

Section M

**of TELEPHONE EQUIPMENT  
& SUPPLIES CATALOG**

ISSUED OCTOBER, 1963

## TELEPHONES & ACCESSORIES

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**AUTOMATIC ELECTRIC SALES CORPORATION**

NORTHLAKE, ILLINOIS 60164     /     TELEPHONE (312) 562-7100

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## Type 80 Desk Telephone



You'll find Type 80 superior in every way—in performance, service, maintenance and design.

Dialing is dependable—quick and quiet. Finger-plate is lower on outer edge so numbers are easy to see from various positions. Twin contacts insure positive, reliable operation. Dial dust cover protects from dirt and insects. Housing is set on non-skid feet. New dial mounting slides on and off—no screws to loosen. Big, easy-to-read figures and arrow-heads make dialing fast and accurate.

Transmission is clear and lifelike. Shorter handset brings transmitter closer to speaker's mouth—boosts volume and overcomes line loss and noises. Self-compensating network *automatically* adjusts for different line conditions. New induction coil and balancing network reduce side-tone. Induction coil, condenser and balancing network are all sealed against moisture.

Installation is simple and swift. Your service man needs only a screwdriver and a few minutes. Components are all grouped together in screw-mounted units. No soldering is required—all wires end in spade clips which attach to screw terminals. The unique "installer's hooklock" is a special feature of Type 80. It keeps the hook down during installation—leaves your service man with both hands free. No calls are lost, no switches tied up, while phone is being worked on.

Type 80's handset almost "walks" right into the cradle, and this practically eliminates "off-hook" trouble.

Type 80 is clean and compact in design. Housing and handset molded of tough plastics to take the roughest abuse. Subscribers can choose from 7 decorator colors plus black.

## Type 90 Wall Telephone



Combines advantages of wall mounting with advanced features of our Type 80 Desk Telephone. It's especially popular for use in the home. Type 90 saves desk and table space—remains out of the way, yet within easy reach. Coiled cord pulls up close to the phone—children can't reach it.

Handset can't be dragged, brushed or knocked off the hook. The cradle wraps around the handset and holds it securely. This keeps "off-hook" trouble calls down. No problem with broken hooks, either—the tough, chrome-plated cradle fits securely to a sturdy shaft which turns in a long bearing-bracket. It's more than a match for the handset-slamming subscriber.

Type 90 has a shallow profile because the handset mounts at the side. It doesn't stick out into the room—fits snugly to the wall. Another advantage is when subscriber has to leave the phone, he can hang handset behind the cradle. This keeps the handset from dangling down the wall and scratching its finish. The special dial angle makes numbers easy to read whether you stand or sit.

Installation and maintenance are a snap. All components are mounted on the base within easy reach. Loosen just one screw, the cover lifts off and you fasten Type 90 to the wall (handset stays in the cradle). The ringer is removed from the front—without taking phone off the wall. Self-compensating network. To remove dial, just push and lift. A couple turns of the screwdriver and you connect the line wires to the terminal block.

Subscribers will admire the streamlined design of Type 90. What's more, there are 7 decorator colors to choose from. Subscribers can have a color to blend or contrast with any color scheme.

## How to Order and Price Type 80 and 90 Telephones

To quickly find the complete part number and total price for any Type 80 or 90 phone, follow the four steps outlined on this page.

### Example

**Step 1.** Let's suppose you choose a standard Type 80 phone in color (coiled cord is standard). Your part number in Column 2 is NB-822. Your basic price in Column 3 is \$13.45.

**Step 2.** This step determines the specific color you want. You choose Sand Beige color. Your part number is 10. Price is included in Step 1.

**Step 3.** You choose dial with ABC number plate. Your part number is C. Add \$6.15 to your basic price.

**Step 4.** You choose straight-line ringer with adjustment wheel. Your part number is SA. Add \$6.20 to your basic price.

Your complete part number:

**NB-82210-CSA**

Your total price:

Basic price.....	<b>\$13.45</b>
ABC dial.....	<b>6.15</b>
Ringer with	
Adj. wheel.....	<b>6.20</b>
	<b>\$25.80</b>

	Column 1 Description	Column 2 Part No.	Column 3 Price Each
<b>Step 1</b> Choose phone (coiled cord is standard).	Type 80 Telephone, Black..... Type 80 Telephone, Black with Hooklatch..... Type 80 Telephone, Color..... Type 80 Telephone, Color, with Hooklatch..... Type 90 Telephone, Black..... Type 90 Telephone, Black, with Hooklatch..... Type 90 Telephone, Color..... Type 90 Telephone, Color, with Hooklatch.....	<b>NB-802</b> <b>NB-812</b> <b>NB-822</b> <b>NB-832</b> <b>NB-902</b> <b>NB-912</b> <b>NB-922</b> <b>NB-932</b>	<b>\$13.45</b> <b>14.55</b> <b>13.45</b> <b>14.55</b> <b>13.45</b> <b>14.55</b> <b>13.45</b> <b>14.55</b>
<b>Step 2</b> Choose black or a color.	Black..... Sand Beige..... Jade Green..... Classic Ivory..... Turquoise..... Sunlight Yellow (Type 90 phone only)..... Camellia Pink..... Gardenia White..... Forget-me-not Blue (Type 80 phone only).....	Std. <b>10</b> <b>12</b> <b>13</b> <b>15</b> <b>17</b> <b>18</b> <b>19</b> <b>30</b>	Price Included in Step 1
<b>Step 3</b> Choose dial (color Type 80 & 90 phones with ABC dials, less ringers, are in stock).	Dial with 1-0 Number Plate..... No dial (dial blank only).....  Dial with ABC (Metropolitan) Number Plate..... Dial with SATT Party Identification..... (See Chart 1 on page M-14 for ordering information)	<b>A</b> <b>B</b>  <b>C</b> <b>D-U</b>	<b>\$6.15</b>  Price Includ- ed in Step 1 <b>6.15</b> <b>7.65</b>
<b>Step 4</b> Choose ringer	Straight-line, less adjustment wheel..... Straight-line, with adjustment wheel (Type 80 only)..... 16.6-cycle Harmonic..... 20-cycle Harmonic or Decimonic..... 25-cycle Harmonic..... 30-cycle Harmonic or Decimonic..... 33.3-cycle Harmonic..... 40-cycle Decimonic..... 42-cycle Harmonic..... 50-cycle Harmonic only..... 50-cycle Decimonic only..... 54-cycle Harmonic..... 60-cycle Decimonic..... 66-cycle Harmonic..... 66.6-cycle Harmonic..... Ringer with vacuum tube for superimposed ringing..... Ringer with vacuum tube for superimposed ringing and adjustment wheel (Type 80 phone only)..... Less Ringer.....	<b>SL</b> <b>SA</b> <b>16</b> <b>20</b> <b>25</b> <b>30</b> <b>33</b> <b>40</b> <b>42</b> <b>50</b> <b>51</b> <b>54</b> <b>60</b> <b>66</b> <b>67</b> <b>VT</b>  <b>VA</b> <b>XX</b>	<b>\$5.95</b> <b>6.20</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>7.95</b>  <b>8.20</b> Price Included in Step 1

NOTE: For fastest delivery, order phones and ringers separately.

Prices are subject to change without notice.

M-3

## Type 182 Starlite® Telephone

Here's the unique new extension phone that's smaller in size . . . different in design. Starlite is the perfect phone to complement any room in the home . . . the perfect extension where space is limited.

**It's little! It's lovely!** Subscribers will like Starlite's original rectangular design. And they'll really appreciate it's space-saving size—about one-half the size of regular phones. The handset blends with the housing to form a low silhouette and unified shape. A recessed area below the dial plate provides a handy pick-up grip.

**Electroluminescent dial light!** Starlite's soft, green dial light glows for years longer than ordinary incandescent lamps. That's because it's electroluminescent . . . an exclusive feature of Starlite. There's no filament to burn out, so it doesn't have to be replaced every few months. No heat is given off, either. And the electroluminescent dial light costs only a penny or two per year. In addition, the light can be turned from dim to bright whether the handset is on or off the hook.

**Holds its place in use!** Starlite resists being pulled

off a table or desk. A rubberized cork pad covers the bottom of the housing and keeps Starlite in place when in use. Also, Starlite's handset cord extends to its full length with little tension.

**Six colors!** Your subscribers can choose from six popular pastels: beige, pink, blue, white, ivory and turquoise.

**Easy to install!** Starlite uses a standard 3-conductor line cord. A separate cord plugs into a 110-volt, a-c. outlet to provide current for the dial light. The current is automatically limited by a resistor within the Starlite. Result: easy, convenient installation. Also, Starlite can be equipped with a standard, 4-prong plug for portability.

**Use as a main station, too!** With AE's Type 33 Compact Ringer Box, Starlite can be used as a main station—or as a ringing extension. This wall-mounted ringer box measures only 5¼ inches long, 5¼ inches wide and 2½ inches deep. It houses a high impedance ringer, either straight-line, harmonic or decimonic—in any standard frequency. Available in 11 colors or black. To order, see Page M-18.



## How to Order and Price Type 182

To quickly find the complete part number and total price for any Type 182 phone, follow the three steps outlined on this page.

## Example

**Step 1.** Choose the phone as described in Column 1. Your part number in column 2 is NB-825. Your basic price in column 3 is \$15.85.

**Step 2.** You choose dial with ABC number plate. Your part number is C. Add \$6.15 to your basic price.

**Step 3.** This step determines the specific color you want. You choose Sand Beige color. Your part number is B. Price included in Step 1.

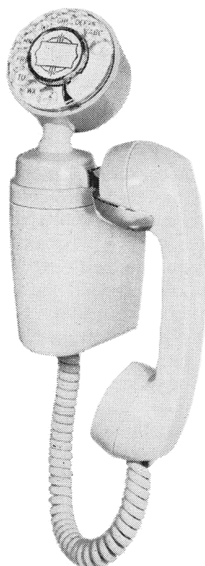
Your complete part number:  
**NB-825-CB**

Your total price:  
**\$22.00**

	Column 1	Column 2	Column 3
	Description	Part No.	Price Each
<b>Step 1</b> Choose the phone you want.	Type 182 Starlite, with Coiled Cord . . . . .	<b>NB-825</b>	<b>\$15.85</b>
<b>Step 2</b> Choose the dial you want.	Dial with 1-0 Number Plate . . . . . Dial Blank . . . . . Dial with ABC Number Plate . . . . . Dial with SATT Party Identification. (Order separately. See Chart 4 on page M-14.) . . . . .	<b>A</b> <b>B</b> <b>C</b>	<b>\$6.15</b> <b>2.15</b> <b>6.15</b> <b>7.65</b>
<b>Step 3</b> Choose the color you want.	Sand Beige . . . . . Classic Ivory . . . . . Turquoise . . . . . Forget-Me-Not Blue . . . . . Camellia Pink . . . . . Gardenia White . . . . .	<b>B</b> <b>E</b> <b>G</b> <b>K</b> <b>L</b> <b>M</b>	Price Included in Step 1



## **Type 183 Space-Maker® Telephone**



**Adjustable Dial and Handset.** Dial tilts up to 45° and rotates 360°. At any point, it locks in place. Hookswitch swings from side to side—a 180° arc. Within this arc, the hookswitch locks in any one of seven positions. Your installer can set both dial and handset in the positions most convenient for your subscriber.

