# Telephone Guide

Printed in vertical format 8 ½ X 11 inches on 60# coated stock, in booklet form using four color process lithography. Because of the age of this piece there has been some age fading of the inks used in the color process. Where possible some of this aging has been minimized through editing.

Published in 1968, providing an overview of the telecommunications apparatus available from ITT during this period.

An added bonus to this guide is that the owner had handwritten prices for selected items on the guide's pages. In order to provide the "as produced" appearance in the scans these prices were removed in editing. These prices were then compiled in a list and for historical purposes has been included in this file.

Scanned and produced by Mike Neale
From an original document furnished by Roger Conklin, Members of
Antique Telephone Collectors Association US
Telephone Collectors International US
Telecom Heritage Group UK

Adobe document copyright 2005, Mike Neale & Roger Conklin, Midland, Texas, USA













# Telephone Guide



## **Telephones By ITT Telecommunications**

ITT Telecommunications offers a line of compact, attractive, anti-sidetone telephones which will operate efficiently over a wide range of loop resistance and line impedance. Long loop efficiency, automatic transmission equalization, automatic sidetone balancing and excellent discrimination against noise make these sets universal in application. Their utility is further increased by optional special features, a wide selection of ringers, and availability in colors to match any decor.

Long trouble-free life, with attendant low maintenance costs, is assured by timeproven design, high quality materials and fine workmanship. Each part is manufactured from material selected as most suitable for its purpose. Each component is designed to assure its continued satisfactory performance under normal and adverse conditions . . . The network incorporates self-healing capacitors to prevent permanent damage from power surges; the carbon chamber of the transmitter capsule is gold plated for enduring top performance; the use of silicon carbide varistors insures trouble-free circuitry; external parts are made of tough color-saturated plastic which is easily cleaned and refinished.

These, and countless other features, make ITT telephones the phones you install and forget.

## **Table of Contents**

DESCRIPTION	PAGE
TELEPHONES	
Single-line telephones	1, 2, 3, 16
Two-line telephones	4
Three-line telephones	
Key system telephones	
DIALS	10
HANDSETS	
RINGERS	
TELEPHONE LOUDSPEAKER "ORATOR	16
TELEPHONE ORDERING INFORMATION	

## Hand Telephone Sets, (Dial is in the Handset) The Trendline\*







Hand telephones provide the ultimate in user convenience, small size and attractive appearance. The handset is a complete telephone inasmuch as it may be used to make any number of calls without the user operating the hookswitch plunger in the base. Dial tone is obtained after each call by depressing the recall button, located below the dial, for a few seconds. Dial illumination is provided by an incandescent lamp. The transformer must be ordered separately when this feature is desired. Message waiting phones are not equipped with dial light. These telephones may be ordered as complete telephones or as components, (handset, handset cord, and base).

## Complete Telephones (K-200, K-254, K-2200, K-2254)

Complete telephones consist of the handset, the base and 6-foot handset cord. The desk telephones include desk stand cord and connecting block.

#### Handsets (K-220 and K-2220)

The handset includes the transmitter, receiver, network, dial, dial light, and recall button. Message waiting handsets are not equipped with dial light.

#### Handset Cords (1027)

The handset cord is packaged in a transparent bag. It plugs into the handset and into the base.

#### Bases (K-AC, Wall; K-AD, Desk)

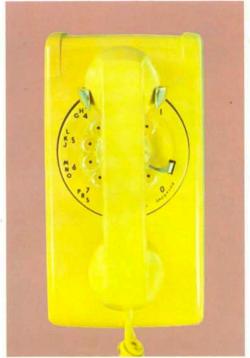
The base includes hookswitch, (line switch), and ringer (when specified). It is available in two versions, wall and desk. The desk version includes desk stand cord and connecting block. The desk stand cord plugs into the base.

Code	Description
1. BASIC TE	LEPHONE
K-200 K-254 K-2200 K-2254	Telephone, Trendline* desk, rotary dial Telephone, Trendline* wall, rotary dial Telephone, Trendline* desk, TEL-TOUCH® Telephone, Trendline* wall, TEL-TOUCH®
2. COLORS	
00 02 04 05 09 11 12 13 14 14 15 30	Black Red Yellow Green Ivory Rose Pink Aqua Blue Light Beige Light Gray White Turquoise
3. RINGERS	-
(LR) (BA)	Less ringer Straight line blased ringer (No. 153 single gong)
4. SPECIAL	FEATURES
30 37 38	No special features Message waiting lamp, 90-volt Message waiting lamp, 125-volt
5. TYPE OF	DIAL
M	Metropolitan, (letters and numerals)
K-220**-30M K-2220**-30M	NLY (Does not include handset cord)  Handset, Trendline*, Rotary Dial Handset, Trendline*, TELTOUCH®
BASE ONLY	Thanson, Transmitter, The Total of the
K-AC1**(LR) K-AC1**(BA) K-AD1**(LR) K-AD1**(BA)	Base, Trendline* wall, less ringer Base, Trendline* wall, straight line ringer Base, Trendline* desk, less ringer Base, Trendline* desk, straight line ringer
HANDSET CO	
1027**(03)650 1027**(25)650 1027**(26)650	Handset cord, 6 feet of usable length Handset cord, 9 feet of usable length Handset cord, 13 feet of usable length
TRANSFORM	ER FOR DIAL LIGHT
31( )690	Transformer, Input: 105 to 125 volts AC, 60 cps.

<sup>\*</sup>Trademark of ITT
\*\*Substitute color code

## Single Line Rotary Dial Telephones; K-500 Series





#### K-500

Standard rotary dial desk phone. Available in numerous versions dependent upon selection of color, ringer, special feature and type of dial. (See table at right.) Equipped less ringer, less special features, and with metropolitan dial, it becomes a versatile unit which will permit economical ordering and stocking. Includes desk stand cord, 32()783 connecting block assembly, and number card.

#### K-554

Standard rotary dial wall phone. Identical to the K-500 in circuitry. Includes number card.

