. Visual signals indicate status of calls; there is a choice of three audible signaling options. When incoming calls are abandoned, the circuit times itself out and frees the line. Central-office calls can be originated during power failure.

Dial-selective intercom is added as a separate system.

Key-ABX 6-LINE UNIT

The S-C 500 6-line unit is ideal where line requirements and growth potential are moderate. This unit is prewired to make up a system with a capacity of up to six central-office or PBX lines. Line cards can be plugged in as needed. If more than six lines are required, S-C Key Telephone Units can be added to increase system capacity. A swing-out gate, opening right or left as desired, puts all wiring out front.

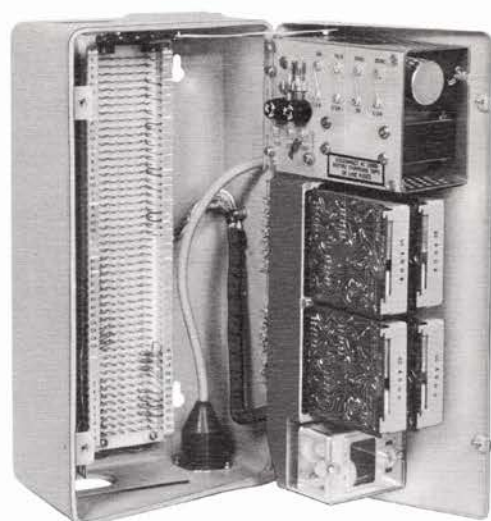
This full-featured unit provides space for mounting a dial-selective, common-talking path intercom in addition to the line-card cells. The unit can be equipped with a floor stand and cover assembly, which provides for mounting the power supply and which permits floor-mounting if desired. When equipped with a floor stand, the unit is 14 $\frac{1}{8}$ inches wide, 28 $\frac{1}{2}$ inches high, and 9 $\frac{1}{2}$ inches deep; without the floor stand, the unit is 13 $\frac{1}{4}$ inches wide, 16 $\frac{5}{8}$ inches high, and 9 $\frac{3}{8}$ inches deep.

If a larger dial-selective intercom is required, a separate cabinet can be added. Standardization of modular packaging techniques permits the basic S-C 1A2 selector-only intercom to be mounted in units as described above. Additional units, when required, are mounted in compact wall-mounted cabinets.

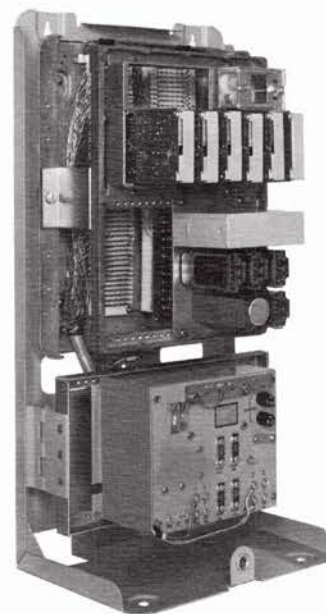
Key-ABX 13-LINE CELL

The S-C 584A 13-line cell (shown in cabinet for wall mounting) and the S-C 583A 15-line cell are ideal where a system with large outside line capacity is required or where equipment for more than one system is located in the same area. Several systems providing the features and capacity of the S-C 500 6-line system and the S-C 550 4-line system can be contained in one wall-mounted cabinet, forming a centralized group of Key-ABX Systems. One 13-line cell, for example, can accommodate line cards for three 3-line systems and one 4-line system. The line cells can be mounted in a cabinet for wall mounting or on any standard 23-inch rack. The over-all dimensions of the cabinet are 25 $\frac{3}{4}$ inches wide, 16 $\frac{1}{2}$ inches high, and 9 $\frac{1}{2}$ inches deep.

