Telephone Guide

ITT

Telecommunications—Apparatus

Telephone Guide, 1978

Printed in vertical format 8 ½ X 11 inches on 80# coated stock, in booklet form using four color process lithography.

Published in 1978, providing an overview of the telecommunications apparatus available from ITT during this period.

Telephones by ITT Telecommunications—

The Phones You Install and Forget.

ITT offers an extensive line of modern telephones, components and parts to fit your every need. Single-line, two-line, three-line and multi-line key telephones are available in all the most wanted decorator colors, and in both pushbutton and rotary dial models. There is also a large selection of message waiting instruments for the modern hotel and motel where first-rate efficiency is so very important. Many phones can be ordered with a broad selection of optional features to further add to their utility.

ITT also gives you the option of modularity. Both installation time and costs are cut to a minimum with the advent of the modular phone, offered in a wide variety of colors and three degrees of modularity.

All of these telephones are universal in application thanks to long loop efficiency, automatic transmission equalization, automatic sidetone balancing and excellent discrimination against noise.

Also, ITT offers a comprehensive line of components where the qualities of efficiency and durability are outstanding.

Fine workmanship, time-proven design and top-notch quality all describe ITT telephones and components which remain unsurpassed in an industry where trouble-free performance is a must.

Select your ITT telephone.

Install it ... and forget it!

Table of Contents

How to Custom Order Your Telephone

ITT offers telephones in a wide variety of colors, models and features. The following chart makes the process of deciding upon and ordering the exact phones you want an easy and pleasant "shopping" assignment—in six easy steps!

Note: *All options are not available on all models. See ORDERING INFORMATION tables for option availability.*

1. Select the Telephone
Select the basic model.

2. Select the Color
Color availability of each telephone model is shown on the page with that model.
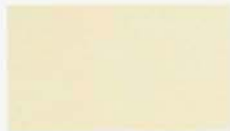
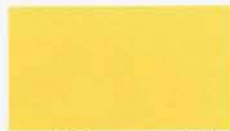|	
00 Black (-3)	43 Burnt Orange (-112)
05 Moss Green (-51)	44 Light Ash
09 Ivory (-50)	45 Cocoa Brown (-113)
12 Aqua Blue (-64)	46 Harvest Gold (-111)
13 Beige (-60)	47 Cherry Red (-114)

Numbers in brackets (-00) are WE color numbers

15 White (-58)

The colors shown here are approximate.

3. Select the Version
O Conventional
F Fully Modular
H Half Modular
Q Quarter Modular

4. Select the Ringer Option
LR Less Ringer
BA Straight-line biased ringer
CA Common Audible Signal

5. Select the Special Feature
20—No special feature. Desk sets include a silver-satin line cord. Half- and full-modular desk sets are less line cord and include a modular jack to accept a modular line cord. Quarter- and full-modular wall sets include a modular plug for installation to a standard modular wall jack.

21—Same as 20 except equipped with a 9-foot (274 cm) handset cord.

24—Same as 20 except equipped with a grounding button.

27—Same as 20 except equipped with 90-volt message-waiting lamp.

28—Same as 20 except equipped with 125-volt message-waiting lamp.

29—Single-line handsfree with 4-conductor silver-satin line cord.

30—No special feature. Desk sets include a color-matched line cord.

31—Same as 30 except equipped with a 9-foot (274 cm) handset cord.

34—Same as 30 except equipped with a grounding button.

37—Same as 30 except equipped with 90-volt message-waiting lamp.

38—Same as 30 except equipped with 125-volt message-waiting lamp.

39—Equipped to operate with an external speakerphone. Also designates an integral single-line handsfree set with 6-conductor color-matched line cord.

40—Standard. Indicates mounting cord terminated in 50-contact plug (or plugs).

41—Same as 40 except equipped with push-button ground.

42—Same as 40 except equipped to operate with an external speakerphone. Also used as special feature code for some integral handsfree sets.

44—Single-line set wired for use in a key system. Desk set has 4-conductor, silver-satin line cord.

46—Same as 42 except equipped with a push-button switch. When used with a 6-button key set, this pushbutton is wired as a grounding button (normally open contacts). When used with a 10/20-style set, the pushbutton is wired as an Operator Recall button (normally closed contacts).

56—Same as 46 but includes a headset jack with switch.

76—Same as 42 except equipped with automatic exclusion with exclusion-release button.

6. Select the Dial
M Metro type (letters and numerals)
R Regular type (numerals only)
N No dial—has dial blank (K-500 and K-554 sets only)
T Pushbutton pulse (Tel-Pulse) dial (Metro type only)

Note: *The complete code number for each telephone is made up with a number from each of the six steps.*

Example: 500-13-F-BA-20-M

500 is the basic model number; (single-line, desk, rotary)

13 is the color (beige)

F is the version (Fully Modular)

(BA) is the Ringer Option (straight-line)

20 is the special feature (in this case no special feature)

M is the type of dial (Metro)

Modular Telephones—

No Longer a Concept

Now you can install or replace telephones within seconds. You simply attach the plug-in cord to a wall jack, connect the handset and base with a handset cord and your fully modular phone is installed.

It's easy and saves you money! Installation time and costs are cut to a minimum. And, your customers can select the color and style phone to perfectly accent their home and office. ITT offers just about every model imaginable in a multitude of color variations and degrees of modularity.

Full-Modular Telephones are furnished less line and handset cords and are equipped with jacks to accept plug-in cords. They are offered in standard desk and wall models with rotary or pushbutton dial. Wall models include a modular plug as part of the telephone baseplate . . . no adapter is required.

Half-Modular Telephones are furnished with hardwired handset cord and less line cord. The base is equipped with a jack to accept a plug-in line cord. Half-modular sets are offered in desk models only, including the Trendline.

Quarter-Modular Telephones are furnished with a hardwired handset cord. Desk sets are equipped with a line cord that is hardwired to the set and plug-ended at the wall end. Wall sets include a modular plug as part of the telephone baseplate.

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AREA
CODE   601
287-3771

Rotary Dial Telephones—

Basic to Communications

With us since before the turn of the century, the Rotary Dial Telephone has been innovated, perfected, and stands as a testimony to superb engineering know-how.

Available in a wide variety of decorator colors and designed to meet specific individual requirements, ITT offers the following line of Rotary Dial Telephones.

- Trendline series
- Single-line K-500 series
- Two and three-line K-500 series with hold
- 6-Button Key telephones
- 10/20/30 Button Key telephones
- Handsfree telephones

The Trendline™ Rotary Telephones

The Trendline telephones offer the ultimate in convenience and attractive appearance. The handset is a complete telephone inasmuch as the user may make any number of calls without operating the hookswitch plunger in the base. After each call, the user need only momentarily depress the recall button, located below the dial, to get another dial tone. Dial illumination is provided by an incandescent lamp. A transformer must be ordered separately when this feature is desired.

These telephones may be ordered as complete instruments, or as separate components.

Complete Telephones K-200 (Desk) and K-254 (Wall)

Conventional versions consist of the handset, the base and a retractile handset cord. Desk telephones also include a line cord. Modular versions are equipped as described in the ordering information.

Components

Handset K-220

The handset includes transmitter, receiver, network, dial, dial light and recall button.

Handset Cords 1027 (Non-Modular)

The handset cord plugs into the handset and into the base. It comes packaged in an individual container.

Bases—Wall Base K-AC and Desk Base K-AD

The base includes hookswitch (line switch) and ringer (when specified). The conventional and quarter-modular desk versions include a line cord which plugs into the base. The half-modular bases do not include a line cord.

Ordering Information, Rotary Trendline Sets

ITEM	CODE	
1. Basic Sets	0200 Desk Set	
	0254 Wall Set	
2. Colors	00, 05, 09, 12, 13, 15, 43, 44, 45, 46, 47	
3. Versions	O All	
	H 0200 only	
	Q 0200 only	
4. Ringers	BA (153 single-gong type)	
	LR	
5. Special Features	20, 27, 28 H and Q versions only	
	30, 37, 38 O versions only	
Dials	M, R	
Components	0220**-30M	Handset (does not include handset cord)
	AC1**-OBA	Wall base with ringer
	AC1**-OLR	Wall base less ringer
	AD1**-OBA	Desk base with ringer
	AD1**-OLR	Desk base less ringer
	AD1**-HBA	Desk base with ringer, half-modular (does not include line cord)
	AD1**-HLR	Same, less ringer
	AD1**-QBA	Desk base with ringer, quarter-modular
	AD1**-QLR	Desk base less ringer, quarter-modular
	1027**-066	Handset cord, standard 66 inches (168 cm)
	1027**-108	Handset cord, 9 feet (274 cm)
	1027**-156	Handset cord, 13 feet (396 cm)
	000031-101	Transformer, dial lamp

**Insert 2-digit color code in place of asterisks.

Single Line Rotary Dial Telephones

These telephones have an outstanding reputation for trouble-free operation. The quality of the components, the workmanship, and the time-tested design assure reliable operation and minimum maintenance. Available in a variety of models, colors, and features, these sets are equipped with a new printed-circuit network which makes repair easier.

Desk (K-500) and Wall (K-554) Sets

These "standard of the industry" instruments are now available in modular versions, as well as in the conventional version.

Rotary Dial Desk Phone With Exclusion Feature (K-502)

The addition of the exclusion feature assures total privacy when desired. Lifting the left hand cradle plunger will temporarily disconnect extension phones, and the conversation is limited to the one desired phone, insuring privacy. Replacing the handset automatically restores the connection to other phones. Includes 6-conductor desk stand cord.

Ordering Information, K-500 Series Single-Line and 2-Line Sets

ITEM	CODE
1. Basic Sets	0500 Desk Set 0502 Desk Set, manual exclusion 0554 Wall Set
2. Colors	00, 05, 09, 12,* 13, 15, 43, 44, 45, 46,* 47* (*except 0502)
3. Versions	O All F 500, 554 only H 500 only Q 500, 554 only
4. Ringers	BA (130 type) LR
5. Special Features	20 500; 554F and Q 21 500; 554Q 24 500; 554F and Q 27 500; 554F and Q 28 500; 554F and Q 30 502; 554 31 554 (except modular) 34 502, 554 (except modular) 37 554 (except modular) 38 544 (except modular) 39 500 (except modular) 44 500, 554
6. Dials	M All N 500, 554 with feature code 20 or 30 R All

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Two-Line and Hold Sets

Desk (K-575) and Wall (K-555) Models
One line can be held while placing or answering a call on the second line which may be CO, PBX, or manual intercom.