#### K-502

Identical to the K-500 with the addition of the exclusion feature. Lifting the left hand cradle plunger temporarily disconnects extension phones and permits private conversation. Replacing the handset restores the connection to other phones. Includes desk stand cord, 29()783 connecting block assembly, and number card.

## ORDERING INFORMATION (See inside of rear cover)

Code	Description
1. BASIC TE	LEPHONE
K-500 K-502 K-554	Telephone, single line desk Telephone, single line desk, exclusion Telephone, single line wall
2. COLORS	
00	Black
02	Red Yellow
05	Green
09	Ivory
11	Rose Pink
12	Aqua Blue
13	Light Beige
14	Light Gray
15	White
16	Sea Green
3. RINGERS	(Two-Gong Type)
(LR)	Less ringer
(BA)	Straight line blased ringer
(TBA)	Straight line blased ringer with gas tube for superimposed signaling
()	Frequency selective ringer (See Inside of rear cover for codes.)
4. SPECIAL	FEATURES
30	No special features
33	Lift-to-talk (K-500, K-554)
34	Pushbutton ground (K-500, K-554)
35	4-wire ring and talk circuit (K-500, K-554)
37	Message waiting lamp, 90-volt (K-500 only)
38	Message waiting lamp, 125 volt (K-500 only)
44	A-lead control for use with key telephone system.
5. TYPE OF	DIAL
M	Metropolitan
R	Regular
N	No dial — equipped with dial blank
MISCELLA	
31()690	Transformer, (for dial/night light), Input 105 to

## Single Line Tel-Touch® Telephones; K-2500 Series





#### K-2500

Standard TEL-TOUCH® (push-button dial) desk phone. Incorporates the same circuitry and basic components as the K-500 with the exception of the TEL-TOUCH® dial. Includes desk stand cord, 32()783 connecting block assembly, and number card. Uses two-gong ringer.

#### K-2502

Identical to the K-2500 with the addition of the exclusion feature. Lifting the left hand cradle plunger temporarily disconnects extension phones and permits private conversation. Replacing the handset restores the connection to other phones. Includes desk stand cord, 29()783 connecting block assembly, and number card. Uses two-gong ringer.

#### K-2554

Standard TEL-TOUCH® wall phone. Circuitry is similar to the K-2500 but it incorporates miniature components in keeping with the modern trend. Uses the same type dial as the K-2500. Includes number card. Uses single-gong ringer, (No. 148 straight line type or No. 151 frequency selective type).

NOTE: Face plates of matching color are standard on Tel-Touch® Desk Phones.

#### ORDERING INFORMATION

(See inside of rear cover

Code	Description
1. BASIC TE	LEPHONE
K-2500 K-2502 K-2554	Telephone, desk; single line TEL-TOUCH® Telephone, desk; single line TEL-TOUCH® exclusion Telephone, wall; single line TEL-TOUCH®
2. COLORS	
00 04 05 09 11 12 13 15	Black Yellow (K-2554 only) Green Ivory Rose Pink (K-2554 only) Aqua Blue Light Beige White Sea Green
3. RINGERS	
(LR) (BA) (TBA) ()	Less ringer Straight line biased ringer Straight line biased ringer with gas tube for superimposed signaling (K-2500 and K-2502). Frequency selective ringer (See inside of rear cover for frequency ringer codes.)
4. SPECIAL	FEATURES
30 33	No special features Litt-to-talk (K-2500 only)
5. TYPE OF	DIAL
M R	Metropolitan Regular

## **Two-Line Telephones**





Two-line Telephones provide the small business or the home with a flexible arrangement whereby two lines may be accessed by one or more telephones. A turn-and-push key permits the user to select either of the two lines. The push section of the key may be used to operate a buzzer or other external circuit.

#### K-510

Standard two-line rotary dial desk telephone.

#### K-2510

Standard two-line TEL-TOUCH® desk telephone.

#### K-558

Standard two-line rotary dial wall telephone, Identical in circuitry to K-510.

#### K-575

Two-line rotary dial desk telephone with HOLD feature. Lifting the left hand cradle plunger places a hold on the non-connected line. The turn key then may be turned alternately between the two lines, connecting one line while holding the opposite line.



#### K-2575

Two-line TEL-TOUCH® telephone with HOLD feature. Similar to K-575 except has pushbutton dial.

#### K-555

Two-line rotary dial wall phone with HOLD feature. Identical in circuitry to K-575. Hold is applied by depressing button at top of housing.

#### ORDERING INFORMATION

(See inside of rear cover)

Code	Description
1. BASIC TE	LEPHONE
K-510	Telephone, 2-line desk, rotary dial
K-2510	Telephone, 2-line desk, TEL-TOUCH® dial
K-558	Telephone, 2-line wall, rotary dial
K-575	Telephone, 2-line desk, rotary dial, with HOLD feature
K-2575	Telephone, 2-line desk, TEL-TOUCH® dial with HOLD feature
K-555	Telephone, 2-line wall, rotary dial, with HOLD feature
2. COLORS	
00	Black
05	Green
09	Ivory
12	Aqua Blue
13	Light Beige
14	Light Gray (Rotary dial only)
15	White
3. RINGERS	(Two-Gong Type)
(LR)	Less ringer
(BA)	Straight line biased ringer
(TBA)	Straight line biased ringer with gas tube for
8 9	superimposed signaling
()	Frequency selective ringer (See inside of rear cover for codes.)
4. SPECIAL	FEATURES
30	No special features
5. TYPE OF	DIAL
M	Metropolitan
R	Regular

NOTE: Face plates of matching color are standard on Tel-Touch® Desk Phones.

## **Three-Line Telephones**





Provide access to three lines without the use of external switching equipment. The three lines may be outside, private exchange, or intercom or a combination of these. The six keys are arranged in pairs with the right hand key of each pair being the line key, and the left hand key of each pair being the hold key for that line. The right hand pair may be used for manual intercom with the hold key modified for signaling. An operator recall button is provided, (forward of the handset), since depressing a cradle plunger will release any operated hold keys. Visual signals, (lamps), are provided to indicate a busy line or the line on which a call is incoming. Ringing voltage operates the incoming-call lamps—under the line buttons. A power transformer must be ordered separately for operation of busy lamps-under the hold buttons.