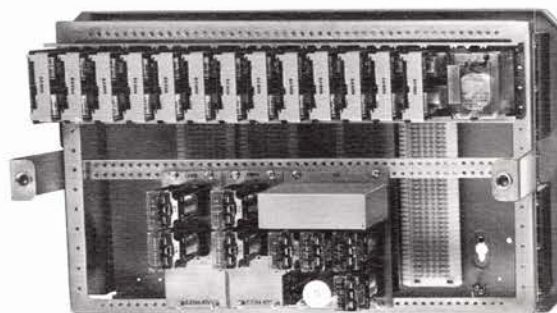
Dial-selective intercom is added as a separate system.



S-C 550 4-LINE UNIT



S-C 500 6-LINE UNIT WITH S-C 207C SELECTOR



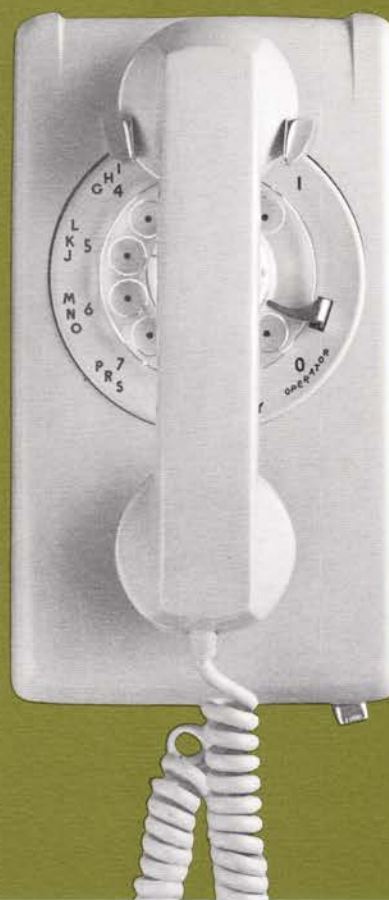
S-C 584 13-Line Cell mounted in S-C 16C Cabinet. S-C 207C Selector and two S-C 216A Transfer Circuits are also mounted in the cabinet.

S-C 500D SINGLE-LINE TELEPHONE

S-C 554B SINGLE-LINE TELEPHONE



Single-line telephones, restricted to interior communication only, can be used in conjunction with any Key-ABX System. They extend the convenience of Key-ABX to telephones not requiring connection to an outside line and prevent unauthorized outside calls. Single-line telephones are available in Beige, Ivory, Green, Gray, White, Red, Blue, Yellow, Pink, Turquoise, and Black.



INTERCOM SYSTEMS AND FEATURES

FEATURES	S-C 1A2 INTERCOM ARRANGEMENTS						SERIES 5		
	SERIES 2	SERIES 3	SELECTOR ONLY	SINGLE LINK	TWO LINK	SERIES 7	MODEL 15-3	MODEL 28-4	SERIES 6
Station Capacity	9, 18	18	9, 18, 27, 36	9, 18, 27, 36	9, 18, 27, 36	10	15	28	†
Talking Paths	common	common	common	1	2	2	3	4	‡
Dial Tone	—	—	—	0	S	S	S	S	S
Busy Tone	—	—	—	0	S	S	S	S	S
Audible Station Signaling	S	S	S	S	S	S	S	S	S
Ringback Tone	—	—	—	0	S	S	S	S	S
Busy Lamp Signaling	S	S	S	S	S	—	—	—	—
Flashing Lamp Signals	—	—	—	0	S	—	—	—	—
Meet-Me Conference	S	S	S	—	—	—	0	0	0
Preset Conference	—	—	0	0	0	—	—	—	—
Add-on Conference	—	—	0	0	0	—	—	—	—
Executive Right-of-Way	—	—	—	—	—	0	0	0	0
Paging	—	—	*	*	*	—	0	0	0
Code Call	—	—	—	—	—	—	0	0	0
Tie Lines	—	—	—	—	—	—	0	0	0
Line Hunting	—	—	—	—	—	—	0	0	0
Party Line Service	—	—	—	—	—	—	—	—	0
Time-Out on No Dial	—	—	—	—	—	—	S	S	S

S = Standard 0 = Optional

† Unlimited

‡ As Required

* If S-C 1A2 Key Switching Equipment is being used, a paging adapter can be plugged into a receptacle and a paging line can be associated with a key on the telephone. Reduces line capacity by one.

