

### **Telecommunications Division**

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# Telephone Guide

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# Telephone Guide

# Telephones by ITT Telecommunications

# The phones you install and forget-

ITT offers a comprehensive line of modern telephones, components and parts. Single-line, two-line, three-line and multiline-key telephones are available in a wide variety of the most wanted colors, and in both push-button and rotary dial models.

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

Many phones can be ordered with a broad selection of optional features to further add to their utility. And, ITT also offers a comprehensive selection of ringers to suit any application.

The fine workmanship, high quality of materials and the time-proven design of all ITT telephones and components assure long trouble-free life and low maintenance costs.

Select your ITT telephone.

Install it... and forget it!

#### **Table of Contents**

#### **Rotary Dial Telephones**

Ordering information 2
Trendline® 3
Single-line 4
Cinderella 5
Two-line 6
Three-line 7
Key system 8
Corinthian® multi-key 9
10/20 button key 10
Message waiting 12

#### **Pushbutton-Dial Telephones**

Ordering information 14
Trendline® 15
Single-line 16
Single-line, wall miniature 17
Single-line, wall, standard 18
Two-line 19
Three-line 20
Key system 21
10/20 button key 22
Corinthian® multi-key 23
Message waiting 24

#### Components and Miscellaneous Items

Ringers 26, 27, 28, 29
Rotary dials 30
Pushbutton dials 31
Handsets 32
Transmitters & Receivers 33
"Orator" telephone loudspeaker 34
Connecting Blocks 35
Power transformers 36



# **Rotary Dial Telephones**

ITT offers a wide variety of Rotary Dial Phones. You can order the phone that is engineered to meet your individual requirement—single-line, 2-line, 3-line and multiline-in decorator colors and a variety of attractive and efficient designs.

**Single-Line Telephones** are offered in standard versions, and also in special versions designed for specific types of applications.

**Message-Waiting Telephones** — designed for use in hotels and motels to permit a PBX operator to inform a room occupant, through an automatic signal, that a message has been left with the operator.

**2-Line Telephones** permit accessing two outside lines, or one outside line and one internal line. They are available with a choice of exclusion (privacy) feature or with hold feature.

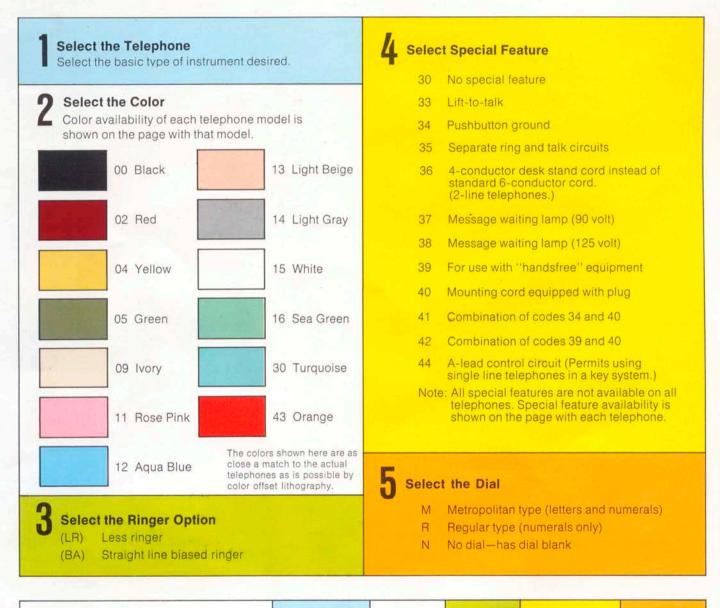
**3-Line Telephones** permit accessing and holding calls on up to three outside lines without requiring external switching equipment. One line may be used for internal communications if desired. Available with exclusion feature on one line to insure total privacy.

**Multi-Line Key Telephones** are intended for use with key telephone systems. Such systems permit a number of key telephones to share a number of PBX or central office lines — or a combination of PBX and central office lines — without the need for a switchboard. Dial intercom and other features may also be included in a key telephone system and accessed by each telephone in the system.



# How To Custom Order Your Rotary Dial Telephone

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



#### Example: Note: 13 The complete code number for each telephone is made up 30 is the 500 is the 13 is Mis special feature of a number from each of the basic model the type the color ringer (in this case number (Light Beige) option of dial five steps. No special feature)







# The Trendline-Rotary Hand Telephone Sets

The dial is in the handset!

The Dial-in-Handset Telephone offers 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. The transformer must be ordered separately when this feature is desired.

These telephones may be ordered as complete instruments, or as separate components including handset, handset cord and base.

#### Complete Telephones K-200 Desk and K-254 Wall

Complete telephones consist of the handset, the base and a 6-foot retractile handset cord. Desk telephones also include a line cord.

#### Components Handset K-220

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

#### Handset Cords 1027

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 desk version includes a line cord which plugs into the base.

ITEM	CODE	DESCRIPTION		
1. Basic Telephone	K-200 K-254	Telephone, Trendline desk, rotary dial Telephone, Trendline wall, rotary dial		
2. Colors	00 Black 02 Red 04 Yellow 05 Green	09 Ivory 14 Light Gray 11 Rose Pink 15 White 12 Aqua Blue 30 Turquoise 13 Light Beige 43 Orange		
3. Ringers	(LR) (BA)	Less ringer Straight line blased ringer (No. 153 single gong		
4. Special Features	30 37 38	No special feature Message waiting lamp, 90-volt Message waiting lamp, 125-volt		
5. Type of Dial	M Metropo	M Metropolitan, (letters and numerals)		
	Handset Only (Does not include handset cord) K-220**30M Handset, Trendline, Rotary Dial			
Components	Base Only K-AC1**(LR) Base, Trendline wall, less ringer K-AC1**(BA) Base, Trendline wall, straight line ringer K-AD1**(LR) Base, Trendline desk, less ringer K-AD1**(BA) Base, Trendline desk, straight line ringer Handset Cords 1027**(03)650 Handset cord, 6 feet of usable length 1027**(25)650 Handset cord, 9 feet of usable length 1027**(26)650 Handset cord, 13 feet of usable length			
Miscellaneous	3200-001 3200-00B	Transformer, Input: 105 to 125 volts AC, 60 Hz Output: 6 to 8 volts, 1.75 volt-amperes, 60 Hz Connecting block assembly, (one piece) Connecting block assembly, (two piece)		
		Contraction of the Contraction o		

<sup>\*\*</sup>Substitute color code

# Single Line Rotary Dial Telephones

These telephones have an outstanding reputation for trouble-free operation. The quality of the components and workmanship, and the time-tested design assure reliable operation and minimum maintenance. Single line phones are available in a variety of models, colors and special features.

#### Standard Rotary Dial Desk Phone K-500

Many versions are available depending upon the selection of color, ringer, special feature and type of dial. Without the ringer or special features, and with metropolitan dial, this becomes a versatile unit which will permit economical ordering and stocking. Includes desk stand cord.

#### Standard Rotary Dial Wall Phone K-554

This convenient wall model is identical to the K-500 in circuitry.

#### Rotary Dial Desk Phone with Exclusion Feature. K-502

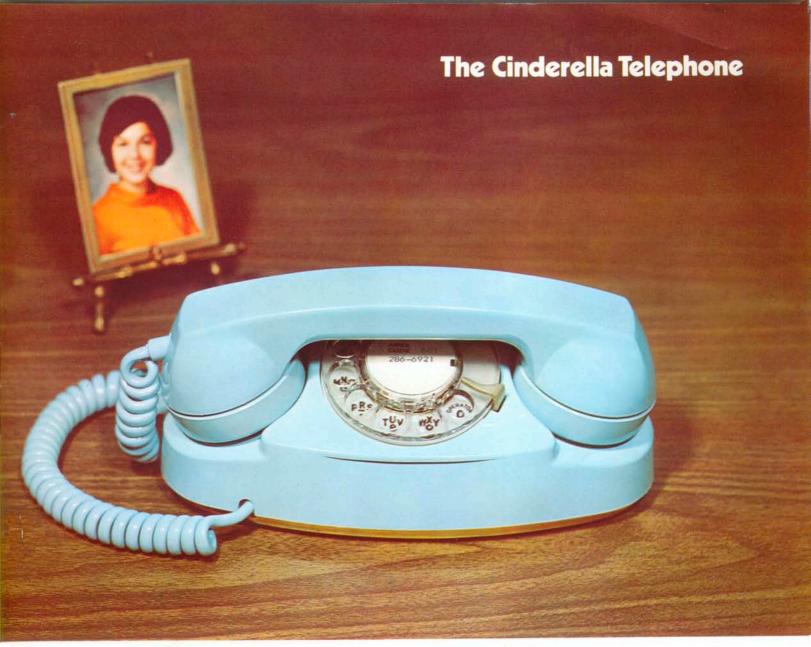
The addition of the convenient and often vital exclusion feature assures total privacy when desired. Lifting the left hand cradle plunger will temporarily disconnect extension phones and the conversation is limited to the one desired phone, insuring privacy. Replacing the handset automatically restores the connection to other phones. Includes 6-conductor desk stand cord, 2900 type connecting block assembly, and number card.