**Mounts on Any Vertical Surface.** Wall, column, side of desk or workbench. It's out-of-the-way, yet within easy reach. Your subscriber saves time, saves steps—without using any table or counter space.

As an extension, Type 183 needs only two wires to its associated main-line instrument. In addition, Type 183 may be used in conjunction with Type 33 Compact Ringer Box as a complete subscriber's station. To order Ringer Box, see Page M-18.

### **How to Order and Price Type 183**

	Part No.	Price Each
<b>Step 1: Choose phone</b>		
Type 183 Space-Maker w/coiled cord.....	<b>NB-830</b>	<b>\$19.05</b> (Black) <b>19.05</b> (Color)
<b>Step 2: Choose dial</b>		
Dial with 1-0 Number Plate.....	<b>A</b>	<b>\$6.15</b>
No dial (Dial blank only)	<b>B</b>	Price included in Step 1
Dial with ABC Number Plate.....	<b>C</b>	<b>6.15</b>
Dial with SATT Party Identification. (Order separately. See Chart 3 on page M-14).....		<b>7.65</b>
<b>Step 3: Choose black or a color</b>		
Black.....	<b>A</b>	
Sand Beige.....	<b>B</b>	Price included in Step 1
Jade Green.....	<b>D</b>	
Classic Ivory.....	<b>E</b>	
Turquoise.....	<b>G</b>	
Sunlight Yellow.....	<b>J</b>	
Camellia Pink.....	<b>L</b>	
Gardenia White.....	<b>M</b>	

#### **Example**

You choose Type 183 with ABC dial and in Sand Beige color.  
Your complete part number is: **NB-830-CB**  
Your total price is: **\$25.20**

## **Type 80-T Sound-Booster\* Telephone**



Designed for hard-of-hearing people and installations which present unusual transmission problems.

The built-in, transistor amplifier makes it possible to amplify incoming signal up to 6 times (16 db), at the turn of a knob.

### **How to Order and Price Type 80-T**

	Part No.	Price Each
<b>Step 1: Choose phone</b>	<b>NA-802</b>	<b>\$50.60</b> (Black) <b>50.60</b> (Color)
Type 80-T phone w/coiled cord.....		
<b>Step 2: Choose black or a color</b>		
Black.....	<b>00</b>	
Sand Beige.....	<b>10</b>	
Jade Green.....	<b>12</b>	
Classic Ivory.....	<b>13</b>	Price included in Step 1
Turquoise.....	<b>15</b>	
Camellia Pink.....	<b>18</b>	
Gardenia White.....	<b>19</b>	
Forget-Me-Not Blue....	<b>30</b>	
<b>Step 3: Choose dial</b>		
1-0 Dial.....	<b>A</b>	<b>\$6.15</b>
No dial (dial blank only)	<b>B</b>	Price included in Step 1
ABC Dial.....	<b>C</b>	<b>6.15</b>
<b>Step 4: Choose ringer</b>		
Straight-line, less adjustment wheel....	<b>SL</b>	<b>\$5.95</b>
Straight-line, with adjustment wheel....	<b>SA</b>	<b>6.20</b>
16.6-cycle Harmonic....	<b>16</b>	<b>6.50</b>
20-cycle Harmonic or Decimonic.....	<b>20</b>	<b>6.50</b>
25-cycle Harmonic....	<b>25</b>	<b>6.50</b>
30-cycle Harmonic or Decimonic.....	<b>30</b>	<b>6.50</b>
33.3-cycle Harmonic....	<b>33</b>	<b>6.50</b>
40-cycle Decimonic....	<b>40</b>	<b>6.50</b>
42-cycle Harmonic....	<b>42</b>	<b>6.50</b>
50-cycle Harmonic only.	<b>50</b>	<b>6.50</b>
50-cycle Decimonic only	<b>51</b>	<b>6.50</b>
54-cycle Harmonic....	<b>54</b>	<b>6.50</b>
60-cycle Decimonic....	<b>60</b>	<b>6.50</b>
66-cycle Harmonic....	<b>66</b>	<b>6.50</b>
66.6-cycle Harmonic....	<b>67</b>	<b>6.50</b>
Ringer with vacuum tube for superimposed ringing.....	<b>VT</b>	<b>7.95</b>
Less Ringer.....	<b>XX</b>	Price included

\*Sound-Booster is a trademark of Automatic Electric Company

## Type 85 Multi-Line Telephone

Type 85 is available in three models that provide two-line pickup, signaling and extension exclusion.

**Type 85-A.** Has combined push-and-turn button only.

Wired for 2-line pickup and signaling. User turns a button to switch to Line 2. He can also signal his secretary by pushing the same button. Type 85-A can be wired, on the job, as follows:

**Single-Line Ringer Cut-off (Ringer in Set).** Use as extension phone in bedrooms, workshops, private offices where quiet is often desired. Turning the button cuts off ringer, but line remains open to conversation.

**Single-Line Extension Switching.** An extension (or extension headset enabling a secretary to take notes) can be placed on line by turning button on "parent" phone, and is cut off by restoring the button. Single-Line Extension Switching with Ringer Transfer. Turning button on "parent" phone turns on extension ringer—disconnects ringer at "parent" station.

**External Ringer Control.** Turning button transfers ringing to distant ringer box (or boxes) elsewhere in building. If away from desk, subscriber knows when there is an incoming call.



**Extension Exclusion with Line Shorting.** Gives utmost privacy. Turning the button not only excludes extensions, but actually "shorts" the extension line, so it's impossible to tap it.

**Type 85-B.** Has two pushbuttons only. Wired for extension exclusion. To cut off all extensions, user presses exclusion button. To bring in extension party, he simply presses other button. When handset is replaced, exclusion button is automatically restored. (Note: only a "parent" phone can be equipped with extension exclusion.) Type 85-B can be wired, on the job, as follows:

**2-Line Pick-Up (Switching Key Feature).** By picking up handset, the subscriber has access to Line 1. To switch to Line 2, subscriber presses one of the buttons. Line 1 is automatically restored when handset is replaced.

**Type 85-C.** Has two pushbuttons and combined push-and-turn button. Wired for 2-line pickup and extension exclusion. Ideal for executives with two lines and extension on Line 1. Push-and-turn button gives access to both lines, enables user to signal his secretary with a light or buzzer. To cut off extensions on Line 1, he presses exclusion button.

## How to Order and Price Type 85

By following the five steps below, you can quickly order any Type 85 telephone

	Description	Part No.	Price Each
<b>Step 1</b> Choose phone	Type 85 w/coiled cord	<b>NB-852</b>	<b>\$17.90</b> (Black) <b>17.90</b> (Color)
<b>Step 2</b> Choose black or a color (matching line cord & coiled cord)	Black Sand Beige Dawn Gray Jade Green Turquoise Gardenia White	<b>00</b> <b>10</b> <b>11</b> <b>12</b> <b>15</b> <b>19</b>	Price included in Step 1
<b>Step 3</b> Choose dial	Dial with 1-0 Number Plate No dial (dial blank only)  Dial with ABC Number Plate Dial with SATT Party Identification (See Chart 1 on page M-14 for ordering information)	<b>A</b> <b>B</b>  <b>C</b> <b>D-U</b>	<b>\$6.15</b> Price included in Step 1 <b>6.15</b> <b>7.65</b>
<b>Step 4</b> Choose ringer	Straight-line, less adjustment wheel Straight-line, with adjustment wheel 16.6-cycle Harmonic 20-cycle Harmonic or Decimonic 25-cycle Harmonic 30-cycle Harmonic or Decimonic 33.3-cycle Harmonic 40-cycle Decimonic 42-cycle Harmonic 50-cycle Harmonic only 50-cycle Decimonic only 54-cycle Harmonic 60-cycle Decimonic 66-cycle Harmonic 66.6-cycle Harmonic	<b>SL</b> <b>SA</b> <b>16</b> <b>20</b> <b>25</b> <b>30</b> <b>33</b> <b>40</b> <b>42</b> <b>50</b> <b>51</b> <b>54</b> <b>60</b> <b>66</b> <b>67</b>	<b>\$5.95</b> <b>6.20</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b> <b>6.50</b>
<b>Step 5</b> Choose Type 85 key assembly	Type 85-A (Combined push-and-turn button) Type 85-B (Pushbuttons) Type 85-C (Combined push-and-turn button with pushbuttons)	<b>1</b> <b>2</b> <b>3</b>	<b>\$3.00</b> <b>2.00</b> <b>5.00</b>

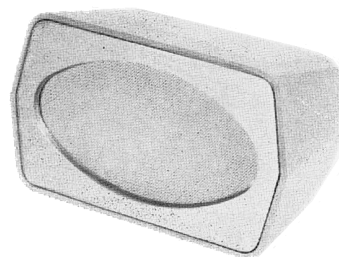
## Example

You order Type 85 in Sand Beige color, with ABC dial, straight-line ringer with adjustment wheel, and Type 85-C key assembly.

Your complete part number is: **NB-85210-CSA3**

Your total price is: **\$35.25**

**Type 880 Speakerphone—Executive Model**



Offers the convenience of hands-free telephoning. Type 880 looks like a Speakerphone—not like a desk phone with an attachment. Both telephone unit and loudspeaker are handsomely different in appearance. A new gain switching eliminates feedback, singing and other bothersome distortions. The “on-off” rocker switch, speaker volume control and microphone are all built in. Type 880 also has a pleasing tone signal which is heard through the speaker. Choice of six colors: beige, green, gray, white, turquoise or black.