SERIES 2 INTERCOM A COMPACT PACKAGE

DESCRIPTION

The Series 2 Intercom is a packaged unit consisting of a dial selector (S-C 207C Selector Circuit) and a power supply (S-C 86731 Power Supply) mounted in an apparatus mounting cabinet equipped with a cover (S-C 501-2 Apparatus Mounting and Cover).

CAPACITY

Nine stations with common-talking path. An S-C 216A Transfer Circuit can be added to the cabinet to increase the capacity to 18 stations. See Series 3 Intercom.

FEATURES

Audible station signaling
Busy lamp signals indicate when inside line is in use.

LOOP RESISTANCE

50 ohms; a long-line adapter (S-C 225A Long-Line Circuit) is available to extend the range; the adapter can be mounted in the cabinet if capacity does not exceed nine stations; otherwise, an additional cabinet is required.

POWER REQUIREMENTS

Input: 105- to 130-volt, 60 cycle ac at a maximum load of 60 watts.

Output: 24 volts dc, 0.9 amp max, for talking.

24 volts dc, 0.6 amp max, for relay signaling.

10 volts ac (60 cycles), 2.8 amp max, for lamp and buzzer signaling.

18 volts ac (60 cycles), 1.4 amp max, for buzzer signaling.

SERIES 3 INTERCOM DESIGNED FOR GROWTH

DESCRIPTION

The Series 3 Intercom is a packaged unit consisting of a dial selector (S-C 207C Selector Circuit), a transfer circuit (S-C 216A Transfer Circuit), and a power supply (S-C 86731 Power Supply) mounted in an apparatus mounting cabinet equipped with a cover (S-C 501-2 Apparatus Mounting and Cover).

CAPACITY

18 stations with common-talking path. Additional transfer circuit or circuits and an additional cabinet can be added to increase the capacity to 27 or to 36 stations.

FEATURES

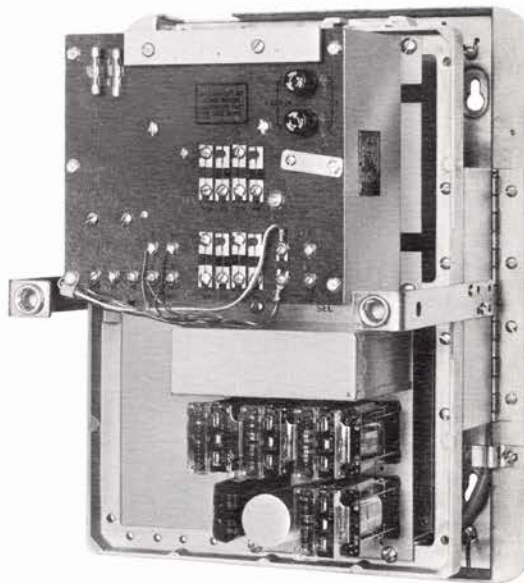
Audible station signaling
Busy lamp signals indicate when inside line is in use.

