

KELLOGG

INTER-TEL SYSTEM ***Circa 1951***

Kellogg Inter-Tel system, provided access to one outside line and up to 4 telephone stations with intercom signaling capability between stations. Used the 1010BA redbar telephone with a signal lamp and pushbutton. The year date of 1951 is assumed from the type of telephone and the logo style, just before the association with IT&T.

From the collection of Mike Neale

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www.kelloggtelephone.com

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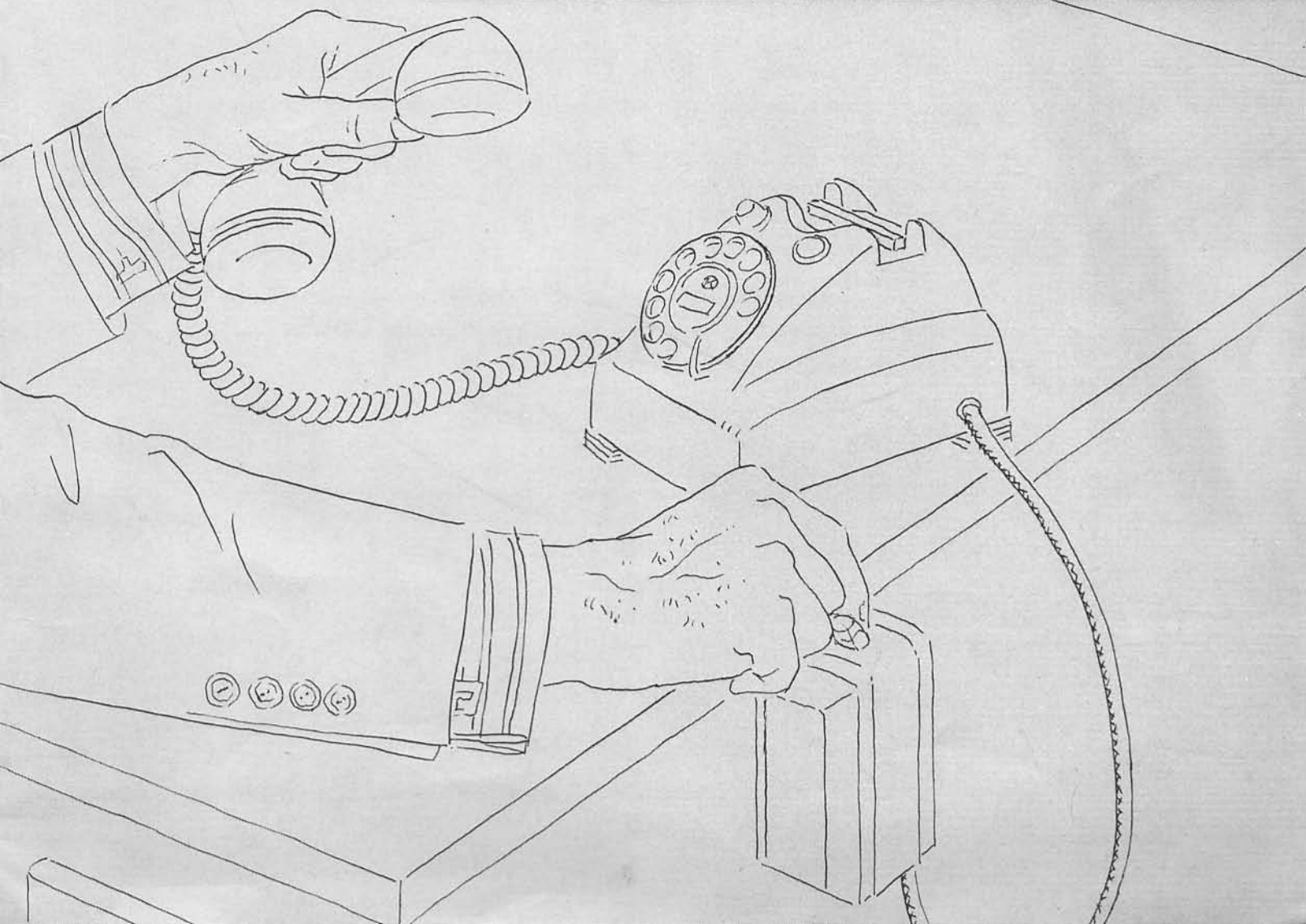
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KELLOGG

Inter-Tel SYSTEM

FOR INDIVIDUAL BUSINESS
LINE SUBSCRIBERS... AND A
REVENUE PRODUCER FOR YOU



GENERAL INFORMATION

Kellogg Inter-Tel System is a simplified, flexible, non-attendant interior telephone system for small business establishments desiring several telephone stations on the same line. This equipment provides answer, hold, transfer, conference, and intercommunication features similar to Private Branch Exchange service but does not require the assistance of a P.B.X. operator.