To place a call, user simply presses the “on-off” switch to “on” position—and then dials the number. A signal light beneath “on” position is a reminder to turn unit off when the call is completed.

To answer a call, user switches Speakerphone on and talks. The built-in microphone picks up a normal voice from across the room and from any direction. There’s no need to raise the voice or shout. The “mike” is muted when speaker is operating—can’t pick up sounds from speaker. Speaker circuit is reduced to 20 db when “mike” is in use. To keep conversation private, simply lift handset—even during conversation—and turn off loudspeaker.

Type 880 is ideal for conference calls. A volume control wheel lets you boost speaker sound so that others in the room can hear. There’s no confusion, no repetition, no microphone to pass around.

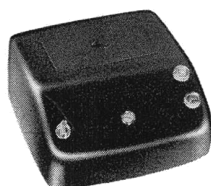
Installation takes only minutes. That’s because you install Type 880 exactly like a regular phone.

**How to Order and Price Type 880**

Step 1	Description	Part No.	Price Each
Choose phone	Type 880 with coiled cord and tone signal*.....	<b>NB-880</b>	<b>\$160.00</b> (Black) <b>160.00</b> (Color)
<b>Step 2</b>			
Choose black or a color	Black.....	<b>00</b>	
	Sand Beige.....	<b>10</b>	Price included in Step 1
	Dawn Gray.....	<b>11</b>	
	Jade Green.....	<b>12</b>	
	Turquoise.....	<b>15</b>	
	Gardenia White....	<b>19</b>	
<b>Step 3</b>			
Choose dial	Dial with 1-0 Number Plate.....	<b>A</b>	Price included in Step 1
	Dial with ABC Number Plate.....	<b>C</b>	Price included in Step 1
	Dial with SATT Party Identification..		<b>\$1.50</b>
	(Order separately. See Chart 4 on Page M-14.) ....		
<b>Step 4</b>	Ringer (Tone Signal)	<b>SL</b>	Included in Step 1

*\*If harmonic ringer is desired in place of tone signal, Type 33 Compact Ringer box must be provided. To order ringer, see Page M-16. To order Ringer Box, see page M-18.*

**Type 88-AT Conversion Set**



Provides multi-line phones with loud-speaking arrangement. Transistorized. Operates from line current. May be used with AE 10A1 Key Systems or with W.E. 1A or 1A1 Systems.

Part No	Description	Price Each
<b>L-7034-AO</b>	Conversion Set (Black).....	<b>\$135.00</b>
<b>L-7034-BO</b>	Conversion Set (Sand Beige).....	<b>135.00</b>
<b>L-7034-CO</b>	Conversion Set (Dawn Grey).....	<b>135.00</b>
<b>L-7034-DO</b>	Conversion Set (Jade Green).....	<b>135.00</b>
<b>L-7034-GO</b>	Conversion Set (Turquoise).....	<b>135.00</b>
<b>L-7034-MO</b>	Conversion Set (White).....	<b>135.00</b>

Prices are subject to change without notice.



## Type 87A Multi-Line Telephone



**Line and Hold Keys.** A line key and hold key are provided for each of three lines. Clear, plastic line keys light from neon bulb on ringing current, providing visual indication of line with incoming call. Optional: Busy Visual Control Unit which lights lamps of lines in use. Hold keys are interlocked with associated line key and also restore when handset is replaced in cradle.

**Audible Signals.** Common audible signal mounts in telephone. Provides audible signal for all three lines from 20 cycle or straight line ringing current. Alternatively, straight line ringer for one line mounts in telephone. Use separate Type 33 ringer box (see page M-18) for other lines.

**Exclusion Keys.** Optional exclusion key in cradle permits user to disconnect all extensions from one line for complete privacy. Extensions are reconnected by right-hand button and when handset is restored.

**Signal Button.** Push button to operate external signal for secretary, etc.

### How to Order and Price Type 87A

Step 1: Choose phone	Part No.	Price Each
Type 87A phone w/coiled cord.	<b>NB-873</b>	<b>\$57.25</b> (Black) <b>57.25</b> (Color)
<b>Step 2: Choose black or a color (matching line cord and coiled cord)</b>		
Black.....	<b>00</b>	
Sand Beige.....	<b>10</b>	
Dawn Gray.....	<b>11</b>	
Jade Green.....	<b>12</b>	Price Included
Turquoise.....	<b>15</b>	in Step 1
Gardenia White.....	<b>19</b>	
<b>Step 3: Choose dial</b>		
Dial with 1-0 Number Plate...	<b>A</b>	<b>\$6.15</b>
No dial (dial blank only).....	<b>B</b>	Price Included
Dial with ABC Number Plate.	<b>C</b>	<b>6.15</b>
<b>Step 4: Choose ringer</b>		
Common audible signal.....	<b>CA</b>	<b>\$14.50</b>
Straight-line ringer.....	<b>SL</b>	<b>5.95</b>
Less ringer.....	<b>XX</b>	Price Included
<b>Step 5: Choose key assembly</b>		
Without exclusion key.....	<b>A</b>	Price Included
With exclusion key.....	<b>B</b>	<b>\$2.00</b>

### How to Order Busy Visual Control Unit for Type 87A Telephone

Cat. No	Type	Description	Price Each
<b>S-9300</b>	P-450	Busy Visual Control Unit..	<b>\$57.50</b>

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Prices are subject to change without notice.

## Type 860A Call Commander® Telephone For Use with Key Systems



Used with 10-A1 (or W.E. 1-A1) key system, it provides lighted pushbuttons to answer or hold up to 17 lines. Contains ringer for audible signalling on incoming central office lines. Capacity of 17 line keys provides facilities for answering tie lines, establishing conference calls, pushbutton signaling for frequently called intercom stations. Ideal for receptionist use where number of C.O. lines exceeds four. "Add-on Conference" in 10-A1 relay equipment permits connection of any C.O. line on the Call Commander phone to any standard Type 86 telephone in the system.

See Section K for detailed description of key system services available.

### How to Order and Price Type 860A

Part No.	Description	Price Each
<b>NB-860-CSLB</b>	Call Commander**, Sand Beige, 12-button.....	<b>\$220.00</b>
<b>NB-860-CSLD</b>	Call Commander**, Jade Green, 12-button.....	<b>220.00</b>
<b>D-59307-A</b>	6-button key set (additional)....	<b>30.60</b>
<b>D-543295-B</b>	Running cable, 100', receptacle at both ends.....	<b>114.00</b>
<b>D-543295-E</b>	Running cable, 50', receptacle at one end.....	<b>57.00</b>
<b>FD-1068-AB</b>	Buzzer (15-20 V., A.C.).....	<b>4.25</b>
<b>H-883001-8</b>	Buzzer Mounting Assembly....	<b>.58</b>

\*\*Equipped with coiled cord, metropolitan dial, straight-line ringer with control lever, two 6-button key sets, about 8' of line cable (120 conductors) with plug. Order third 6-button key set (D-59307-A) separately.



## Type 86 Key Telephone

For Use with Key Systems



Used with 10-A1 (or W.E. 1-A1) key systems, Type 86 telephones provide lighted pushbuttons to answer and hold up to five lines. Clear, plastic buttons and translucent designation strip light brightly to designate lines in use and incoming calls. Can be supplied with SL ringer or 20-volt buzzer for audible signal. Self-compensating network automatically balances for short or long loop for best quality transmission. Keys (in Step 5 of ordering information) which are designated P, can be quickly converted from pick-up to pushbutton signaling function for operating external signal to secretary, etc. Furnished in choice of six colors with factory connected junction box or trimmed for use with W.E. 44A terminal block.

See Section K for complete description of key system services.

### How to Order and Price Type 86

Step 1: Choose phone			Step 3: Choose dial		
Part No.	Price Each		Part. No.	Price Each	
Type 86 Key phone w/coiled cord & junction box.....	<b>NB-863</b>	<b>\$56.45</b> (Black) <b>\$6.45</b> (Color)	Dial with 1-0 Number Plate.....	<b>A</b>	<b>\$6.15</b>
Type 86 Key Phone w/coiled cord & line cord trimmed for use with W.E. 44A terminal block.....	<b>NB-862</b>	<b>\$52.70</b> (Black) <b>\$2.70</b> (Color)	No dial (dial blank only).....	<b>B</b>	Price Included
			Dial with ABC Number Plate.....	<b>C</b>	<b>6.15</b>
Step 2: Choose black or a color (matching line cord and coiled cord)			Step 4: Choose signal		
Black.....	<b>00</b>		Straight-line ringer.....	<b>SL</b>	<b>\$5.95</b>
Sand Beige.....	<b>10</b>		20-volt buzzer.....	<b>BA</b>	<b>5.95</b>
Dawn Gray.....	<b>11</b>	Price Included	Step 5: Choose key assembly*		
Jade Green.....	<b>12</b>	in Step 1	HPPPPsPsPs (6 key).....	<b>C</b>	Price Included
Turquoise.....	<b>15</b>		HPPPPsC (6 key).....	<b>D</b>	"
Gardenia White.....	<b>19</b>		PPPPsPsPs (6 key).....	<b>E</b>	"
			HPPPPsPsPs (6 key) w/exclusion key	<b>H</b>	<b>2.00</b>
			HPPPPsC (6 key) w/exclusion key	<b>J</b>	<b>2.00</b>
			PPPPsPsPs (6 key) w/exclusion key	<b>K</b>	<b>2.00</b>

\*H—Hold key; P—Pickup key; Ps—Pickup key convertible to signal key; C—Extension cut-off key.

### Type 86-A Key Adapter



Converts standard phones (types 80, 90, 182, 183, 880 or equivalent phones) to keyset operation. Use with our 10A1 Key Systems (or the W.E. 1A or 1A1 systems).

