## Nos. 1222 and 1223 Handset Telephones



In the development of the No. 1222 and No. 1223 selfcontained Handset Telephones primary consideration was given to the requirements of the operating company and to the appeal they would have to the user. These units introduce improvements and innovations to accomplish this end. As a result we have sturdy construction, easy maintenance, highly efficient transmission and symmetry in design. The manner in which this is accomplished is described in further detail below.

The Housing is a single zinc die-casting which includes the cradle. This material was selected because of its mechanical strength and capability of taking the smooth surface and sharply defined lines of the mold. It is finished with a synthetic urea-formaldehyde baked enamel, comparing favorably in wear resistant qualities to solid plastic. Its low sweeping lines fit quietly into its surroundings. A recess below the cradle and at the rear of the housing forms a convenient handle in which to insert the fingers when the telephone is moved.

A Pressed Metal Base upon which the housing rests, mounts all equipment except the plunger switch and the dial when the telephone is used with dial exchanges. The base is attached to the housing by a strong webbing which prevents any strain on the wiring when the telephone is opened for inspection. Four large rubber feet absorb shock when the telephone is moved, avoid mars to furniture, prevent slippage when dialing and elevate the base sufficiently to allow the egress of sound from the ringer. The base is assembled to the housing by necked screws. Perforations covered by rayon cloth, underneath the ringer gongs, prevent muffling of sound and exclude the entry of insects. Separate terminal blocks provide a ready means for connecting the line and handset cords.

All parts are easily accessible and readily interchanged because of the screw terminal arrangement employed. A screw driver is the principal tool required for installing, replacing or adjusting this instrument. Wherever there are moving parts which require alignment, the complete unit is assembled to a solid frame.

The No. 20 Handset has a balanced appearance resulting from the use of a flat transmitter mouthpiece which is similar in shape to the receiver earcap. This type of mouthpiece gives less variation in pick-up of the voice when the transmitter is moved about in front of the mouth. The handset, mouthpiece, and earcap are made of tough molded material. All connections are made through spring contacts, securely fastened to inserts which are molded into the handle. Both the receiver and transmitter are complete units, so designed that they are simply placed in their respective compartments and clamped tightly in place by the earcap and mouthpiece. No centering or wire fastening is necessary.

The Transmitter is patterned after those used with previous handsets, which have gained well deserved recognition in the telephone field. High in fidelity and unusually good on long and short lines, reproducing the voice naturally in any position in which it is held, it retains the clear articulation demanded by modern telephone practice. Spring-pressure contacts in the transmitter compartment enable the transmitter to be dropped in position and to make reliable connections when the mouthpiece is screwed into position.

The Receiver used in the No. 20 Type Handset was designed especially for this unit. It is of the capsule type and provides a smoother, less resonant response frequency characteristic than any previous Stromberg-Carlson receiver. Improved articulation is secured by placing the resonant peak at approximately 2000 cycles per second while at the same time introducing sufficient damping. When mounted in the handset, two circular contacts engage two spring points, no matter in which position it is placed. This assures positive circuit contacts under spring-pressure as soon as the earcap is screwed down.

Ringers are of the same general construction as those used in No. 1212 Telephones, where they have met with universal approval. Two-toned gongs produce a clear, penetrating signal-free from harshness. The complete ringer is a single unit mounted on rubber to eliminate the clatter which is normally radiated from a solid mounting. The ringer is adjusted and tested separately from the instrument. This allows changes from one frequency to another to be made with the least amount of effort. The only tool required in substituting a ringer is a screw driver.

A Compact Induction Coil with six screw terminals simplifies circuit changes and testing. Proper proportioning of the windings, together with the correct arrangement of sub-station elements results in improvement in transmitting and receiving efficiency and reduced side-tone, compared with our previous standard telephones.

The Capacitor (Condenser) is composed of two separate units, a 2.25 mf . capacitor for the talking circuit and a split 1.00 mf . capacitor (consisting of two .5 mf . units) for the ringing circuit. They are housed in a single light gray finished case. Five wires with spade tips terminate the units, for ready connection to their respective circuit terminals.

The Plunger Switch provides a highly reliable means of controlling the telephone circuit. Chromium-plated plunger rods, one at each end of the cradle, engage a hinged lever which operates the spring pusher regardless of how the handset is placed in the cradle. Reliability of contact operation is insured by the use of twin precious metal contacts on forked springs. The springs are reinforced with stiffeners, so that definite and permanent adjustments in tension can be made.


No. 1222 Handset Telephone
For Dial Service

## Nos. 1222 and 1223 Handset Telephones (Cont.)

Wiring for the telephone is in a formed cable that is made of lacquer insulated wire. This insulation possesses qualities essential for use in humid climates and retains its color brilliancy indefinitely. All telephones are wired for both manual and dial service. When the dial is used, the wiring provides for shorting the subscriber station elements including the ringer and capacitor, thus affording clean cut pulsing during dialing. The telephone circuit arrangement is anti-sidetone, and the wiring permits the telephone to be used on lines employing either bridged or divided circuit ringing. Under certain grounded line ringing conditions, Vincent Rare Gas Relays or W. E. Co.'s No. 333-A Tubes are employed to isolate ground from the ringer circuit except while generator current is applied. The Vincent Rare Gas Relay is provided for this purpose for use in harmonic ringing systems while the W. E. 333-A tube is employed in superimposed ringing systems, used in W. E. offices. Mounting and wiring facilities are provided for these units when they are installed. Thus the

No. 1222 and No. 1223 Telephones are universal in their application to Central Energy lines.