LOOP RESISTANCE

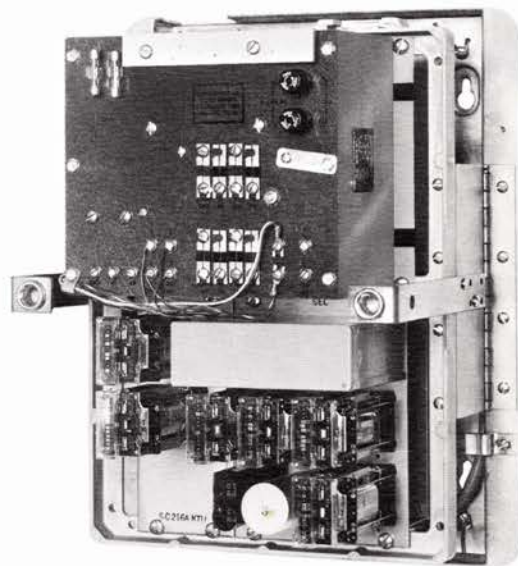
50 ohms; a long-line adapter (S-C 225A Long-Line Circuit) is available to extend the range; the adapter must be mounted in a separate cabinet.

POWER REQUIREMENTS

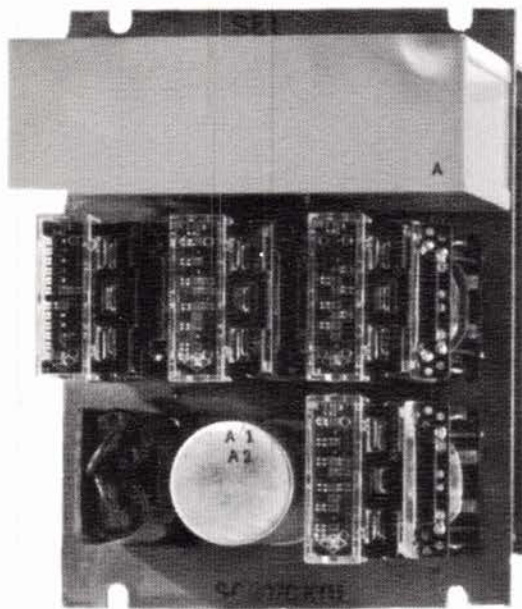
Power requirements are the same as listed for the Series 2 Intercom.



SERIES 2 INTERCOM



SERIES 3 INTERCOM



S-C 207C SELECTOR



S-C 214B SINGLE-TALKING LINK

S-C 1A2 INTERCOM FOR VERSATILITY

DESCRIPTION

The S-C 1A2 Dial-Selective Intercom is the building block intercom system of the telephone industry. Modular construction permits system arrangements that vary from a basic 9-station dial selector (S-C 207C Selector Circuit) mounted in the cabinet of a 6-line S-C 1A2 Key Telephone System to a full-featured full-capacity system. Start with nine stations and add S-C 1A2 Key Telephone Units to increase capacity or to add features.

CAPACITY

Up to 36 stations with common-talking path (selector-only arrangement), with single private talking path (single-talking link arrangement), or with two private talking paths (two-talking link arrangement).

FEATURES AVAILABLE WITH SELECTOR-ONLY ARRANGEMENT

Audible station signaling

Busy lamp signaling

Preset conference arrangement: Up to six preselected stations can be simultaneously signaled for a conference by dialing a code or by pressing a key. Maximum of six called and one calling party per conference group.

Add-on conference: An outside line can be connected into a preset conference arrangement, or a conference connection can be established between an outside line and an intercom only station under control of a station that has access to the outside line.

FEATURES AVAILABLE WITH SINGLE-TALKING LINK AND TWO-TALKING LINK ARRANGEMENTS.

Dial tone indicates that link is available.

Busy lamp signals indicate that a link is not available.

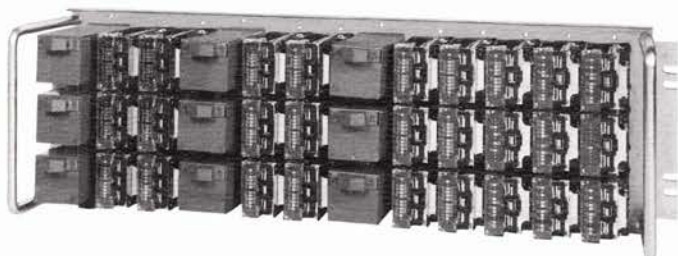
Busy tone: Busy tone before dialing indicates that a link is not available, especially useful for intercom only station. Busy tone after dialing indicates that called station is busy and has been "Camped-On".