ITE	EM	CODE	DESCRIPTION
1.	Basic Telephone	K-500 K-502 K-554	Telephone, single line desk Telephone, single line desk, exclusion Telephone, single line wall
2.	Colors	04 Yello 05 Green 09 Ivory 11 Rose	Except K-502) (Except K-502) w (Except K-502) 13 Light Beige n 14 Light Gray 15 White
3.	Ringers (Two-Gong Type)	(LR) (BA)	Less Ringer Straight line blased ringer
4.	Special Features	30 33 34 35 37 38 39 44	No special feature Lift-to-talk (K-500, K-554) Pushbutton ground (K-500, K-554) Separate ring and talk circuit (K-500, K-554) Message waiting lamp, 90-volt (K-500, K-554) Message waiting lamp, 125-volt (K-500, K-554) For handsfree application (K-500 only) For use with key telephone system (K-500, K-554)
5.	Type of Dial	M Metro R Regula N No dia	
Mi	scellaneous	3200-00 2900-00 Extra-Let 3031**(2 3031**(2	I Connecting Block Assembly, 4-termina (one-piece) B Connecting Block Assembly, 4-termina (two-piece) I Connecting Block Assembly, 10-termina (two-piece) I Connecting Block Assembly, 4-termina (two-piece) I Connecting Block Assembly, 4-termina (two-piece)

<sup>\* \*</sup> Substitute color code.







#### The Cinderella Telephone

The increasing popularity of the Cinderella telephone is testimony to its exceptionally attractive appearance, delightful choice of colors and convenient size. These phones are not equipped with an internal ringer, and must have an externally connected ringer, if a ringer is required. Connecting blocks are not included, since the terminal board of the extension ringer serves as the connecting block.

The Cinderella telephone includes a combination dial light and night light with a night light switch. A separate power source of 6 to 8 volts AC or DC at a current of about ¼ ampere is required to supply the lamp. Power transformer 31 is recommended.

ITE	M	CODE	DESCRIPTION
1.	Basic Telephone	K-701	Telephone, Cinderella.
2.	Colors	11 Rose 12 Aqua 13 Light	Blue 16 Sea Green
3.	Ringers	(LR)	Less ringer
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 R Regular N No dial-equipped with dial blank	
Miscellaneous		31	Transformer assembly: Input 105 to 125 volts 60 Hz; output 6 to 8 volts, 1.75 volt-amperes, 60 Hz.
		3200-001 3200-00B	

## **Two-Line Rotary Telephones**

Two-line rotary dial desk telephones are the perfect choice for any small business or for the home to provide 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. Desk telephones include desk stand cord and 10-terminal connecting block.

# Standard Two-Line Rotary Dial Desk Telephone, K-510 Convenient two-line phone with features as described above.

# Two-Line Rotary Dial Desk Telephone with Exclusion Feature, K-511

Lifting the left-hand cradle plunger about ¼ inch disconnects other phones from the excluded line and assures the user perfect privacy. Replacing the handset restores the connection to other phones.

# Standard Two-Line Rotary Dial Wall Telephone, K-558 Circuitry is identical to K-510.

## Two-Line Rotary Dial Desk Telephone with Hold Feature, K-575

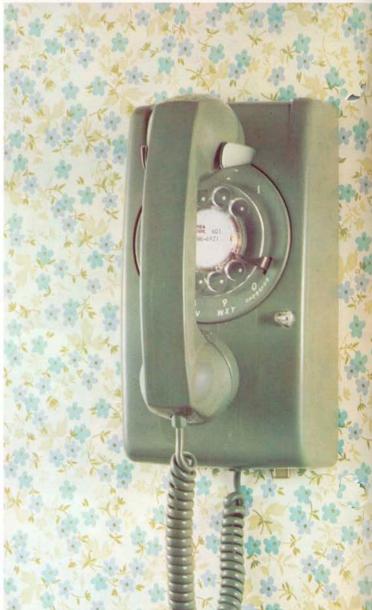
Lifting the left hand cradle plunger places a hold on the non-connected line. The turn key may then be turned to permit answering or placing a call on the second line, and the first line will be automatically placed on HOLD. The user returns to the held call by rotating the turn key to its original position. Replacing he handset releases the HOLD switch and prevents inadvertent holding of a line.

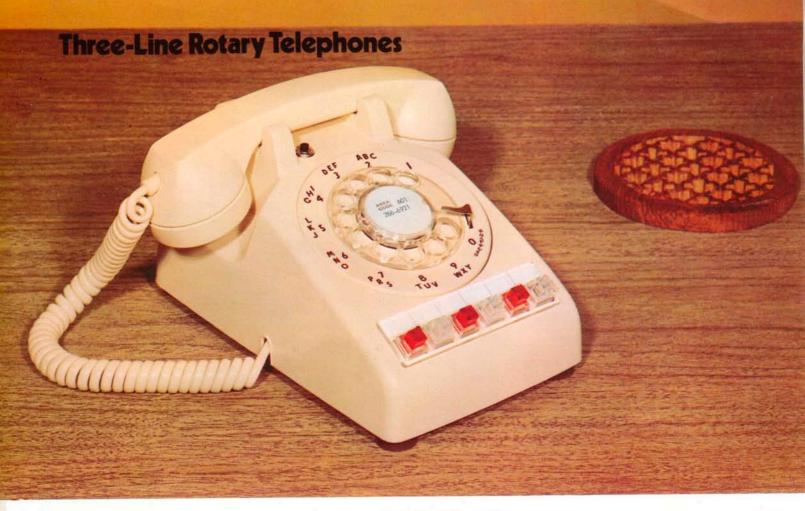
# Two-Line Rotary Dial Wall Phone with "Hold" Feature, K-555

Identical in circuitry to K-575. Hold is applied by depressing button at top of housing, and is released by replacing the handset in the cradle or by lifting the button approximately ½ inch.

ITE	М	CODE	DESCRIPTION
1.	Basic	K-510	Telephone, 2-line desk, rotary dial
	Telephone	K-511	Telephone, 2-line desk, rotary dial- exclusion
		K-558	Telephone, 2-line wall, rotary dial
		K-575	Telephone, 2-line desk, rotary dial with HOLD feature
		K-555	Telephone, 2-line wall, rotary dial, with HOLD feature
2.	Colors	00 Black	13 Light Beige
		05 Green	14 Light Gray
		09 Ivory	15 White
3.	Ringers	(LR)	Less ringer
	(Two-Gong Type)	(BA)	Straight line blased ringer
4.	Special	30	No special features
	Features	36	Equipped with 4-conductor desk stand cord instead of standard 6-conductor
			cord. Also includes 4-terminal connecting block instead of standard
			10-terminal connecting block
5.	Type of	M Metropo	litan
	Dial	R Regular	







#### **Three-Line Rotary Telephones**

These telephones provide access to three lines without the use of external switching equipment. The three lines may be outside, private exchange, 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. 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 incoming call on a line. 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.

#### Standard Three-Line Rotary Dial Telephone, K-576

Versatility and efficiency—with the features described above

# Three-Line Rotary Dial Telephone with Exclusion Feature, K-577

This important feature assures complete privacy when desired. Lifting the left hand cradle plunger disconnects other phones from one line. Replacing the handset restores the connection to other phones.

#### 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 in a 139 type ringer box.

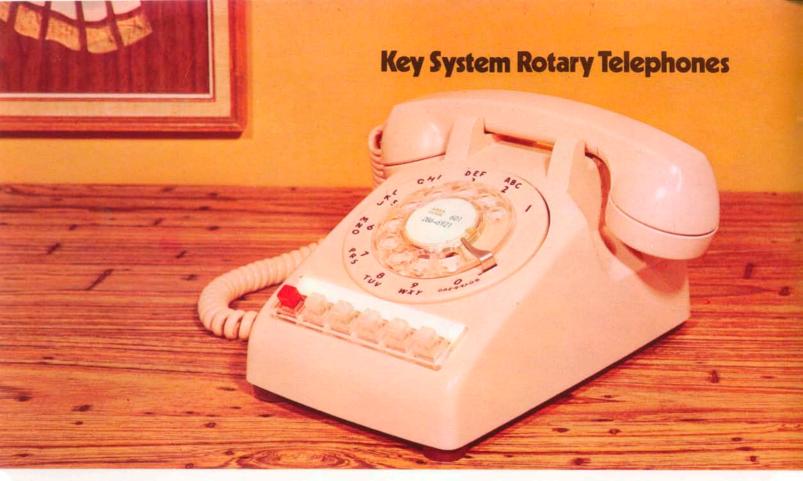
#### **Power Transformer**

The 190169 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, TALK and LAMP power. Lorain T-16A or equivalent power supply will provide power for a maximum of six telephones.

ITEM	CODE	DESCRIPTION
1. Basic Telephone	K-577	Telephone, 3-line with HOLD on each ine, rotary Telephone, 3-line with HOLD on each line, equipped with exclusion feature, rotary
2. Colors	00 Black 05 Green 09 Ivory	13 Light Beige 14 Light Gray 15 White
3. Ringers (Two-Gong Type)	(LR) (BA)	Less ringer Straight line biased ringer
4. Special Features	34	No special features Pushbutton ground Mounting cord equipped with plug Combination of codes 34 and 40
5. Type of Dial	M Metropolitan R Regular	
Miscellaneous	144 190169 3100-001 11323-(**)7	Common audible signal Power transformer Connecting block assembly for phones not equipped with plug 9 Kit for converting round button phone to square buttons. (Same color)

<sup>\*\*</sup>Substitute color code



#### **Key System Rotary Telephones**

These telephones are used with a multiline 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 or 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. These telephones may be ordered with the mounting cord terminated in a 50-contact plug or with individual conductors terminated with spade tips.

Five-line key telephones are offered in three types as described below:

#### Standard Type. K-564

Here are all the features necessary for operation in a key telephone system. Equipped with 34-conductor mounting cord.

#### **Exclusion Type.**

K-565 with special feature code 30 or 40.

This model assures you complete 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 and a manual exclusion switch.

#### Type for Use with Handsfree Equipment.

K-565 with special feature code 39 or 42.

This advanced telephone 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.