Dial Mounting arrangements are provided. The dial wires are connected to a dummy terminal block. When a dial is installed, it is only necessary to remove these wires, discard the block and attach them to the dial, without disturbing the cable form in any way. Standard A. E. Co.'s, W. E. Co.'s, and N. E. Co.'s dials can be furnished at current prices.

A Dial Opening Cover Plate is furnished with each telephone unless otherwise specified.

A Terminal Block is furnished with the line cord of each telephone. It consists of a black phenol compound base on which brass screw type terminals are mounted. The No. 14-A Terminal Block is used with two conductor line cords and the No. $15-\mathrm{A}$ is used with three conductor line cords.

Net Weight-6 lb. 6 oz ., packed 7 lbs .8 oz .


# Nos. 1222, 1223 and 1224 Telephones (Cont.) <br> Code Numbers and Prices of Telephones <br> All Telephones Wired Anti-Side-Tone <br> \author{ Metallic Ringing 

 <br> Straight Line <br> Divided Circuit Ringing <br> Straight Line}

| Code No. | Description of Ringer | Code No. of Ringer | $\begin{gathered} \text { Price } \\ \text { Each } \\ \text { Less Dials } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| 1222-E | 1800 Ohms, Straight Line | 61-A | \$17.45 |
| Standard Harmonic |  |  |  |
| $\dagger$ 1222-EY | 16\%\% Cycles, Fourth Party | 60-E | \$18.00 |
| †1222-FY | 331/3 Cycles, First Party | 60-F | 18.00 |
| $\dagger 1222$-GY | 50 Cycles, Second Party | 60-G | 18.00 |
| $\dagger$ 1222-HY | 66\% 2 Cycles, Third Party | 60-H | 18.00 |
| 1222-NY | 25 Cycles, Fifth Party | 60-N | 18.00 |

$\dagger$ Used with either rotary multi-cycle ringing machines or converters.

Other Frequencies
(for converter operation only)

| 1222-KX | 30 Cycles, First Party | $60-\mathrm{K}$ | $\$ 18.00$ |
| :--- | :--- | :---: | ---: |
| 1222-LX | 42 Cycles, Second Party | $60-\mathrm{L}$ | 18.00 |
| 1222-MX | 54 Cycles, Third Party | $60-\mathrm{M}$ | 18.00 |
| 1222-PX | 66 Cycles, Fourth Party | $60-\mathrm{P}$ | 18.00 |
| 1222-RX | 16 Cycles, Fifth Party | $60-\mathrm{R}$ | 18.00 |

Code No.
1223-B
1223-S

Description of Ringer
1223-S
1800 Ohms, Straight Line
Code No.

of Ringer \begin{tabular}{r}
Price <br>

Less | Each |
| ---: | :--- |
| Dials | <br>

$61-\mathrm{A}$ <br>
$\mathbf{8 1 7 . 4 5}$ <br>
$61-\mathrm{S}$
\end{tabular}

Standard Harmonic

| $\dagger$ 1223-EY | $16 \% / 3$ Cycles, Fourth Party | $60-\mathrm{E}$ | $\$ 18.00$ |
| :--- | :--- | :--- | ---: |
| $\dagger 1223-\mathrm{FY}$ | $331 / 3$ Cycles, First Party | $60-\mathrm{F}$ | 18.00 |
| $\dagger 1223-\mathrm{GY}$ | 50 Cycles, Second Party | $60-\mathrm{G}$ | 18.00 |
| $\dagger \mathbf{1 2 2 3 - H Y}$ | $66 \% / 3$ Cycles, Third Party | $60-\mathrm{H}$ | 18.00 |
| 1223-NY | 25 Cycles, Fifth Party | $60-\mathrm{N}$ | 18.00 |

$\dagger$ Used with either rotary multi-cycle ringing machines or converters.

## Other Frequencies

(for converter operation only)

| 1223-KX | 30 Cycles, First Party | $60-\mathrm{K}$ | $\$ 18.00$ |
| :--- | :--- | :--- | ---: |
| 1223-LX | 42 Cycles, Second Party | $60-\mathrm{L}$ | 18.00 |
| 1223-MX | 54 Cycles, Third Party | $60-\mathrm{M}$ | 18.00 |
| 1223-PX | 66 Cycles, Fourth Party | $60-\mathrm{P}$ | 18.00 |
| 1223-RX | 16 Cycles, Fifth Party | $60-\mathrm{R}$ | 18.00 |

Extension and Two Piece Telephones
1222
Less Ringer, For Extension Service
$\$ 15.20$
1224-A Less Ringer, Induction Coil and Condenser
$\$ 12.75$ (For use with desk set boxes, see Note 5.)