Inter-Tel fulfills all telephone requirements of the individual business line subscriber who desires Private Branch Exchange service but is too small an organization to justify the initial cost and operating expense of an attendant Private Branch Exchange switchboard.

The Kellogg Non-Attendant Inter-Tel System has been designed for operation in dial service areas and also those exchange areas served with Common Battery Manual Central Office Equipment.

Stores, clubs, offices, schools, churches, clinics, garages, restaurants, professional offices and numerous other business organizations will welcome Inter-Tel installations as the solution to faster and improved telephone service.

Kellogg Inter-Tel installations will improve your earnings; will increase revenues to your monthly and yearly exchange operating statements.

Your initial investment in Inter-Tel equipment is small. It will pay you to investigate the revenue earning possibilities of the Kellogg Inter-Tel Telephone System.

FEATURES OF THE KELLOGG *Inter-Tel* SYSTEM

INCOMING AND OUTGOING CALLS

Outgoing telephone calls may be originated at any station the instant a line is available. Each telephone is equipped with a ringer to alert all stations on incoming calls. Incoming and outgoing calls in the Inter-Tel System may be handled in a quick and efficient manner by any individual within the organization. Inter-Tel supervision eliminates "cutting in" on other telephone conversations as experienced under present method of installing one or more extension telephones on the same line.

NON-ATTENDANT TELEPHONE SYSTEM

No designated individual necessary to handle incoming and outgoing calls. If desired however, any one person may act as attendant for all individuals in system.

HOLD FEATURE

A holding feature is provided at each station. The calling party may be held on the line while securing information from another station over the intercommunication circuit.

TRANSFERING INCOMING CALLS

Transferring incoming calls from any station to any other station is instantly accomplished. Each telephone is provided with push button for code signaling any other station in the system.

CONFERENCE CALLS

Conference calls between incoming calling party and several stations in the system can be provided in matter of seconds.

RINGER BRIDGED ACROSS LINE

Ringer bridged across line at each station to indicate incoming calls to be answered even though two stations may be talking over intercommunication facilities.

INSTANTANEOUS SUPERVISION

Instantaneous supervision of incoming and outgoing telephone calls at each Inter-Tel station permitting maximum usage of telephone service.

INTERCOMMUNICATION

Intercommunication calls may be originated between any station in the system.



EASE OF OPERATION

The Kellogg Inter-Tel System provides your individual line business subscribers with a highly efficient telephone service at the lowest cost per call. Speed-up, improve business subscriber's telephone service with this modern, efficient, and up-to-date method of handling telephone calls. Obtain for the telephone company and for your business subscribers maximum service results with Inter-Tel installations.

Review for yourself the operational features of the Kellogg Inter-Tel System.

INCOMING AND OUTGOING TELEPHONE CALLS

Two, Three, Four (or more) telephone instruments may be connected to a single central office line. All telephone bells will ring simultaneously on incoming calls. Calls may be answered at any telephone.

To Answer an Incoming Call: If key located in key box is not in the "answer" position as engraved on the key box, do so before lifting handpiece from cradle. Lift handpiece from cradle and answer call in normal manner. The red supervisory lamp located on all telephones in the system remains lighted until the handpiece is returned to the cradle.

To Make an Outgoing Call: Key should be in the normal or "answer" position before lifting handpiece from cradle of telephone. Remove handpiece and dial or indicate the desired number to the telephone operator. Red supervisory lamp on all telephones remains lighted until handpiece is returned to the cradle.

To Transfer a Call to Another Station: The only operation necessary is to code signal the desired station over the buzzer system provided in each telephone. Remain on the line until the calling and called party are connected before replacing handpiece on cradle of telephone. The red supervisory lamp remains lighted until conversation is completed and called party restores handpiece to cradle.