ITEM	CODE	DESCRIPTION
1. Basic Teleph	one K-564 K-565	Telephone, key-standard Telephone, key-special
2. Colors	00 Black 05 Green 09 Ivory	13 Light Beige 14 Light Gray 15 White
3. Ringers (Two-Gor	s (LR) ng Type) (BA)	Less ringer Straight line biased ringer
4. Special Feature		No special features For hands free operation (K-565 only) Mounting cord equipped with plug For handsfree operation and has mounting cord equipped with plug (K-565 only)
5. Type of Dial	M Metro R Regula	
Miscellaneou		Connecting block assembly for K-564 or K-565 phones not equipped with plug 9 Kit, for converting round button phone to square buttons. (Same color.) Exclusion switch assembly

<sup>\*\*</sup>Substitute color code



#### Corinthian® Multi-key Telephones

Corinthian multi-key telephones, used with a key telephone system, provide access to a maximum of eleven lines. Buttons and lighting provide a high level of convenience. The red button holds one or more outside lines. Remaining buttons are used for line pickup or 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. Depending upon the wiring of the system, a dialselective intercom circuit may be connected to a pickup button, or it may be connected when all buttons of the telephone are in nonoperated position. The all-buttons-up intercom feature permits access to a maximum of eleven outside lines plus dial-selective intercom. The units are available with 5-line capacity and with 11-line capacity. Fiveline units are expandable to 11-line capacity. All units are equipped with a plug-terminated cord and are wired for use with handsfree (speakerphone) equipment.

#### 5-Line Unit K-234

The 5-line unit can be expanded to 11-line capacity by adding kit number 180113 and replacing the mounting cord with an 874 type mounting cord. The unit comes equipped with a 50-conductor mounting cord terminated with a 50-contact plug.

#### 11-Line Unit K-235

The 11-line unit comes equipped with an 80-conductor mounting cord, terminated with two 50-contact plugs.

#### 5-Line Unit with 80-Conductor Cord K-236

This easily-expandable 5-line unit comes equipped with an 80-conductor mounting cord terminated with two 50-contact plugs. To expand it to 11-line capacity, simply add kit number 180113.

#### **Ordering Information**

ITEM	CODE	DESCRIPTION	
1. Basic Telephone	K-234	Telephone, rotary dial CORINTHIAN® multi-key, 5-line capacity	
retephone	K-235	Telephone, rotary dial CORINTHIAN® multi-key, 11-line capacity	
	K-236	Telephone, rotary dial CORINTHIAN® multi-key, 5-line capacity with 80-conductor mounting cord	
2. Colors	00 Black 05 Green	13 Light Beige 15 White	
3. Ringers	(LR)	Less ringer	
	(BA)	Straight line biased ringer (Type 148-EBA)	
4. Special Features	42	For handsfree application. Mounting cord terminated in plug(s).	
5. Type of Dial	M Metropo R Regular		
Expansion Components	inc	expansion (From 5 to 11 line) Does not clude mounting cord 550 Cord, mounting; 80-conductor. Use with above kit to expand K-231 to	
	11-line capacity. 874**(15)650 Cord, mounting; 80-conductor. Use with above kit to expand K-234 to 11-line capacity.		

For existing installations where earlier Corinthians are in use and the "all-buttons-released" intercom is used order from the list below:

K-231 (Sequel to K-234 above)

K-232 (Sequel to K-235 above)

compatible with earlier Corinthian telephones if the "all-buttonsreleased" intercom is not used and the associated leads are

K-233 (Sequel to K-236 above except does not provide all-buttons-released intercom. If 180113 expansion kit is added, this feature is automatically added.)

disconnected.



# 10/20 Button Key Rotary Dial Telephones

Used with a key telephone system, these phones provide access to a maximum of nineteen 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 handsfree (speakerphone) equipment.

#### 9-Line Units 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.

#### 19-Line Units K-831 (Desk)

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



#### Ordering Information

ITE	M	CODE	DESCRIPTION	
1.	Basic Telephone	K-830 K-831 K-854	Telephone, 10-button key, desk Telephone, 20-button, key, desk Telephone, 10 button, key, wall	
2.	Colors	00 Black 05 Green 13 Light Beige 15 White		
3.	Ringer Single-Gong Type	(LR) (BA)	Less ringer Straight line biased ringer (148-EBA)	
4.	Special Features	42 Equipped for use with handsfree (speakerphone) equipment. Mounting cord terminated in plug (or plugs).		
5.	Type of Dial	M Metropolitan (Letters and numerals)		

#### Ordering Information cont.

Miscellaneous		Diode, station busy color code as follows: 0 eige; 05—Green; 15—W Faceplate, 10-butto	, 0-Black; hite. on desk
	181143-*** 181531-101	Faceplate, 20-butto	on desk expansion, (Orde 143 Faceplate
			Color of Phone
	101 102 103 104	Color of Faceplate  Charcoal  Light Green  Muted Beige  Light Gray	Black (00) Green (05) Light Beige (13) White (15)









# Message Waiting Rotary Dial Telephones

Fine hotels and motels have found that a message-waiting phone is practically a necessity if they are to establish a reputation for first-rate service, and that it also makes the telephone attendant's job easier. A neon lamp in the phone can be switched on by the PBX attendant to indicate to the guest that a message has been left at the switchboard when he was out. The attendant need not keep ringing the guest in the hope that he has returned, and slip ups in delivering messages become a thing of the past.

The neon lamp is connected across the telephone line conductors and is under control of the telephone hookswitch. When the telephone is on-hook, the lamp can be made to glow by applying appropriate direct current across the line conductors at a remote point. When the handset is lifted, the lamp connection is broken at the hookswitch. (Provision must be made to release the remote connection automatically.) Two basic versions are offered, code 37 and code 38. Code 37 is intended for 90-volt DC operation; code 38 is intended for 105 to 125-volt DC operation.

Message waiting telephones are available in most popular style singleline models.

ITEM	CODE	DESCRIPTION
1. Basic Telephone	K-200 K-254 K-500 K-554 K-701	Telephone, Trendline desk, rotary dial Telephone, Trendline wall, rotary dial Telephone, desk, rotary dial Telephone, wall, rotary dial Telephone, Cinderella
2. Colors	00 Black (except Cinderella) 02 Red (except Cinderella) 04 Yellow (except Cinderella) 05 Green (except Cinderella) 10 Ivory (except Cinderella) 11 Rose Pink 12 Aqua Blue 13 Light Beige 14 Light Gray (except Cinderella) 15 White 16 Sea Green (except Trendline) 30 Turquoise (Trendline only) 43 Orange (except Cinderella)	
3. Ringers	(LR) (BA)	Less Ringer Straight line biased ringer (except Cinderella) (Cinderella requires external ringer)
4. Special Feature Code	37 38	Message waiting lamp, 90-volt Message waiting lamp, 125-volt
5. Type of Dial	M Metrop	politan



# **Pushbutton Dial Telephones**

ITT offers you great variety in the category of Pushbutton Dial Telephones with many appealing colors and attractive, efficient designs. In ordering ITT Pushbutton Dial Telephones, you have a choice of single-line, 2-line, 3-line, and multiline key phones.

#### Single-Line Telephones

They are offered in standard versions and also in special versions designed for specific types of applications.

#### Message-Waiting Telephones

They have proved to be invaluable to hotels and motels. These phones permit a PBX operator to signal a room occupant to the effect that a message for him has been left with the operator.

#### 2-Line Telephones

These permit accessing two outside lines or one outside line and one internal line. They are available with exclusion (privacy) feature or with HOLD feature.

#### 3-Line Telephones

They offer still greater versatility, permitting accessing and holding calls on up to three outside lines without the need for external switching equipment. One line may be used for internal communication if desired. Available with exclusion (privacy) feature on one line.

**Multi-Line Key Telephones** are intended for use with key telephone systems. Such systems permit a number of key telephones to share a number of PBX or central office lines — or a combination of PBX and central office lines — without the need for a switchboard. Dial intercom and other features may also be included in a key telephone system and accessed by each telephone in the system.



## How To Custom Order Your Pushbutton Dial Telephone

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



Select Special Feature

- 30 No special feature
- 33 Lift-to-talk
- 34 Pushbutton ground
- 35 Separate ring and talk circuits
- 36 4-conductor desk stand cord instead of standard 6-conductor cord. (2-line telephones.)
- 37 Message waiting lamp (90 volt)
- 38 Message waiting lamp (125 volt)
- 39 For use with "handsfree" equipment
- 40 Mounting cord equipped with plug
- 41 Combination of codes 34 and 40
- 42 Combination of codes 39 and 40
- 44 A-lead control circuit (Permits using single line telephones in a key system.)

Note: All special features are not available on all telephones. Special feature availability is shown on the page with each telephone.

5 Select the Dial

- M Metropolitan type (letters and numerals)
- R Regular type (numerals only)
- N No dial-has dial blank

#### Note:

The complete code number for each telephone is made up of a number from each of the five steps.

#### Example:

2500 is the basic model number

## 13

13 is the color (Light Beige)

# (BA)

BA is ringer option

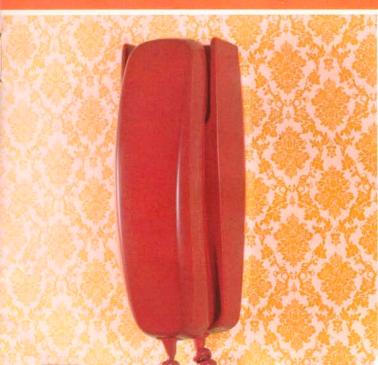
# 30

30 is the special feature (in this case No special feature) M M is

M is the type of dial







# Trendline Pushbutton Hand Telephone Sets

Despite its compact size, the Trendline telephone is a full-performance telephone. The user can make any number of calls without operating the hookswitch plunger in the base. Dial tone is obtained after each call by momentarily depressing the recall button located below the dial buttons. An incandescent lamp illuminates the dial for easy dialing even in dim or darkened rooms. (When this feature is desired, the transformer must be ordered separately. Message-waiting phones, however, are not equipped with a dial light.) You may order these telephones as complete units, or as three individual components: handset, handset cord, and base.