## General Notes

1. Last digit of code number indicates number of conductors in line cord. No. 1222 is designed for full metallic circuit ringing. No. 1223 is designed for divided circuit ringing. Straight line ringers are equipped with biasing springs. No. 1223-S is used extensively on long central energy rural lines.
2. All telephones are equipped with dial blanks unless otherwise specified or unless ordered with dials.
3. If telephones are to be equipped with dials, specify make and code number and add $\$ 4.00$ each to the price of any of the above telephones.
4. Wiring is complete and mounting facilities are provided for the installation of the Vincent Rare Gas Relay or the Western Electric No. 333-A Tube when it is found desirable to isolate the ground from the ringer circuit except when ringing is applied to the line. Divided circuit telephones of the No. 1223 type are arranged to be equipped in this manner. An extra charge is made for these parts. Add the letter " V " to code when Vincent Rare Gas Relay is to be furnished, add letter " T " to code when W. E. Co's $333-\mathrm{A}$ Tube is to be furnished.
5. No. 1224-A Telephones may be used with Nos. 1156-A, 1156-AD, 1167-A, 1209, 1217-A, 1218-A, and 1230 Desk Set Boxes when anti-side-tone circuits are desired. When booster type circuits are required they may be used with Nos. 1156 and 1167 Desk Set Boxes and when local battery instruments are required they may be used with No. 1180 Desk Set Boxes.
6. Add suffix letter $\mathbf{W}$ to telephone code number when rubber covered cords are required. Add $\$ .25$ to regular price to cover this change.

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## Nos. 1222 and 1223 Handset Telephones (Cont.)



Piece Parts of Nos, 1222 and 1223 Telephones. FIg. 1: Front View. Fig, 2: View Inside HousingFig. 3: Dial Blank Assembly. Fig. 4: Plunger Switch Assambly. Fig. 5i Assembly qf Base

Piece Parts of Nos. 1222, 1223, and 1224 Handset Telephones ${ }^{\prime}$

| Code No. | Description | $\begin{aligned} & \text { Price } \\ & \text { Each } \end{aligned}$ | Code No. | Deseription | Price | Code No. | Description | ${ }_{\substack{\text { Price } \\ \text { Each }}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 174 | Screw, Dial Blk. | \$ 01 | 32842 | Bushing, Spr. Comb. | \$. 015 | 32969 | Terminal St | \$ 35 |
| 1106 | Lock Washer, Cond. |  | 32870 | Bracket, Spr. Comb. | . 15 | 32976 | Screw, Grommet | . 02 |
|  | Mtg. | . 0025 | 32871 | Lever | . 07 | 32978 | Dial Blank | . 40 |
| 1204 | Lock Washer, SH. Pr. | . 0025 | 32878 | Grommet | . 10 | 33237 | Screw, Dial | . 01 |
| 5278 | Screw, Capacitor | . 005 | 32882 | Plunger | . 30 | 33378 | Stud, Spr. Comb. | . 01 |
| 5400 | Washer, Ringer Mtg. | . 005 | 32883 | Housing, Telephone | 3.75 | 33970 34622 | Capacitor (No. 48) | 1.25 |
| 13820 | Insulation | . 01 | 32889 | Rod, Handle | . 02 |  | Complete Sw. Assem. |  |
| 21437 | Screw, Spr. Comb. | . 015 | 32890 | Rod, Lever | . 03 | 28569 | Gong. C . Tap Screw |  |
| 23766 | Cap, Dial Blank | . 03 | -32943 | Induction Coil |  | 28570 | Gong |  |
| 24727 | Separator, Spr. Comb. | . 015 |  | (No. 46A) | 2.00 | MC-3G | 41/1 ${ }^{\prime}$ Cord, Handset |  |
| 24731 | Stud, Spr. Comb. | . 02 | 32949 | Terminal Strip | 45 | MD-2H | $6^{\prime} 0^{\prime \prime}$ Cord, Line 2 Co |  |
| 25404 | Protector, Dial Blk. | . 03 | 32952 | Screw, Grommet | . 02 | MD-3H | $6^{\prime} 0^{\prime \prime}$ Cord, Line 3 Co |  |
| 28246 | Spring Assembly | . 11 | 32953 | Screw, Base | . 02 | MD-4G | $6^{\prime} 6^{\prime \prime}$ Cord, Line for |  |
| 28248 | Spring Assembly | . 11 | 32954 | Insulation, Lever Tip | . 015 | 60 | Type Ringer, Harmo |  |
| 28433 | Screw, Gong | . 0025 | 32955 | Grommet | . 04 | 61-A | Ringer, Straight Line |  |
| 28479 | Card, Dial Blk. | . 03 | 32957 | Stiffener, Spr. Comb. | . 01 | *For prices, see separate pages covering items listed. |  |  |
| 29961 | Terminal Block | . 02 | 32959 | Foot Assembly | . 08 |  |  |  |

## No. 1212 Handset Telephones

## A Self-Contained, Anti-Side-Tone Telephone



No. 1212 Handset Telephone.

The Stromberg-Carlson No. 1212 Handset was designed not only to incorporate high quality transmission and reception but also to meet the requirements of utility and attractive design.

Outstanding designers of household furniture as well as prominent engineers were called upon to provide a housing that would conservatively meet the demands of good taste and at the same time accommodate the necessary equipment -ringer, induction coil, condenser, and hook switch-all concealed in one unit. Access to all parts was another feature which was given definite consideration, so that inspection and maintenance would be easy. The completed instrument has met the approval of many thousands of users and finds a ready demand by telephone subscribers.