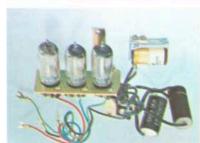
#### K-576

Standard three-line rotary dial telephone.

Three-line rotary dial telephone with exclusion feature. Lifting the left hand cradle plunger disconnects other phones from one line for private conversation. Replacing the handset restores the connection to other phones.

Standard three-line TEL-TOUCH® telephone.

Three-line TEL-TOUCH® telephone with exclusion feature. Similar to K-577 except equipped with pushbutton dial.



#### Common Audible Signal

The common audible signal, 144, provides an audible signal for all three lines of a three-line telephone. May be installed in phone or externally.

#### Power Transformer

The 190169 transformer provides power to operate busy lamps for a maximum of seven three-line telephones. Must be ordered separately.

Code	Description
1. BASIC TE	LEPHONE
K-576 K-577 K-2576 K-2577	Telephone, 3-line with HOLD on each line, rotary. Telephone, 3-line with HOLD on each line, equipped with exclusion feature, rotary. Telephone, 3-line with HOLD on each line, TEL-TOUCH®. Telephone, 3-line with HOLD on each line, equipped with exclusion feature, TEL-TOUCH®
2. COLORS	
00 05 09 13 14	Black Green Ivory Light Beige Light Gray White
3. RINGERS	(Two-Gong Type)
(LR) (BA) (CA)	Less ringer Straight line blased ringer Common audible signal
4. SPECIAL	FEATURES
30 34 40	No special features Pushbutton ground, (K-576, K-577) Mounting cord equipped with plug
5. TYPE OF	DIAL
M R	Metropolitan Regular
MISCELLA	ANEOUS
144 190169 31 () 783	Common audible signal Power transformer Connecting block assembly for phones not equipped with plug
11323-(**)79	Kit for converting round button phone to square buttons. (Same color.)  (**) Substitute color code.
	1_AGC_1CHMMARINANCE-ACCOMMARICANCE

## **Key System Telephones; K-500 Series**



These telephones are used in conjunction with a key telephone system to provide access to a maximum of five lines. The lines may be outside, intercom, private branch exchange, or private. The left hand (red) pushbutton may be used to place a hold on one or more lines. Visual signals, (lamps), are provided for all lines.

#### K-564

Standard rotary-dial multi-key telephone. Has all features necessary for connection and operation in a key system installation. If the mounting cord is not equipped with plug, a connecting block assembly, 30()783, must be ordered separately.

#### K-565

Similar to the K-564, but has additional features. The K-565 with special feature code 30 or 40 provides an exclusion feature on one line. Lifting the left hand cradle plunger disconnects other phones from the excluded line for private conversation. Replacing the handset restores the connection to excluded phones.

The K-565 with special-feature-code 39 or 42 is equipped for use with hands-free equipment. These phones do not have an exclusion switch, though they are equipped with the exclusion plunger. To add the exclusion feature, order 79971-1 Exclusion Switch Assembly separately.

Code	Description
1. BASIC TE	LEPHONE
K-564 K-565	Telephone, key Telephone, key-special
2. COLORS	
00 05 09 13 14	Black Green Ivory Light Beige Light Gray White
3. RINGERS	(Two-Gong Type)
(LR) (BA)	Less ringer Straight line biased ringer
4. SPECIAL	FEATURES
30 39 40 42	No special features For hands free operation (K-565 only) Mounting cord equipped with plug For hands free operation and has mounting cord equipped with plug (K-565 only)
5. TYPE OF	DIAL
M R	Metropolitan Regular
MISCELLA	ANEOUS
30()783	Connecting block assembly for K-564 or K-565 phones not equipped with plug
11286(**)79	Kit, for converting round button phone to square buttons. (Same color.)
79971-1	Exclusion switch assembly

## **Key System Telephones; K-2500 Series**



These telephones are used in conjunction with a key telephone system to provide access to a maximum of five lines. The lines may be outside, intercom, private branch exchange, or private. The left hand (red) pushbutton may be used to place a hold on one or more lines. Visual signals, (lamps), are provided for all lines.

#### K-2564

Standard ITT TEL-TOUCH® multi-line key telephone. Has all features necessary for connection and operation in a key system installation. If the mounting cord is not equipped with a plug, a connecting block assembly, 30 ()783, must be ordered separately.

#### K-2565

Similar to K-2564 but has additional features. The K-2565 with special-feature-code 30 or 40 provides an exclusion feature on one line. Lifting the left hand cradle plunger disconnects other phones from the excluded line for private conversation. Replacing the handset restores the connection to excluded phones.

The K-2565 with special-feature-code 39 or 42 is equipped for use with hands free equipment. These phones do not have the exclusion feature though they are equipped with the exclusion plunger. To add the exclusion feature, order 79971-I Exclusion Switch Assembly separately.

Code	Description
1. BASIC TE	LEPHONE
K-2564 K-2565	Telephone, key TEL-TOUCH® Telephone, key TEL-TOUCH® special
2. COLORS	
00 05 09 13 14 15	Black Green Ivory Light Beige Light Gray White
3. RINGERS	(Two-Gong Type)
(LR) (BA)	Less ringer Straight line biased ringer
4. SPECIAL	FEATURES
30 39 40 42	No special feature For hands free operation (K-2565 only) Mounting cord equipped with plug For hands free operation and has mounting cord equipped with plug (K-2565 only)
5. TYPE OF	DIAL
M R	Metropolitan Regular
MISCELLA	NEOUS
30()783 79971-1	Connecting block assembly Exclusion switch assembly

## Corinthian® Multi-Key Telephones; K-230 Series



These telephones are used in conjunction with a key telephone system to provide access to a maximum of eleven lines plus an intercom line. The intercom line is connected when all buttons of the keys are released.\* The lower left hand (red), pushbutton is used to place a hold on one or more lines. Visual signals, (lamps), are provided for all lines.

Has one six-button key assembly and provides five-line capacity plus intercom. May be converted to eleven-line capacity by adding 180113 Expansion Kit and 869\*\*(15)650 80-conductor Mounting Cord. (The asterisks in the mounting cord number are to be replaced by the desired color code when orderingsee table at right.)