#### Complete Telephone K-2200, K-2254

Each complete telephone consists of the handset, the base, and a 6-foot handset cord. The desk telephones include desk stand cord.

#### Components Handsets 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

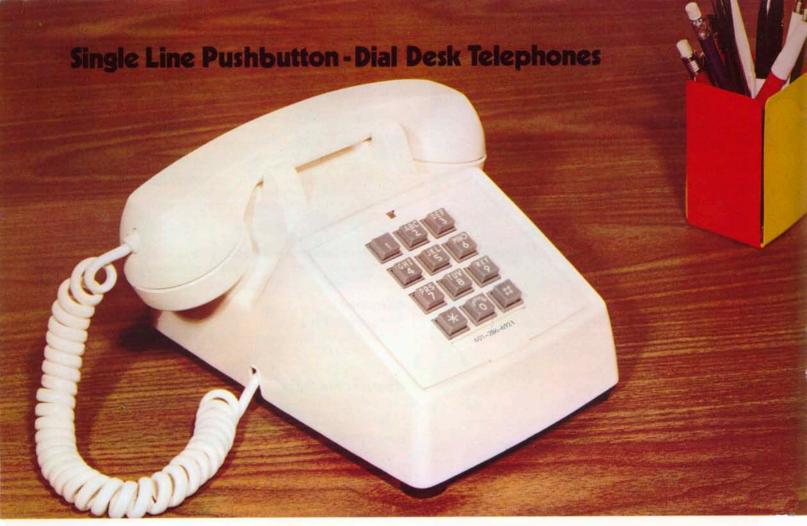
The handset cord plugs into the handset and into the base. It comes packaged in an individual container.

#### Bases (Wall Base K-AC and Desk Base K-AD)

The base includes hookswitch (line switch) and ringer (when specified). The desk version includes desk stand cord, which plugs into the base.

ITEM	CODE	DESCRIPTION
1. Basic Telephone	K-2200 K-2254	Telephone, Trendline desk Telephone, Trendline wall
2. Colors	00 Black 02 Red 04 Yellow 05 Green	09 Ivory 14 Light Gray 11 Rose Pink 15 White 12 Aqua Blue 30 Turquoise 13 Light Beige 43 Orange
3. Ringers	(LR) (BA)	Less ringer Straight line biased 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	Handset Onl	an, (letters and numerals)  y (Does not include handset cord)  M Handset, Trendline
Components		) Base, Trendline wall, less ringer ) Base, Trendline wall, straight line ringe
	K-AD1**(LR K-AD1**(BA Handset Cor 1027**(03)6 1027**(25)6	) Base, Trendline desk, less ringer ) Base, Trendline desk, straight line ringe

<sup>\*\*</sup>Substitute color code



#### Single Line Pushbutton-Dial Desk Telephones

These pushbutton-dial desk phones provide practically trouble-free performance and minimum maintenance costs. Available in a wide range of colors and models and give you many special features for the choosing.

#### Standard Pushbutton-Dial Desk Phone K-2500

This standard model incorporates the same circuitry and basic components as the K-500 with the exception of the pushbutton-dial. It includes desk stand cord, and number card, and uses a two-gong ringer.

### Pushbutton-Dial Desk Phone with Exclusion Feature K-2502

Lifting the left hand cradle plunger temporarily disconnects all extension phones and permits total privacy of conversation. Replacing the handset restores the connection to other phones. Desk stand cord is included, as is the connecting block assembly, and number card. Uses two-gong ringer.

ITEM	CODE	DESCRIPTION
1. Basic Telephone	K-2500 K-2502	Telephone, desk; single line Telephone, desk; single line, exclusion
2. Colors	00 Black 02 Red (Except K-2502) 04 Yellow (Except K-2502) 05 Green 09 Ivory 11 Rose Pink (Except K-2502) 12 Aqua Blue (Except K-2502) 13 Light Beige 14 Light Gray 15 White 16 Sea Green (Except K-2502) 43 Orange (Except K-2502)	
3. Ringers	(LR) (BA)	Less ringer Straight line biased ringer
4. Special Features	30 33 37 38 39 44	No special features Lift-to-talk (K-2500) Message waiting lamp, 90 volt (K-2500) Message waiting lamp, 125 volt (K-2500) For handsfree application (K-2500) For use in K-1A2 key telephone system (K-2500)
5. Type of Dial	M Metro R Regula	
Miscellaneous	3200-001 3200-00E 2900-001 180697-1	B Connecting Block Assembly, (two-piece)

# Single Line Pushbutton-Dial (Miniature Type) Wall Telephones, K-2554

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 circuitry. 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.

ITEM	CODE	DESCRIPTION
1. Basic Telephone	K-2554	Telephone, wall; single line pushbutton-dial
2. Colors	00 Black 02 Red 04 Yellow 05 Green 09 Ivory 11 Rose F 12 Aqua I 13 Light I 14 Light I 15 White 16 Sea G 43 Orange	Blue Beige Gray reen
3. Ringers	(LR) (BA)	Less ringer Straight line biased ringer (No. 148)
4. Special Features	30 44	No special feature A-lead control for use with key telephone system
5. Type of Dial	M Metrop R Regular	



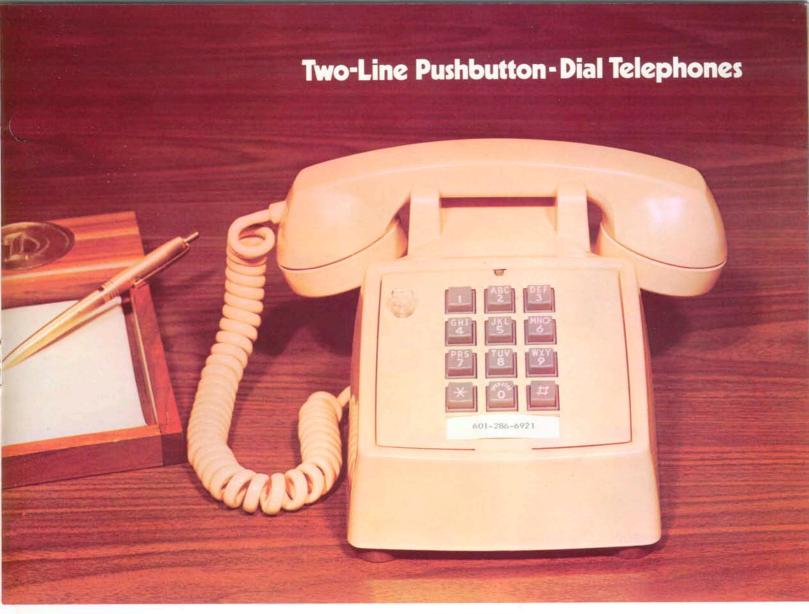


# Single Line Pushbutton-Dial Standard Size Wall Telephones, K-3554

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 series telephones with the exception of the pushbutton-dial. Uses standard-size 2-gong ringer.

ITEM		CODE	DESCRIPTION
11111	Basic Telephone	K-3554	Telephone, wall; pushbutton-dial, standard size
2. (	Colors	00 Black 02 Red 04 Yellow 05 Green 09 Ivory 11 Rose Pi 12 Aqua B 13 Light B 14 Light G 15 White 16 Sea Gr	lue eige ray
3. F	Ringers	(LR) (BA)	Less ringer Straight line biased ringer
	Special Features	30	No special features
	Type of Dial	M Metropo R Regular	litan
	ellaneous	100007 10	Kit, polarity guard



#### Two-Line Pushbutton-Dial Telephones

Two-line pushbutton-dial phones give homes and small businesses high-quality phone service with top efficiency and flexibility through two lines 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. These phones include desk stand cord and connecting block.

## Standard Two-Line Pushbutton-Dial Desk Telephone, K-2510

This standard model has the basic features described above.

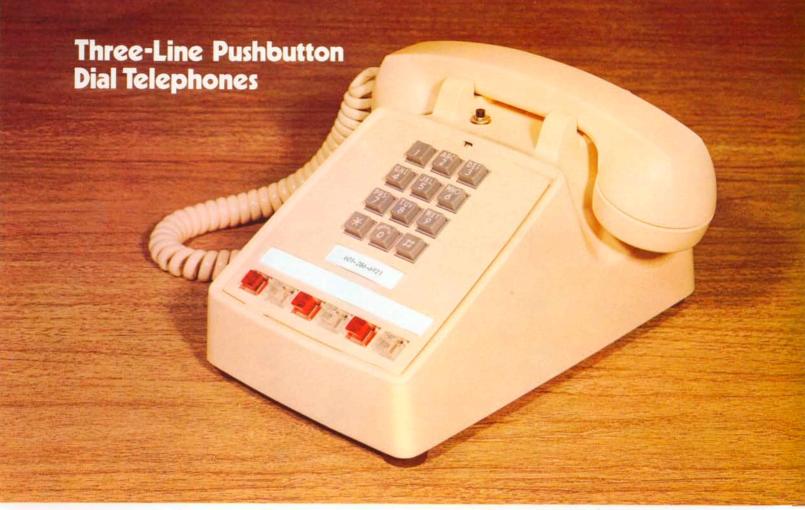
#### Two-Line Pushbutton-Dial Desk Telephone with Exclusion Feature, K-2511

This two-line pushbutton-dial desk telephone has the important exclusion feature to insure privacy when desired. Lifting the lefthand cradle plunger about ¼ inch disconnects other phones from the excluded line. Replacing the handset restores the connection to the other phones.