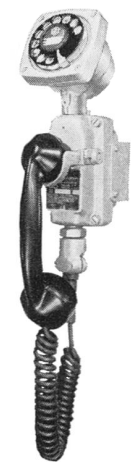
### How to Order and Price Type 86-A

Step 1. Choose Key Assembly Key		Price		
Adapter w/AE Junction Box:	Part No.	Each		
HPPPPsPsPs (6 key).....	<b>L-7030-C</b>	<b>\$38.75</b>		
HPPPPsC (6 key).....	<b>L-7030-D</b>	<b>38.75</b>		
PPPPsPsPs (6 key).....	<b>L-7030-E</b>	<b>38.75</b>		
Key Adapter w/line cord trimmed for use with W.E. 44A terminal block:				
HPPPPsPsPs (6 key).....	<b>L-7043-C</b>	<b>\$35.00</b>		
HPPPPsC (6 key).....	<b>L-7043-D</b>	<b>35.00</b>		
PPPPsPsPs (6 key).....	<b>L-7043-E</b>	<b>35.00</b>		
Step 2. Choose color (add appropriate letter to part number above).				
Black.....	<b>A</b>	Jade Green.....	<b>D</b>	No Charge
Sand Beige.....	<b>B</b>	Turquoise.....	<b>G</b>	
Dawn Grey.....	<b>C</b>	Gardenia White.....	<b>M</b>	

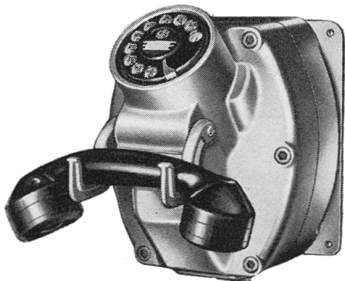
Prices subject to change without notice.

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Hazardous Location Telephones



No.  
ETWA-227



No. ETWA-20

U.L. listed for use in oil refineries, gas plants, laboratories and other hazardous locations. Sealed housing encloses all components that might produce sparks. If gases should penetrate the housing and explode, the explosion is contained within the phone—prevents room atmosphere from igniting.

Part No.	Description	List Price Each
ETWA-20	Dial Telephone (wall type) with Ringer.....	\$400.00
ETWA-227	Dial Telephone (wall type)*.....	175.00
ETDA-20	Dial Telephone (desk type) with Ringer. Not shown.....	400.00

DISCOUNTS FROM LIST PRICE: For one order, one delivery.  
Over \$75 list but less than \$300 list, 20%.  
Over \$300 list, 30%.

\*A straight-line ringer and ringer box must be ordered separately for this telephone. To order the ringer and ringer box, specify Order Number RB-1. List cost for the two items together is \$48.50.

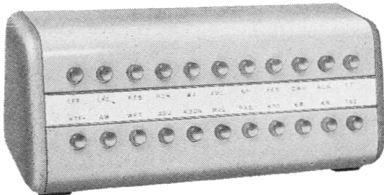
Outdoor Telephone



Regardless of how wet the weather is, this phone performs with indoor dependability. A must for cab stands, lumber yards, loading docks, etc. Locking door limits use—prevents abuse. Black “crackle” enamel finish on cast aluminum case.

Part No.	Description	Price Each
L-975-AO	Outdoor Telephone—Automatic, Straight-Line Ringer, Type 81 Handset and AE 1-0 Dial. Condenser Is Provided for Metallic or Ground Ringing.	\$95.00
L-975-BO	Outdoor Telephone—Manual, Convertible. Same as above (dial omitted)....	88.85
L-975-EO	Outdoor Telephone, Automatic, Straight-Line Ringer, Type 81 Handset, ABC Dial. ....	95.00

Type 11  
P-A-B-X Executive Quick-Call Service



Executive Quick-Call Service gives the busy executive more direct control and speed in communicating through a P-A-B-X System. It eliminates dialing—connects the

executive instantly to phones called most frequently.  
With Executive Quick-Call, there are 20 direct lines to the people called most often. On these inside calls, just press a button—the called party's phone rings immediately. If the called party is using his phone, just push another button and he hears a tone in the background of his conversation. Hearing this, he can shorten his talk, press the cradle button, and be connected to your line. Optional feature: pushbutton that cuts in on the busy line.

For the convenience of hands-free operation, Quick-Call can be used with a Speakerphone. The Quick-Call unit measures 12¼" wide, 5⅝" deep, 5⅞" high. The terminal box mounts under the desk, or on a nearby wall. Relay equipment measures 18⅜" wide and 6⅞" high. Easily installed.

Part No.	Description	Price Each
H-883147-1	Type 11 Executive Quick-Call Unit, two tone gray, consisting of key cabinet, terminal box..	\$525.00
DH-83191-71M	Relay equipment	
D-910005-A	Plastic-covered cable, 32 conductors, to connect key cabinet to relay equipment. ....	*28.80
H-882860-1	Wall mounting bracket for mounting relay equipment....	9.00
NB-88011-CSL	Type 880 Speakerphone, gray, with ABC number plate. ....	160.00

\*Per 100 feet.

**Railroad Telephones (Local Battery)**
**Type 80 Telephone**


For use on desks in the yard or shop offices, in railroad business cars, and in pumping or compressor stations. Molded black plastic housing is rugged, yet lightweight. Non-skid rubber feet keep phone from slipping. Repairs are rarely needed—and are quickly and easily made. Maintenance cost is at a minimum. Requires magneto-battery box for signaling.

Part No.	Description	Price Each
<b>L-8009-B2</b>	Type 80 Desk phone, with high-impedance ringer . . . . .	<b>\$26.55</b>
<b>L-8009-B3</b>	Type 80 Desk phone, less ringer, with Waystation Filter . . . . .	<b>48.85</b>

**Type 183 Telephone**

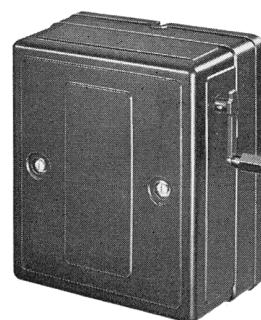

Compact Space-Maker® model—ideal for use on dispatcher's circuits. Handset cradle swings a full 180°, locks in any one of seven different positions for maximum convenience. Mounts easily on edge of desk, on a wall, post or column. Angle mounting bracket included for use, if needed. Measures only 5½" high, 3½" deep and 6" wide overall. Handset is only 8½" long. For connection to dispatcher's line, order phone only. For message circuits, order both phone and ringer box. Requires magneto-battery box for signaling.

Part No.	Description	Price Each
<b>L-8308-B2</b>	Type 183 phone (local battery telephone) . . . . .	<b>\$23.55</b>
<b>L-1508-XXXX</b>	Type 33 Compact Ringer Box . . . . .	<b>1.00</b>
<b>D-56566-B</b>	Straight-line ringer . . . . .	<b>5.95</b>

**Type 60 Telephone**


Install this phone in siding booths out on the line. Built to give lasting service despite rough treatment. Die-formed metal housing protects internal parts. Sturdy cradle hook holds the handset securely in place. Type 60 incorporates a small, powerful generator. Designed for wall mounting, so it requires little space. Type 60 is 9¾" high, 11½" wide and 5" deep.

Part No.	Description	Price Each
<b>L-658-B2</b>	Type 60 phone, with high-impedance ringer . . . . .	<b>\$45.50</b>
<b>L-658-B3</b>	Type 60 phone, less ringer, with Waystation Filter . . . . .	<b>67.00</b>

**Magneto Battery Box**


Used as companion to Type 80 or 183 Railroad telephones for complete service on message circuits. Molded of black plastic. Houses a magnet generator which delivers powerful ringing signals even on long, heavily-loaded lines. Space for two No. 6 dry cells or a two-cell unit battery. 9" high by 4½" deep by 9½" wide.

Part No.	Description	Price Each
<b>L-594-DO</b>	Magneto battery box (less batteries) . . . . .	<b>\$23.00</b>

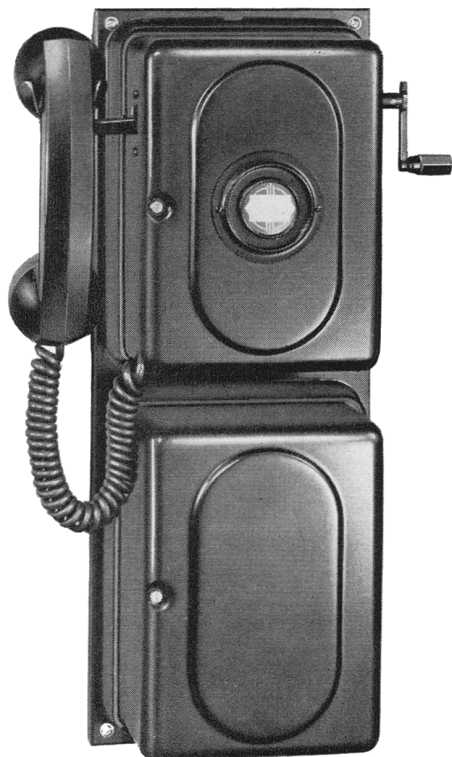
Prices subject to change without notice.

**M-11**



**Railroad Telephones (Local Battery)**

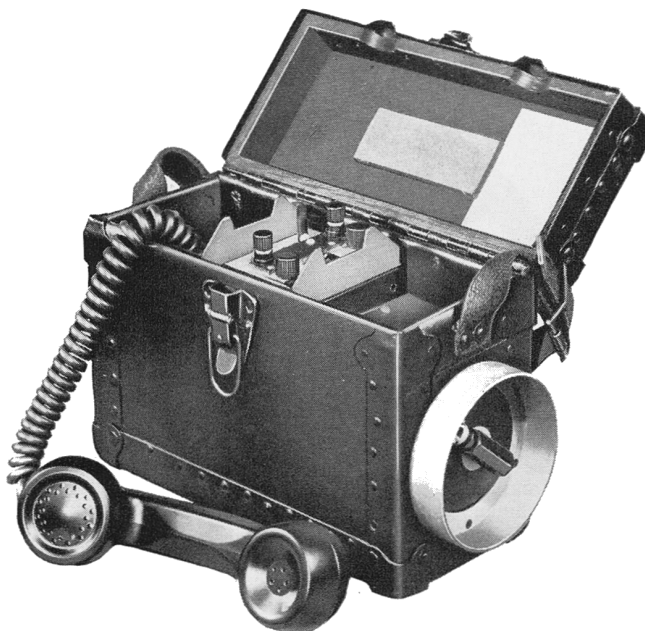
**Self-Contained Booth Telephone**



For use in wayside booths. Ready to mount as a single unit. Consists of Type 60 phone (shown on page M-11) and battery box for two dry cells. Both are mounted on a hardwood backboard with connecting wires concealed and protected. 20½" high, 11½" wide, 5¾" deep.

Part No.	Description	Price Each
<b>L-659-B2</b>	Self-Contained Booth phone, with generator and high-impedance ringer.	<b>\$64.95</b>
<b>L-659-B3</b>	Self-Contained Booth phone, less ringer, with generator and Waystation Filter.	<b>86.45</b>

**Type 10-A Portable Telephone**



Equip track or pipeline inspectors, signal and communication crews, and every train with this handy portable phone. Perfect for use in cars or trucks. It can be used anywhere, connecting to any message or dispatcher circuit with the Universal Line Pole. Small, insulated generator produces powerful ringing signals. Easy to carry, yet sturdily built to withstand hard outdoor use.