Note: If more than one set is to be connected to two outside lines, unless the sets are in the same immediate area, 3-line sets are recommended. (2-line sets give no visual indication when another set is busy on one of the lines.) 2-line sets are generally used in the following applications:

(1) 1 set; 2 CO/PBX lines, an extension ringer for one of the lines.

(2) 2 sets; 1 CO/PBX line connected to both sets; one manual intercom line between the two sets.

(3) Two or more sets in same immediate area; 2 CO/PBX lines; one phone rings on one line and another phone rings on the other line.

Three-Line and Hold Sets

These telephones provide access to three lines without the use of external switching equipment. The three lines may be CO, PBX, intercom or a combination of these. The six keys are arranged in pairs. The right hand key of each pair is the line key, and the left hand key of each pair is the HOLD key for that line. The right hand pair may be used for manual intercom* with the HOLD key modified for signaling. Visual signals (lamps) are provided to indicate a busy line or an incoming call on a line. A power transformer (P/N 41-101) must be ordered separately for operation of busy lamps—under the HOLD buttons.

Model K-576
Model 576 is the standard 3-line set.

Model K-577, Exclusion Type
Similar to model 576, it is equipped with an exclusion switch to provide privacy on one predetermined line.

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 a phone or externally in a 139 type ringer box.

Power Transformer
The 41 transformer provides power to operate busy lamps for a maximum of seven three-line telephones. Must be ordered separately.

*Manual intercom requires a power supply that provides SIGNAL and TALK power. Lorain T-16A or equivalent power supply will provide power for a maximum of six telephones.

Ordering Information, K-500 Series
2-Line, 3-Line and Hold Sets

ITEM	CODE	
1. Basic Sets	0555	Wall Set, 2-line with hold
	0575	Desk Set, 2-line with hold
	0576	Desk Set, 3-line standard
	0577	Desk Set, 3-line exclusion
2. Colors	00, 05, 09, 13, 15, 43,* 44, 45 (except 0576 and 0577)	
3. Versions	O	
4. Ringers	BA, LR All	
5. Special Features	30 0555, 0575	
	40, 41 0576, 0577	
6. Dials	M, R	
Miscellaneous	000144-OCA	Common audible signal 0576, 0577
	000041-101	Transformer, for busy lamp operation for 3-line sets 0576, 0577

6-Button Key Telephones

These telephones are used with a multi-line key telephone system to provide access to a maximum of five lines. The left hand (red) button is used to place a hold on one or more outside lines. The five right hand buttons are used for line pickup, while the three buttons to the extreme right are convertible to non-locking operation for manual signaling or for control of semi-automatic exclusion. A signal lamp is provided beneath each of the five pickup buttons to indicate the status of the associated line, whether it is idle, busy, on hold, or has an incoming call. A lamp may also be installed beneath the hold button to signal that another (predetermined) station in the system is busy.

Model K-564

The K-564 is the standard 5-line key set. It is equipped with a 34-conductor mounting cord terminated in a 50-contact plug and is available with or without a grounding button.

Model K-565, Feature Codes 40 and 41

This model assures privacy whenever desired. Lifting the left hand cradle plunger approximately ¼ inch disconnects any subsequent multipled telephones from line 1, or the exclusion switch may be used to control semiautomatic exclusion. Comes equipped with a 42-conductor mounting cord, a manual exclusion switch, and with or without a grounding button.

Model K-565, Feature Codes 42 and 46

This model with feature code 42 is equipped with a 50-conductor mounting cord, an additional set of contacts in the hookswitch for on-off control of handsfree equipment, and an additional set of off-normal contacts in the dial to shunt the handsfree speaker during dialing. *Includes a manual exclusion plunger, but does not include the manual exclusion switch.* To add the manual exclusion feature, order 79971-001 Exclusion Switch Assembly separately. With feature code 46, this model is equipped with a grounding (red) button.

Model K-566, Feature codes 40 and 41

Same as K-564 except equipped for hookswitch button-restoration and includes an operator recall (black) button.

Model K-567, Feature Codes 40, 41, 42, 46

Same as K-565s described above except equipped for hookswitch button-restoration and includes an operator recall button.

Ordering Information, Rotary 5-Line Sets

ITEM	CODE
1. Basic Sets	0564 Desk Set, 5-line standard
	0565 Desk Set, 5-line special
	0566 Same as 564 with button restoration
	0567 Same as 565 with button restoration
2. Colors	00, 05, 09, 13, 15, 44, 45
3. Versions	O
4. Ringers	BA, LR All
5. Special Features	40, 41 All
	42, 46 0565, 0567 only
6. Dials	M, R

10/20/30 Button Key Telephones

Used with a key telephone system, these phones provide access to a maximum of 29 lines. The red button is used to place a hold on one or more outside lines, while remaining buttons are used for line pickup or they may be converted to non-locking operation for manual signaling or for control of semi-automatic exclusion. (Manual exclusion control is not offered.) A signal lamp is provided beneath each of the pickup buttons to indicate the status of the associated line—whether idle, busy, held or call-incoming. A lamp may also be installed beneath the HOLD button and connected to an external circuit such as a station-busy circuit. Further important features include individual designation tabs installed under the cap of each button for convenience in changing or adding button designations. All units are equipped to be used with external handsfree (speakerphone) equipment.

Hookswitch Button Restoration Feature*

All desk models are provided with hookswitch button restoration. However, this feature can be disabled by the installer if not wanted.

Operator Recall Feature

Units coded with suffix 46 include an operator recall button which is normally required when hookswitch button restoration is used.

Automatic Exclusion (Privacy) Feature (CO/PBX lines)

Units coded with suffix 76M include an automatic exclusion (privacy) circuit and a privacy release button. To ensure privacy, all sets in a key system must be equipped with the privacy circuit. A kit, P/N 182316-101 can be installed to provide this feature.

9-Line Sets K-830 (Desk) and K-854 (Wall)

Both of these 10-button units provide one HOLD and nine convertible (pickup or signaling) buttons. Equipped with a 50-conductor mounting cord terminated in a single 50-contact plug.

9-Line Set with Busy-Lamp Field, K-835, (Desk Only)

This set includes a Busy-Lamp Field with busy lamps for 24 stations. The 100-conductor mounting cord is terminated in two 50-contact plugs—one dedicated to the busy lamp field.

19-Line Set K-831 (Desk)

This 20-button set provides one HOLD button and nineteen convertible (pickup or signaling) buttons. Equipped with a 100-conductor mounting cord terminated in two 50-contact plugs.

29-Line Sets K-861

These large capacity sets are similar to the 9-line and 19-line sets except they are slightly larger and are equipped with a headset jack and switch. The 75-pair mounting cord is terminated in three 50-contact plugs.

*Operating the handset cradle restores any operated line button to unoperated position. An operator recall button is provided for signaling a PBX operator or transferring a call. The purpose of hookswitch button restoration is to prevent a user from inadvertently picking up a line which is being held by another party and possibly losing the call.

Ordering Information, Multi-line Key Sets

ITEM	CODE	
1. Basic Sets	0830 Desk Set, 9-line	
	0831 Desk Set, 19-line	
	0835 Desk Set, 9-line with BLF	
	0854 Wall Set, 9-line	
	0861 Desk Set, 29-line	
2. Colors	00, 05, 13, 15, 44, 45	
3. Versions	O	
4. Ringers	BA (148-DBA)	
	LR	
5. Special Features	42 Except 0861	
	46 Except 0854 and 0861	
	56 0861 only	
	76 All	
6. Dials	M	
Miscellaneous	9003**-102	Cord, mounting, 100-conductor
	180658-101	Diode, station busy
	181144-***	Faceplate, 10-button desk
	181132-***	Faceplate, 10-button wall
	181143-***	Faceplate, 20-button desk
	181531-101	Kit, 10 to 20 button expansion (order 9003 cord and 181143 faceplate separately)
	182316-101	Kit, CO/PBX line exclusion
	182623-101	Kit, intercom privacy (set must be equipped with CO/PBX line exclusion)

**Substitute color code as follows:

00 Black	15 White
05 Moss Green	44 Light Ash
13 Beige	45 Cocoa Brown

***Substitute color code as follows:

Code	Color of Faceplate	Color of Phone
101	Charcoal	Black (00)
102	Light Green	Moss Green (05)
103	Muted Beige	Beige (13)
104	Light Gray	White (15)
105	Burnt Orange	—
106	Light Ash	Cocoa Brown (45)
107	Cocoa Brown	Light Ash (44)
108	Harvest Gold	—
109	Cherry Red	—
110	Clear	—
111	Woodgrain	—

Handsfree Telephones
Single-Line, 7-Line, and 17-Line

These telephones are equipped with a directional microphone and an amplifier-speaker, (enclosed in a single attractive housing), to permit handsfree operation. The phone can also be used in the conventional (handset) manner. To answer or place a call in the handsfree mode, the user simply presses the ON button. After the conversation is completed, he presses the OFF button. When the set is in the handsfree mode, lifting the handset from the cradle will automatically switch the circuit to conventional (handset) operation. Replacing the handset will return the set to the handsfree mode.

A lamp in the ON button indicates when the handsfree feature is on, and a lamp in the OFF button indicates when the user's voice is being transmitted. A manual volume control for the receiver is also provided to compensate for local noise conditions and incoming voice levels.

Power for the handsfree circuitry is provided by a wall-receptacle-mounted transformer included with the set. The set will operate in the conventional (handset) mode without power from the transformer.

7-Line Key Telephone (K-842)
A 10-button model with 7 buttons for line pickup, one for HOLD and two for handsfree ON and OFF.

17-Line Key Telephone (K-843)
A 20-button model with 17 buttons for line pickup, one for HOLD and two for handsfree ON and OFF.