#### K-232

Has two six-button key assemblies and provides eleven-line capacity plus all-buttons-released intercom.

#### K-233

Same as K-231, except factory-equipped with 80-conductor mounting cord so future expansion to eleven-line capacity will require the addition of 180113 Expansion Kit only.

\*Note: The K-233 does not provide all-buttons-released intercom. However if 180113 Expansion Kit is added, the intercom feature is automatically added.

Code	Description
1. BASIC TE	LEPHONE
K-231 K-232 K-233	Telephone, rotary dial CORINTHIAN® multi-key 5-line capacity plus intercom Telephone, rotary dial CORINTHIAN® multi-key 11-line capacity plus intercom Telephone, rotary dial CORINTHIAN® multi-key 5-line capacity with 80-conductor mounting cord
2. COLORS	
05 13 15	Green Light Beige White
3. RINGERS	
(LR) (BA)	Less ringer Straight line biased ringer (No. 148 single gong)
4. SPECIAL	FEATURES
39 42	For hands free application. Mounting cord ter minated with spade terminals.  For hands free application. Mounting cord ter minated in plug.
5. TYPE OF	DIAL
M R	Metropolitan Regular

## Corinthian® Multi-Key Telephones; K-2230 Series



These telephones are used in conjunction with a key telephone system to provide access to a maximum of eleven lines plus an intercom line. The intercom line is connected when all buttons of the keys are released.\* The lower left hand, (red), pushbutton is used to place a hold on one or more lines. Visual signals, (lamps), are provided for all lines.

#### K-2231

Has one six-button key assembly and provides five-line capacity plus intercom. May be converted to eleven-line capacity by adding 180113 Expansion Kit and 869\*\*(15)650 80-conductor Mounting Cord. (The asterisks in the mounting cord number are to be replaced by the desired color code when ordering, see table at right.)

#### K-2232

Has two six-button key assemblies and provides eleven-line capacity plus all-buttons-released intercom.

#### K-2233

Same as K-2231 except factory equipped with 80-conductor mounting cord so future expansion to eleven-line capacity will require the addition of 180113 Expansion Kit only.

"NOTE: The K-2233 does not provide all-buttons-released intercom. However, if 180113 Expansion Kit is added, the intercom feature is automatically added.

Code	Description
1. BASIC TE	LEPHONE
K-2231 K-2232 K-2233	Telephone, TEL-TOUCH® CORINTHIAN® multi- key, 5-line capacity plus intercom. Telephone, TEL-TOUCH® CORINTHIAN® multi- key, 11-line capacity plus intercom. Telephone, TEL-TOUCH® CORINTHIAN® multi- key, 5-line capacity with 80-conductor mounting cord.
2. COLORS	
05 13 15	Green Light Beige White
3. RINGERS	
(LR) (BA)	Less ringer Straight line biased ringer (No. 148 single gong)
4. SPECIAL	FEATURES
30 39 40 42	No special feature For hands free application. Mounting cord terminated with spade terminals. Mounting cord terminated in plug. For hands free application. Mounting cord terminated in plug.
5. TYPE OF	DIAL
M R	Metropolitan Regular

## **Dials**



Type 10A—Miniature type with 23/8" numeral ring and automatic moveable finger stop. Designed for use in dial-in-handset telephones. Not provided with off-normal contacts.



Type 30—Standard type with 41/4" diameter numeral ring. Available in colors to match various telephone housings. (Replaces type 19 dial.)

Type 35—Identical to type 30 but has an additional set of normally open contacts for use with handsfree telephones. (Replaces type 28 dial.)



Type 33—Miniature type with 3" diameter numeral ring. (Replaces type 24 dial.)

Type 38—Identical to type 33 but has an additional set of normally open contacts for type telephones. (Replaces type 24(GR) dial)

#### **Rotary Dials**

Adjusted to a speed of 10 dial impulses per second, nominal, and a pulse ratio with a break period of 61.5% of the pulse duration. Governor minimizes forcing of dial return. The type 30 series rotary dials all employ the same gear train assembly to permit economical maintenance. All dials are smooth and quiet in operation.

Regular dials, (coded D), have numerals only; metropolitan dials, (coded G), have letters and numerals.

#### ORDERING INFORMATION, ROTARY DIALS

Code	Description
10A(G)450	Rotary dial, 2%" diameter metropolitan
30 * * (D) 450	Rotary dial, 41/4" diameter, regular
30 * * (G) 450	Rotary dial, 41/4" diameter metropolitan
33(D)450	Rotary dial, 3" diameter, regular
33(G)450	Rotary dial, 3" diameter, metropolitan
35 * * (D) 450	Rotary dial, 41/4" diameter, regular, for hands free application
35 * * (G) 450	Rotary dial, 41/4" diameter, metropolitan, for hands free applications
38(D)450	Rotary dial, 3" diameter, regular, for hands free application
38(G)450	Rotary dial, 3" diameter, metropolitan, for hands free application
**COLORS	
00	Black
02	Red
04	Yellow
05	Green
09	Ivory
11	Rose Pink
12	Aqua Blue
13	Light Beige
15	White
16	Sea Green



### Tel-Touch® (Pushbutton) Dials

Highly reliable, pre-tuned, transistorized, oscillators generate low-drift twin tones for optimum performance. Twelve-button matrix prevents future obsolescence. Type 32 is standard. Type 36 is designed for hands-free applications.

#### ORDERING INFORMATION, PUSHBUTTON DIALS

Code	Description
32(D)450	Pushbutton dial, regular
32(G)450	Pushbutton dial, metropolitan
36(D)450	Pushbutton dial, regular; for hands-free applications
36(G)450	Pushbutton dial, metropolitan, for hands-free applications

## **Handsets**





### Type 65

Standard handset for ITT telephones. Has four conductor coiled cord.