Complete assembly is just 8¼" high, 13" long and 5½" wide. Weighs 10½ lbs. Meets AAR specifications.

Part No.	Description	Price Each
<b>L-7036-A1</b>	Type 10-A Portable phone, with generator and bell	<b>\$72.50</b>
<b>L-7036-A5</b>	Type 10-A Portable phone, with generator, bell and Waystation Filter	<b>97.00</b>

**Type 900 Magneto Telephone**

Choice of wall or desk installation, because one phone works either way.

Easy conversion to common-battery service. If you convert to dial, simply add a dial to each phone.



Wall View



Desk View

Part No.	Description	Ringer Ohm	Price Each
<b>NL-12707-A</b>	Magneto Telephone	1000	<b>\$32.05</b>
<b>NL-12707-B</b>	Magneto Telephone	1600	<b>32.25</b>
<b>NL-12707-C</b>	Magneto Telephone	2500	<b>32.55</b>
<b>NL-12806-A</b>	Magneto Telephone w/Hookswitch Latch*	1000	<b>32.90</b>
<b>NL-12806-B</b>	Magneto Telephone w/Hookswitch Latch*	1600	<b>33.10</b>
<b>NL-12806-C</b>	Magneto Telephone w/Hookswitch Latch*	2500	<b>33.40</b>

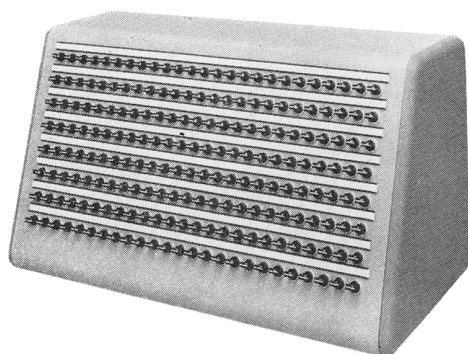
NOTE: All Type 900 phones equipped with "sure-ring" condenser.

\*The hookswitch latch is for monitoring party lines—conserving batteries.

Prices are subject to change without notice.



## Message-Waiting Service



With Message-Waiting Service, a hotel or motel guest receives phone messages the moment he returns to his room. All calls are answered by the P-A-B-X or P-B-X attendant, who rings the guest's phone. If there is no answer, attendant takes the message and operates a push-and-turn key on the Message Service cabinet (above). This activates a flashing light on the guest's phone. When guest returns, this light is a signal to call the attendant for a message.

All control equipment is separate and wires easily into switching equipment. See kit below for converting phones to Message-Waiting Service operation. In beige only.

Part No.	Description	Price Each
<b>H-884077-9</b>	Message-Waiting Service Cabinet (wired for 100 lines, equipped with 60 keys) .....	<b>\$245.00</b>
<b>H-884077-8</b>	Message-Waiting Service Cabinet (wired for 200 lines, equipped with 140 keys) .....	<b>495.00</b>
<b>FD-1040-CL</b>	Booster Power Supply.....	<b>46.30</b>
<b>DH-75516-42A</b>	Interrupter.....	<b>70.00</b>
<b>H-56152-2</b>	Wall-mounting Box for Interrupter.....	<b>11.81</b>
<b>D-59311-AN</b>	Turn Keys (for expanding Message-Waiting Service Cabinet) .....	<b>1.95</b>



## Conversion Kit for Message-Waiting Service

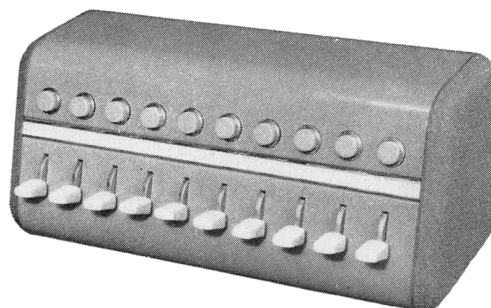
Converts types 80 and 182 phones to Message-Waiting Service operation. Kit includes drill template, lamp assembly, escutcheon ring, retaining clip, instructions.

Part No.	Description	Price Each
<b>H-884686-1</b>	Message-Waiting Service Conversion Kit (for Field Installation).....	<b>\$1.00</b>

NOTE: When ordering instruments for Message-Waiting Service, order Type 80 or 182 phone plus conversion kit.

## Secretarial Answering Unit

With 6, 10 or 20-Line Capacity



10-Line Unit

Enables one secretary to answer calls for a group of executives—saves time, saves money.

Each line has a signal lamp and a simple three-position key. When a call comes in on one line, the corresponding lamp flashes. If executive answers, the lamp stops flashing. But if he is away from his desk, the secretary merely flips appropriate key to "answer" position and takes the message for him. By moving key to "hold" position, she can hold the call and answer other calls.

When Unit is associated with P-A-B-X, this "hold" position makes it easy to call a third party for information; the attendant simply flips the key of an idle line to "answer" position and dials the number. When information is obtained, she releases second line by restoring that key to normal position and picks up "held" line by moving its key to "answer".

One key line, with its "hold" feature, is usually reserved for the secretary's own use. If all keys are to be used by executives, however, the secretary can make or receive her own calls with a special, no-key, extra line. The ringer of her own phone provides the signal for calls on her own line. For this purpose, an instrument with a four-conductor cord is available. (Order NB-813-ASA below.)

In addition to the visual signal for each incoming call line there is a common audible signal for all lines.

Part No.	Description	Price Each
<b>H-884680-1</b>	6-line unit, 2-tone gray, with Common Audible Signal.....	<b>\$130.00</b>
<b>H-884681-1</b>	10-line unit, 2-tone gray, with Common Audible Signal.....	<b>190.00</b>
<b>H-884682-1</b>	20-line unit, 2-tone gray, with Common Audible Signal.....	<b>350.00</b>

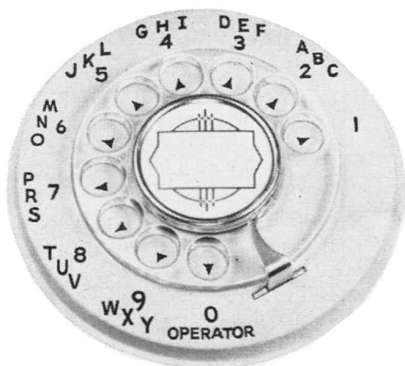
The following units are required to add Common Audible Signal feature to all previous Secretarial Answering Units:

<b>H-882870-1</b>	6-line unit.....	<b>\$35.00</b>
<b>H-882870-2</b>	10-line unit.....	<b>45.00</b>
<b>H-882872-1</b>	20-line unit.....	<b>85.00</b>
<b>NB-813-ASA</b>	Type 80 Telephone equipped with 4-conductor line cord for secretary's use where ringer in phone is to be used for one-line signaling.....	<b>28.30</b>

Prices are subject to change without notice.

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## Automatic Electric Dials



Type 52 Dial

This new dial has a one-piece extended number plate as an integral part of the dial assembly. This makes possible a telephone of exceptionally clean lines. Type 52 Dial features a fingerplate of clear Lucite that maintains overall color harmony.

Dials for Classic Ivory, Sunlight Yellow and Gardenia White phones are lettered and numbered in black. All other dials have white designations.

Part No.	Description	PRICE EACH	
		Black	Color
<b>D-84901-A</b>	Type 52 Dial, Extended Number Plate—Metropolitan ("Letter-Number").....	\$6.40	\$6.60
<b>D-84900-A</b>	Type 52 Dial, Extended Number Plate—"1" to "0".....	6.40	6.60

NOTE: Black is supplied unless color is specified.

## Dial Lubricants

Part No.	Description	Size Container Oz.	Price Each
<b>H-78612-27</b>	Standard Oil Lubricant. Do Not Use with Pres-to-Oiler.....	2	\$2.21
<b>H-78612-44</b>	For Very Low Temperatures (Down to -20°F). Do Not Use with Pres-to-Oiler.....	16	6.09

## Type 51-A Dials

Used on telephones (Types 40, 43, 47, 50, etc.) that do not have extended number plates.

Part No.	Description	Price Each
<b>D-84821-C</b>	Type 51-A Dial—Metropolitan ("Letter-Number").....	\$6.15
<b>D-84820-C</b>	Type 51-A Dial—"1" to "0".....	6.15

Used on early Type 80 phones having separate extended number ring.

Part No.	Description	Price Each
<b>D-84875-A</b>	Type 51-A Dial—"Arrow" Plate. For Use on Early Type 80 Telephones, in Conjunction with Extended Number Rings D-530113-A or D-530138-A.....	\$6.15

For use on instruments exposed to excessive moisture and dust. Similar to dial D-84820-C ("1" to "0" number plate), but molded of black plastic. White enamel numerals.

Part No.	Description	Price Each
<b>D-84839-A</b>	"Splashproof" Dial.....	\$6.80

Used to prevent "broadcasting" dial impulses to a radio receiver, which may otherwise occur when a sensitive receiver is located near an open-wire telephone line. Similar to dial D-84820-C ("1" to "0" number plate), but equipped also with 0.1 mf. condenser and 2-winding radio-frequency choke coil—all mounted in dial base and wired to springs.

Part No.	Description	Price Each
<b>D-84844-C</b>	"Radio-Suppressor" Dial.....	\$7.75

## Extended Number Rings

Use these rings with Type 51-A dial in Type 80 phone only. All other types use Type 52 dial only. Supplied in black.