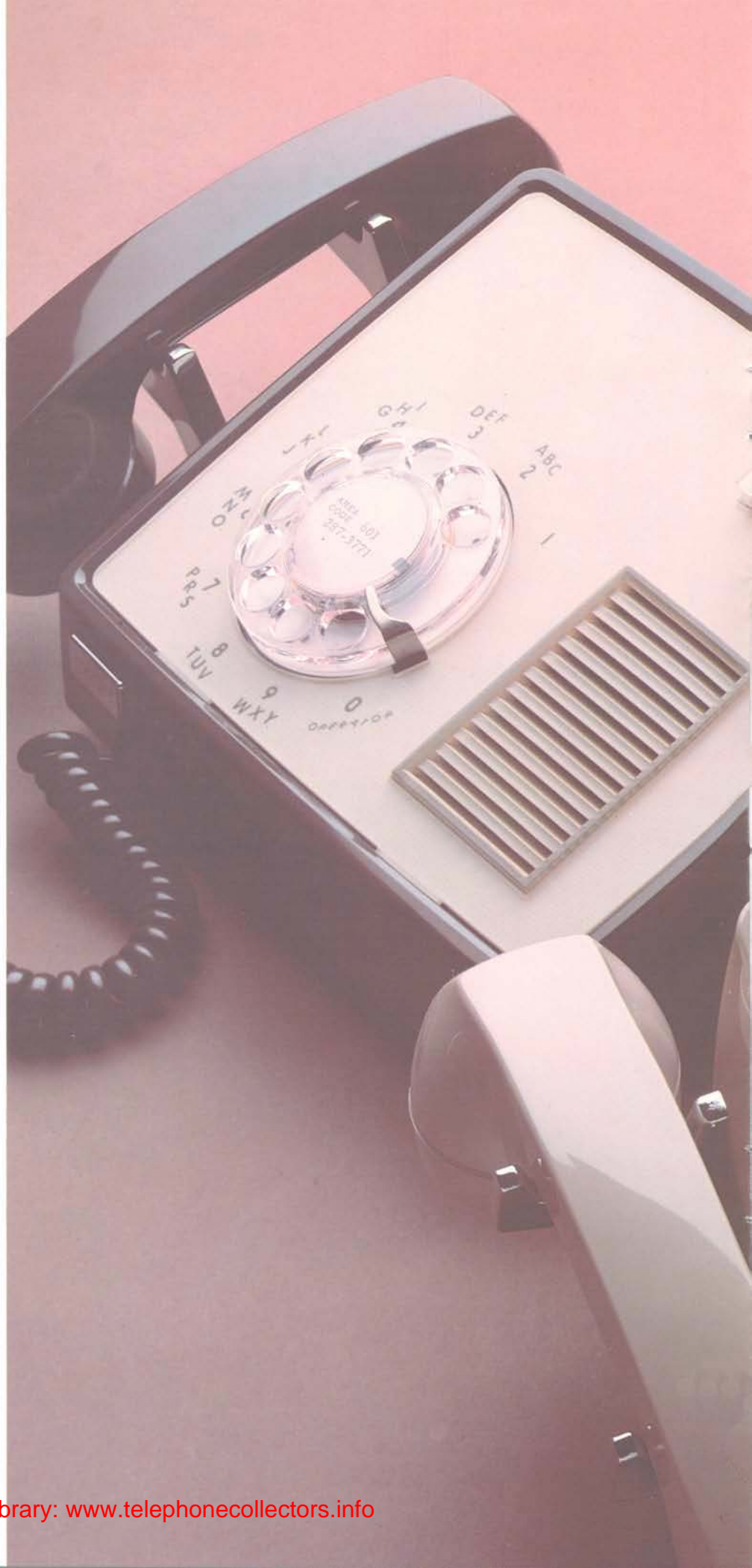### Single-Line Telephone (K-844)
Designed for convenient handsfree operation where only a single-line instrument is required. Three buttons provide ON, OFF, and PRIVACY for the handsfree circuitry. Depressing and holding down the PRIVACY button disables the transmit mode, so the distant party cannot hear local conversation.

Ordering Information, Handsfree Sets

ITEM	CODE	
1. Basic Sets	0842 Desk Set, 7-line HF	
	0843 Desk Set, 17-line HF	
	0844 Desk Set, Single-line HF	
2. Colors	00, 05, 13, 15, 44, 45	
3. Versions	O All	
	Q 0844 only	
4. Ringers	BA (148-DBA)	
	LR	
5. Special Features	29, 39 0844 only	
	42, 76 0842, 0843 only	
6. Dials	M	
Miscellaneous	181768-101	Power Transformer (included with set)
	181790-***	Faceplate, K-842
	181791-***	Faceplate, K-843
	181875-***	Faceplate, K-844
	181795-***	Grille

***Substitute color code as follows:

Code	Color of Faceplate and Grille	Color of Phone
101	Charcoal	Black (00)
102	Light Green	Moss Green (05)
103	Muted Beige	Beige (13)
104	Light Gray	White (15)
106	Light Ash	Cocoa Brown (45)
107	Cocoa Brown	Light Ash (44)

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(601) 287-3771

Pushbutton Telephones—

Convenience and Efficiency

Two qualities ITT tries to build into their entire line of telephones are convenience and efficiency. But nowhere are these factors more obvious than in the pushbutton telephone.

ITT's Tel-Touch™ and Tel-Pulse™ telephones are right in stride with the pushbutton age of today. Available in a wide variety of decorator colors and designed to meet specific individual needs, ITT offers the following line of pushbutton telephones.

- Trendline series
- Single-line K-2500 series and K-3554
- Two and three-line telephones with hold
- 6-Button Key telephones
- 10/20/30 Button Key telephones
- Handsfree telephones

The Trendline™ Pushbutton Sets

The Trendline telephones offer the ultimate in convenience and attractive appearance. The handset is a complete telephone inasmuch as the user may make any number of calls without operating the hookswitch plunger in the base. After each call, the user need only momentarily depress the recall button, located below the dial, to get another dial tone. Dial illumination is provided by an incandescent lamp. A transformer must be ordered separately when this feature is desired.

These telephones may be ordered as complete instruments, or as separate components.

Complete Telephones K-2200 (Desk) and K-2254 (Wall)

Standard versions consist of the handset, the base and a retractile handset cord. Desk telephones also include a line cord. Modular versions are equipped as described on the inside front cover.

Components

Handset K-2220

The handset includes transmitter, receiver, network, dial, dial light and recall button.

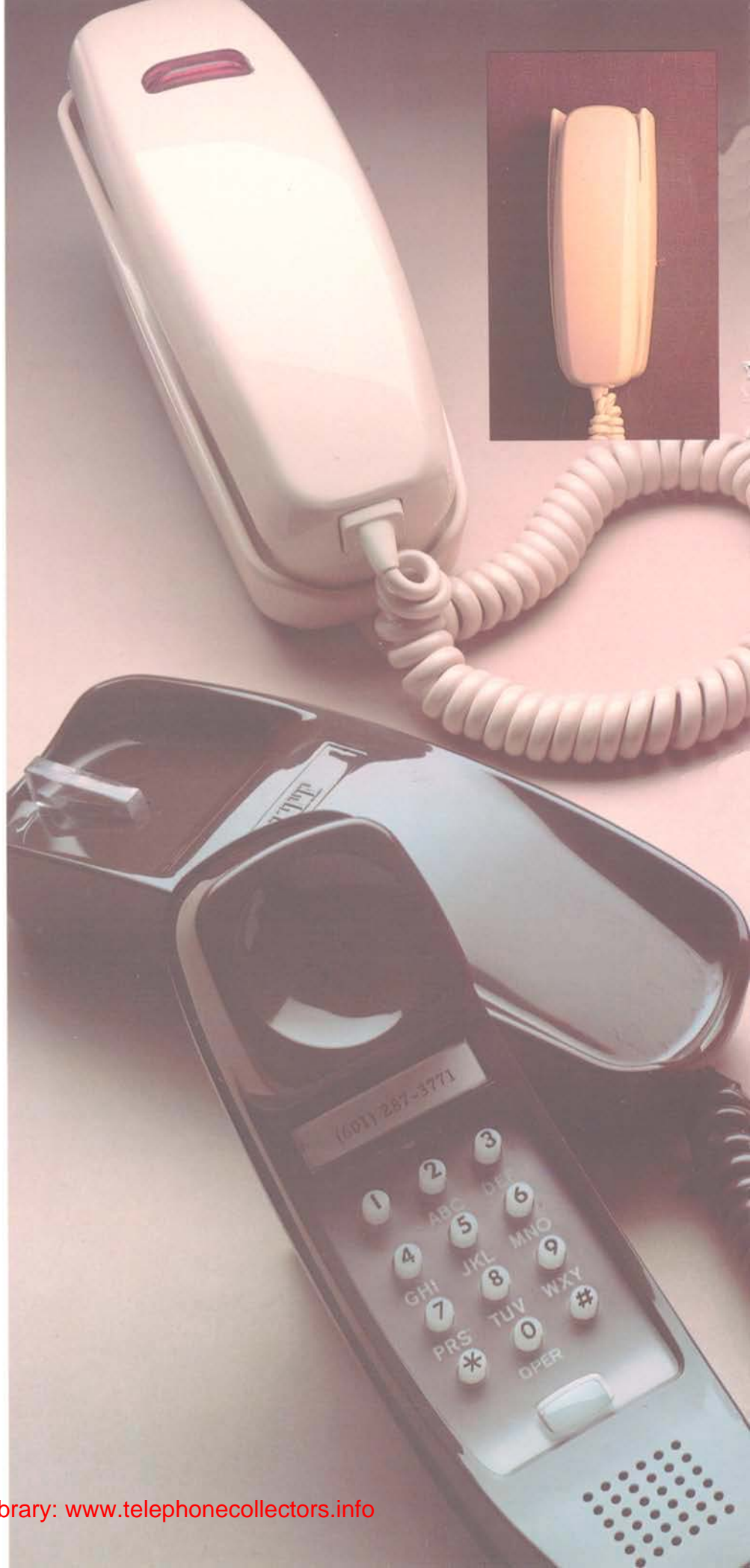### Handset Cords 1027 (Non-Modular)

The handset cord plugs into the handset and into the base. It comes packaged in an individual container.