Flashing lamp signal at called station.

Interrupted ringing at called station.

Interrupted audible tone (ringback tone) at calling station.

Preset conference arrangement: Up to six preselected stations can be simultaneously signaled by dialing a code or by pressing a key. Maximum of six called and one calling party per conference group can be connected into the talking path. System can be arranged so that a lamp at each station of the conference group flashes until all stations are answered. With the two-talking link arrange-



S-C 222A TWO-TALKING LINK

ment, busy tone is sent to the calling station when one of the called conference stations is busy on a call over the other link.

Add-on conference: An outside line can be connected into a preset conference arrangement, or a conference connection can be established between an outside line and an intercom only station under control of a station that has access to the outside line.

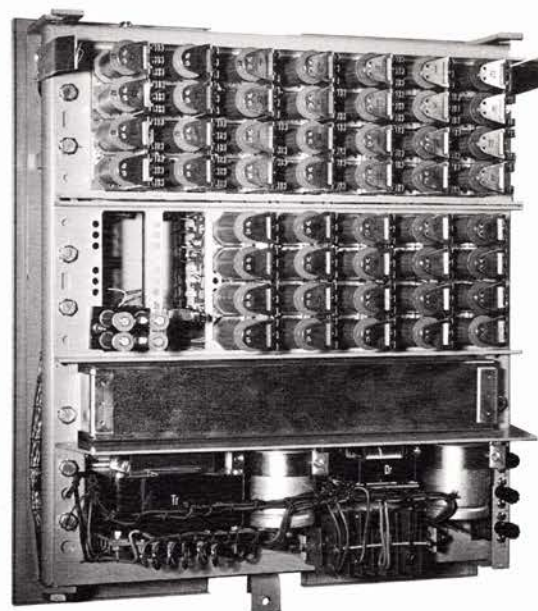
Camp on: Called party is signaled as soon as called station is free.

LOOP RESISTANCE

50 ohms: a long-line adapter is available to extend the range.

POWER REQUIREMENTS

Power requirements vary with the number of stations and type of features provided. Stromberg-Carlson has power supplies for any configuration from the smallest to the largest.



SERIES 7 INTERCOM

SERIES 7 INTERCOM COMPLETELY SELF-CONTAINED

DESCRIPTION

The Series 7 Intercom is a fixed capacity system with a built-in power supply. The equipment is mounted on a hinged gate, which swings out for easy access to the wiring. The wall-mounted cabinet measures 15 inches high, 13 inches wide, and 5½ inches deep. Net weight of the Series 7 Intercom is 37 pounds.

CAPACITY

10 stations with two private talking paths. Recommended for use with 2-line and 3-line telephones.

FEATURES

Dial tone, busy tone, ringing voltage, and ringback tone are supplied by equipment that is part of the system.

Executive right-of-way (optional) is available for station line 1. When executive right-of-way is exercised, the talking parties receive a warning tone prior to cut-in.

LOOP RESISTANCE

650 ohms not including resistance of telephone.

POWER REQUIREMENTS

Power is supplied by a built-in battery eliminator equipped with a power cord for connecting to a conventional 117-volt, 60-cycle ac outlet.

SERIES 5 INTERCOM COMES IN 2 MODELS

DESCRIPTION

The Series 5 Intercom comes in two models. The smaller model, Model 15-3, is easily expanded to the larger model, Model 28-4. Equipment for either model (not including the power supply) is contained in a wall-mounted cabinet. The equipment is mounted on a hinged gate, which swings out for easy access to the wiring. The cabinet is 25 inches high, 23½ inches wide, and 12 inches deep. Net weight of the Series 5 Intercom, less power supply, is 128 pounds; shipping weight is 190 pounds.