A push button is equipped in each telephone for code signaling other stations in the system. A buzzer is provided in each telephone for receiving code signals from other stations in the system. The buzzer system is of the common line signaling type.

Suggested code signal for transferring trunk calls from station answering an incoming call to the desired station is as follows:

First Station — 1 short signal
Second Station — 2 short signals
Third Station — 3 short signals
Fourth Station — 4 short signals

Any station receiving above signal on buzzer in their telephone will recognize from signal that they are wanted on trunk call. Before lifting handpiece to answer operate key to the "answer" position in the key box. At completion of call restore handpiece to cradle of telephone.

INTERCOMMUNICATION CALLS

The intercommunication circuit between all stations is of the common talking, common signaling type. To call another station operate key to "Intercom" position. Lift handpiece and signal desired station, preceding the standard code signal with a long signal, as follows:

First Station — 1 long, 1 short signal
Second Station — 1 long, 2 short signals
Third Station — 1 long, 3 short signals
Fourth Station — 1 long, 4 short signals

Any station receiving above signal on buzzer in their telephone will recognize from signal that they are wanted on an intercom call. Before lifting handpiece operate key to "Intercom" position in key box. At completion of call restore handpiece to cradle of telephone. Red supervisory lamp remains lighted during conversation period.

TO HOLD A CALL

To hold a party on the trunk while securing information over an intercom circuit operate the key to the "Hold" position in the key box, which removes the telephone from the line for intercom purposes. Signal the desired party using the suggested Intercommunication signal system, secure necessary information and return to the trunk by operating key to the "Answer" position. An intercom call may be made with the key in the "Hold" position. Red supervisory lamp remains lighted during conversation period.

CONFERENCE CALLS

A conference call can be arranged on the trunk by any station signaling any or all other stations. A predetermined signal can be used as a "General Call." Red supervisory lamp remains lighted during conversation period.

KELLOGG *Inter-Tel* SYSTEM COMPONENTS

INTER-TEL TELEPHONE (Code #1010BA)

Each Inter-Tel station installation consists of a Kellogg #1010BA Desk Masterphone with or without dial as required; equipped with a standard Kellogg individual line ringer; a sturdy buzzer mounted inside the telephone instrument; a push button mounted on the top right of the telephone for code signaling other stations in the system; a supervisory lamp mounted on the top left of the telephone which glows red when any station in the system is in use; and an eight conductor black fabric covered base cord attached to the telephone instrument at one end, which connects to a Kellogg Key Box at the other end.

The Key Box mounts on the side of a desk or on any other suitable flat surface. A three position locking key is provided in the key box for "Answering," "Holding," and "Transferring" incoming calls. Each operated position of the key is engraved on the cover of the key box indicating the "Answer," "Intercom," and "Hold" positions.

INTER-TEL TRUNK RELAY CABINET (Code #27)

Common to each Inter-Tel System is a small one trunk relay cabinet #27 which terminates the incoming central office line. This small all-steel relay cabinet (3½ inches deep, 9 inches high, 7 inches wide) mounts on any flat surface and houses the necessary relays, condenser, choke coil, and other components to insure trouble free operation of the Inter-Tel system.

POWER EQUIPMENT

Ample talking and signaling power can be provided with a number 1026 Raytheon Rectifier which operates from 110 to 125 volts A.C. source of commercial power and delivers 12 volts D.C. for Inter-Tel talking and 12 volts A.C. for operation of supervisory lamps and buzzer signals at each Inter-Tel station. Designed for wall mounting in any convenient location. Size: Width 7 inches; Depth 6¼ inches; Height 10½ inches.

CABLE

The Kellogg Inter-Tel System requires a six pair cable between each individual Inter-Tel station and the centrally located trunk relay cabinet. For easy of handling and installation we recommend Okonite, Okoseal brown plastic covered flexible cable. Conductor size No. 22 AWG, conductors are color coded as follows: Blue, Orange, Green, Brown, Gray, Red. Each colored conductor is twisted with its white mate.