Part No.	Description	Price Each
<b>D-530113-A</b>	Extended Number Ring—Metropolitan ("Letter-number").....	\$3.35
<b>D-530138-A</b>	Extended Number Ring—"1" to "0".....	.35

## How to Order SATT Dials

Chart 1

To order telephones with SATT dials		
SATT System	Lobe Pos.	*Order Letter
SATT "B"	1	D
	2	E
	3	F
	4	G
	5	H
	6	J
	7	K
	8	L
	9	M
	0	N
SATT "A"	1	P
	1 & 2	R
	1, 2 & 3	S
	1 & 3	T

Chart 2

To order SATT dials separately for all telephones except Types 182, 183 and 880				
SATT System	Color-Order Letter	Lobe Pos.	Order No.	
SATT "B"	D-84916	1	1	
		2	2	
		3	3	
		4	4	
		5	5	
		6	6	
		7	7	
		8	8	
		9	9	
		0	0	
SATT "A"	D-84915	1	1	
		1 & 2	2	
		1, 2 & 3	3	
		1 & 3	4	
		3	5	
		1	1	
		1 & 2	2	
		1, 2 & 3	3	
		1 & 3	4	
		3	5	

Chart 3

To order SATT dials for Type 182 Telephone		
SATT System	Lobe Pos.	Order No.
SATT "B"	1	A1
	2	A2
	3	A3
	4	A4
	5	A5
	6	A6
	7	A7
	8	A8
	9	A9
	0	A0
SATT "A"	1	A1
	1 & 2	A2
	1, 2 & 3	A3
	1 & 3	A4
	3	A5

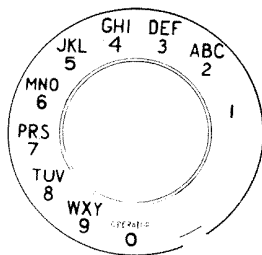
Chart 4

To order SATT dials for Types 183 and 880 Telephones		
SATT System	Lobe Pos.	Order No.
SATT "B"	1	E1
	2	E2
	3	E3
	4	E4
	5	E5
	6	E6
	7	E7
	8	E8
	9	E9
	0	E0
SATT "A"	1	E1
	1 & 2	E2
	1, 2 & 3	E3
	1 & 3	E4
	3	E5

\*NOTE: Order letter should be placed in appropriate position in telephone ordering number.

**Dial Parts and Tools**

**Dial Number Plates**



Part No.	Description	Price Each
<b>D-53772-A</b>	Metropolitan Plate. Red figures and black letters. . . .	<b>\$ .30</b> (1-99) <b>.25</b> (100-over)
<b>D-53146-A</b>	Numbered "1" to "0" in black	<b>.27</b> (1-99) <b>.23</b> (100-over)
<b>D-53211-A</b>	"1" to "0" and "Operator". .	<b>.30</b> (1-99) <b>.25</b> (100-over)
<b>D-530114-A</b>	"Point-Marking" Dial Plate. White arrows on black. (For Type 51-A dials used with Extended Number Rings.)	<b>.27</b> (1-99) <b>.23</b> (100-over)

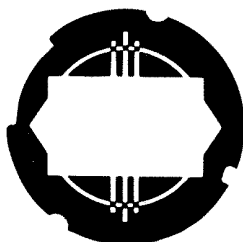
**Dial Blanks**



For manual, convertible phones. Furnished with number card, plastic cover and mounting parts.

Part No.	Description	Price Each
<b>D-49607-A</b>	For Types 40, 43, 47 and 83 telephones. Black plastic. . . . .	<b>\$ .70</b>
<b>D-49318-A</b>	For Type 44 telephone. Black-japanned. . . . .	<b>.64</b>
<b>D-49610-A</b>	For Type 50 telephone. Black plastic. . . . .	<b>.81</b>
<b>D-53627-A</b>	Number card for dial blank. . .	<b>.017</b>
<b>D-53094-A</b>	Clear plastic cover for dial blank	<b>.010</b>
<b>D-49995-AR</b>	For Types 80, 85 and 90 telephones. (Uses dial number cards and cover shown below.)	<b>.60</b> Black <b>.75</b> Color

**Dial Number Cards and Cover**



**No. D-530155-A**



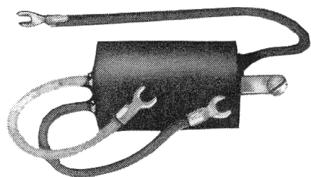
**No. D-530156-A**



**No. D-530153-A**

Part No.	Description	Price Each	Part No.	Description	Price Each
<b>D-530155-A</b>	Regular Dial Number Card. Four perforated dial cards on a "break-out" carrier card, 9 1/2" x 2". Black with white space for number. . . . .	<b>\$ .05</b>	<b>D-530184-A</b>	Regular Dial Number Card for color telephones. (Same as D-530155-A, except background is white—lines and escutcheon are in black.) . . . . .	<b>\$ .05</b>
<b>D-53309-B</b>	Metal Dial Card. . . . .	<b>.13</b>	<b>D-530153-A</b>	Temporary Dial Card Stickers (sheet of 12). Instructions "Disregard Letters—Dial Numbers Only." Printed in yellow. . . . .	<b>.10</b>
<b>D-53176-A</b>	Clear Plastic Cover. . . . .	<b>.01</b>	<b>D-530154-A</b>	Temporary Dial Card Stickers (sheet of 12). Same general format as D-530155-A, but perforated on a 5 3/4" x 4 5/16" sheet. . . . .	<b>.10</b>
<b>D-530156-A</b>	Temporary Dial Card with "Remove When Notified" message to subscribers. Perforated. Four cards to a sheet. Black, with message and space for number in white. . . . .	<b>.05</b>			

**"Radio-Suppressor" for Dials**



Can be connected to any dial. Serves the same purpose as "Radio Suppressor" Dial, Part No. D-84844-C. It's only 1 1/4" x 3/4" x 5/16" in size and mounts within the telephone housing. Three connecting cords and screw terminal provided.

Part No.	Description	Price Each
<b>H-46526-1</b>	"Radio-Suppressor" for dials	<b>\$3.49</b>

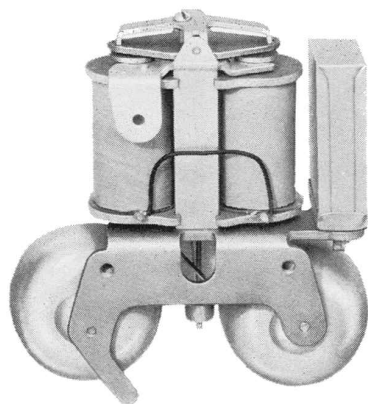
**Dial Tools**



Part No.	Description	Price Each
<b>H-26917</b>	Tool for dial escutcheon lock. . . . .	<b>\$ .20</b>
<b>H-25937</b>	End wrench for dial. For governor nut and large impulse cam nut. . . . .	<b>.97</b>
<b>H-16480</b>	Socket wrench for dial. For small impulse cam nut. . . . .	<b>1.84</b>
<b>H-16290-7</b>	Dial pliers. For adjusting dial springs and governor. . . . .	<b>2.73</b>

Prices are subject to change without notice.





### High Impedance Ringers (D-56548)

For Types 80, 80-T, 85, 90 Telephones, and for  
Type 33 Compact Ringer Box

To provide rapid delivery and to ease your inventory requirements, stock phones without ringers. You can order the D-56548 Ringer separately from this page and combine it with any of the following phones: Type 80, 80-T, 85 and 90. It's also designed for use with the Type 33 Compact Ringer Box. The condenser and coil on this ringer are factory tuned. Impedance 160,000 ohms at 1000 cycles.

**When ordering** individual ringers, please use the piece number. Individual ringers are packed separately, with mounting parts and complete instructions for mounting and adjustment. Capacitor is included. For harmonic, decimonic and synchronomic frequencies.

Part No.	Description	Price Each	Part No.	Description	Price Each
<b>D-56548-ASLR</b>	Straight-Line, less Adjustment Wheel.....	<b>\$5.95</b>	<b>D-56548-A51R</b>	50-Cycle Decimonic Only.....	<b>\$6.50</b>
<b>D-56548-ASAR</b>	Straight-Line with Adjustment Wheel (For Types 80 and 85 Only).....	<b>6.20</b>	<b>D-56548-A54R</b>	54-Cycle.....	<b>6.50</b>
<b>D-56548-A16R</b>	16.6-Cycle.....	<b>6.50</b>	<b>D-56548-A60R</b>	60-Cycle.....	<b>6.50</b>
<b>D-56548-A20R</b>	20-Cycle.....	<b>6.50</b>	<b>D-56548-A66R</b>	66-Cycle.....	<b>6.50</b>
<b>D-56548-A25R</b>	25-Cycle.....	<b>6.50</b>	<b>D-56548-A67R</b>	66.6-Cycle.....	<b>6.50</b>
<b>D-56548-A30R</b>	30-Cycle.....	<b>6.50</b>	<b>D-56548-CVAR</b>	Ringer with Vacuum Tube for Superimposed Ringing and Adjustment Wheel (Type 80 phone only).....	<b>5.70</b>
<b>D-56548-A33R</b>	33.3-Cycle.....	<b>6.50</b>	<b>D-56548-CVTR</b>	Ringer with Vacuum Tube for Superimposed Ringing; less Adjustment Wheel.....	<b>5.45</b>
<b>D-56548-A40R</b>	40-Cycle.....	<b>6.50</b>	<b>D-52144A</b>	Vacuum Tube.....	<b>2.50</b>
<b>D-56548-A42R</b>	42-Cycle.....	<b>6.50</b>			
<b>D-56548-A50R</b>	50-Cycle.....	<b>6.50</b>			

### Ringers (D-56515-A and D-56516)

For Types 40 and 50 Telephones

These ringers are for replacement purposes or for conversion from straight-line to harmonic ringing, or from one frequency to another.

Impedance of these ringers (160,000 ohms at 1000 cycles) improves transmission quality because the flow of inductive noises is retarded. It increases transmission volume because it reduces bridging loss caused by voice currents "sneaking" through the ringer coils.

Ringer frequency can be easily changed by substituting a different clapper weight and reed (and, in some cases, the associated ringing and talking condensers.) For quick, easy installation, all leads have spade tips. Ringers are complete; consist of armature and clapper, coils, gongs, brackets and magnets.

**When ordering**, state catalog number of desired ringer and specify type of phone or ringer box in which it will be used. If condenser and mounting parts are also desired, please specify.

Part No.	Frequency	Price Each	Part No.	Frequency	Price Each
<b>D-56515-A</b>	Straight-Line.....	<b>\$4.95</b>	<b>D-56516-HR</b>	42-cycle.....	<b>\$5.50</b>
<b>D-56516-AR</b>	16.6-cycle.....	<b>5.50</b>	<b>D-56516-DR</b>	50-cycle Harmonic.....	<b>5.50</b>
<b>D-56516-FR</b>	20-cycle.....	<b>5.50</b>	<b>D-56516-NR</b>	50-cycle Decimonic.....	<b>5.50</b>
<b>D-56516-BR</b>	25-cycle.....	<b>5.50</b>	<b>D-56516-JR</b>	54-cycle.....	<b>5.50</b>
<b>D-56516-GR</b>	30-cycle.....	<b>5.50</b>	<b>D-56516-MR</b>	60-cycle.....	<b>5.50</b>
<b>D-56516-CR</b>	33.3-cycle.....	<b>5.50</b>	<b>D-56516-KR</b>	66-cycle.....	<b>5.50</b>
<b>D-56516-LR</b>	40-cycle.....	<b>5.50</b>	<b>D-56516-ER</b>	66.6-cycle.....	<b>5.50</b>

A Conversion Kit is available which lets you use the D-56516 Ringer in the Compact Ringer Box. See ordering information at right.