Handset and Base are made of solid, moulded phenol compound which retains its lustrous finish indefinitely.

Louvers through which the sound from the gongs passes without noticeable restriction are located in the rear of the base and closed by a grille cloth which prevents dust from reaching the moving parts.

The No. 15 Handset Unit is standard equipment. See separate page for detailed description.

A Stamped Metal Base mounts the ringer, induction coil, and condenser.

A Cushion by extending slightly beyond the base and rising vertically to cover the lower edge, in addition to furnishing a transition line between telephone and the table or desk on which it stands provides a three-fold protection:
(1) Eliminates any marring of furniture.
(2) Guards against breakage.
(3) Produces a non-skid instrument which feature is most desirable when used in dial service.

A Stay Cord is used to form a hinge so that when the cradle is swung open from the metal base the conductor cords do not have to act as supports.

Terminal Blocks are furnished on the line cords with facilities for direct connection to the line. These terminal blocks are of black, phenol compound, with brass screw terminals. The No. 14A Terminal Block is used in two conductor service and the No. 15A in three conductor.

The Capacitor (Condenser), enclosed in a light finished metal case, is of the twin type having a 2 MF and 1 MF unit: the former used in the talking circuit and the latter in the ringing circuit. Screw terminals are provided for ease in making connections. It occupies about one-third the space of the older type telephone condenser. This is accomplished by improvements in manufacturing methods, in the selection of paper, and in the wax materials employed.

The Ringer is constructed along lines that have been in use for many years, but important improvements and adaptations have been made to make its use practical in the limited space of the handset base, with the following outstanding features:
(1) The gongs are a new shape and made of different thickness of metal so that a two-tone effect is produced. In the development stages a vast amount of experimental work was carried on with various shapes and metals to produce a signal with good carrying qualities but free from harsh, high-pitched vibrations that are annoying to the subscriber.
(2) Ample winding space has been provided so as to insure an excess power factor for proper functioning and long life.
(3) The ringer assembly includes all parts, coils, gongs, armature, and adjustment facilities in one unit. The adjustment of the gongs is accomplished by a simple lever and set-screw arrangement.
(4) Wiring to the ringer is secured by screw terminals so that when it becomes desirable to change the frequency of a subscriber station the change can be made withoutthe use of a soldering iron or removal of the instrument from its location.

The Hookswitch is of the long plunger type with sufficient travel of the plunger so that positive action is assured even though the cord may catch between the cradle and the handset. The plunger elevating spring is a strong spiral one that operates against a moulded collar on the plunger. It has sufficient strength to assure positive lifting of the plunger when the handset is removed. The long and flexible contact springs are designed and clamped in such a way as to retain their position and tension indefinitely. The tips of the switch springs are formed to make a rounded point contact to the plunger. No sharp edges can come in contact with the plunger to produce unnecessary wear.

The Induction Coil is the No. 23124 described under coils in the Coded Parts section of this catalogue.

Wiring is formed into a neat cable. The anti-side-tone circuit is used and the wiring is arranged so that the telephone may be used on bridging or divided circuit lines. A two or a three conductor line cord is furnished depending on the type of circuit in which the telephone is to be installed.

Dial Mounting-The moulded base is designed to accommodate a dial. Terminals are provided for connecting into the circuit, and when the order indicates that the telephone will be used for dial service the wires necessary for installing the dial are included. Standard A. E. Co.'s, W. E. Co.'s, and N. E. Co.'s Dials can be furnished at current prices.

Cover Plate for dial opening can be furnished when this telephone is ordered for manual service at no extra charge. However, telephone is normally shipped less cover unless order indicates cover is desired.

Net Weight $43 / 4 \mathrm{lbs}$.

## 1212 Handset Telephone (Cont.)

|  | Metallic Ringing |  |  |  | vided Circuit Ringing |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Straight | L Line |  |  |  |
|  | Desseription of Ringer | Code No. <br> of Ringer |  | Code No. | Description of Ringer | Code No. <br> of Ringer |  |
| 1212-AB | 1400 Ohms, Straight Line | $55-\mathrm{A}$ | \$17.45 | 1212-ADB | 1400 Ohms, Straight Line |  | \$17.45 |
| 1212-ABZ | 1400 Ohms, Straight Line Biased | 56-A | 17.45 | 1212-ADBZ | 1400 Ohms, - Straight Line Biased | 56-A | 17.45 |
|  |  |  | Standard | Harmonic |  |  |  |
| †1212-AE | 16 $2 / 3$ Cycles, (Fourth Party) | 57-E | \$18.00 | †1212-ADE | 162/6 Cycles, (Fourth Party) | 57-E | \$18.00 |
| 1212-AF | 331/3 Cycles, (First Party) | 57-F | 18.00 | 1212-ADF | $331 / 3$ Cycles, (First Party) | $57-\mathrm{F}$ | 18.00 |
| $\dagger$ 1212-AG | 50 Cycles, (Second Party) | 57-G | 18.00 | 1212-ADG | 50 Cycles, (Second Party) | 57-G | 18.00 |
| $\dagger$ 1212-AH | $66 \% / 3$ Cycles, (Third Party) | 57-H | 18.00 | 1212-ADH | 662\% Cycles, (Third Party) | $57-\mathrm{H}$ | 18.00 |
| 1212-AN | 25 Cycles, (Fifth Party) | 57-N | 18.00 | 1212-ADN | 25 Cycles, (Fifth Party) | 57-N | 18.00 |

$\dagger$ Used with either rotary multi-cycle ringing machines or converters.