# Two-Line Pushbutton-Dial Desk Telephone with "Hold" Feature, K-2575

This model provides the convenient HOLD feature. Lifting the lefthand cradle plunger places a hold on the non-connected line. The turn key may then be turned to permit answering or placing a call on the second line, while placing the first line on hold automatically. The user returns to the held call by rotating the turn key to its original position.

ITE	М	CODE	DESCRIPTION
1.	Basic Telephone	K-2510 K-2511 K-2575	Telephone, 2-line desk Telephone, 2-line desk with exclusion Telephone, 2-line desk with HOLD feature
2.	Colors	00 Black 05 Green 09 Ivory 13 Light Be 14 Light Gr 15 White	
3.	Ringers	(Two-Gong (LR) (BA)	Type) Less ringer Straight line blased ringer (No. 130)
4.	Special Features	30 36	No special features Equipped with 4-conductor desk stand cord instead of standard 6-conductor cord. Also includes 4-terminal connecting block instead of standard 10-terminal connecting block.
5.	Type of Dial	M Metropol R Regular	itan
Mi	scellaneous	2900-001 180697-102	Connecting Block Assembly, 10-termina Kit, Polarity Guard



#### Three-Line Pushbutton-Dial Telephones

Three-line pushbutton-dial telephones give you the added flexibility and convenience of handling three lines without the use of external switching equipment. This is true whether the three lines are outside, private exchange or 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. 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 a line on which there is an incoming call. Ringing voltage operates the incoming-call lamps—under the line buttons. A power transformer must be ordered separately for operation of busy lamps—located under the hold buttons.

#### Standard Three-Line Pushbutton-Dial Telephone, K-2576

This phone has all the basic features described in the general paragraph above.

## Three-Line Pushbutton-Dial Telephone with Exclusion Feature, K-2577

This phone employs the same circuitry and design as the K-2576 except that it is equipped with a manual exclusion switch. Lifting the left hand cradle plunger disconnects other phones from one line for private conversation. Replacing the handset restores the connection to other phones.

#### Common Audible Signal

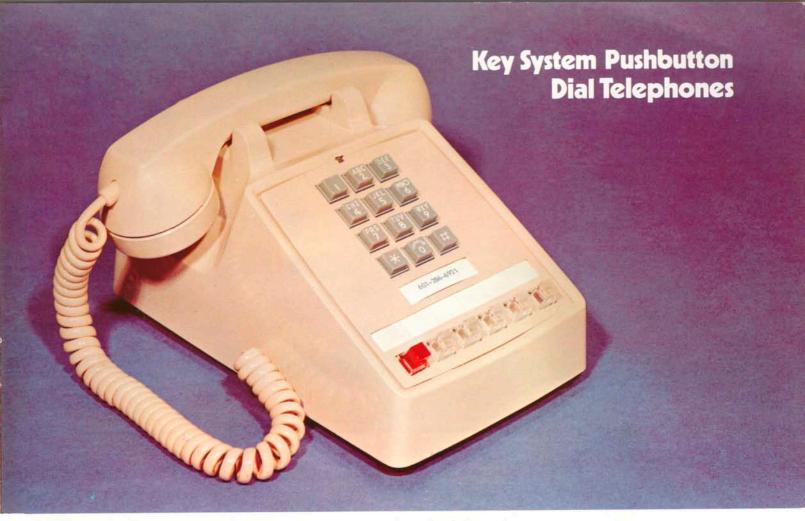
The common audible signal, 144, provides an audible signal for all three lines of a three-line telephone. May be installed in phone or externally in a 139 type ringer box.

#### **Power Transformer**

The 190169 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, TALK and LAMP power. (Lorain T-16A or equivalent power supply will provide power for a maximum of six telephones.)

ITEM	CODE	DESCRIPTION
1. Basic Telephone	K-2576 K-2577	Telephone, 3-line with HOLD on each line Telephone, 3-line with HOLD on each line, equipped with exclusion feature
2. Colors	00 Black 05 Green 09 Ivory	13 Light Beige 14 Light Gray 15 White
3. Ringers	LR BA	Less ringer Straight line biased ringer
4. Special Features	30 34 40 41	No special features Pushbutton ground Mounting cord equipped with plug Combination of codes 34 and 40
5. Type of Dial	M Metropolitan R Regular	
Miscellaneous	144 190169 3100-001	Common audible signal Power transformer Connecting block assembly for phones not equipped with plug



#### Key System Telephones with Pushbutton Dial

These handsomely designed and expertly engineered pushbutton-dial phones are used with a multiline 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, and the three right hand buttons can be converted to non-locking operation for manual signaling or for control of semi-automatic exclusion. A signal lamp beneath each of the five pickup buttons indicates the status of the associated line—whether idle, busy, held or call-incoming. A lamp may also be installed beneath the hold button to signal that another (predetermined) station in the system is busy. These telephones may be ordered with the mounting cord terminated in a 50-contact plug or with individual conductors terminated with spade tips. Five-line telephones are available in three types as described below.

#### Standard Type K-2564

Here are all the features necessary for operation in a key telephone system. Equipped with a 34-conductor mounting cord.

#### Exclusion Type K-2565

with Special Feature Code 30 or 40

This model assures you complete privacy whenever it is desirable. Lifting the left hand cradle plunger approximately ¼ inch disconnects any subsequent multipled telephones from line 1. Or, the exclusion switch may also be used to control semiautomatic exclusion. Replacing the handset in its mounting restores the connection to the other telephones. Comes equipped with a 42-conductor mounting cord and a manual exclusion switch.

#### Type for Use with Handsfree Equipment K-2565

with Special Feature Code 39 or 42

This phone is specially equipped with a 50-conductor mounting cord, an additional set of contacts in the hookswitch for on-off control of handsfree equipment, an additional set of dial off-normal contacts to shunt the handsfree speaker during dialing, and a manual exclusion plunger, It does *not* include the manual exclusion switch. To add the manual exclusion feature, order 79971-001 Exclusion Switch Assembly separately.

ITEM	CODE	DESCRIPTION
1. Basic Teleph	K-2564 N-2565	Telephone, key—standard Telephone, key—special
2. Colors	00 Black 05 Green 09 Ivory	13 Light Beige 14 Light Gray 15 White
3. Ringer	S (Two-Gong Type (LR) (BA)	Less ringer Straight line biased ringer (type 130)
4. Specia Featur		No special feature For handsfree operation (K-2565 only) Mounting cord equipped with plug For handsfree operation and has mounting cord equipped with plug (K-2565 only)
5. Type of Dial	M Metrop R Regula	
Miscellane	ous 3000-001	Connecting block assembly





# 10/20 Button Key Pushbutton-Dial Telephones

These telephones, used with a key telephone system, provide access to a maximum of nineteen lines. The red button is used to place a hold on one or more outside lines. The remaining buttons are used for line pickup or 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 pickup button 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. Designation tabs are individually installed under the cap of each button for convenience in changing or adding button designations. All units can be used with handsfree (speakerphone) equipment.

#### 9-Line Units

Desk Phone K-2830 and Wall Phone K-2854

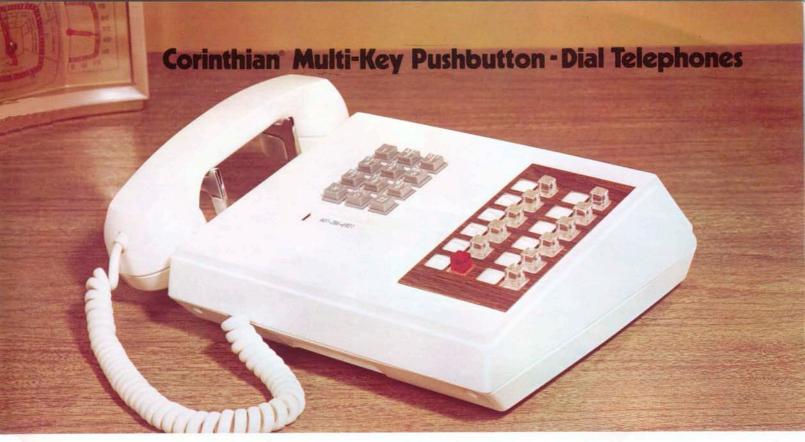
Both the desk and wall units have ten buttons, providing one HOLD and nine convertible (pickup or signaling) buttons. They come equipped with a 50-conductor mounting cord terminated in a single 50-contact plug.

#### 19-Line Units

Desk Phone K-2831

This desk unit has twenty buttons, providing one HOLD and nineteen convertible (pickup or signaling) buttons. It comes equipped with a 100-conductor mounting cord terminated in two 50-contact plugs.

ITEM	CODE	DESCRIPTION	
1. Basic Telephone	K-2830 K-2831 K-2854	Telephone, 10-b Telephone, 20-b Telephone, 10-b	utton key, desk
2. Colors	00 Blac 05 Gree	in and it	
3. Ringer Single-Gong Type	(LR) (BA)	Less ringer Straight line biased	ringer (148-EBA)
4. Special Features	42	Equipped for use w (speakerphone) equ cord terminated in p	uipment, Mounting
5. Type of Dial	M Metropolitan (Letters and numerals)		
Miscellaneous	9003**-006 Cord, mounting, 100-conductor  **substitute color code as follows: 00-Black 05-Green; 13-Light Beige; 15-White. 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)		y n (desk or wall) n (desk) expansion. and 181103
	***Substitute Color Code as follows:		
	101 102 103 104	Color of Faceplate  Charcoal  Light Green  Muted Beige  Light Gray	Color of Phone  Black (00) Green (05) Light Beige (13): White (15)



#### Corinthian® Multi-Key Pushbutton-Dial Telephones

Corinthian multi-key telephones are the instruments to select when access to a maximum of eleven lines plus razor-edge sculptured design is desired. Use these phones with a key telephone system. The red button is used to place a hold on one or more outside lines, while the 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 available.) 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. Depending upon the wiring of the system, a dial-selective intercom circuit may be connected to a pickup button, or it may be connected when all buttons of the telephone are in unoperated position. The all-buttons-up intercom feature permits accessing a maximum of eleven outside lines plus dial-selective intercom.