JUNCTION BOX (Code #1)

For connecting each Inter-Tel station key box in the system to the 6 pair plastic covered cable between stations in the Inter-Tel System, we recommend this compact convenient low cost junction box. Made of steel with a galvanized finish, this junction box measures 4 inches in length; 2½ inches in width and 1⅞ inches in depth. Adequate knock-outs are provided on each side and on each end of the junction box for entrance of the plastic covered 6 pair cable. Proper size box connectors are furnished with each junction box. Attached to the inside of the removable steel cover of the junction box are two terminal strips each with 6 terminals for the necessary cable connections. Cover fastens to the junction box with two screws.



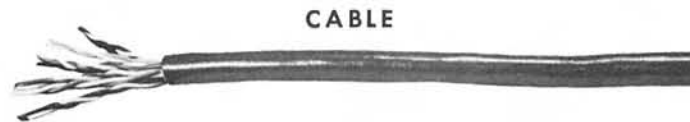
INTER-TEL TELEPHONE
(Code #1010BA)



INTER-TEL TRUNK
RELAY CABINET
(Code #27)



POWER EQUIPMENT



CABLE



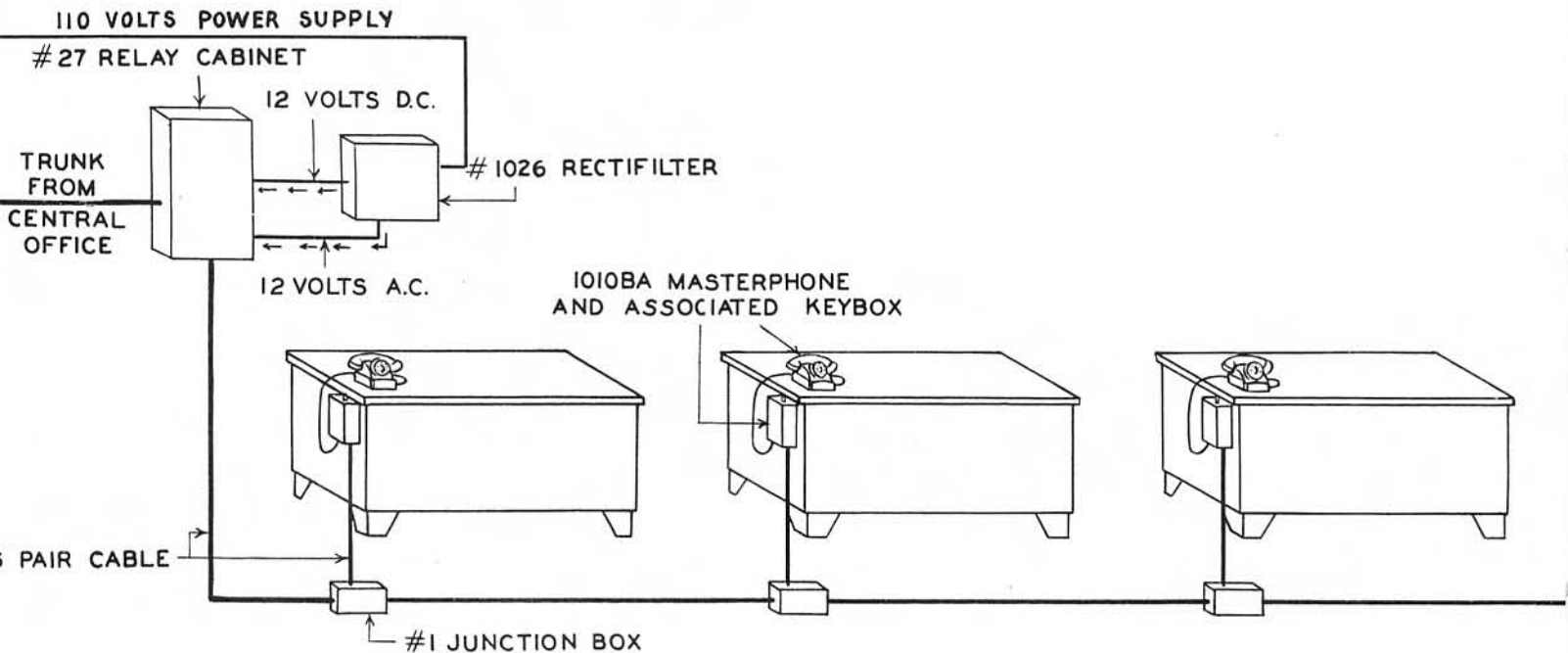
JUNCTION
BOX
(Code #1)

KELLOGG INTER-TEL IS EASY TO INSTALL

The wiring and installation of Kellogg Inter-Tel Systems can be quickly accomplished by following the condensed simplified wiring chart and installation notes on the following page. Also shown are terminal strips "A," "B," "C" with numbering designations for connecting the cable pairs to the proper numbered terminals as shown in the simplified wiring chart.