Bases—Wall Base K-AC and Desk Base K-AD

The base includes hookswitch (line switch) and ringer (when specified). The conventional and quarter-modular desk versions include a non-modular line cord which plugs into the base. The half-modular bases do not include a line cord.

Ordering Information, T-T Trendline Sets

ITEM	CODE	
1. Basic Sets	2200 Desk Set	
	2254 Wall Set	
2. Colors	00, 05, 09, 12, 13, 15,	
	43, 44, 45, 46, 47	
3. Versions	O All	
	H 2200 only	
	Q 2200 only	
4. Ringers	BA (153 single-gong type)	
	LR	
5. Special Features	20, 27, 28 H and Q versions only	
	30, 37, 38 O versions only	
6. Dials	M, P	
Components	2220**-30M	Handset (does not include handset cord)
	AC1**-OBA	Wall base with ringer
	AC1**-OLR	Wall base less ringer
	AD1**-OBA	Desk base with ringer
	AD1**-OLR	Desk base less ringer
	AD1**-HBA	Desk base with ringer, half-modular (does not include line cord)
	AD1**-HLR	Same, less ringer
	AD1**-QBA	Desk base with ringer, quarter-modular
	AD1**-QLR	Desk base less ringer, quarter-modular
	1027**-066	Handset cord, standard, 66 inches (168 cm)
	1027**-108	Handset cord, standard, 9 feet (274 cm)
	1027**-156	Handset cord, standard, 13 feet (396 cm)
	000031-101	Transformer, dial lamp

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Single Line Pushbutton Dial Telephones

These instruments are available in modular versions, as well as in the conventional version. The K-2500 and K-2554 are offered with Tel-Pulse dial.

Standard Size Wall Telephones K-3554

This standard size pushbutton dial wall telephone is of the same high quality as ITT miniature wall phones, but should be ordered where standard size is desired or where 2-gong ringers are required. This wall phone incorporates the same circuitry and basic components as the K-554 telephone with the exception of the pushbutton dial. Uses standard-size 2-gong ringer.

Wall Telephones K-2554 (Miniature Type)

The single line pushbutton dial wall phone gives you the same high quality in every way as the corresponding desk phone. It simply adds the space-saving convenience of a wall-mounted phone. This is a telephone of exceptionally attractive and functional miniature design. Circuitry and performance are similar to that of the K-500 with the exception of the pushbutton dial. The handset cradle is rigidly mounted and the hookswitch is activated by a hinged plunger which protrudes through the cradle. Ringer volume is externally adjustable by a volume control wheel at the top of the set. The K-2554 uses a miniature single gong ringer (type 148 or 151) and standard K-500 type handset.

Desk Phone With Exclusion Feature K-2502

Lifting the left-hand cradle plunger will temporarily disconnect extension phones, and the conversation is limited to the one desired phone, insuring privacy. Replacing the handset automatically restores the connection to other phones. Includes 6-conductor desk stand cord.

Ordering Information, K-2500 Series Single-Line and 2-Line Sets

ITEM	CODE
1. Basic Sets	2500 Desk Set
	2502 Desk Set, manual exclusion
	2554 Wall Set, miniature
	3554 Wall Set, standard size
2. Colors	00, 05, 09, 12,* 13, 15, 43,
	44, 45, 46,* 47*
	(*except 2502)
3. Versions	O
	F 2500, 2554, 3554
	H 2500 only
	Q 2500, 2554, 3554
4. Ringers	BA (148B for 2554, 130BA for others)
	LR
5. Special Features	20 2500; 2554F and Q; and 3554F and Q
	21 2500; 2554F and Q; 3554F and Q
	24 2500, 2554
	27 2500, 3554F
	28 2500, 3554F
	30 2502, 2554, 3554, (except modular)
	31 2554, 3554 (except modular)
	34 2554 (except modular)
	37 3554 (except modular)
	38 3554 (except modular)
	39 2500 (except modular)
	44 2500, 2554
6. Dials	M, R All
	T 2500, 2554 with feature codes 20, 21,
	30, 31 (metro only)

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Two-Line and Hold Telephone

Model K-2575 (Desk Only)

One line can be held while placing or answering a call on the second line which may be CO, PBX, or manual intercom.

Note: If more than one set is to be connected to two outside lines, unless the sets are in the same immediate area, 3-line sets are recommended. (2-line sets give no visual indication when another set is busy on one of the lines.) 2-line sets are generally used in the following applications:

(1) 1 set; 2 CO/PBX lines; an extension ringer for one of the lines.

(2) 2 sets; 1 CO/PBX line connected to both sets; one manual intercom line between the two sets.

(3) Two or more sets in same immediate area; 2 CO/PBX lines; one phone rings on one line and another phone rings on the other line.

Three-Line and Hold Telephones

These telephones provide access to three lines without the use of external switching equipment. The three lines may be CO, PBX, intercom or a combination of these. The six keys are arranged in pairs. The right-hand key of each pair is the line key, and the left-hand key of each pair is the HOLD key for that line. The right-hand pair may be used for manual intercom* with the HOLD key modified for signaling. Visual signals (lamps) are provided to indicate a busy line or an incoming call on a line. A power transformer (P/N41-101) must be ordered separately for operation of busy lamps.

Model K-2576

Model K-2576 is the standard 3-line pushbutton dial set. It is available with Tel-Pulse dial (less ringer).

Model K-2577, Exclusion Type

Similar to model 2576, it is equipped with an exclusion switch to provide privacy on one predetermined line.

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 a phone or externally in a 139 type ringer box.

Power Transformer

The 41 transformer provides power to operate busy lamps for a maximum of seven three-line telephones. Must be ordered separately.

*Manual intercom requires a power supply that provides SIGNAL and TALK power. Lorain T-16A or equivalent power supply will provide power for a maximum of six telephones.

Ordering Information K-2500 Series, 2 and 3-Line Sets with Hold

ITEM	CODE	
1. Basic Sets	2575 Desk Set, 2-line	
	2576 Desk Set, 3-line	
	2577 Desk Set, 3-line exclusion	
2. Colors	00, 05, 09, 13, 15, 43*, 44, 45	(*2575 only)
3. Versions	O	
4. Ringers	BA (130 type)	
	LR	
5. Special Features	30 2575 (except modular)	
	40 2576, 2577	
	41 2576	
6. Dials	M	
	R	
	T 2576, less ringer	

Miscellaneous	000144-OCA	Common audible signal 2576, 2577
	00041-101	Transformer, for busy lamp operation for 3-line sets 2576, 2577

20

6-Button Key Telephones

These telephones are used with a multi-line key telephone system to provide access to a maximum of five lines. The left hand (red) button is used to place a hold on one or more outside lines. The five right hand buttons are used for line pickup, while the three buttons to the extreme right are convertible to non-locking operation for manual signaling or for control of semi-automatic exclusion. A signal lamp is provided beneath each of the five pickup buttons to indicate the status of the associated line, whether it is idle, busy, on hold, or has an incoming call. A lamp may also be installed beneath the hold button to signal that another (predetermined) station in the system is busy.

Model K-2564

The K-2564 is the standard 5-line key set. It is equipped with a 34-conductor mounting cord terminated in a 50-contact plug and is available with or without a grounding button. It is offered with Tel-Pulse dial less ringer.

Model K-2565, Feature Codes 40 and 41

This model assures privacy whenever desired. Lifting the left hand cradle plunger approximately ¼ inch disconnects any subsequent multipled telephones from line 1, or the exclusion switch may be used to control semi-automatic exclusion. Comes equipped with a 42-conductor mounting cord, a manual exclusion switch, and with or without a grounding button.

Model K-2565, Feature Codes 42 and 46

This model with feature code 42 is equipped with a 50-conductor mounting cord, an additional set of contacts in the hookswitch for on-off control of handsfree equipment, and an additional set of off-normal contacts in the dial to shunt the handsfree speaker during dialing. *Includes a manual exclusion plunger, but does not include the manual exclusion switch.* To add the manual exclusion feature, order 79971-001 Exclusion Switch Assembly separately. With feature code 46, this model is equipped with a grounding (red) button.

Model K-2566, Feature Codes 40 and 41

Same as K-2564 except equipped for hookswitch button-restoration and includes an operator recall (black) button. Offered with Tel-Pulse dial (less ringer).

Model K-2567, Feature Codes 40, 41, 42, 46

Same as K-2565s described above except equipped for hookswitch button-restoration and includes an operator recall button.

Tel-Pulse™ Sets

Models K-2564 and K-2566, are available with pushbutton pulse dial to allow pushbutton convenience in areas where the central office will not accept tone dialing. These sets are less ringer (LR) only.

Ordering Information, Five-Line Key Sets

ITEM	CODE
1. Basic Sets	2564 Desk Set, 5-line standard
	2565 Desk Set, 5-line special
	2566 Same as 564 with button restoration
	2567 Same as 565 with button restoration
2. Colors	00, 05, 09, 13, 15, 44, 45
3. Versions	O
4. Ringers	BA (130-type)
	LR
5. Special Features	40, 41 All
	42, 46 2565, 2567
6. Dials	M, R All
	T 2564, 2566 less ringer (LR) and with feature code 40, metro only

10/20/30 Button Key Telephones

Used with a key telephone system, these phones provide access to a maximum of 29 lines. The red button is used to place a hold on one or more outside lines, while remaining buttons are used for line pickup or they may be converted to non-locking operation for manual signaling or for control of semi-automatic exclusion. (Manual exclusion control is not offered.) A signal lamp is provided beneath each of the pickup buttons to indicate the status of the associated lines—whether idle, busy, held or call-incoming. A lamp may also be installed beneath the HOLD button and connected to an external circuit such as a station-busy circuit. Further important features include individual designation tabs installed under the cap of each button for convenience in changing or adding button designations. All units, except those having Tel-Pulse dial, are equipped to be used with external handsfree (speakerphone) equipment.

Tel-Pulse™ Sets
Model K-2830 is offered with pushbutton pulse, (Tel-Pulse) dial.