### Type 69

Similar to type 65 handset but with a pushbutton switch mounted in the stem of the handle for "push-to-talk" application. Available with either a five or a six-conductor coiled



Transmitter Capsule (75555)
High quality carbon type with gold plated carbon chamber. Frequency response, 200 to 4000 cps. DC operating current 30 to 75 milliamperes. DC resistance, approximately 45 ohms. 45 ohms.

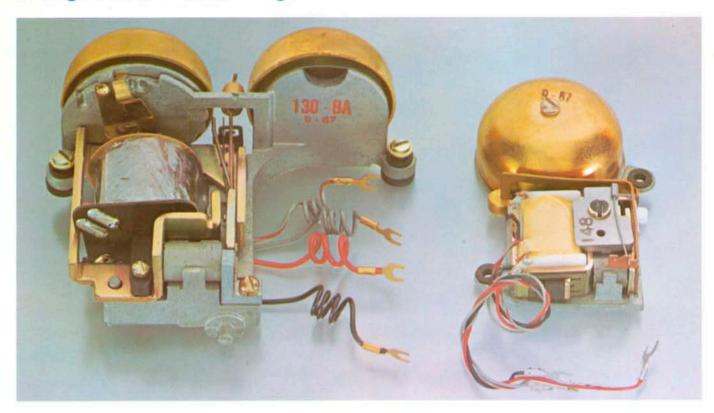


Receiver Capsule (75547)
Ring armature type using low mass diaphragm. Frequency response, 400 to 3300 cps. Impedance, approximately 150 ohms. Overload characteristics, 500 to 2500 cps. with no rattle or distortion with 1 milliwatt input. Includes anticlick varister circuit. (See page 16 for new central armature receiver.) ture receiver.)

Handsets include handle, caps, transmitter holder, transmitter capsule, receiver unit, and matching coiled cord. The handle and caps are molded of the same type high quality plastic as ITT telephone housings. Efficient transmitter and receiver units have excellent response characteristics.

Description
(Includes coiled cord)
Handset, standard Handset, equipped with push button switch and 5-conductor cord Handset, equipped with push button switch and 6-conductor cord
CORDS, COILED
Cord, Handset, standard, 4-conductor Cord, Handset, 10-feet, 4-conductor Cord, Handset, 15-feet, 4-conductor
Black Red Yellow (Type 65 only) Green (Type 65 only) Ivory (Type 65 only) Rose Pink (Type 65 only) Aqua Blue Light Beige Light Gray White

## **Straight Line Biased Ringers**



#### Type 130 (Two Gong)

The type 130 ringer is a two-gong, biased type unit with a double wound coil for party identification, (for 1000-ohm or 2650-ohm identifying ground). A mechanical volume control is standard but may be disabled by the installer. Can be used for bridged or divided ringing, and in conjunction with a gas tube for superimposed signaling thus providing selective ringing for four-party lines. Die cast metal frame is provided with shock mounting grommets. Mounting screws included.

#### Single Gong Miniature Types

Single-gong, biased type unit of miniature design. Includes a mechanical volume control which may be disabled by the installer. Single coil is tapped for party identification, (for 1000-ohm or 2650-ohm identifying ground). Die cast metal frame is provided with shock mounting grommets. Mounting screws included.

#### Type 148 (Illustrated)

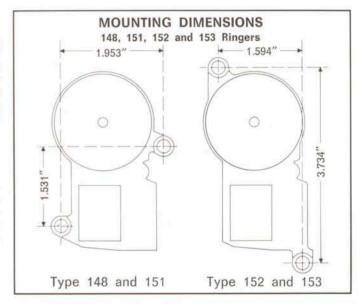
Type 148 has mounting holes located as shown in left hand figure in diagram at right. (For K-2554 TEL-TOUCH® wall and CORINTHIAN® multi-key telephones.)

#### **Type 153**

Similar to type 148 except for location of mounting holes. (For dial-in-handset telephones.) See diagram at right.

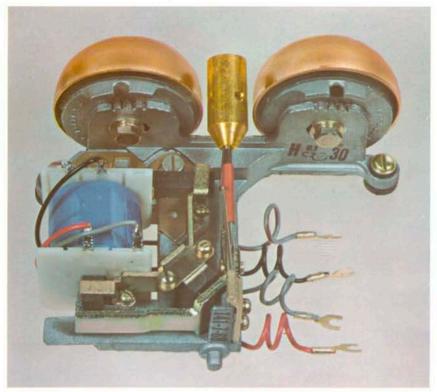
#### Gas Tube (75599)

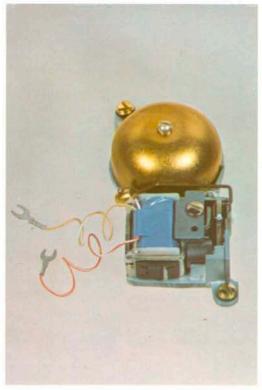
Cold cathode gas tube for use with a biased ringer for superimposed signaling.



Code	Description
130 (BA) 470	Ringer, biased, two-gong
148(BA)470	Ringer, biased, single-gong
153 (BA) 470	Ringer, blased, single-gong
75599	Tube, gas

## **Frequency Selective Ringers**





#### Two Gong Types

High impedance units of proven design. Adjustment for sensitivity is facilitated by a slotted head cam screw and locked by a separate lock screw. Die cast metal frame is provided with shock mounting grommets. Mounting screws included.

#### Type 131

Two-gong frequency selective ringer with single-wound coil. Includes volume control.

#### Type 133

Same as Type 131, but without volume control.

#### Type 141

Two-gong frequency selective ringer, double-wound coil with 1000-ohm identifying ground. Includes volume control.

#### **Type 142**

Same as Type 141 but without volume control.

#### Type 145

Two-gong frequency selective ringer, double-wound coil with 2650-ohm identifying ground. Includes volume control.

#### Type 146

Same as Type 145 but without volume control.

#### Single Gong Miniature Types

Single-gong frequency selective ringers of miniature design. Include mechanical volume control. Single coil is tapped for party identification, (for 1000-ohm or 2650-ohm identifying ground.) Die cast metal frame is provided with shock mounting grommets. Mounting screws included.