## Other Tuned frequencies can be furnished as follows:

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1212 |  | 57-K | \$18.00 | 1212-ADK | 30 |  | 18.00 |
| 1212-AM | 54 Cycles, (Third Party) | ${ }_{57} 57-\mathrm{M}$ | 18.00 | 1212-ADM | 54 Cycles, (Third Party) | $57-\mathrm{M}$ | 18.00 |
| 1212-AP | 66 Cycles, (Fourth Party) | 57-P | 18.00 | 1212-ADP | 66 Cycles, (Fourth Party) | $57-\mathrm{P}$ | 18.0 |
| 1212-AR | 16 Cycles, (Fifth Party) | 57-R | 18.00 | 1212-ADR | 16 Cycles, (Fifth Party) | 57-R | 18. |

In ordering for manual service be sure to state "To be If dials are ordered with telephones state make of dial and equipped with dial blank." spring combination or code.
Add suffix letter $\mathbf{W}$ to telephone code number when rubber covered cords are required. Add $\$ .25$ to regular price to cover this change.


Wiring Diagrams of No. 1212 Handset Telephone

## 1212 Handset Telephone (Cont.)



- DIAL BLANK PARTS - FURNISHED ONLY WHEN SPECIFIED. WHEN THESE PARTS ARE FURNISHED OMIT P-247II PACKAGE ASSEMBLY


Fig. 3

Fig- 2


Fig. 4

Piece Parts of the No. 1212 Handset Telephone. Fig. 1; Front View. Fig. 2: End View. Fig. 3: Looking into The Cradio-Base Removed. Fig. 4: Base.

Piece Parts of No. 1212 Handset Telephone


| Code No, | Description |
| :--- | :--- |
| 23119 | Terminal (Right) |
| $\mathbf{2 3 1 2 0}$ | Terminal (Left) |
| $\mathbf{2 3 1 2 4}$ | Induction Coil |
| $\mathbf{2 8 2 2 1}$ | Base |
| $\mathbf{2 8 2 2 2}$ | Cradle |
| $\mathbf{2 8 4 2 1}$ | Plunger Spring |
| $\mathbf{2 8 4 2 4}$ | Plunger |
| $\mathbf{\$ 2 8 4 2 5}$ | Rubber Cushion |

Line Drawing of the Spring Combination of the $\mathbf{1 2 1 2}$ Handset
$\dagger$ These springs in one complete assembly, mounted on bracket with insulations, priced at $\$ 1.25$.
$\ddagger$ When rubber cushions are not available, $\mathrm{P}-35033$ felt cover and $\mathrm{P}-35034$ ring will be substituted.

## Nos. 1197 and 1198 Type Handset Telephones



No. 1197 Handset
The Stromberg-Carlson No. 1197 and No. 1197-A Handset Telephones are two piece sets used with Nos. 1156, 1217, 1218, or 1226 Desk Set Boxes, (see following pages) for manual service only. They employ the No. 15 Handset unit and are wired for booster or anti-side-tone circuit as ordered. The ringer, condenser, and induction coil are in the desk set box. (No. 1197 may also be used for magneto service with No. 1180 Desk Set Box.) No. 1197-B with 4 conductor desk set cord, used in the operator's circuit of cordless switchboards.

Net Weight- $23 / 4 \mathrm{lbs}$.

| Code No. | $\quad$Description | Price <br> Each |
| :--- | :--- | ---: |
| $\mathbf{1 1 9 7}$ | Handset Telephone-Booster Circuit | $\$ 12.65$ |
| 1197-A | Handset Telephone-Anti-Side-Tone Circuit | 12.75 |
| $\mathbf{1 1 9 7 - B}$ | Handset Telephone-Used as operator's set |  |
| $\mathbf{1 2 0 7}$ | with cordless switchboards | 12.75 |
|  | Handset Telephone-With Induction Coil <br> in Base (see Magneto Telephones) | 13.60 |

Piece Part Numbers of $\mathbf{1 1 9 7}$ Handset



No. 1198 Handset
The Stromberg-Carlson No. 1198 Handset Telephone is designed for dial service and is wired for booster circuit or anti-side-tone circuit as ordered. It employs the No. 16 Handset and is equipped with Stromberg-Carlson Duratex Cords. Package Assembly No. 24711 containing dial connecting cords is included; but should it be desired to use this telephone in manual service be sure to order cover for dial opening, at no extra charge. Dials are extra and will not be provided unless ordered. The No. 1198 uses the same Desk Set Boxes as the No. 1197.