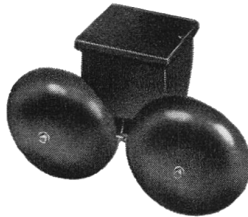
Part No.	Description	Price Each
<b>H-884381-1</b>	Conversion Kit for mounting D-56516 Ringer (with small heel piece) in Type 33 Compact Ringer Box.....	<b>\$4.00</b>



**Auxiliary Signals**

**Improve Service for Subscribers—Cut Down Holding Time for You**

**Loud-Ringing Bells**



These high-impedance bells are equipped with 6-inch gongs. Ringer movement and condenser are mounted in a cast aluminum box; finished in black japan. Bells furnished with impregnated coils and PVC-covered wiring for outdoor installation.

Dimensions—8¾ inches high; 12¾ inches wide; 4½ inches deep.

Impedance: 160,000 ohms at 1000 cycles.

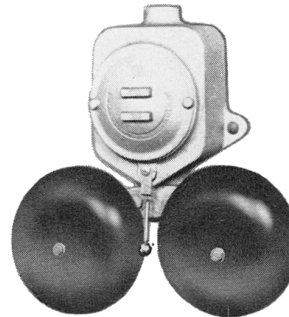
Part No.	Frequency	Condenser Capacitance Mf.	Price Each
<b>D-56559-ASL</b>	Straight-Line	.4	<b>\$22.50</b>
<b>D-56559-A16</b>	16.6-cycle	.7	<b>24.50</b>
<b>D-56559-A20</b>	20-cycle	.7	<b>24.50</b>
<b>D-56559-A25</b>	25-cycle	.3	<b>24.50</b>
<b>D-56559-A30</b>	30-cycle	.2	<b>24.50</b>
<b>D-56559-A33</b>	33.3-cycle	.2	<b>24.50</b>
<b>D-56559-A40</b>	40-cycle	.2	<b>24.50</b>
<b>D-56559-A42</b>	42-cycle	.08	<b>24.50</b>
<b>D-56559-A50</b>	50-cycle Harmonic	.1	<b>24.50</b>
<b>D-56559-A51</b>	50-cycle Decimonic	.1	<b>24.50</b>
<b>D-56559-A54</b>	54-cycle	.1	<b>24.50</b>
<b>D-56559-A60</b>	60-cycle	.08	<b>24.50</b>
<b>D-56559-A66</b>	66-cycle	.08	<b>24.50</b>
<b>D-56559-A67</b>	66.6-cycle	.08	<b>24.50</b>

**Continuous Telephone Signaling Units**

Consists of A-C relay, which operates on straight-line central-battery or magneto ringing current. It closes a local circuit to a signal which operates until relay is released. Relay contacts carry 5 amperes at 110V., A.C.

Part No.	Description	Price Each
<b>CRT-TC-40</b>	In Case for Indoor or Outdoor Installation	<b>\$34.84</b>

**Loud-Ringing Weatherproof Bell**



Two-gong vibrating type; operate directly from straight-line ringing current.

Supplied with condenser for central-battery or magneto service; or without condenser for magneto service only.

Dimensions—1⅓" wide, 1" high.

Part No.	Description	Price Each
<b>D-56418-A</b>	Weatherproof Bell—C. B. or Mag. Has 1600-Ohm Ringer Mechanism, 1 Mf. Condenser, Enclosed in Cast Aluminum Alloy Case; ¾" Conduit Connections.	<b>\$65.50</b>

**Neon Signal Lights**



A visual signal that lights up when the telephone rings. Easily connected to the phone with two-conductor interior wire. Operates directly from ringing current of the telephone (65 volts or more). No battery, transformer or relay control needed. Neon tubes have no filament to burn out—rated life is about 3,000 hours.

Two and three-dome signals have octagonal, molded plastic bases. Mount on wall or desk.

**2-Dome Signal Lights**

Part No.	Description	Lgth. In.	Width In.	Ht. In.	Price Each
<b>D-94043-E</b>	Red & Green	3¾	2½	2½	<b>\$4.70</b>

**3-Dome Signal Lights**

<b>D-94044-E</b>	White, Green & Red	5¾	2½	2½	<b>\$5.45</b>
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**Single-Dome Signal Lights**

<b>D-94090-N</b>	Red	2¾	2½	2½	<b>\$3.40</b>
<b>D-94090-P</b>	White	2¾	2½	2½	<b>3.40</b>
<b>D-94090-R</b>	Green	2¾	2½	2½	<b>3.40</b>

**Telephone Switching Keys**



Used for switching one phone to two or three different lines, connecting a number of phones to one line, etc. Locking-type lever key is assembled on steel base and protected by a pressed steel cover.

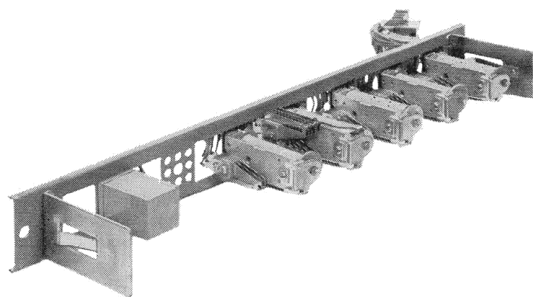
Mounts easily on side of desk or table.

Dimensions: 5¾ inches long (including key handle); 3¾ inches wide; 1½ inches high. Finished in black japan.

Part No.	Description	Price Each
<b>MC-88003-A</b>	Switching Key—2-Conductor, 2-Way	<b>\$9.50</b>
<b>MC-8885-A</b>	Switching Key—2-Conductor, 3-Way	<b>10.35</b>

Prices are subject to change without notice.

## Subscriber Transfer Service



With Subscriber Transfer Service, your customer can switch his business calls to his home phone, or any other designated station. No calls go unanswered. It's a helpful service for physicians, dentists, etc., as well as business men who don't employ a secretary and are often away from their office.

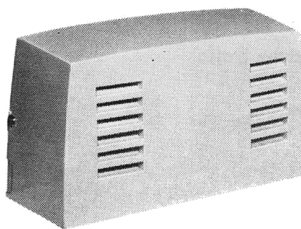
Subscriber Transfer Service connects the customer to a transfer unit located in the central office. To switch calls to his home phone or answering service, the subscriber simply turns a transfer key on either a Type 80 telephone (with turn key) or on a separate transfer switch key used with a standard phone. All incoming calls are then automatically routed to the home phone or answering service. When the transfer key is operated, ringers sound at both phones. This prevents loss of calls from failure to restore transfer key at the business office.

The transfer unit is self-contained and compact. It measures only 1' 5 $\frac{3}{4}$ " x 2 $\frac{1}{8}$ " and mounts on a convenient 19" relay rack. Switching equipment consists of five relays for each subscriber. Subscriber Transfer Service is for use in 48-volt automatic exchanges with or without SATT detection service.

Part No.	Description	Price Each
<b>RG-5205-A</b>	Subscriber Transfer Unit. For use in 48-volt automatic exchange. Dimensions: 1' 5 $\frac{3}{4}$ " x 2 $\frac{1}{8}$ " for 19" rack.....	<b>\$60.00</b>
<b>NB-850-CSL*</b>	Type 80 phone with turn key, coiled cord, ABC dial and straight line ringer (black only).....	<b>30.55</b>
<b>MC-88003-A</b>	Switching Key. 2-conductor—2-way. (See Page M-17 for description) ..	<b>9.50</b>
<b>MC-8885-A</b>	Switching Key. 2-conductor—3-way. (See Page M-17 for description) ..	<b>10.35</b>

\*This phone can also be furnished with 1-0 dial, SATT dial, or blanked for dial, and with choice of ringer. To order, see Page M-3, Steps 3 and 4.

## Telechime

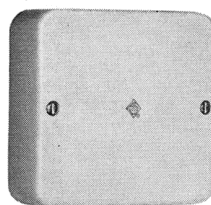


For use with compact phones, or as a replacement for existing ringers. Activated by an incoming call and sounds a pleasing double chime which is repeated as long as the call is unanswered.

Only two screws required to mount on wall desk, or any vertical surface. Operates on straight line ringing. Terminal block is self-contained. Compact, plastic housing is tough, yet lightweight.

Cat. No.	Description	Price Each
<b>S-9428</b>	Telechime, less cover	<b>\$11.65</b>
<b>S-9429</b>	Cover, beige	<b>1.85</b>
<b>S-9430</b>	Cover, white	<b>1.85</b>

## Type 33 Compact Ringer Box



Designed for use with the Starlite and Space-Maker phones.

5 $\frac{1}{4}$ " by 5 $\frac{1}{4}$ " x 2 $\frac{1}{16}$ " deep.

Eleven colors or black.

To order ringers, see page M-16.

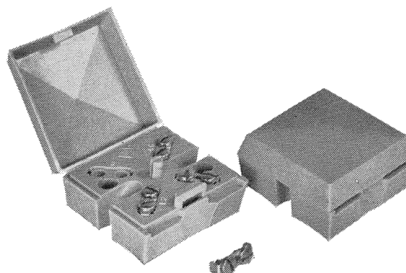
Part No.	Description	Price Each
<b>L-1508-XXX</b>	Ringer Box & cover only	<b>\$1.00</b>

(black or color)

Specify color by adding fourth suffix as follows:

Black.....	<b>A</b>	Turquoise.....	<b>G</b>
Sand Beige.....	<b>B</b>	Sunlight Yellow.....	<b>J</b>
Dawn Gray.....	<b>C</b>	Forget-Me-Not Blue.....	<b>K</b>
Jade Green.....	<b>D</b>	Camellia Pink.....	<b>L</b>
Classic Ivory.....	<b>E</b>	Gardenia White.....	<b>M</b>
Garnet Red.....	<b>F</b>	Blue-Beige.....	<b>N</b>

## Telephone Connecting Blocks



Trim-lined connecting blocks with smooth cutouts for connecting cords and line wires. Opening in base allows line wires to be brought in directly under the block. One-piece, polypropylene construction does away with screw-type opening and closing. Pyramid shaped cover conceals its own latches, opens easily when center is pushed in. Choice of three or four points. Blue-beige color.