#### Type 151 (For K-2554 Wall Telephones)

Location of mounting holes is same as for 148 ringer. (Page 12)

#### Type 152 (For Trendline T.M. Telephones)

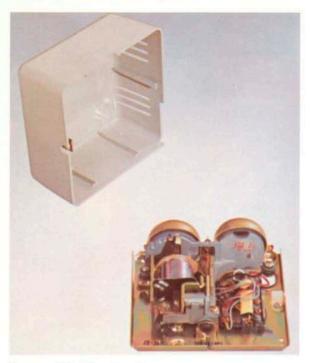
Location of mounting holes is same as for 153 ringer. (Page 12)

#### ORDERING INFORMATION

Code	Description/Frequency
131 () 470	Ringer (See description at left)
133 () 470	Ringer (See description at left)
141 () 470	Ringer (See description at left)
142[]470	Ringer (See description at left
145 () 470	Ringer (See description at left
146 () 470	Ringer (See description at left
151 () 470	Ringer (See description at left
152()470	Ringer (See description at left
	HARMONIC
(HA1)	33 1/3 cps
(HA2)	50 cps (Same as HC5)
(HA3)	
(HA4)	
(HA5)	25 cps
	SYNCHROMONIC
(HB1)	30 cps (Same as HC3)
(HB2)	42 cps
(HB3)	54 cps
(HB4)	66 cps
(HB5)	16 cps
	DECIMONIC
(HC1)	20 cps
(HC2)	
(HC3)	
(HC4)	_ 40 cps
(HC5)	50 cps (Same as HA2)

NOTE: Each frequency selective ringer includes capacitor when required.

## **Extension Ringers**



#### Type 139 Ringer Box

Designed to enclose a standard two-gong ringer, this unit will also house the K-144 common audible signal. Consists of a steel base plate with attached terminal board and a molded plastic housing. Available with ringer installed or less ringer. Units less ringer (LR) include a 190440-6 capacitor. (The capacitor is for use with ringers in frequency range of 16 through 30 cps.)



#### Type 75 Loud Ringing Bell

High impedance extension ringer designed for either indoor or outdoor installation. Features two horizontally mounted four-inch gongs which provide greater penetrating power than the old style vertically mounted gongs. Compatible with all types of circuits, including high impedance ringers, without causing line unbalance.

#### 79938 Ringer Mechanism

Straight line biased type mechanism with double wound coil. (Similar to 130 Ringer Mechanism.)

#### 79939 Ringer Mechanism

Frequency selective type mechanism with single wound coil. Available in harmonic, synchromonic, and decimonic frequencies. (Frequency is designated by part number suffix, see table.) (Similar to 133 Ringer Mechanism.)

#### ORDERING INFORMATION

Code	Description/Frequency
139(LR) 470 139(BA) 470 139(TBA) 470 139() 470	Ringer box, less ringer Ringer box with type 130 ringer Ringer box with type 130 ringer and gas tube for superimposed signaling Ringer box with frequency selective ringer (See below)
	HARMONIC
139(*A1)470	33 1/3 cps
139 ( * A2) 470	50 cps (Same as *C5)
139 (* A3) 470	66 2/3 cps
139(*A4)470	16 2/3 cps
139 (*A5) 470	25 cps
	SYNCHROMONIC
139(*B1)470	30 cps (Same as *C3)
139 (*B2) 470	42 cps
139 (*B3) 470	54 cps
139 (*B4) 470	66 cps
139 (*B5) 470	16 cps
	DECIMONIC
139(*C1)470	20 cps
139 ( * C2) 470	60 cps
139( *C3)470	30 cps (Same as *B1)
139( *C4) 470	40 cps
139 ( * C5) 470	50 cps (Same as *A2)

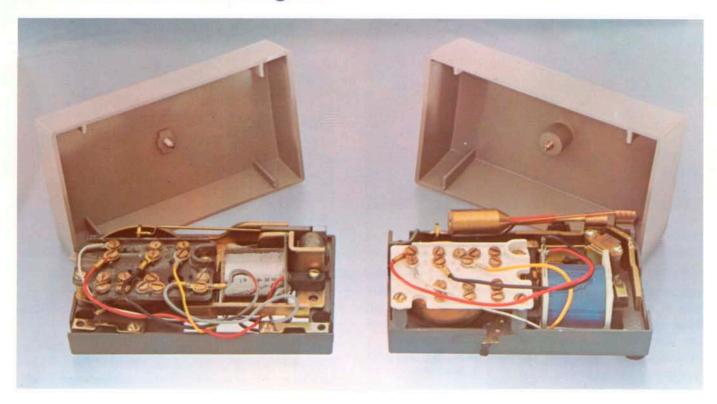
\*Replace asterisk with single digit code below

i	With	131	Ringer	installed	
2	With	133	Ringer	installed	
3	With	141	Ringer	installed	
4	With	142	Ringer	Installed	
5	With	145	Ringer	Installed	
6	With	146	Ringer	Installed	

Example: 139(2A1)470 indicates a type 139 ringer box with a 133 ringer,  $33\frac{1}{3}$  cps frequency.

Code	Description/Frequency	Ringer Mechanism
75 (LR) 301	Bell, loud ringing, less ringer mechanism	None
75(BA)301	Bell, loud ringing, straight line blased mechanism	79938
75()301	Bell, loud ringing, frequency selective mechanism	79939-(See below)
	HARMONIC	
75(HA1)301	33 1/3 cps	79939-1
75 (HA2) 301	50 cps (Same as HC5)	79939-2 or 15
75 (HA3) 301	66 2/3 cps	79939-3
75 (HA4) 301	16 2/3 cps	79939-4
75 (HA5) 301	25 cps	79939-5
	SYNCHRO	MONIC
75(HB1)301	30 cps (Same as HC3)	79939-6 or 13
75 (HB2) 301	42 cps	79939-7
75 (HB3) 301	54 cps	79939-8
75 (HB4) 301	66 cps	79939-9
75 (HB5) 301	16 cps	79939-10
	DECIMONIC	
75(HC1)301	20 cps	79939-11
75 (HC2) 301	60 cps	79939-12
75 (HC3) 301	30 cps (Same as HB1)	79939-13 or 6
75 (HC4) 301	40 cps	79939-14
75(HC5)301	50 cps (Same as HA2)	79939-15 or 2

## **Miniature Extension Ringers**



## Straight Line Biased Types

#### Type 136

Type 136 ringer is a double wound coil, single gong, straight line, biased type unit assembled on a metal base with molded plastic cover. Equipped with mechanical volume control and a terminal board for connections.