Hookswitch Button Restoration Feature*
All desk models are provided with hookswitch button restoration. However, this feature can be disabled by the installer if not wanted.

Operator Recall Feature
Units coded with suffix 46 include an operator recall button which is normally required when hookswitch button restoration is used.

Automatic Exclusion (Privacy) Feature (CO/PBX lines)
Units coded with suffix 76M include an automatic exclusion (privacy) circuit and a privacy release button. To ensure privacy, all sets in a key system must be equipped with the privacy circuit. A kit, P/N 182316-101 can be installed to provide this feature.

9-Line Sets K-2830 (Desk) and K-2854 (Wall)
Both of these 10-button units provide one HOLD and nine convertible (pickup or signaling) buttons. Equipped with a 50-conductor mounting cord terminated in a single 50-contact plug. Available with Tel-Pulse dial.

9-Line Set with Busy-Lamp Field K-2835 (Desk Only)
This set includes a Busy-Lamp Field with busy lamps for 24 stations. The 100-conductor mounting cord is terminated in two 50-contact plugs—one dedicated to the busy lamp field.
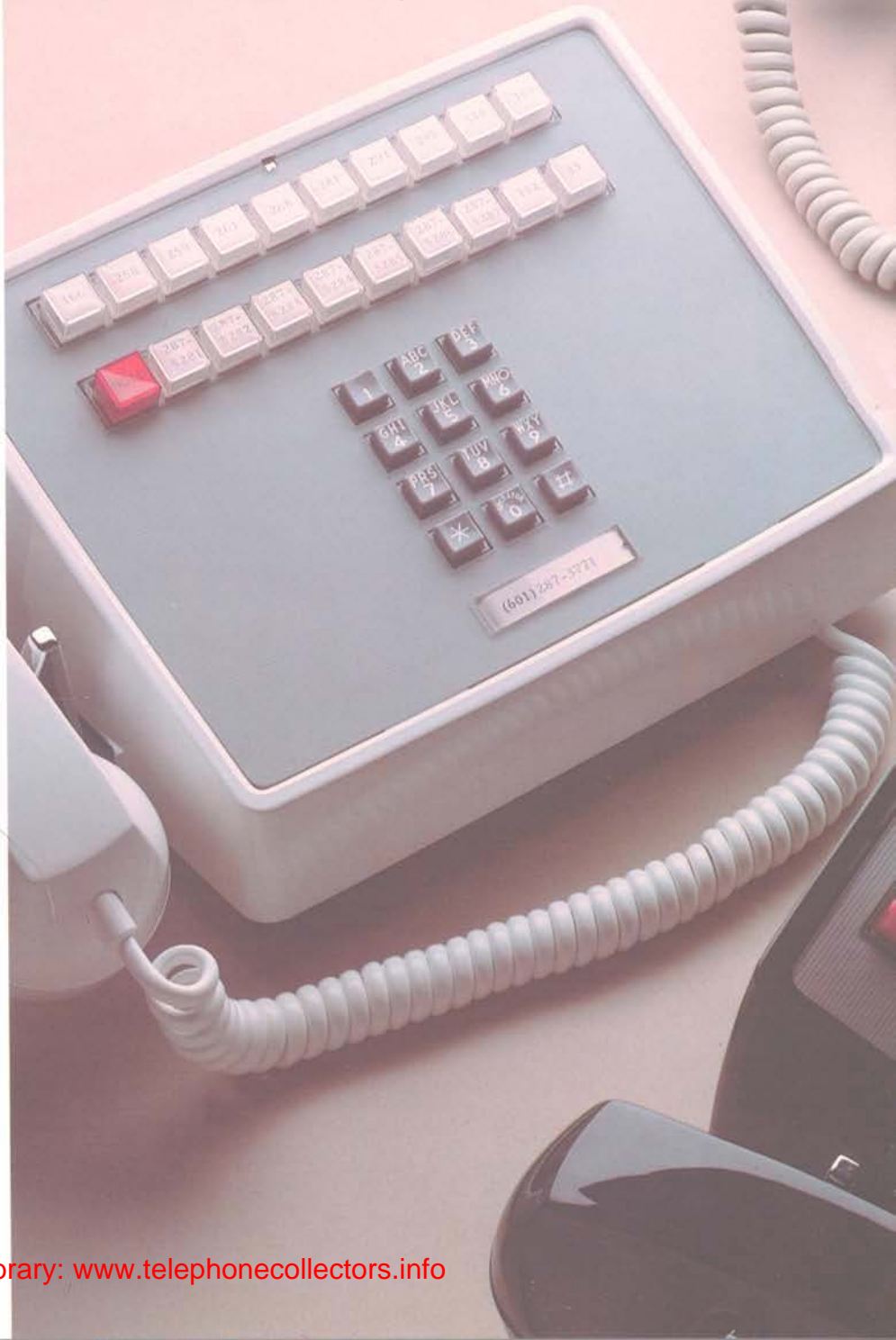
19-Line Set K-2831
This 20-button set provides one HOLD button and nineteen convertible (pickup or signaling) buttons. Equipped with a 100-conductor mounting cord terminated in two 50-contact plugs.

29-Line Sets K-2861
These large capacity sets are similar to the 9-line and 19-line sets except they are slightly larger and are equipped with a headset jack and switch. The 75-pair mounting cord is terminated in three 50-contact plugs.

*Operating the handset cradle restores any operated line button to unoperated position. An operator recall button is provided for signaling a PBX operator or transferring a call to a PABX. The purpose of hookswitch button restoration is to prevent a user from inadvertently picking up a line which is being held by another party and possibly losing the call.

Ordering Information, Multi-line Key Sets

ITEM	CODE	
1. Basic Sets	2830 Desk Set, 9-line	
	2831 Desk Set, 19-line	
	2835 Desk Set, 9-line with BLF	
	2854 Wall Set, 9-line	
	2861 Desk Set, 29-line	
2. Colors	00, 05, 13, 15, 44, 45	
3. Versions	O	
4. Ringers	BA (148-DBA)	
	LR	
5. Special Features	40 2830 Tel-Pulse only	
	42 Except 2861 and Tel-Pulse	
	46 Except 2854, 2861 and Tel-Pulse	
	56 2861 only	
	76 Except Tel-Pulse	
6. Dials	M All	
	T 2830 only	
Miscellaneous	9003**-102	Cord, mounting, 100-conductor
	182316-101	Kit, CO/PBX line exclusion
	182623-101	Kit, intercom privacy (set must be E/W CO/PBX line exclusion)
	180658-101	Diode, station-busy
	181142-***	Faceplate, 10-button (desk or wall)
	181103-***	Faceplate, 20-button desk
	181531-101	Kit, 10 to 20 button expansion (order 9003 Cord and 181103 Faceplate separately)
	182316-101	Kit, CO/PBX line exclusion
	182623-101	Kit, intercom privacy. (Set must be equipped with CO/PBX line exclusion.)

**Substitute color code as follows:

00 Black	15 White
05 Moss Green	44 Light Ash
13 Beige	45 Cocoa Brown

***Substitute color code as follows:

Code	Color of Faceplate	Color of Phone
101	Charcoal	Black (00)
102	Light Green	Moss Green (05)
103	Muted Beige	Beige (13)
104	Light Gray	White (15)
105	Burnt Orange	—
106	Light Ash	Cocoa Brown (45)
107	Cocoa Brown	Light Ash (44)
108	Harvest Gold	—
109	Cherry Red	—
110	Clear	—
111	Woodgrain	—

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Handsfree Telephones Single-Line, 7-Line, and 17-Line

These telephones are equipped with a directional microphone and an amplifier-speaker, (enclosed in a single attractive housing), to permit handsfree operation. The phone can also be used in the conventional (handset) manner. To answer or place a call in the handsfree mode, the user simply presses the ON button. After the conversation is completed, he presses the OFF button. When the set is in the handsfree mode, lifting the handset from the cradle will automatically switch the circuit to conventional (handset) operation. Replacing the handset will return the set to the handsfree mode.

A lamp in the ON button indicates when the handsfree feature is on, and a lamp in the OFF button indicates when the user's voice is being transmitted. A manual volume control for the receiver is also provided to compensate for local noise conditions and incoming voice levels.

Power for the handsfree circuitry is provided by a wall-receptacle-mounted transformer included with the set. The set will operate in the conventional (handset) mode without power from the transformer.

7-Line Key Telephone (K-2842)
A 10-button model with 7 buttons for line pickup, one for HOLD and two for handsfree ON and OFF.

17-Line Key Telephone (K-2843)
A 20-button model with 17 buttons for line pickup, one for HOLD and two for handsfree ON and OFF.

Single-Line Telephone (K-2844)
Designed for convenient handsfree operation where only a single-line instrument is required. Three buttons provide ON, OFF, and PRIVACY for the handsfree circuitry. Depressing and holding down the PRIVACY button disables the transmit mode, so the distant party cannot hear local conversation.