CAPACITY

Model 15-3: 15 stations with 3 talking paths.

Model 28-4: 28 stations with 4 talking paths.

STANDARD FEATURES

Dial tone, busy tone, ringing voltage, and ringback tone are supplied by equipment that is part of the intercom. The tone and ringing equipment is actuated only when required during a call.

Automatic time-out of talking path if no dialing takes place within 30 seconds after seizure.

Meet-me-conference. Up to 3 parties (Model 15-3) or 4 parties (Model 28-4) can dial into a conference arrangement.

Paging. Any telephone can be used (in conjunction with an amplifier and loudspeaker system) for paging by dialing the paging access code. Messages spoken into the telephone transmitter are amplified and then reproduced over loudspeakers.

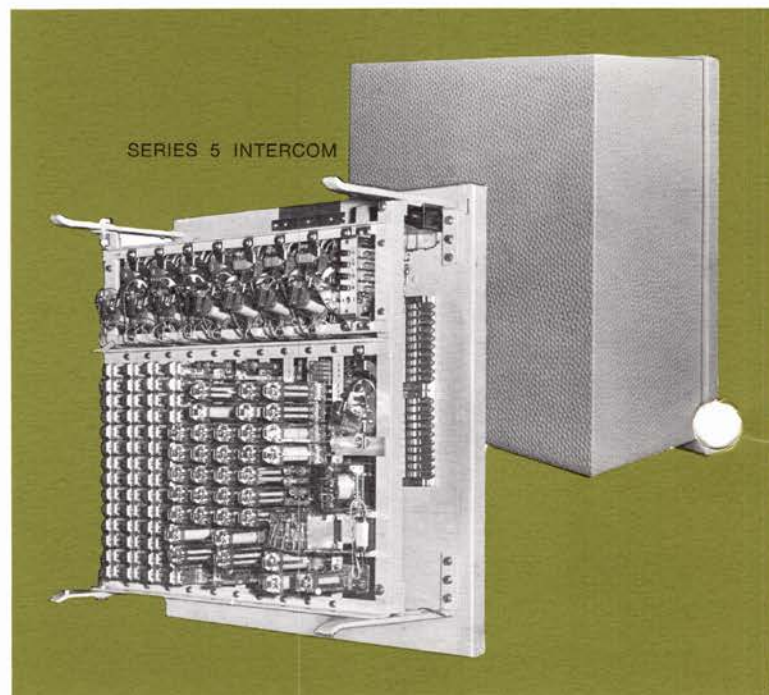
Code call. Available in 25-code capacity. A code call can be originated from any telephone by dialing the access code and then dialing the code—call signal. Code calls can be answered from any telephone by dialing the code—call answering code.

Tie lines can be furnished as required.

Line hunting for 1 to 13 groups of 2 lines each.

OPTIONAL FEATURES

Executive right-of-way for designated stations. Tele-



phones equipped with a pushbutton are required for actuating EROW feature. When executive right-of-way is exercised, the talking parties receive a warning tone prior to cut-in. When the person making the EROW call wishes to speak privately, he requests that the other parties hang up. The called station is then rung automatically.

LOOP RESISTANCE

350 ohms not including resistance of telephone.

POWER REQUIREMENTS

A 24-volt dc power source is required. When stable commercial power is available, a 4-ampere battery eliminator can be used; however, if a battery eliminator is used, the intercom system will be inoperable during a failure of commercial power. When it is essential that the system operate during a failure of commercial power, a 20-ampere-hour battery and 2.5-ampere battery charger can be used.

SERIES 6 INTERCOM PROVIDES FOR UNLIMITED EXPANSION

DESCRIPTION

The Series 6 Intercom provides for unlimited expansion; especially suitable when growth potential is large or when a high-capacity system is required. The equipment is mounted on racks $13\frac{1}{2}$ inches deep and $7\frac{1}{2}$ feet high and require a ceiling height of $8\frac{1}{2}$ feet. Line connector racks are $20\frac{1}{4}$ inches wide; selector racks are $18\frac{1}{2}$ inches wide. A 100-line system requires less than 27 square feet of floor space, including access space. The shipping weight is less than 500 pounds.