These units are available with 5-line or 11-line capacity, and the 5-line units are expandable to 11-line capacity. All units are equipped with plug-terminated cord and are equipped for use with handsfree (speakerphone) equipment.

#### 5-Line Unit, K-2234

This versatile 5-line unit can be expanded to 11-line capacity by adding kit number 180113 and replacing the mounting cord with 874 type mounting cord. It comes equipped with a 50-conductor mounting cord terminated with a 50-contact plug.

#### 11-Line Unit, K-2235

The 11-line unit comes equipped with an 80-conductor mounting cord terminated with two 50-contact plugs.

#### 5-Line Unit with 80-Conductor Cord K-2236

This easy-to-expand 5-line unit comes already equipped with an 80-conductor mounting cord terminated with two 50-contact plugs. To expand it to 11-line capacity, simply add kit number 180113.

#### **Ordering Information**

ITEM	CODE	DESCRIPTION
1. Basic Telephone*	K-2234	Telephone, pushbutton-dial CORINTHIAN® multi-key, 5-line capacity plus intercom
	K-2235	Telephone, pushbutton-dial CORINTHIAN® multi-key, 11-line capacity plus intercom
	K-2236	Telephone, pushbutton-dial CORINTHIAN® multi-key 5-line capacity with 80-conductor mounting cord
2. Colors	00 Black 05 Green	13 Light Beige 15 White
3. Ringers	(LR) (BA)	Less ringer Straight line biased ringer (No. 148-EBA)
4. Special Features	42	For handsfree application, Mounting cord terminated in plug(s)
5. Type of Dial	M Metropolitan R Regular	
Expansion Components	180113	Kit, expansion, from 5 to 11-line capacity
	869**(15)6	50 Cord, mounting; 80-conductor. Use with above kit to expand 2231 to 11-line capacity
	874**(15)6	50 Cord, mounting; 80-conductor. Use with above kit to expand 2234 to 11-line capacity
	180697-102	Kit, polarity guard

"All Corinthian multi-key telephones listed above are wired to be compatible with ITT, W. E., and S-C key telephones. They are compatible with earlier Corinthian telephones if the "all-buttons-released" intercom is not used and the associated leads are disconnected.

For existing installations where earlier Corinthians are in use and the "all-buttons-released" intercom is used order from the list below:

K-2231\*\*(BA)42M (Sequel to K-2234 above) K-2232\*\*(BA)42M (Sequel to K-2235 above) K-2233\*\*(BA)42M (Sequel to K-2236 above except does not provide all-buttons-released intercom. If 180113 expansion kit is added, this feature is automatically added.)







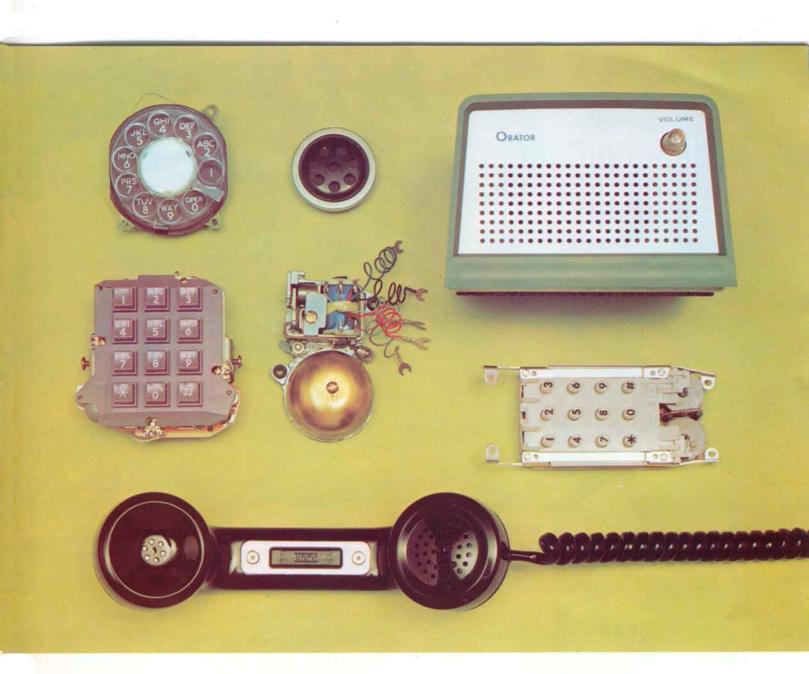
# Message-Waiting Pushbutton Dial Telephones

Hotels and motels employ message-waiting phones to provide an essential service to their guests. They also make the desk clerk's job much easier. A neon lamp in the phone can be switched on by the PBX attendant to indicate to the guest that a message has been left at the switchboard when he was out. There is no need for the attendant to keep ringing the guest, and no danger that the guest won't receive his message.

The neon lamp is connected across the telephone line conductors and is under control of the telephone hookswitch. When the telephone is on-hook, the lamp can be made to glow by applying appropriate direct current across the line conductors at a remote point. When the handset is lifted, the lamp connection is broken at the hookswitch. (Provision must be made to release the remote connection automatically.) Two basic versions are offered, code 37 and code 38. Code 37 is intended for 90-volt DC operation; code 38 is intended for 105 to 125 volt DC operation.

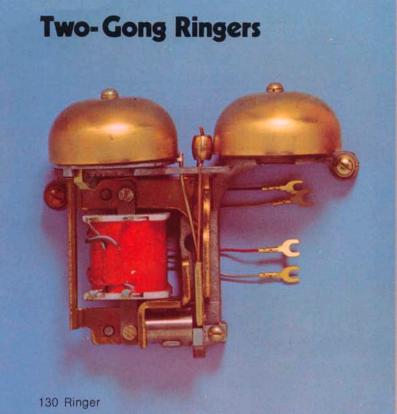
Message waiting telephones are available in most popular style singleline models.

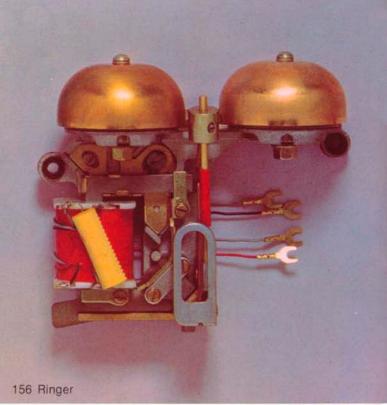
ITEM	CODE	DESCRIPTION
1. Basic Telephone	K-2200 K-2254 K-2500	Telephone, Trendline desk, pushbutton-dial Telephone, Trendline wall, pushbutton-dial Telephone, desk, pushbutton-dial
2. Colors	00 Black 02 Red 04 Yellow 05 Green 09 Ivory 11 Rose P 12 Aqua B	14 Light Gray 15 White 16 Sea Green (except Trendline) 30 Turquoise (Trendline only) ink 43 Orange
3. Ringers	(LR) (BA)	Less ringer Straight line blased ringer
4. Special Feature Code	37 38	Message waiting lamp, 90-volt Message waiting lamp, 125-volt
5. Type of Dial	M Metropo	litan



# **Telephone Components and Miscellaneous Items**







#### **Two-Gong Ringers**

ITT offers a complete line of high impedance, two-gong ringers; the straight-line biased unit, plus frequency-selective units in Harmonic, Synchromonic and Decimonic series. These ringers are designed for use in standard size telephones and type 139 ringer boxes for bridged or divided ringing.

The coil design permits using either of two windings, 1000 Ohm or 2650 Ohm, for 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 Ringer

The type 130 straight line biased 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 manual 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.

#### **Gas Tube 75599**

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

ITEM	CODE	DESCRIPTION/FREQUENCY
	130(BA)470	Ringer, Straight Line Biased Type
	156(-)470	Ringer, Frequency Selective
	157(-)470	Ringer, Frequency Selective
Harmonic	-(HA1)-	
	-(HA2)-	50 Hz (Same as HC5) 66% Hz
	-(HA3)-	66% Hz
	-(HA4)-	16% Hz
	-(HA5)-	25 Hz
Synchromonic	-(HB1)-	30 Hz (Same as HC3)
.,	-(HB2)-	
	-(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	75599	Tube, gas (for AC/DC signaling)
		equency selective ringer includes or when required.

## Single-Gong Ringers

ITT single-gong ringers are available to meet almost any requirement for miniature ringers whether straight line biased or frequency-selective. 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 148, Straight Line Biased Ringer

Factory adjusted to ring at 20 Hz and at 30 Hz. The bias spring has two positions to permit adjustment for loop lengh. Mounting holes are located as shown in the left hand figure of the diagram. Designed for use in K-2554 wall telephone.

#### Type 148E, 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 153, 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 telephone.

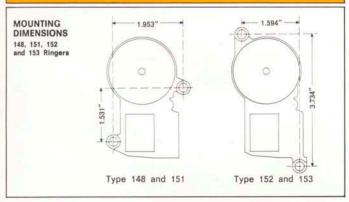
#### Type 152, Frequency Selective Ringer

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

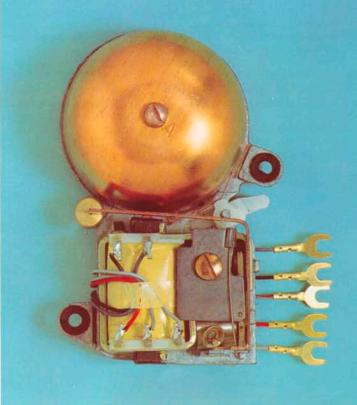
#### Diode Kit, 181042

For use with straight line biased ringer for superimposed signaling.