Ordering Information, Handsfree Sets

ITEM	CODE	
1. Basic Sets	2842 Desk Set, 7-line HF	
	2843 Desk Set, 17-line HF	
	2844 Desk Set, Single-line HF	
2. Colors	00, 05, 13, 15, 44, 45	
3. Versions	O All	
	Q 2844 only	
4. Ringers	BA, (148-DBA)	
	LR	
5. Special Features	29, 39 2844 only	
	42, 76 2842, 2843 only	
6. Dials	M	
Miscellaneous	181768-101	Power Transformer (included with set)
	181792-***	Faceplate, K-2842
	181793-***	Faceplate, K-2843
	181876-***	Faceplate, K-2844
	181795-***	Grille

***Substitute color code as follows:

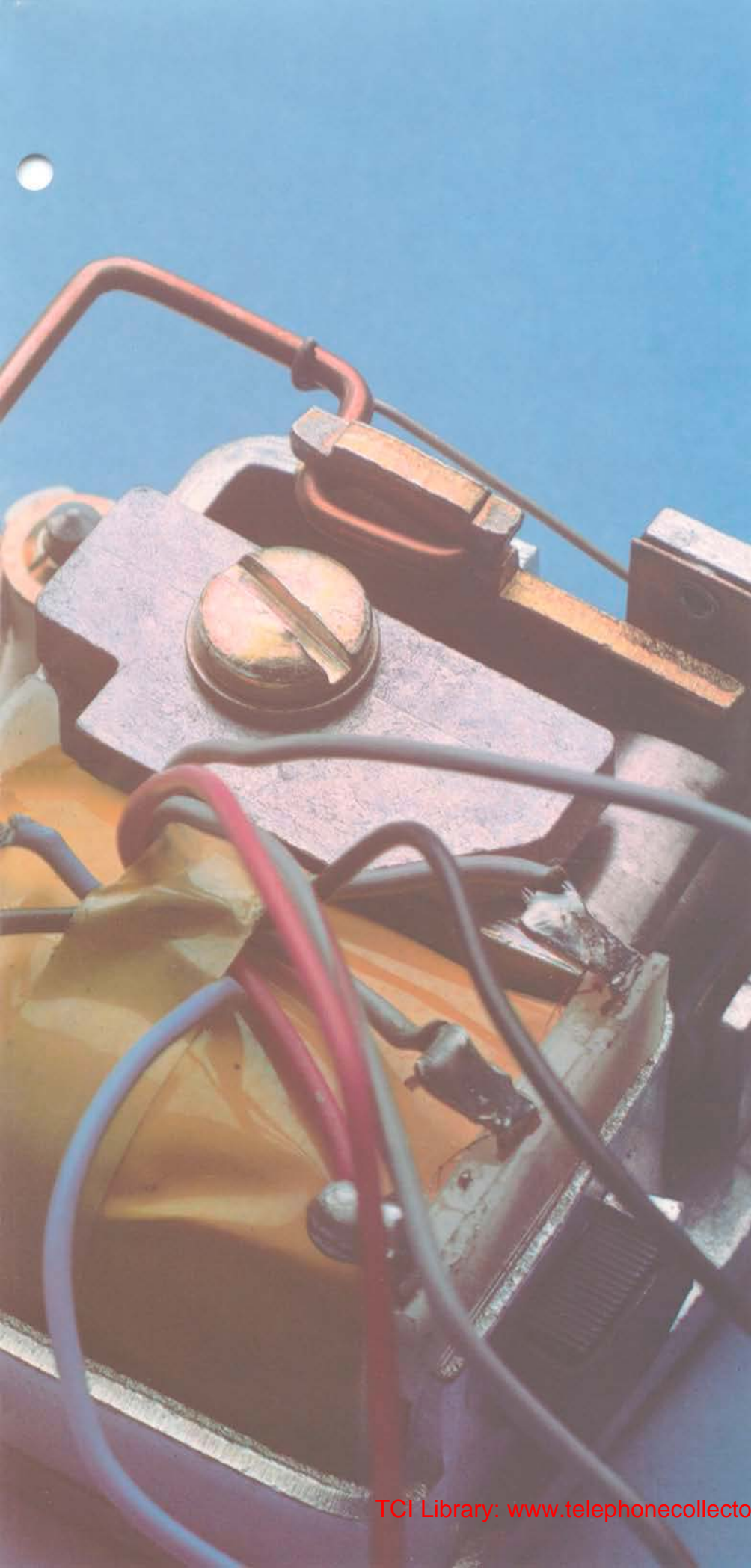| Code	Color of Faceplate and Grille	Color of Phone
101	Charcoal	Black (00)
102	Light Green	Moss Green (05)
103	Muted Beige	Beige (13)
104	Light Gray	White (15)
106	Light Ash	Cocoa Brown (45)
107	Cocoa Brown	Light Ash (44)

Telephone Components

It's only logical that the people who design such a comprehensive line of telephones should also offer a complete line of telephone components.

Top-notch quality also describes ITT components that remain unsurpassed in an industry where trouble-free performance is a must.

- Rotary dials
- Tel-Pulse™ dials
- Pushbutton tone dials
- Handsets, transmitters, receivers
- Ringers
- Consoles, call announcers, telephone loudspeakers
- Telephone networks
- Power transformers

Rotary Dials

Rotary dials are submitted to rigid quality control to ensure smooth, quiet and trouble-free operation. Each dial consists of a rigid metal base on which are mounted the gear train, mainspring, contact spring assembly, numeral ring, clear plastic finger plate and station number card. The gear train and contact spring assembly are protected by a plastic dust cover. Leads are equipped with cord tips designed for No. 4, 5, or 6 screws. (Type 1000 dial is not equipped with leads.*)

Dials are adjusted to a speed for 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.

Regular dials (coded D) have numerals only; metropolitan dials (coded G) have letters and numerals. Dials coded H have a dot only at each finger hole.

Type 10A (P/N 095991-101)

Miniature type with 2⅜" numeral ring and automatic movable finger stop. Designed for use in dial-in-handset telephones. Not provided with off-normal contacts and not equipped with leads.*

Type 30

Standard type with 4¼" 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 use with handsfree telephones. (Replaces type 24 [GR] dial.)

Ordering Information, Rotary Dials

ITEM	CODE	
Rotary Dials	1000-OOG	Rotary dial, 2⅜" diameter, metro (095991-101)
	0030**-OOD	Rotary dial, 4¼" diameter, regular
	0030**-OOG	Rotary dial, 4¼" diameter, metro
	003300-OOD	Rotary dial, 3" diameter, regular
	003300-OOG	Rotary dial, 3" diameter, metro
	0035**-OOD	Rotary dial, 4¼" diameter, regular, for handsfree application
	0035**-OOG	Rotary dial, 4¼" diameter, metro for handsfree application
	003800-OOD	Rotary dial, 3" diameter, regular for handsfree application
	003800-OOG	Rotary dial, 3" diameter, metro, for handsfree application
	003800-OOH	Rotary dial, 3" diameter, dots only at finger holes, for handsfree application
Colors**	00, 05, 09, 12, 13, 15, 43, 44, 45, 46, 47	

*Type 1000 dial is provided with male tabs to accept female snap-on terminals.
**Substitute color code.

Pushbutton Tone Dials

Pushbutton (tone) dials have a twelve-button matrix and transistorized oscillators. Ten buttons are used for telephone dialing, and two buttons are included for special-service applications.

Type 32, Standard Pushbutton Dial

Equipped with pushbuttons having numbers 1 through 0, or numbers and letters. Used for standard pushbutton dial telephones. Buttons are light gray with white characters. Equipped with flexible wire leads.

Type 36, Pushbutton Dial for Handsfree Use

Similar to type 32 except provided with an additional set of contacts for use with handsfree (speakerphone) equipment.

Type 37, Pushbutton Dial for Trendline Sets

Miniature dial with ten pushbuttons having numbers 1 through 0 and two special service buttons. Buttons are translucent white with black characters. Equipped with screw terminals.

Type 40, 16-Button Pushbutton Dial

Numbers 1 through 0 are used for station to station dialing and the remaining 6 buttons are used to provide special service signals.

Note: These dials are offered with or without integral polarity guard.

Ordering Information, Pushbutton Tone Dials

ITEM	CODE	
Pushbutton Tone Dials	003200-OOD	T-T dial, regular
	003200-OPD	Same with polarity guard
	003200-OOG	T-T dial, metro
	003200-OPG	Same with polarity guard
	003600-OOD	T-T dial, regular, for handsfree application
	003600-OPD	Same with polarity guard
	003600-OOG	T-T dial, metro, for handsfree application
	003600-OPD	Same with polarity guard
	003700-OOO	T-T dial, regular, for Trendline
	004000-OOD	T-T dial, 16-button, regular
	004000-OOG	T-T dial, 16-button, metro
	004000-OPG	Same with polarity guard

Pushbutton Pulse (Tel-Pulse™) Dial

The Tel-Pulse dial provides the speed and convenience of pushbutton dialing in areas where the central office is not equipped to accept "tone" dialing. When installed in a telephone it emits pulses similar to a rotary dial instead of multi-frequency tones.

The dial is line powered, draws current only during dialing, is not sensitive to line polarity reversals, and will accept 18 digits.

Outpulsing begins upon receipt of the first digit.

Provisions are made for optional pulse rates and interdigital intervals as follows (factory strapped for 10 PPS and 800 MS):

Pulse Rate (Pulses Per Second)	Interdigital Interval (Milliseconds)
10	400 or 800
20	200 or 400

Ordering Information, Tel-Pulse™ Dial

ITEM	CODE	
Pushbutton Pulse Dials	006000-OOG	Tel-Pulse dial, metro
	182416-101	Bracket Set (2554 wall set)
	182417-101	Bracket Set (2830 desk set)
	182418-101	Bracket Set (6-button sets, less ringer)
	182419-101	Bracket Set (2500 desk set)
	183605-101	Kit to convert a 554 rotary wall set to a 3554 Tel-Pulse set (excludes Tel-Pulse dial)