#### Type 138

Identical to type 136 except for the addition of a gas tube (for superimposed signaling) and the use of a larger cover.

## **Frequency Selective Types**

#### Type 137

Type 137 ringer is a single wound coil, single gong, frequency selective type of unit assembled on a metal base with molded plastic cover. Equipped with mechanical volume control and a terminal board for connections.

#### **Type 147**

Type 147 ringer is similar to type 137 but uses a double wound coil for party identification.

Code	Description	
136 (BA) 470 138 (TBA) 470 137 () 470 147 () 470	Ringer, extension; straight line biased. Ringer, extension; straight line biased with ga tube for super-imposed signaling. Ringer, extension; frequency selective, single wound coil. Insert code below. Ringer, extension; frequency selective, double wound coil. Insert code below.	
	HARMONIC	
(HA1) (HA2) (HA3) (HA4) (HA5)	33 1/3 cps 50 cps (Same as HC5) 66 2/3 cps 16 2/3 cps 25 cps	
	SYNCHROMONIC	
(HB1) (HB2) (HB3) (HB4) (HB5)	30 cps (Same as HC3) 42 cps 54 cps 66 cps 16 cps	
	DECIMONIC	
(HC1) (HC2) (HC3) (HC4)	20 cps 60 cps 30 cps (Same as HB1) 40 cps	
(HC5)	_ 50 cps (Same as HA2)	



#### Cinderella Telephones

Cinderella telephones are compact instruments of attractive appearance. Not equipped with an internal ringer they must have an externally connected ringer if a ringer is required. Connecting blocks are not included, as the terminal board of the extension ringer serves as the connecting block. If installation does not include extension ringer, order 32()783 connecting block separately.

#### K-701

The K-701 Cinderella telephone includes a combination dial and night light as standard. A separate power source of 6 to 8 volts AC or DC at a current of about 1/4 ampere is required to supply the lamp. Power transformer K-31()690 is recommended.

#### K-703

The K-703 telephone is similar to the K-701 but is not equipped with the dial and night light.

#### ORDERING INFORMATION (See inside of rear cover)

Code	Description		
1. BASIC TE	LEPHONE		
K-701	Telephone, Cinderella; with dial and night		
K-703	Telephone, Cinderella; less dial and night light		
2. COLORS			
11:	Rose Pink		
12	Aqua Blue		
13	Light Belge		
15	White		
16	Sea Green		
3. RINGERS			
(LR)	Less ringer		
4. SPECIAL	FEATURES		
30	No special features		
37	Message waiting lamp, 90-volt		
38	Message waiting lamp, 125-volt		
5. TYPE OF	DIAL		
M	Metropolitan		
R	Regular		
N	No dial-equipped with dial blank		



#### K-107(A)—Telephone Loudspeaker Set, the "ORATOR"

The K-107(A) loudspeaker set is designed for use with any standard type telephone to permit a group of people to hear both sides of a telephone conversation. A combination volume control and on-off switch is provided on the front panel. The housing is molded of the same type high quality plastic used in ITT telephone housings. Matching 9-foot cord is included. Anodized brushed aluminum face plate. Requires an external power supply of 18 to 22 volts AC or DC. Key system power supply may be used when available, otherwise order K-31(A)690 transformer separately.

#### ORDERING INFORMATION

Code	Description
K-10700(A)	Orator®, Black
K-10705(A)	Orator®, Green
K-10709(A)	Orator®, Ivory
K-10713(A)	Orator®, Light Beige
K-10714(A)	Orator®, Light Gray
K-10715(A)	Orator®, White
K-31(A)690	Transformer assembly, Input 105 to 125 volt, AC, 60 cps; Output, 15 to 18 volt, 2.25 volt amperes.



#### Central Armature Receiver Unit

Performance characteristics similar to those for ring armature receiver unit shown on page 11. No. 88250-1 has pressure type connections and is used in Trendline<sup>T,M</sup>-telephones. No. 88250-3 has screw terminals and with adapter No. 88720-1 is designed for use in standard handsets.

Telephone code numbers are made up

in five steps as illustrated in the following example: 500 13 (BA) 30 M SELECT THE DIAL SELECT THE TELEPHONE M Metropolitan type (letters Use table of contents on and numerals) inside of front cover to locate Regular type (numerals the type of instrument only) desired. N No dial-has dial blank SELECT THE COLOR SELECT SPECIAL FEATURE SELECT THE RINGER OPTION RINGER OPTION CODE COLOR CODE CODE SPECIAL FEATURE 30 No special feature (LR) Less ringer (BA) 33 Lift-to-talk. Straight line biased ringer 00 Black Straight line biased ringer and (TBA) 34 Pushbutton ground gas tube for superimposed Separate ring and talk 35 signaling. circuits. Common audible signal (For (CA) Red three-line telephone) 37 Message waiting lamp (90 volt) Frequency selective ringers. (-)(See below) Message waiting lamp 38 (125 volt) HARMONIC 04 Yellow Equipped for "Hands Free" 39 operation (\*A1) 33 1/3 cps. (\*A2) 50 cps (Same as \*C5) 40 Mounting cord equipped with plug (\*A3) 66 2/3 cps 05 Green (\*A4) Combination of codes 39 42 16 2/3 cps 8 40 (\*A5) 25 cps 44 A-lead control circuit (Per-SYNCHROMONIC 09 Ivory mits using single line telephones in a key system.) (\*B1) 30 cps (Same as \*C3) (\*B2) 42 cps (\*B3) 54 cps Rose Pink 11 Note: With exception of Code 30 (\*B4) 66 cps special features are not available (\*B5) 16 cps on all telephones. Special feature availability is shown on page with DECIMONIC Aqua Blue 12 each telephone. (\*C1) 20 cps (\*C2) 60 cps 30 cps (Same as \*B1) (\*C3) 13 Light Beige (\*C4) 40 cps (\*C5) 50 cps (Same as \*A2) Light Gray 14 \*For telephones equipped with twogong frequency selective ringers, replace asterisk with single digit code below. (See page 13 for description 15 White of each ringer.) 1 Type 131 ringer 4 Type 142 ringer 2 Type 133 ringer 5 Type 145 ringer Sea Green 16 3 Type 141 ringer 6 Type 146 ringer Examples: (1A1),(1A2), etc. For telephones equipped with single-Turquoise 30 gong frequency selective ringer, replace asterisk with the letter W. Examples: (WA1), (WA2), etc. NOTE: Color availability is shown on page with each telephone.