Net Weight- $23 / 4 \mathrm{lbs}$.

| Code No. |  | Price <br> Each |
| :--- | :--- | ---: |
| 1198 | Handset Telephone-Booster Circuit | Less Dial |
| 1198-A | Handset Telephone-Anti-Side-Tone Circuit | 12.75 |

Piece Parts of Nos. 1197 and 1198 Handsets

| Code No. | Description |
| :--- | :--- |
| $\mathbf{2 3 0 7 1}$ | Base of 1198 |
| $\mathbf{2 3 0 7 3}$ | Cradle |
| $\mathbf{2 3 1 1 1}$ | Plunger |
| $\mathbf{2 3 1 1 3}$ | Spring |
| $\mathbf{2 3 1 1 9}$ | Terminal (1198) Rt. |
| $\mathbf{2 3 1 2 0}$ | Terminal (Left) |
| $\mathbf{2 3 1 7 3}$ | Cover, Bottom |
| $\mathbf{2 3 6 0 9}$ | Spring Assembly |


| Price Each | Code No. | Description | Price Each | Code No. | Description | Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$1.50 | 24476 | Base of 1197 | \$1.75 | MC-4F | $4^{\prime} 9^{\prime \prime}$ Cord for No. 16 |  |
| . 85 | 25677 | Ind. Coil (No. 1207) | 1.75 | MD-3G | $5^{\prime} 3^{\prime \prime}$ Cord for 1197, 1198 |  |
| . 25 | 34373 | Spring Assembly | . 11 |  | and 1207 |  |
| . 05 | 34374 | Spring Assembly | . 11 | MD-4G | $5^{\prime} 3^{\prime \prime}$ Cord for 1198-A and |  |
| . 03 | 34375 | Spring Assembly | . 11 |  | 1197-B |  |
| . 03 | 15 | Handset |  | MD-4G | $6^{\prime} 6^{\prime \prime}$ Cord for 1197-A |  |
| . 60 | 16 | Handset | * | *For pri | ces, see Coded Parts Secti | " ${ }_{\text {" }}$ \% |
| . 11 | MC-3F | $4^{\prime} 9^{\prime \prime}$ Cord for No. 15 | * | Catalog |  |  |

No. 1202 Type Handset Telephone


No. 1202 Handset Extension Telephone
The No. 1202 instrument is designed for use as an extension telephone. It has a condenser and induction coil mounted in the base and employs a two conductor line cord with a No. 14-A Terminal Block attached. It may be used with a No. 1158-B Bell Box.
Net Weight- $23 / 4 \mathrm{lbs}$. Uses an MD-2G $6^{\prime} 6^{\prime \prime}$ Line Cord and an MC-3F $4^{\prime} 9^{\prime \prime}$ Handset Cord.

| Code |  | Description |
| :--- | :---: | :---: |
| No. | Price |  |
| $\mathbf{1 2 0 2}$ | Handset Telephone | $\$ 15.20$ |



## Colored Handset Telephones

Stromberg-Carlson Handset Telephones Nos. 1197, 1198, 1202 , and 1212 were formerly made in the following attractive colors. During the duration of the war manufacture of colored handsets will be discontinued. The present stock of these telephones is considerable. Our Rochester Office will be glad to quote prices and to list the colors available, upon application.

Colors

## Brown Chinese Red Ivory <br> Maroon

The Colored Parts of these handsets are of molded cellulose acetate in which the color pigments are worked all the way through the plastic so that the color will not wear nor chip off. Aside from the color they are identical to the equivalent telephones finished in black.

Cords-The Duratex cords used with colored handsets are finished in suitable colors to harmonize with the handsets.

Bell Boxes-For colored handsets specify the bell box needed and name the color. The colored bell boxes are tinted to harmonize with the handset specified.

## Handset Wall Telephones

Handset Wall Telephones are often the most practical and convenient types for given locations.

Used in offices, they may be mounted on a wall or at the end of a desk, so that the desk top may be kept clear. For certain types of business where several people use the same instrument they are especially adaptable. Their compact structure permits them to be mounted in out-of-the-way locations where other types are unsuitable.

Stromberg-Carlson Wall Telephones provide clear and efficient reception and transmission. They are available for manual or dial use and are furnished with straight line or tuned frequency ringers as required.

No. 1211 Handset Wall Telephone


No. 1211 Handset Wall Telephone Dial Equipped 쥴

The Case is of moulded phenol compound which retains its lustrous black finish indefinitely. The louvers through which the sound from the gongs passes without noticeable restriction are concealed by ribbing that follows the contour of the box and handset, to make the whole instrument appear to have even less depth than it actually has.

## No. 1211 Handset Wall Telephone (Cont.)



No. 1211-M Handset Wall Telephone

The Receptacle from which the handset is suspended is made of the same material as the case or box, is integral with it, and designed so that regardless of the angle at which the handset is returned to the switch compartment, it comes to rest in a vertical position at the front of the case. This insures correct action of the hook switch plunger.

The Hookswitch is arranged with a short arm which is its only moving part. Once properly adjusted, positive action is assured. The springs are equipped with twin contacts to provide reliable, low resistance operation.

A Stamped Metal Base mounts all of the apparatus and furnishes facilities for concealing the mounting screws.

The Ringer is the same as that used in the 1212 Handset Telephone.

It is equipped with two gongs of different thicknesses, which give a pleasing tone, of maximum audibility.

The Induction Coil is the same as that used in No. 1212 Type Stromberg-Carlson Handset Telephones. Compact and efficient, they are designed to operate correctly with their associated components to provide fine articulation and reception.