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Handsets

Each handset assembly consists of a handle and caps molded of the same type of plastic as telephone housings, a carbon type transmitter unit, and a magnetic type receiver unit.
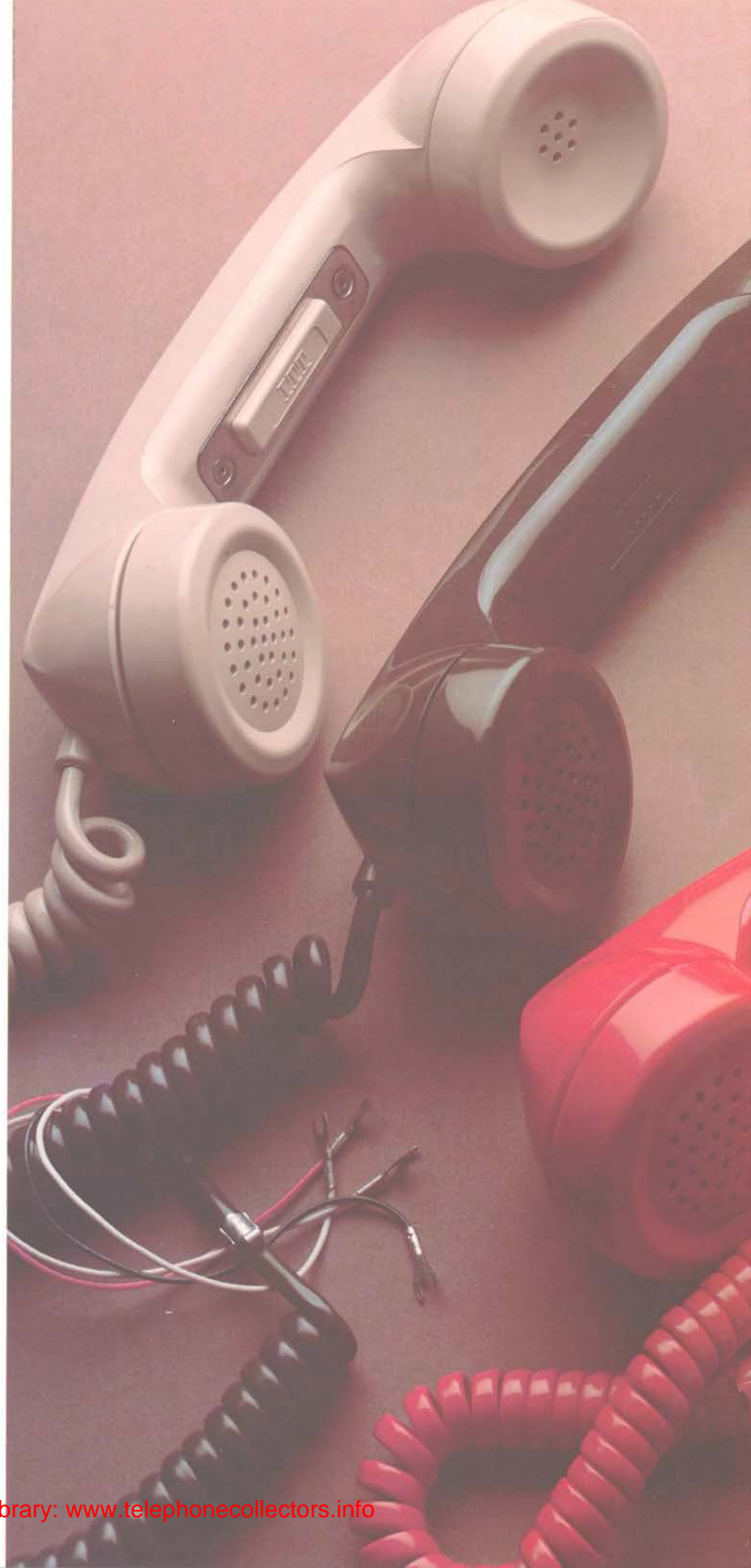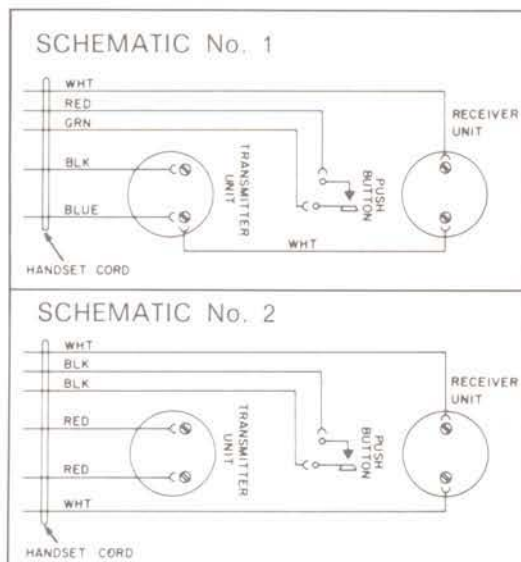
Type 65 Standard Handset (65C2)
Equipped with a hardwired 48-inch (122 cm) coil cord of same color as the handle and caps. Model 65C3 is the same except it is equipped with a 9-foot (273 cm) cord.

Type 65 Modular Handset (65M2)
Similar to the standard 65C2 handset described above except it does not include a handset cord but is equipped with a modular jack to accept a 4-conductor modular handset cord.

Type 69 Push-To-Talk Application
Similar to the standard 65C2 handset except it is equipped with a push-to-talk switch and a 5 or 6-conductor handset cord. Schematics are shown in the accompanying drawings.

SCHEMATIC No. 1

WHT
RED
GRN
BLK
BLUE
RECEIVER UNIT
TRANSMITTER UNIT
PUSH BUTTON
WHT
HANDSET CORD

SCHEMATIC No. 2

WHT
BLK
BLK
RED
RED
WHT
RECEIVER UNIT
TRANSMITTER UNIT
PUSH BUTTON
HANDSET CORD

Receivers and Transmitters

75547 Receiver Unit
This is a ring armature magnetic type receiver unit with screw terminals. Basic components are the low mass composite diaphragm assembly, the flange type permanent magnet and the pole piece and coil winding assembly.

88250 Receiver Unit
A bipolar central armature magnetic type receiver, its basic components are the low mass composite diaphragm, dual-coil assembly, magnet, and pole piece assembly assembled on a die cast housing. A protective shield and membrane are provided. Terminal plates at the rear of the frame are provided for electrical connections which may be made by pressure type connections, soldered leads, or screws.

75555 Transmitter Unit
The transmitter is a carbon type unit employing gold plated electrodes. Construction is capsule-type, with parts secured by clamping bands. Has pressure-type connections, with the one inch OD clamping band serving as one contact and the electrode cap as the other contact.

Ordering Information, Handsets

ITEM	CODE	
1. Handset Assemblies	65**-OC2	Handset, standard 48"(122 cm) 4-conductor cord
	65**-OC3	Handset, 108" (274 cm) 4-conductor cord
	65**-OM2	Handset, modular (does not include a cord but includes modular jack)
	69##-OC1	Handset, PTT, 48" (122 cm) 5-conductor cord, Schematic No. 1, ITT logo
	69##-OC2	Handset, PTT, 48" (122 cm) 5-conductor cord, Schematic No. 1, no logo
	69##-OC3	Handset, PTT, 48" (122 cm) 6-conductor cord, Schematic No. 2, ITT logo
	69##-OC4	Handset, PTT, 48" (122 cm) 6-conductor cord, Schematic No. 2, no logo
2. Handset Parts	079289-0**	Cap, receiver
	079290-0**	Cap, transmitter
	1005**-048	Cord, 4-conductor, 48" (122 cm)
	1005**-108	Cord, 4-conductor, 108" (274 cm)
	1005**-180	Cord, 4-conductor, 180" (457 cm)
	1018##-048	Cord, 5-conductor, 48" (122 cm)
	1019##-048	Cord, 6-conductor, 48" (122 cm)
	9018**-072	Cord, modular, 4-conductor 72" (183 cm)
	9018**-108	Cord, modular, 4-conductor 108" (274 cm)
	079250-0**	Handle (65**-OC2, 65**-OC3)
	182863-0**	Handle (65**-OM2) (modular)
	084495-0##	Handle (69)
	182955-101	Holder, transmitter (all handsets)
	182947-101	Jack assembly, modular handset
	075547-101	Receiver unit, (ring armature type)
	088250-101	Receiver unit (central armature type)
	075555-101	Transmitter unit

Colors ** 00, 05, 09, 12, 13, 15, 43, 44, 45, 46, 47
     ## 00, 05, 13, 15

PTT indicates "Push-To-Talk."

Two-Gong Ringers

ITT offers a complete line of high impedance two-gong ringers designed for use in standard sized telephones and in type 139 ringer boxes for bridged or divided ringing. The coil design permits using either 1000 Ohm or 2650 Ohm resistance to ground for tip party identification at the installer's option. All ringers are equipped with shock-mounting feet (grommets) and mounting screws.

Type 130, Straight-Line Biased-Armature Ringer

The type 130 straight-line biased-armature ringer is factory adjusted to ring at 20 Hz and at 30 Hz. The unit includes a mechanical volume control which can be manually operated by the subscriber to provide any one of four levels of sound output and can be adjusted by the installer to silence the ringer. The bias spring has two settings to permit adjustment for loop length.

Type 156, Frequency-Selective Ringer With Volume Control

The type 156 frequency-selective ringer includes a volume control which can be manually operated by the subscriber to provide any one of three levels of sound output. Adjustment for ringing sensitivity is facilitated by a cam screw and locked by a separate lock screw.

Type 157, Frequency-Selective Ringer Less Volume Control

Identical to type 156 described above except it does not include a volume control.

Single-Gong Ringers

These high-impedance ringers include a mechanical volume control with two positions. The single coil is tapped at 500, 1000, and 2650 Ohms to provide any required resistance to ground for tip party identification. All ringers are equipped with shock-mounting feet (grommets) and mounting screws.

Type 148A, Straight-Line Biased Ringer

Factory adjusted to ring at 20 Hz and at 30 Hz, a bias spring permits adjustment for loop length. Mounting holes are located as shown in the left hand figure of the diagram. Designed for use in K-2554 wall telephones.

Type 148D, Straight-Line Biased Ringer

Identical to type 148 except ringer can be silenced by means of the volume control. Designed for use in multi-key telephones.

Type 153A, Straight-Line Biased Ringer

Identical to type 148 except for location of mounting holes (see diagram). Designed for use in Trendline telephones.