#### HAND WRITTEN PRICES REMOVED FROM ITT CATALOG SCAN OF TELEPHONE GUIDE 1968 ONLY ITEMS PRICED ARE LISTED

#### SORTED BY PAGE NUMBER AND PART NUMBER

GUIDE PAGE	ITT PART NUMBER	DESCRIPTION	PRICE NOTED
1	1027	CORD, HANDSET	2.50
1	K-200/254	TRENDLINE, ROTARY	39.80
1	K-220	TRENDLINE HANDSET, ROTARY	22.60
1	K-2200/2254	TRENDLINE, TEL-TOUCH	49.95
1	K-2220	TRENDLINE HANDSET, TEL-TOUCH	32.75
1	K-AC	TRENDLINE WALL BASE	12.40
1	K-AD	TRENDLINE DESK BASE	14.40
2	K-500	DESK SET, ROTARY	19.90
2	K-502	DESK SET, ROTARY W/EXCLUSION SW	28.50
2	K-554	WALL SET, ROTARY	19.90
3	K-2500	DESK SET, TEL-TOUCH	38.50
3	K-2502	DESK SET, TEL-TOUCH W/EXCLUSION SW	47.60
3	K-2554	WALL SET, TEL-TOUCH	38.50
4	K-2510	DESK SET, TWO LINE TEL-TOUCH	47.85
4	K-510	DESK SET, TWO LINE ROTARY	29.95
4	K-557	DESK SET, TWO LINE ROTARY W/HOLD	31.00
4	K-558	WALL SET, TWO LINE ROTARY	29.25
5	144	COMMON AUDIBLE SIGNAL, THREE LINE	16.25
5	K-2576	DESK SET, THREE LINE TEL-TOUCH	73.88
5	K-2577	DESK SET, THREE LINE TEL-TOUCH W/EXCLUSION	73.30
5	K-576	DESK SET, THREE LINE ROTARY	62.63
5	K-577	DESK SET, THREE LINE ROTARY W/EXCLUSION	63.90
6	K-564	DESK SET, 6 BUTTON ROTARY W/CORD & PLUG	68.00
6	K-565	DESK SET, 6 BUTTON ROTARY, W/EXCLU	64.00
7	K-2564	DESK SET, 6 BUTTON TEL-TOUCH W/CORD & PLUG	77.40
7	K-2565	DESK SET, 6 BUTTON TEL-TOUCH, W/EXCLU	83.40
8	K-231	DESK SET, CORINTHIAN, 6 BUTTON ROTARY	87.50
8	K-232	DESK SET, CORINTHIAN, 12 BUTTON ROTARY	128.30
8	K-233	DESK SET, CORINTHIAN, 6 BUTTON ROTARY W/12 B CORD	106.30
9	K-2231	DESK SET, CORINTHIAN, 6 BUTTON TEL-TOUCH	106.10
9	K-2232	DESK SET, CORINTHIAN, 12 BUTTON TEL-TOUCH	146.90
9	K-2233	DESK SET, CORINTHIAN, 6 BUTTON TEL-TOUCH W/12 B CORD	124.90
10	30	DIAL, STANDARD FOR K-500 STYLE	5.25
10	32	DIAL, TEL-TOUCH 12 BUTTON	20.13
10	33	DIAL, MINATURE	6.95
10	10A	DIAL, MINATURE FOR TRENDLINE	6.00
11	65	HANDSET, K-5XX AND K-25XX TEL SETS	8.75
11	69	HANDSET, K-5XX AND K-25XX TEL SETS, W/PTT	11.82
11	75547	RECEIVER CAPSULE	3.75
11	75555	TRANSMITTER CAPSULE	1.35
12	130	STRAIGHT LINE BIASED RINGER, TWO GONG SINGLE COIL	4.10
13	131	FREQUENCY SELECTIVE RINGER, TWO GONG, W/VOL CONT	4.85
13	133	FREQUENCY SELECTIVE RINGER, TWO GONG	4.60
13	141	FREQUENCY SELECTIVE RINGER, TWO GONG, 1000 OHM W/VOL CONT	4.85
13	142	FREQUENCY SELECTIVE RINGER, TWO GONG, 1000 OHM	4.60
13	145	FREQUENCY SELECTIVE RINGER, TWO GONG, 2500 OHM W/VOL CONT	4.85
13	146	FREQUENCY SELECTIVE RINGER, TWO GONG, 2500 OHM	4.60
13	151	MINIATURE SINGLE GONG RINGER	4.85
13	152	MINIATURE SINGLE GONG RINGER, FOR TRENDLINE	4.85
13	153	MINIATURE SINGLE GONG RINGER 1000/2650 OHM FOR TRENDLINE	4.60
14	75	LOUD BELL ASSY, LESS RINGER MECHANISM	22.30
14	139	RINGER MOUNTING BOX	6.75
14	79938	RINGER MECHANISM FOR TYPE 75, STR LINE BIASED	3.10
14	79939	RINGER MECHANISM FOR TYPE 75, FREQ SEL	3.75
15	136	MINIATURE EXTENSION RINGER, STR LINE BIASED	6.75
15	137	MINIATURE EXTENSION RINGER, FREQ SEL	6.75
16	K-107(A)	ORATOR LOUDSPEAKER	30.00
16	K-701	CINDERELLA ROTARY TELEPHONE, LR	22.50
. •			22.00