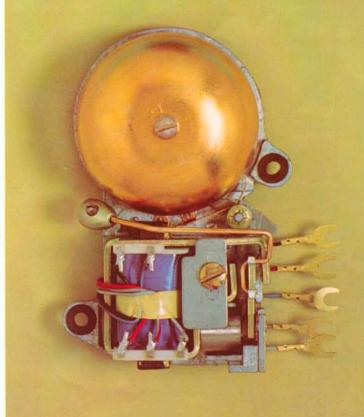
ITEM	CODE	DESCRIPTION
	148(BA)470	Ringer, biased, single-gong
	148E(BA)470	Ringer, biased, single-gong
	153(BA)470	Ringer, biased, single-gong
	181042	Diode Kit (for AC/DC signaling)
	151(-)470	Ringer, frequency selective
	152(-)470	Ringer, frequency selective
Harmonic	-(HA1)-	33 1/3 Hz
	-(HA2)	50 Hz (Same as HC5)
	-(HA3)-	66% Hz
	-(HA4)-	16% 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)
	NOTE: Each rin	ger includes matching capacitor.







151 Ringer



## **Extension Ringers**

Extension ringers are designed for wall mounting and include a terminal board, a matching capacitor and a light beige cover. They can be used as additional signals on a line, for night answering signals on PABX's, or as an external ringer for a telephone. 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 double wound coil, single gong, straight line biased type unit assembled on a metal base with molded plastic cover, It is equipped with mechanical volume control and a terminal board for connections.

#### Type 138 for Superimposed Signalling

Type 138 ringer is identical to Type 136 except for the addition of a gas tube (for superimposed signaling) and the use of a larger cover.

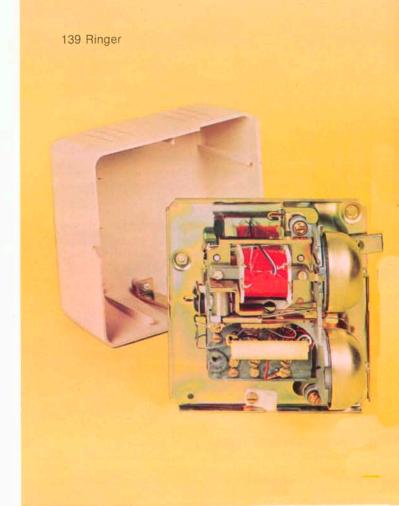
#### Type 139 Ringer Box—with or without Ringer

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 base plate 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.)

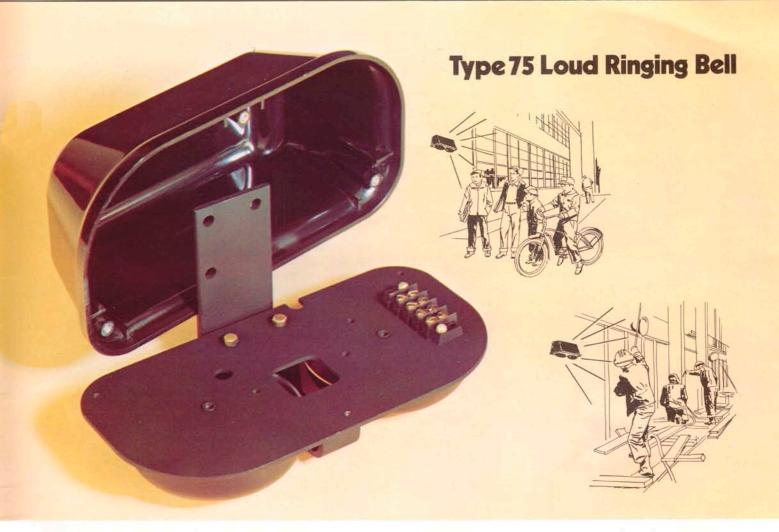
#### Type 147, Frequency Selective Type

Type 147 ringer is a double wound coil, single gong, frenquency selective type of unit assembled on a metal base with molded plastic cover. Equipped with mechanical volume control and a terminal board for connections. Available in Harmonic, Synchromonic, and Decimonic series.

ITEM	CODE	DESCRIPTION
	136(BA)470	Ringer, extension; straight line biased
	138(BA)470	Ringer, extension; straight line biased with gas tube for super-imposed signaling.
	139(LR)470	Ringer box, less ringer.
	139(BA)470	Ringer box with type 130 ringer.
	147(-)470	Ringer, extension; frequency selective double wound coil. Insert code below
Harmonic	-(HA1)-	33 1/3 Hz
	-(HA2)-	50 Hz (Same as HC5)
	-(HA3)-	66% Hz
	-(HA4)-	16% 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)







#### Type 75 Loud Ringing Bell

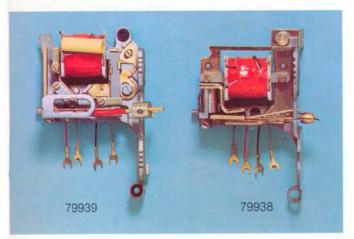
A loud ringing bell is invaluable in any noisy location, whether indoors or outdoors. Its most common indoor application is in industrial plants, while outdoor locations include lumber yards, railway yards, schoolyards and other open areas. A rugged plastic cover protects internal parts and connections from precipitation, and open design of baseplate prevents internal condensation. It features two four-inch gongs mounted horizontally below with the ringer mechanism mounted vertically above, and is compatible with all circuits using high impedance ringers.

#### Type 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 double-wound coil. Available in harmonic, synchromonic, and decimonic frequencies. (Frequency is designated by part number suffix, see table.) (Similar to 157 Ringer Mechanism.)



ITEM	CODE	DESCRIPTION/FREQUENCY
	75(LR)301	Bell, loud ringing, less ringer
	75(BA)301	mechanism Bell, loud ringing, straight line biased mechanism
Ringer Mechanism	79938	Mechanism, straight line biased 20 through 30 Hz
Harmonic	79939-1	Mechanism, Frequency Selective
	79939-2 or 15	Mechanism, Frequency Selective
	79939-3	Mechanism, Frequency Selective
	79939-4	Mechanism, Frequency Selective
	79939-5	Mechanism, Frequency Selective 25 Hz
Synchromonic	79939-6 or 13	Mechanism, Frequency Selective 30 Hz
	79939-7	Mechanism, Frequency Selective 42 Hz
	79939-8	Mechanism, Frequency Selective
	79939-9	Mechanism, Frequency Selective
	79939-10	Mechanism, Frequency Selective 16 Hz
Decimonic	79939-11	Mechanism, Frequency 20 Hz
	79939-12	Mechanism, Frequency 60 Hz
	79939-13 or 6	Mechanism, Frequency 30 Hz
	79939-14	Mechanism, Frequency 40 Hz
	79939-15 or 2	Mechanism, Frequency 50 Hz







## **Rotary Dials**

Rotary dials are submitted to rigid quality control to insure 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 10A dial is not equipped with leads\*.)

Dials are 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.

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

Miniature type with 2% numeral ring and automatic moveable finger stop. Designed for use in dial-in-handset telephones. Not provided with off-normal contacts and not equipped with leads\*

#### Type 3000

Standard type with 4% diameter numeral ring. Available in colors to match various telephone housings. (Replaces type 19 dial.)

#### Type 3500

Identical to type 3000 but has an additional set of normally open contacts for use with handsfree telephones. (Replaces type 28 dial.)

#### Type 3300

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

#### Type 3800

Identical to type 3300 but has an additional set of normally open contacts for use with handsfree telephones. (Replaces type 24(GR) dial.)

ITEM	CODE	DESCRIPTION	
Rotary Dials	10A(G)450	Rotary dial, 2%" dia	meter metropolita
	30**(D)450	Rotary dial, 41/4" dia	
	30**(G)450	Rotary dial, 41/4" dia	meter metropolita
	3300(D)450	Rotary dial, 3" diame	eter, regular
	3300(G)450	Rotary dial, 3" diame	eter, metropolitan
	35**(D)450	Rotary dial, 41/4" dia for handsfree applica	
	35**(G)450	Rotary dial, 4¼ " dia metropolitan, for har applications	meter,
	3800(D)450	Rotary dial, 3" diame handsfree applicatio	
	3800(G)450	Rotary dial, 3" diame for handsfree applic	
	3800(H)450	Rotary dial, 3" diame finger holes, For har	
Colors **	00 Black	09 Ivory	14 Light Gray
	02 Red	11 Rose Pink	15 White
	04 Yellow	12 Aqua Blue	16 Sea Green
	05 Green	13 Light Beige	43 Orange

<sup>\*</sup>Type 10A dial is provided with male tabs to accept female snap-on terminals.

<sup>\*\*</sup>Substitute color code



## **Pushbutton Dials**

Pushbutton (tone) dials have twelve-button matrix and highly reliable transistorized oscillators. Ten buttons are used for telephone dialing, and two special-service buttons are included to avoid future obsolescence.

#### Type 3200, Standard Pushbutton Dial

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

#### Type 3600, Pushbutton Dial for Handsfree Use

Similar to type 3200 except provided with an additional set of contacts for use with handsfree (speakerphone) equipment. Used in Corinthian, 10/20 button, and special K-565 and K-2565 key telephones.