The principle types of installations are (1) Conduit Method, (2) Exposed Cable Method, (3) Wire Mold Method. The conduit method is the ideal installation to protect the 6 pair Okonite Okoseal plastic cable from injury. The exposed cable method is satisfactory and more economical where cable runs are not subject to damage. The wire mold method is the more expensive type of installation and is very satisfactory in certain locations where it is necessary to lay the cable on the floor and cover with the metal wire mold to prevent injury to cable crossing aisles, floors, etc.

A TYPICAL INSTALLATION



WIRING CHART

INSTALLATION NOTES

#27 TRUNK RELAY CABINET

Terminals #2 and #9 on the #27 Relay Trunk Cabinet terminal strip are used to terminate the incoming trunk line from the central office.

Terminals #3 and #4 are used for termination of the 12 volt DC current from the #1026 Raytheon Rectifier. Terminal #4 is for the negative DC and Terminal #3 is for the Positive DC.

Terminals #7 and #10 are used to terminate the 12 volts AC from the #1026 Raytheon Rectifier.

POWER SUPPLY—#1026 RAYTHEON RECTIFIER

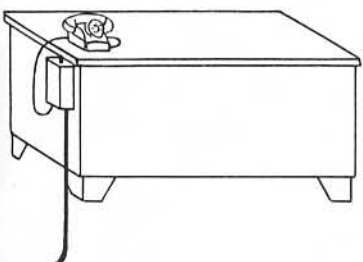
The #1026 Raytheon Rectifier is plugged into a standard 110 volt 60 cycle commercial current outlet. The 12 volt DC is connected to Terminals #3 and #4 in the #27 Relay Cabinet and the 12 volt AC is connected to Terminals #7 and #10 in the #27 Relay Cabinet.

KEY BOX AT EACH INTER-TEL STATION

The Gray wire of the Gray-White pair is used as a loop from the first station key box through the junction box to the next station key box and so forth as a common for the buzzer circuit.

JUNCTION BOXES

Usually a #1 junction box is mounted near the telephone and the main cable from the Relay Cabinet is looped through each junction box. Another cable is connected between the junction box and the key box. Two key boxes may be wired into one junction box.



SIMPLIFIED WIRING CHART					
Cable Pairs	Refer Terminal A	Refer Terminal B	Refer Terminal C		
1	Blue	9	1	9	
	White	1	2	1	
2	Orange	6	6	4	
	White	5	7	3	
3	Green	10	3	11	
	White	7	4	10	
4	Brown	11	5	7	
	White	8	8	8	
		#1 Keybox	#2 Keybox	#3 Keybox	#4 Keybox
5	Gray	12	12	12	12
	White	Spare Single in Cable			
6	Red	Spare Pair in Cable			
	White				

TERMINAL STRIP "A"

Located in #27 Trunk Relay Cabinet

1	2	3	4	5	6	7	8	9	10	11
0	0	0	0	0	0	0	0	0	0	0

TERMINAL STRIP "B"

Located in #1 Junction Box

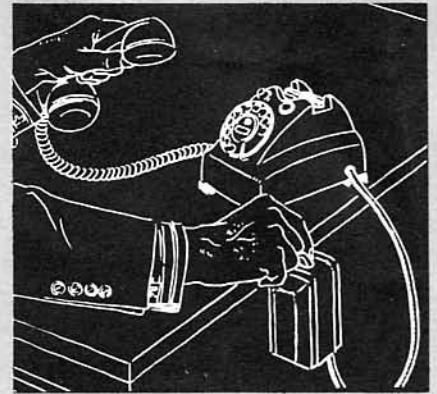
1	0	0	2
3	0	0	4
5	0	0	6
7	0	0	8
9	0	0	10
11	0	0	12

TERMINAL STRIP "C"

Located in Keybox
Associated with #1010BA Telephone

1	0	0	2
3	0	0	4
5	0	0	6
7	0	0	8
9	0	0	10
11	0	0	12
13	0	0	14

HOW TO ORDER YOUR KELLOGG *Inter-Tel* SYSTEM



Determine your requirements for Kellogg Inter-Tel System from the following chart. When ordering specify all equipment necessary for the installation, by code or piece number, name, and quantity desired.