The No. 15 Handset with its well-known transmitter and receiver is standard equipment on Stromberg-Carlson No. 1211 Handset Wall Telephones.


View of No. 1211-M Handset Wall Telephone with case removed, showing the compact arrangement of ringer, terminal strip, induction coil, and condenser on its pressed metal base. The bayonet slots at the top and bottom simplify mounting:

## The Anti-Side-Tone Circuit is used.

To Mount-In the metal back of this telephone are two bayonet slots, one of which is vertical, the other horizontal. Locate the telephone and spot the screw for the top vertical bayonet slot. This screw should be inserted part way. Then the base should be hung on this screw and aligned vertically, after which the horizontal slot screw should be spotted and sunk. Final alignment should then be made and both screws drawn tight.

For Dial Service-When dials are required for immediate service a small dial case of black phenol compound is mounted on the flat top of the telephone case. This dial case is equipped with a cord and plug. The plug, when inserted in the five prong jack mounted on the base, completes the dial connection to the telephone.

Where future dial service is anticipated the telephone is wired for dial and equipped with blanks for covering dial case mounting holes.

Dimensions- $7 \frac{13}{16}$ ins. high; $53 / 8$ ins. wide; $33 / 4$ ins. deep. With handset in place the maximum depth is 5 ins.

Net Weight- $51 / 4 \mathrm{lbs}$.

## No. 1211 Handset Wall Telephone (Cont.)

Manual and Dial Service
Metallic Ringing Straight Line

| Straight Line |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| * Code No. | ${ }^{* * \text { Code No. }} \underset{\text { Dial }}{ }$ | Description | Code No. of Ringer | Price Each |
| 1211-MB |  | 1800 Ohms, St. Line | 61-A | \$17.00 |
| 1211-MBZ | 1211-ABZ | 1800 Ohms, Biased | 61-A | 17.00 |
| Standard Harmonic |  |  |  |  |
| $\dagger$ 1211-ME | $\dagger$ 1211-AE | 162/3 Cyc., 4th Pty. | 59-E | 17.55 |
| $\dagger$ 1211-MF | $\dagger$ 1211-AF | 331/3 Cyc., 1st Pty. | 59-F | 17.55 |
| +1211-MG | +1211-AG | 50 Cyc., 2nd Pty. | $59-\mathrm{G}$ | 17.55 |
| $\dagger 1211-\mathrm{MH}$ | +1211-AH | 662/3 Cyc., 3rd Pty. | 59-H | 17.55 |
| 1211-MN | 1211-AN | 25 Cyc., 5th Pty. | 59-N | 17.55 |

$\dagger$ Used with either rotary multicycle ringing machine or converters.

## Other Tuned Frequencies

(These telephones for converter operation only)

| 1211-MK | 1211-AK | 30 Cyc., 1st Pty. | 59-K | 17.55 |
| :--- | :--- | :--- | :--- | :--- |
| 1211-ML | 1211-AL | 42 Cyc., 2nd Pty. | $59-\mathrm{L}$ | 17.55 |
| 1211-MM | 1211-AM | 54 Cyc., 3rd Pty. | $59-\mathrm{M}$ | 17.55 |
| 1211-MP | 1211-AP | 66 Cyc., 4th Pty. | $59-\mathrm{P}$ | 17.55 |
| 1211-MR | 1211-AR | 16 Cyc., 5th Pty. | $59-\mathrm{R}$ | 17.55 |

*Manual telephones are equipped with blanks which cover the dial case mounting holes.
No. 1211-M Type Handsets are arranged for future dial use by removal of a dummy plug and adding P-29617 Package Assembly. This consists of P-28476 Dial Case, P-28505 Back Cover, and P-28542 Dial Cord and Plug Assembly.

| Code No. | Description | Price |
| :--- | :---: | ---: |
| $\mathbf{2 9 6 1 7}$ | Package Assembly | $\$ 1.00$ |

**Dial Telephone Code Nos. include dial mounting case and wiring for dial service. Dials are extra equipment. When No. 1211-A dial service Type Telephones are ordered, the No. 1211-M Type Telephone is used in filling the order, together with a separate P-29617 Package Assembly to be mounted by the customer at the time of mounting the dial. The dial case is assembled to the telephone in the factory only when so specified on the order.

## Divided Circuit Ringing

As all of the above handsets are now arranged so that they may be used for divided circuit ringing by a simple wiring change made on the terminal block the former codes denoting divided circuit ringing handsets have been abandoned.

Parts of No. 1211 Handset Wall Telephone

|  | Deseription | Price Each | $\underset{\substack{\text { Code } \\ \text { No }}}{ }$ | Description | ${ }_{\text {Prive }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19140 | Term. Strip | \$ . 30 | 28505 | Dial Case Cove | . 05 |
| 23124 | Ind. Coil | 2.00 | 28518 | Case (1211) | 2.00 |
| 28037 | Case (1210) | 1.75 | 28569 | Gong | 15 |
| 28086 | Holder | . 60 | 28570 | Gong |  |
| 28108 | Lever | . 30 | 28570 | Gong | 15 |
| 28373 | Plug | . 05 | 28542 | Cord with Plug | . 50 |
| 28476 | Dial Case | . 75 | 29503 | Plug | . 10 |

35010 covers the complete Hookswitch Assembly consisting of spring combination, hook lever and bracket, with screws, nuts and tips \$1.40.
See above tables of telephones for ringer codes used. For prices refer to Coded Parts Section of Catalogue under SignalsRinger.