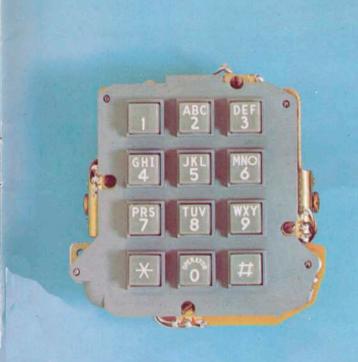
#### Type 3700, Pushbutton Dial for Trendline Telephones

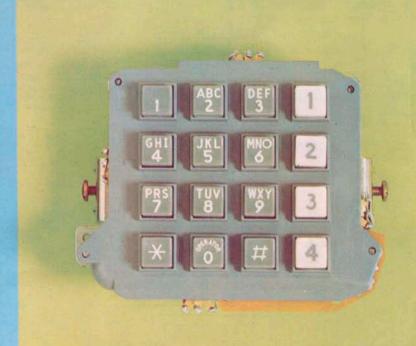
Miniature dial with ten pushbuttons having numbers 1 through 0 and two special service buttons. Buttons are translucent white with black characters, Equipped with screw terminals.

#### Type 4000, 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.

ITEM	CODE	DESCRIPTION
Pushbutton	3200(D)450	Pushbutton dial, regular
Dials	3200(G)450	Pushbutton dial, metropolitan
	3600(D)450	Pushbutton dial, regular; for handsfree applications
	3600(G)450	Pushbutton dial, metropolitan; for handsfree applications
	3700(D)450	Pushbutton dial, regular; for dial-in- handset telephones
	4000(D)	Dial, 16-pushbutton. As illustrated except numerals only on buttons 2 through 0.
	4000(G)	Dial, 16-pushbutton. As illustrated.







#### Handsets

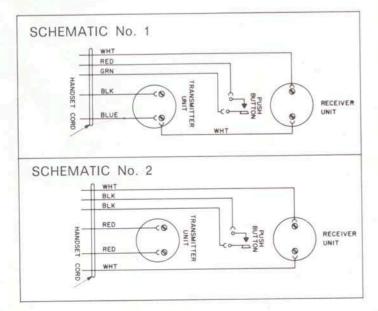
ITT handsets are notable for their excellent response characteristics. Both the handle and the caps are molded of the same type premium quality plastic as ITT telephone housings. Handsets include handle, caps, transmitter unit, receiver unit, and matching coiled cord.

#### Type 65 Standard Handset

This handset is the standard model for ITT telephones. It has a four conductor coiled cord.

#### Type 69 Push-To-Talk Application

This handset is similar to type 65 but is designed for use in push-totalk application. A convenient pushbutton switch is mounted in the stem of the high impact resistant plastic handle. It has carbon type transmitter unit, magnetic type receiver unit, and is available with a 5 or 6 conductor coiled cord.



ITEM	CODE	DESCRIPTION
Handsets		
(Receiver Unit Eq	uipped With Anti	-Click Varistor)
	65**(C2)410	Handset, Standard
	69**(C1)410	Handset, 5-conductor cord, "ITT" logo, Schematic No. 1
	69**(C3)410	Handset, 6-conductor cord, "ITT" logo, Schematic No. 2
Handsets		
(Receiver Unit No	ot Equipped With	Anti-Click Varistor)
	69**(C9)410	Handset, 5-conductor cord, "ITT" logo, Schematic No. 1
	69**(C6)410	Handset, 6-conductor cord, "ITT" logo, Schematic No. 2
Extra	1005**(22)650	Cord, Handset, 10-feet,
Length Coiled	1005**(23)650	(Except Orange) Cord, Handset, 15-feet
Cords For Type 65		
Components	79250-**	Handle, handset (does not include caps) (Type 65)
	79289-**	Cap, receiver
	79290-**	Cap, transmitter
	75384-2	Holder, transmitter
	75547-1	Unit, receiver (Ring armature type)
	75555-1	Unit, Transmitter
Colors**		
00 Black		12 Aqua Blue (Type 65 only)
02 Red		13 Light Beige
04 Yellow (Type 6	S5 only)	14 Light Gray
05 Green		15 White
09 Ivory (Type 65		16 Sea Green (Type 65 only)
11 Rose Pink (Type 65 only)		43 Orange (Type 65 only)



### **Transmitters and Receivers**

ITT receivers deliver exceptionally high efficiency and sound output, while transmitters assure faithful reproduction over the effective range.

#### 75547 Receiver Unit for Type 65 and 69 Handsets

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. Frequency response, 200 to 4000 cps. DC operating current 30 to 75 milliamperes, DC resistance, approximately 45 ohms, Weight is 74 grams.

#### 88250 Receiver Unit for Use in Trendline® Telephone Handsets

This receiver is designed for use in Trendline® telephone handsets. 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. Characteristics similar to 75547 receiver unit. Weight is 36 grams.

#### 75555 Transmitter Unit

This transmitter unit forms a part of handsets number 65, 69, 220 and 2220. It 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 cap as the other contact. 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 anti-click varister circuit. Weight is 39 grams.

ITEM	CODE	DESCRIPTION
Receiver	75547-1	Receiver Unit, Standard (Ring Armature)
and Transmitter	75547-2	Receiver Unit, Less Varister (Ring Armature)
Transmitter	88250-1	Receiver Unit, Standard (Central Armature)
	75555-1	Transmitter Unit



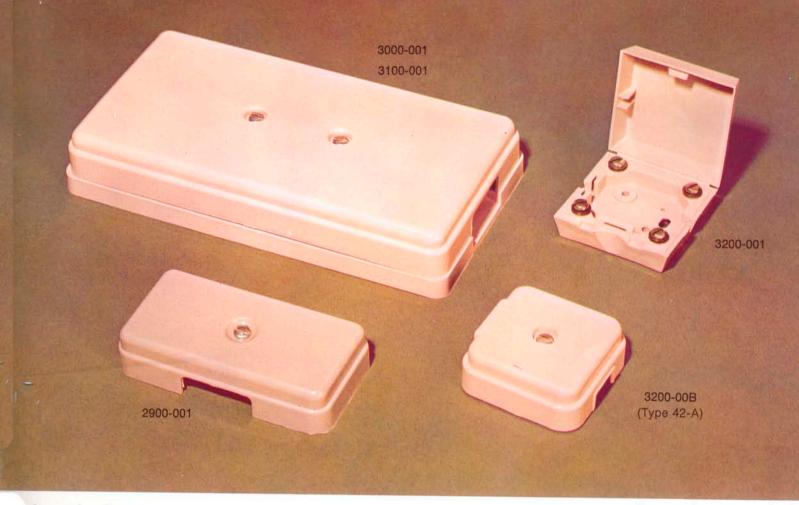
#### The "Orator" Telephone Loudspeaker

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 of high quality plastic used in all ITT telephone housings. A matching 9-foot cord is included. The face plate 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.

ITEM	CODE	DESCRIPTION
Loudspeaker	K-107**(A)	Orator
Transformer	31-00A	Transformer assembly. Input 105 to 125 volt, AC, 60 Hz; Output, 15 to 18 volt.
		2.25 volt amperes, 60 Hz
	**Substitute	2.25 volt amperes, 60 Hz
Colors	**Substitute	2.25 volt amperes, 60 Hz
Colors	1/2005/00/1000	2.25 volt amperes, 60 Hz color code

<sup>\*\*</sup>Substitute color code

# **Connecting Blocks**



#### Connecting Blocks

Molded of impact-resistant plastic with tinned brass terminals. Include cadmium plated steel terminal screws and washers. Do not include mounting hardware except as noted. Covers are light beige color.

No. 2900—provides 10 terminals: consists of one 10-terminal block and plastic cover.

No. 3000—provides 40 terminals: consists of four 10-terminal blocks, plastic backboard, and plastic cover.

No. 3100—provides 20 terminals: consists of two 10-terminal blocks, plastic backboard, and plastic cover.

No. 3200-001—provides 4 terminals and space for mounting a miniature buzzer. It includes a hinged cover which latches to the base. The unit is latched closed by pressing against the center of the cover. It is opened by simultaneously pressing against the center of the cover to release the latch and pulling the cover outward on the side opposite the hinge.

No. 3200-00B—provides 4 terminals and includes separate screwattached cover. Equivalent to type 42 connecting block.

ITEM	CODE	DESCRIPTION
Connecting	2900-001	Connecting Block, 10-terminals
Blocks	3000-001	Connecting Block, 40-terminals
	3100-001	Connecting Block, 20-terminals
	3200-001	Connecting Block, 4-terminals
	3200-00B	Connecting Block, 4-terminals

## **Power Transformers**





#### Type 31

Type 31 transformer is generally used to supply power for telephone dial lamps. Number 31 A is also available and is recommended for use with the K-107A "Orator" telephone loudspeaker. All Type 31 transformers can be plugged directly into a 110 volt AC outlet. They have sealed ceramic cases with output terminal screws protected when the unit is plugged in. They do not include leads.

#### Number 190169

This transformer is generally used with 3-line telephones to provide power for operation of line-busy lamps. Its case is metal, with brackets for mounting with two screws. Included is a 6-foot power cord which plugs into a standard 110 volt AC outlet, and 6-foot output leads. Dimensions are 3'  $\frac{1}{16}$ " H, 3'  $\frac{5}{16}$ " W (not including mounting brackets), 4'  $\frac{5}{16}$ " L.

ITEM	CODE	DESCRIPTION
Type 31	31	Transformer, Input: 105 to 125 volts AC, 60 cps. Output: 6 to 8 volts, 1.75 volt-amperes, 60 cps.
	31A	Transformer, input: 105 to 125 volts AC, 60 cps. Output: 15 to 18 volts AC, 2.25 volt-amperes, 60 cps.
Number 190169	190169	Transformer, Input: 105-125 volts AC, 60 cps. Output: 8 to 10 volts AC, 7.8 volt-amperes, 60 cps.



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