INTER-TEL SYSTEM COMPONENTS	SPECIFY FOR EACH STATION IN SYSTEM	SPECIFY FOR EACH SYSTEM INSTALLATION
INTER-TEL TELEPHONE	Specify one #1010BA Telephone for each station in system. Can be furnished with or without dial. Specify if dials are wanted.	
TRUNK RELAY CABINET		Specify one #27 Trunk Relay Cabinet for each system installation.
POWER		Specify one #1026 Raytheon Rectifier for each system installation.
CABLE	Include in cable measurements sufficient quantity of 6 pair Okonite cable to connect each station Key Box to each station Junction Box.	Specify 6 pair Plastic Okonite Okoseal Cable. Indicate number of feet required for system installation.
JUNCTION BOXES		Specify Number of No. 1 Junction Boxes Required for Each Inter-tel System Installation.
MISCELLANEOUS INSTALLATION MATERIALS	For cable clamps, mounting screws, flux solder refer to Supply Section of Kellogg #11 catalog. If floor moulding, fixtures etc. are desired write Kellogg for information on "Wire Mold".	

KELLOGG SWITCHBOARD AND SUPPLY COMPANY

6650 SOUTH CICERO AVENUE • CHICAGO 38, ILLINOIS



KELLOGG SWITCHBOARD AND SUPPLY COMPANY

6650 SOUTH CICERO AVE.

CHICAGO 38, ILLINOIS

PORTSMOUTH 7-6900

WOULD YOU LIKE A SUIT WITH NO POCKETS?

Or a telephone company with no profits? We know you wouldn't like either of these situations. Your tailor can put pockets in your suit and Kellogg Inter-Tel can fix up your profits.

Profits are made through extra revenue. The Kellogg Inter-Tel System builds bonus revenue by giving your customers the additional phone service they need!

Inter-Tel provides features such as answer, hold, transfer, and inter-communication service. Here's a P.B.X. setup without an operator! A low cost system to the customer with high revenue to you. (Several companies report as high as a 20% revenue increase with Kellogg Key Systems.)

Think of the stores, clubs, offices, churches, schools, etc., in your district that would snap up this Inter-Tel service.

Read the enclosed bulletin with applications and extra revenue in mind -- then fill in the enclosed order form and mail it today!

Yours very truly,

W. D. Burke, Manager
Apparatus Sales

WDB/sg



KELLOGG SWITCHBOARD AND SUPPLY COMPANY

CHICAGO • DALLAS • SAN FRANCISCO • KANSAS CITY

SOLD TO _____

SHIP TO _____

SHIP BY { EXPRESS _____
 FREIGHT _____
 P. POST _____

QUANTITY	PART NO.	DESCRIPTION OF ITEM	UNIT PRICE	SUB-TOTAL
	#1010BA	INTER-TEL MASTERPHONE AND KEY BOX	\$48.65 ea.	
	#27	TRUNK RELAY CABINET	35.75 ea.	
	#1026	RAYTHEON RECTIFIER	68.00 ea.	
ft.	6 Pair	OKOSEAL CABLE	169.10/M ft.	
	#1	JUNCTION BOX	3.40 ea.	
<p>NOTE: If dial is required add \$6.30 to the price of each Masterphone. Prices subject to change without notice. All prices are F. O. B. Chicago, Illinois and points of shipment.</p>				
PURCHASER'S ACCEPTANCE		SALESMAN	TOTAL ▶	
BY _____		_____		

Postage
Will Be Paid
by
Addressee

No
Postage Stamp
Necessary
If Mailed in the
United States

BUSINESS REPLY ENVELOPE

First Class Permit No. 3677, Sec. 34.9, P. L. & R., Chicago, Illinois

KELLOGG SWITCHBOARD AND SUPPLY CO.

6650 S. CICERO AVENUE

CHICAGO 38, ILLINOIS

Attn.: W. D. BURKE