CAPACITY

The Series 6 Intercom is designed for installations that require 20 or more lines initially. The basic line connector rack is wired for 50 lines and 7 connectors (7 talking paths). Lines are equipped in multiples of 10, and connectors are equipped as required. Two line-connector racks can provide for 100 lines and 14 connectors. If the system is to have more than 100 lines, selectors are required, and each selector rack is wired for a maximum of 15 selectors.

STANDARD FEATURES

Dial tone, busy tone, ringing voltage, and ringback tone are supplied by a motor-generator with a cam operated interrupter. The motor-generator, which requires 24 volts dc for operation, runs only when required during a call.

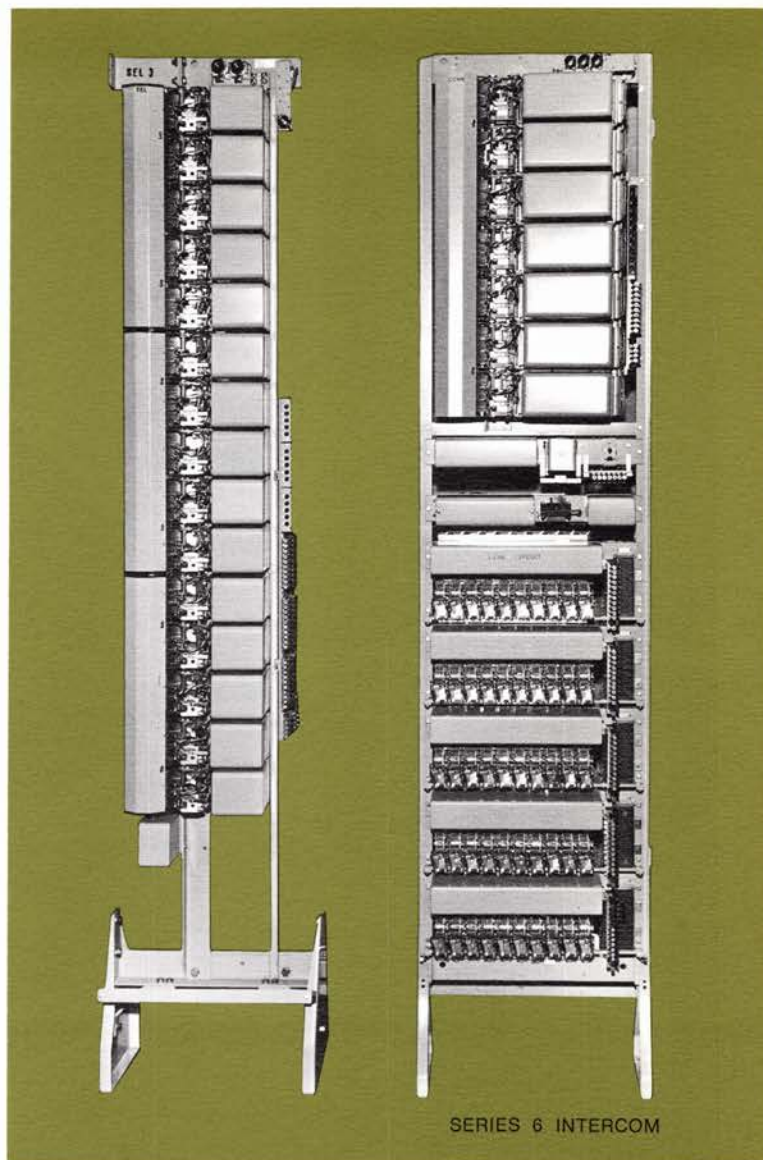
Automatic time-out of talking path if no dialing takes place within 30 seconds after seizure.