Part No.	Description	Price Each
<b>D-150206-A</b>	Type 13 (three points).....	<b>\$3.30</b>
<b>D-150207-A</b>	Type 14 (four points).....	<b>.35</b>

## **Type 840 Anti-Noise Handset**



All sidetone is eliminated when caller depresses the non-locking "press-to-listen, release-to-talk" pushbutton, which places a short circuit across the transmitter. This allows caller to listen without interference of noise passing from transmitter to receiver in his own handset. Releasing transmitter cutout button removes the short-circuit and permits transmitter to operate in normal manner. Also available with "press-to-talk" pushbutton.

## **How to Order Type 840 Handset**

**With Coiled Cord—For Use with Types 80, 90, 85 or 87 Telephones which Have Self-Compensating Networks**

Part No. "Press-to-Listen"	Part No. "Press-to-Talk"	Description	Price Each
<b>L-9057-CA</b>	<b>L-9065-CA</b>	Handset (black).....	<b>\$16.90</b>
<b>L-9057-CB</b>	<b>L-9065-CB</b>	Handset (beige).....	<b>17.50</b>
<b>L-9057-CC</b>	<b>L-9065-CC</b>	Handset (grey).....	<b>17.50</b>
<b>L-9057-CD</b>	<b>L-9065-CD</b>	Handset (green).....	<b>17.50</b>
<b>L-9057-CE</b>	<b>L-9065-CE</b>	Handset (ivory).....	<b>17.50</b>
<b>L-9057-CG</b>	<b>L-9065-CG</b>	Handset (turquoise).....	<b>17.50</b>
<b>L-9057-CJ</b>	<b>L-9065-CJ</b>	Handset (yellow).....	<b>17.50</b>
<b>L-9057-CK</b>	<b>L-9065-CK</b>	Handset (blue).....	<b>17.50</b>
<b>L-9057-CL</b>	<b>L-9065-CL</b>	Handset (pink).....	<b>17.50</b>
<b>L-9057-CM</b>	<b>L-9065-CM</b>	Handset (white).....	<b>17.50</b>

**With Coiled Cord—  
For Use with Type 183 Telephone Only**

<b>L-9057-DA</b>	<b>L-9065-DA</b>	Handset (black only)...	<b>\$16.90</b>
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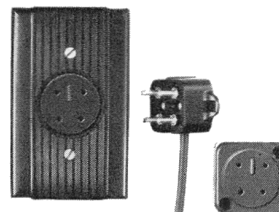
## **Hand Test Telephone**



For general supervisory purposes in automatic exchanges. Made of red plastic to resist breakage and minimize loss. Standard AE transmitter, receiver and dial. Three-position switch (talk-listen, loop testing at 1500 ohm, and monitoring). Please order telephone, suitable cord assembly and bracket separately.

Part No.	Description	Price Each
<b>L-9066-CF</b>	Type 800 Hand Test Telephone.....	<b>\$25.00</b>
<b>D-543392-A</b>	Cord & Test Plug Assembly (for use with standard & TWX circuits)....	<b>4.75</b>
<b>D-543395-A</b>	Cord & Alligator Clip Assembly.....	<b>2.40</b>
<b>D-543142-A</b>	Cord & Switchboard Plug Assembly..	<b>4.75</b>
<b>D-780869-A</b>	Frame mounting Bracket.....	<b>.35</b>

## **Portable Telephone Plugs and Jacks**



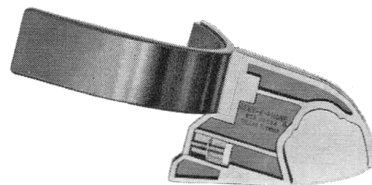
By offering portable phones equipped with plugs and wall jacks for installation at points where permanent phones would not be desirable, telephone companies secure increased revenue in clubs, hotels, residences, etc.

Can be supplied for surface mounting, or with a flush plate for mounting in standard electric switch box (not furnished). Plug has convenient screw terminals for spade-type cord connections.

Jack, plug and flush plate regularly supplied in brown plastic; available in ivory, if specified.

Part No.	Description	PRICE EACH	
		1 to 49	50 & Over
<b>D-42704-A</b>	Type 49 Jack & Flush Plate for mounting in standard switch (Brown)		
<b>D-42704-B</b>	box—4-conductor.....	<b>\$1.70</b>	<b>\$1.57</b>
(Ivory)			
<b>D-42703-A</b>	Type 40 Jack for surface mounting—4-conductor.....	<b>.92</b>	<b>.84</b>
(Brown)			
<b>D-42703-B</b>	(Ivory)		
<b>D-57154-A</b>	Type 28 Plug—4-conductor...	<b>1.00</b>	<b>.93</b>
(Brown)			
<b>D-57154-B</b>	(Ivory)		

## **Rest-A-Phones**



A telephone rest adjustable for left or right shoulder. Three-point suspension holds phone at correct height and angle. Cradle lined with sure-grip, non-soiling neoprene plastic. Will not soil clothing. Fits all standard phones.

Cat. No.	Description	Wt. Ozs.	Price Each
<b>S-6041</b>	Black Rest-A-Phone.....	1.2	<b>\$1.50</b>
<b>S-6017</b>	Green Rest-A-Phone.....	1.2	<b>1.50</b>
<b>S-5972</b>	Gray Rest-A-Phone.....	1.2	<b>1.50</b>
<b>S-5985</b>	Red Rest-A-Phone.....	1.2	<b>1.50</b>
<b>S-6003</b>	Beige Rest-A-Phone.....	1.2	<b>1.50</b>
<b>S-6146</b>	Ivory Rest-A-Phone.....	1.2	<b>1.50</b>

Prices are subject to change without notice.

**M-19**



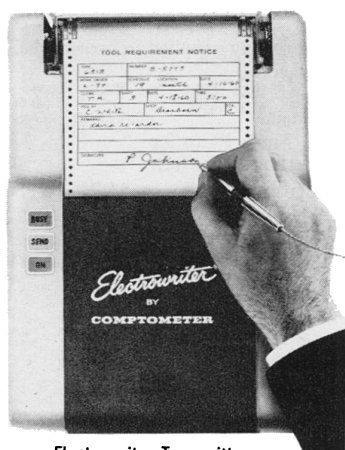
## Operator's Headset



Used by switchboard operators in manual exchanges and PBX boards. Also used at toll boards and for supervisory duties. Transmission characteristics are similar to the W.E. 52-AW headset.

Can also be furnished with a transistorized amplifier unit for noisy locations or hard of hearing operators. The amplifier is housed in a metal case on the plug at the end of the headset cord. A volume control knob is located on the front of the case. No alterations are needed to use the headset—switchboard circuits not disturbed in any way.

Part No.	Description	Price Each
<b>L-7032-AO</b>	Operator's Headset Only. With Spade-Tip Cord.....	<b>\$27.00</b>
<b>SS-15135-1</b>	Operator's Headset with Transistor Amplifier Unit.....	<b>87.00</b>
<b>SS-15135-30</b>	Transistor Amplifier Unit Only. For Attachment on W.E. 52-AW Headset.	<b>60.00</b>



Electrowriter Transmitter

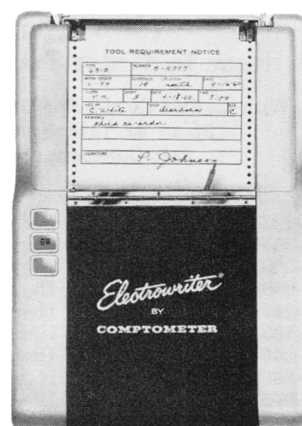
## Electrowriter® Systems

Permit customers to "write" a phone call.

Electrowriter systems combine the speed of telephoning with the accuracy of a written message. Transmitter sends messages over telephone lines to any desired number of receivers... at any distance. When used with a telephone and Subset 60 unit, Electrowriter provides alternating voice-write service.

Units are self-contained, fully transistorized. No special power supply.

NOTE: Specify friction or sprocket paper feed for receiver. Sprocket feed required when printed forms are used.



Electrowriter Receiver

Part No.	Description	Price Each
<b>88T/008</b>	Transmitter w/ mercury pen .....	<b>\$708.00</b>
<b>88R/007</b>	Receiver .....	<b>723.00</b>
<b>1007</b>	Alternate send-receive, voice-write network .....	<b>52.60</b>
<b>SS60</b>	Subset 60 (required for 1007 network)...	<b>72.00</b>
<b>1771-312</b>	Receiver ink (4-oz. bottle).....	<b>1.60</b>
<b>1734-801</b>	Transmitter ink cartridge .....	<b>1.60</b>

NOTE: A new Electrowriter transceiver, which combines sending and receiving functions into one machine, is also available. This unit is completely compatible with the model shown above. For full details about the Electrowriter transceiver, write to the Director of Business Communication Sales, Automatic Electric Sales Corporation, Northlake, Illinois.

## Leich Extension Relay Ringing Unit

## Frequency Ringing

Provides extra ringer on lines that have reached ringer capacity. Principal use is to operate signals, bells, gongs, horns or any device that requires 110 volt, 60 cycle, AC. Consists of traffic type telephone ringer, relay and one-to-one isolation transformer. Metal box (12" by 6" by 2½") houses the components. Equipped with cord and plug for connecting to 110 volt, 60 cycle, AC receptacle. Power requirements for the devices operated can be up to 35 watts. Over 35 watts, an auxiliary power relay unit must be used.

Cat. No.	Description	Price Each
<b>017022-*</b>	Extension Relay Ringing Unit.....	<b>\$34.40</b>

\*Add suffix letter code (listed below).

<b>C</b> —Straight Line Ringer	<b>L</b> —25 Cycle Ringer	<b>S</b> —16 Cycle Ringer
<b>G</b> —33½ Cycle Ringer	<b>M</b> —30 Cycle Ringer	<b>T</b> —20 Cycle Ringer
<b>H</b> —50 Cycle Ringer	<b>N</b> —42 Cycle Ringer	<b>U</b> —60 Cycle Ringer
<b>J</b> —66⅔ Cycle Ringer	<b>P</b> —54 Cycle Ringer	<b>V</b> —40 Cycle Ringer
<b>K</b> —16⅔ Cycle Ringer	<b>R</b> —66 Cycle Ringer	