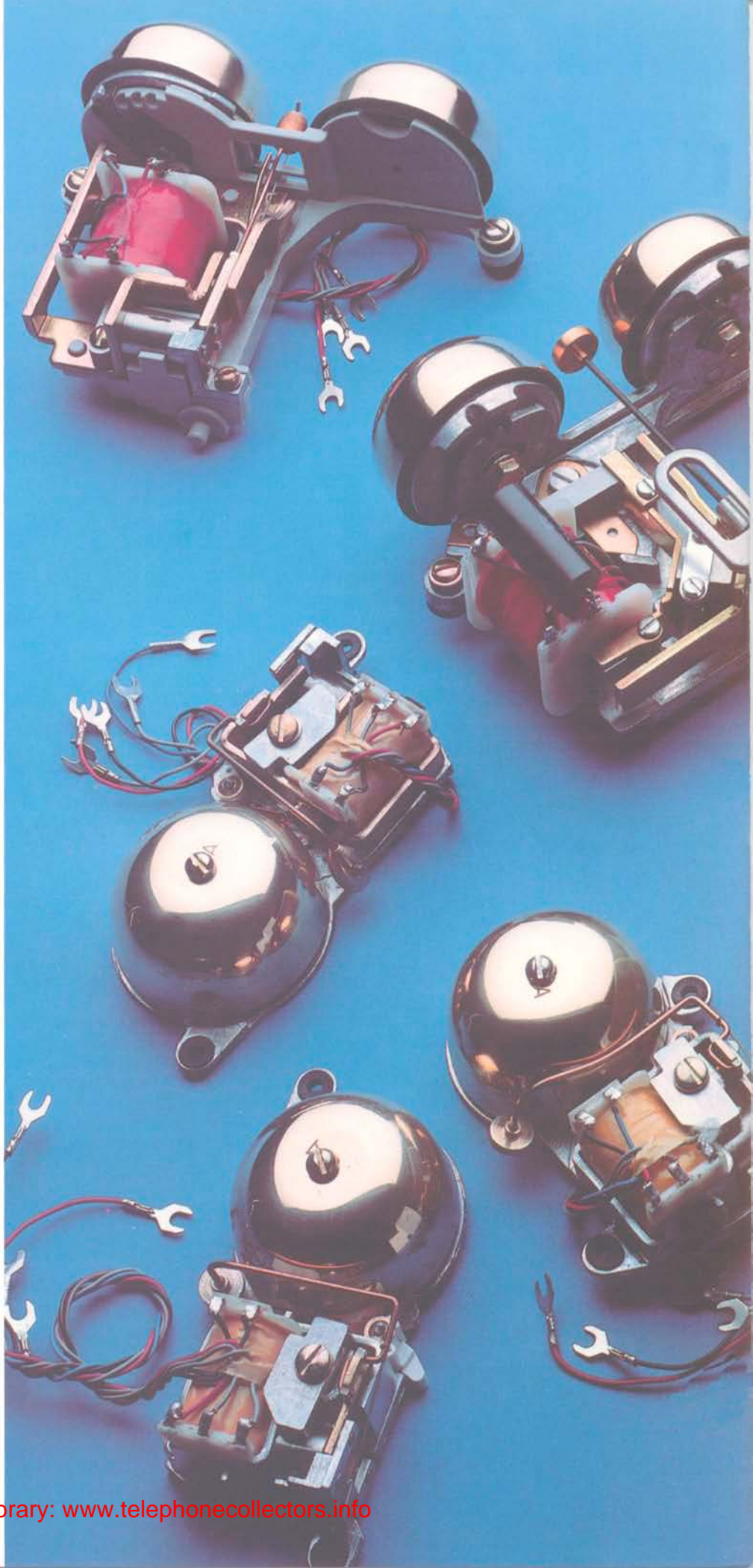### Type 151, Frequency-Selective Ringer

Mounting holes are located as shown in left hand figure of diagram. Designed for use in K-2554 wall telephones.

Type 152, Frequency-Selective Ringer

Mounting holes are located as shown in right hand figure of diagram. Designed for use in Trendline telephones.

Diode Kit, 181042

For use with straight-line biased ringer for superimposed signaling.

Extension Ringers and Box

Extension ringers are designed for wall mounting and include a terminal board, a matching capacitor and a light beige cover. All units employ a double-wound coil which can be connected to provide either 1000 Ohm or 2650 Ohm resistance to ground for tip party identification.

Type 136, Straight-Line Biased Type

Type 136 ringer is a single-gong, straight-line biased-armature type unit. It is equipped with mechanical volume control and a terminal board for connections.

Type 139, Ringer Box—With or Without Ringer

Type 139 ringer box is designed to enclose a standard two-gong ringer or a K-144 common audible signal. It consists of a steel baseplate with attached terminal board and a molded plastic housing. Available with a 130 type ringer installed, or less ringer. Includes a capacitor for use with ringers in frequency range of 16 through 30 cps. (Ringers of higher frequency include a matching capacitor.)
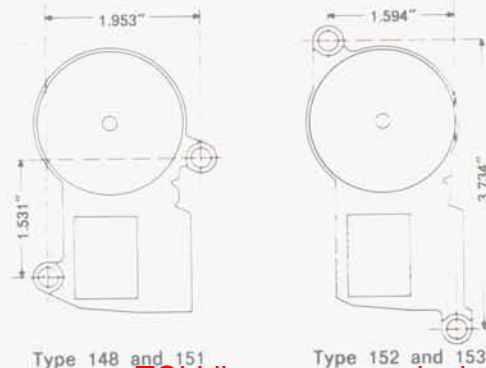
Type 147, Frequency-Selective Type

Similar to 136 except offered in Harmonic, Synchromonic, and Decimonic series.

Ordering Information, Ringers and 139 Ringer Box

ITEM	CODE	
Ringers, BA Type	000130-OBA	Ringer, 2-gong
	000136-OBA	Ringer, extension, miniature
	000139-OBA	Ringer, extension, standard
	000148-ABA	Ringer, 1-gong (for 2554 sets)
	000148-DBA	Ringer, 1-gong (for 10/20 type sets)
	000153-ABA	Ringer, 1-gong (for Trendline)
Ringer Box	000139-OLR	Box, ringer (for 2-gong ringers)
Ringers, frequency selective	000147-_*_	Ringer, extension, miniature
	000151-_*_	Ringer, 1-gong (for 2554 sets)
	000152-_*_	Ringer, 1-gong (for Trendline)
	000156-_*_	Ringer, 2-gong, E/W volume control
	000157-_*_	Ringer, 2-gong, less volume control
Harmonic	-(HA1)-	33 1/3 Hz
	-(HA2)-	50 Hz (same as HC5)
	-(HA3)-	66 2/3 Hz
	-(HA4)-	16 2/3 Hz
	-(HA5)-	25 Hz
Synchromonic	-(HB1)-	30 Hz (same as HC3)
	-(HB2)-	42 Hz
	-(HB3)-	54 Hz
	-(HB4)-	66 Hz
	-(HB5)-	16 Hz
Decimonic	-(HC1)-	20 Hz
	-(HC2)-	60 Hz
	-(HC3)-	30 Hz (same as HB1)
	-(HC4)-	40 Hz
	-(HC5)-	50 Hz (same as HA2)
Miscellaneous	181042-101	Kit, diode

*Insert frequency code here (example 000156-HA1).

MOUNTING DIMENSIONS
148, 151, 152 and 153 Ringers

1.953"
1.531"
Type 148 and 151

1.594"
3.734"
Type 152 and 153

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DSS Consoles, Call Announcers, and Telephone Loudspeakers

DSS (Direct-Station-Selection) Console/Busy-Lamp Fields

DSS consoles/busy-lamp fields are intended for use in ITT K76A Call Announcing key telephone systems to show busy stations and to permit an attendant at a central answering location to signal stations individually by depressing a button on the console. A station can be signaled even when that station is busy. The stations to be signaled must be equipped with a K-174B Call Announcer. When the attendant depresses and holds down a button, the corresponding Call Announcer is activated, emits a beep tone, and the attendant and station party can converse through the attendant's handset and the station party's Call Announcer.

DSS Consoles are available in two capacities, 30 buttons-and-lamps and 50 buttons-and-lamps. Both consoles are the same size as the 10 and 20-button key sets. The DSS consoles operate with key system power.

The "Call Announcer"

One of these units is used at each station in certain key telephone systems, such as ITT K76A Key Telephone Systems, to provide tone and voice signaling. The Call Announcer includes a transmitting circuit which permits a party called on intercom to answer back handsfree. Operates from key system power.

The "Orator" Telephone Loudspeaker

Use with any standard type telephone to permit a group of people to hear both sides of a telephone conversation. It cannot be used for answer-back. A combination volume control and on-off switch is provided on the front panel. The housing is molded of the same type of high quality plastic used in all ITT telephone housings. A matching 9-foot cord is included. The faceplate is of anodized brushed aluminum. Requires an external power supply of 18 to 22 volts AC or DC. Key system power supply may be used when available, otherwise, order the 31A transformer separately.

Ordering Information, Consoles, Call Announcers, Loudspeakers

CODE	DESCRIPTION
0107**-OOA	Orator
0174**-OOB	Call Announcer
0176**-OOA	DSS Console, 30-button
0176**-OOB	DSS Console, 50-button
000031-OOA	Transformer/Orator
Colors	00, 05, 13, 15, 44, 45

**Substitute color code.

Telephone Networks

The same basic network is used in all ITT telephones with the exception of Trendline sets.

If replacing a 075335 encapsulated network, the appropriate spacer will be required to permit mounting the printed circuit network in its place. If replacing a printed circuit network, the spacer already in the set should be left in place, the old network removed and the new network snapped into place.

Ordering Information, Telephone Networks

CODE	DESCRIPTION
183070-101	Network and Spacer (except 2554)
183070-104	Network and Spacer (for 2554)
181427-101	Network, standard (except 2554)
181427-104	Network (for 2554)
182175-101	Spacer (except 2554)
182931-101	Spacer (for 2554)

Power Transformers

All transformers included here plug into standard 115-volt AC wall service outlets and have screw terminals for output connections. Input for all units is 105 to 125 volts AC at 60 Hz except 181768-101 input is 100 to 130 volts, 50 or 60 Hz. Outputs vary as follows:

31-00A Transformer:	15 to 18 volts, 2.25 volt-amperes, 60 Hz
31-101 Transformer:	6 to 8 volts, 1.75 volt-amperes, 60 Hz
41-101 Transformer:	9 volts, 1 ampere, 60 Hz
181768-101 Transformer:	12 to 13 volts, 4.8 volt-amperes, 50/60 Hz. Has two outputs (four terminals).

Ordering Information, Power Transformers

CODE	DESCRIPTION
000031-00A	Transformer/Orator
000031-101	Transformer/Dial Lamp
000041-101	Transformer/3-Line Sets
181768-101	Transformer/Handsfree Sets

TG0978-20M

Printed in U.S.A.