OPTIONAL FEATURES

Executive right-of-way for designated stations. When the person making the EROW call wishes to speak privately, he requests that the other parties hang up. The called station is then rung automatically.

Meet-me conference. Up to 5 parties can dial into a conference arrangement.

Paging. Any telephone can be used (in conjunction with an amplifier and loudspeaker system) for paging by dialing the paging access code. Messages spoken into the telephone transmitter are amplified and then reproduced over loudspeakers.



Code call. Available in 25- or 125-code capacity. A code call can be originated from any telephone by dialing the access code and then dialing the code-call signal. Code calls can be answered from any telephone by dialing the code-call answering code.

Tie lines can be furnished as required.

Line hunting over any connector level.

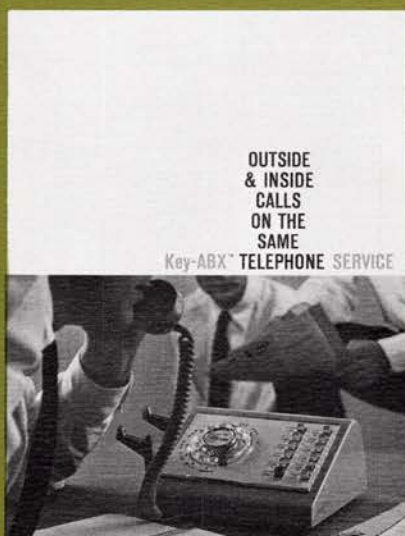
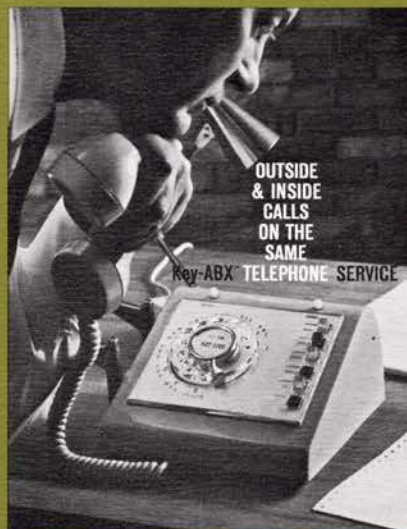
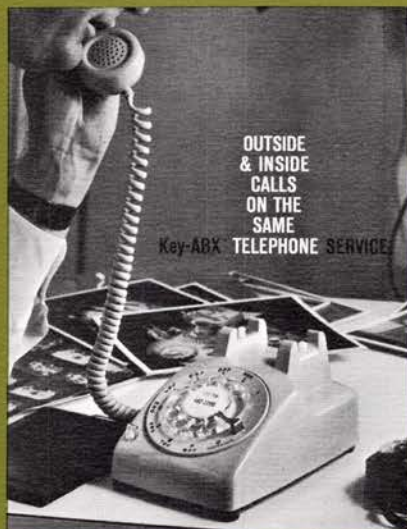
Party lines with selective ringing can be provided. Reverting call selector allows any party on a line to call any other party on the same line.

LOOP RESISTANCE

1000 ohms not including resistance of telephone; a long-line adapter is available to extend the loop to 2000 ohms.

POWER REQUIREMENTS

A 24-volt dc power source is required and is normally provided by a conventional battery and charger. When stable commercial power is available a battery eliminator can be used; however, if a battery eliminator is used, the intercom system will be inoperable during a failure of commercial power.



STROMBERG-CARLSON Wants to Help You Open Doors to New Business.

A series of sales brochures *written to your prospects* are available. The brochures are designed to help your salesmen and customers discuss Key-ABX Telephone Service—feature by feature. T-3041 describes 2-line service, T-3042 describes 3-line service, and T-3043 describes 5- and 11-line service. Similar brochures are available on Stromberg-Carlson PABX Systems. Request copies from the nearest Stromberg-Carlson Branch Office.

Stromberg-Carlson

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