Wiring Diagram of No. 1211-A Telephone


Parts Drawing of No, 1211 Wall Telephorte


No. 1201 Type Handset Telephone


## No. 1201 Type Suspended Handset

The Stromberg-Carlson No. 1201 Type Handset Telephone is a compact suspended handset unit, hung from a hookswitch at the side of a small, enameled, metal hookswitch box.
These Telephones are convenient instruments for a large number of uses, especially where space is at a premium. They are particularly well suited for office installations or as extensions to main line instruments. Desk workers find them desirable as they can be conveniently mounted on the corner of a desk, leaving the top entirely clear for routine work. The desk set box may be mounted in some concealed or out-of-theway place.

The finish of the switch box is black enamel which provides a neat appearance with the glossy black of the handset.

Code No. 1201-C is wired for booster circuit use and operates with a No. 1156-BY Desk Set Box.

Code No. 1201-CA is wired for anti-side-tone operation and uses a No. 1156-ADB Desk Set Box.

Net Weight- $21 / 2 \mathrm{lbs}$.

Code No.
1201-C 1201-CA

Description
Price Each
$\$ 12.15$ 12.15



Wiring Diagram of No. 15 Handset



Wiring Diagram of No. 16 Handset

Piece Parts of the No. 15 Handset

The No. 15 or No. 16 Handset is used with the following Handset Telephones: 1191, 1192, 1195, 1197, 1198, 1201, $1202,1210,1211,1212,1215,1216,1232,1233$, and 1234. The handle is made of black phenol compound for standard sets and of cellulose acetate in the colored units.

The Receiver is made of carefully selected materials to provide uniformly high efficiency. Each receiver is assembled and tested as a complete unit before being threaded into the handle. The diaphragm is maintained in a correct position with relation to the rest of the receiver. As a result of careful design and workmanship a receiver of excellent receiving characteristics is obtained.

The Transmitter operates satisfactorily under the low current conditions of Long Lines and the heavy currents of Short Lines. It is quiet in operation and provides voice transmission with fine articulation. An outstanding feature which makes this possible is found in the design of the diaphragm. The center of the diaphragm is cone shaped while annular corrugations near the outer edge give the flexibility necessary to permit the center to move freely as a rigid unit.

| Code No. | Description | Cord Used | Price Each |
| :--- | :---: | :---: | :---: |
| $\mathbf{1 5}$ | Handset | MC-3F $4^{\prime} 9^{\prime \prime}$ | $\$ 7.00$ |
| $\mathbf{1 6}$ | Handset | MC-4F $4^{\prime} 9^{\prime \prime}$ | 7.00 |
|  | (Used with D-2819 Wall Telephone) |  |  |

## Parts of No. 15 Handset

| Code No. | Description | Price Each | Code No. | Description | Price <br> Each | Code No. | Description | Price <br> Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23164 | Clamping Collar $\$$ | \$ . 35 | 22575 | Phenolic Handle | \$2.75 | 34243 | Diaphragm | \$ . 05 |
| 23165 | Tension Ring, nic. silver | . 06 | 22580 | Spring | . 11 | 34364 | Phenolic Earcap | . 35 |
| 23166 | Phenolic Mouthpiece | . 50 | 24562 | Transmitter | 2.50 | MC-3F | Cord $4^{\prime} 9^{\prime \prime}$ No. 15 | * |
| *For | Prices see Coded Parts Section | ction. | 34242 | Receiver | 2.20 | MC-4F | Cord $4^{\prime} 9^{\prime \prime}$ No. 16 | * |

No. 19 Handset (Test Set )


No. 19 Type Handset
No. 19 Handsets are used primarily as test sets by service men working on Central Energy Lines. Compact and sturdy, they can be carried readily in a lineman's pocket.

Transmitter and receiver units are mounted on a black enameled metal handle with rounded edges. A switch is provided in the handle to cut the handset into service when it is connected to the line.

Net Weight-1 lb. 9 oz.

$\left.\begin{array}{ll}\text { Code No. } & \begin{array}{c}\text { Price } \\ \text { Each }\end{array} \\ \text { 19-C Used with Central Energy Systems as a test } \$ 11.75 \\ \text { set or as an extension Telephone. Equipped }\end{array}\right)$

## No. 19 Handset (Cont.) (Test Set)



## Piece Parts

| Code No. Description | Price Each | Code No. Description | Price Each |
| :---: | :---: | :---: | :---: |
| 20 Condenser | \$ | 13605 Slide | \$ . 27 |
| 239 Bushing | . 01 | 13613 Switch Assem. | . 55 |
| 588 Hex. Brass Nut | . 01 | 13620 Shell | . 39 |
| 1148 Hexagonal Nut | . 01 | 21686 Cord | 05 |
| 3041 Brass Screw | . 03 | 21758 Cord | . 05 |
| 3851 Brass Screw | . 02 | 22781 F.H.B.M. Screw | . 01 |
| 8786 Magnet | . 20 | 23166 Mouthpiece | . 50 |
| 8788 F.H.B.M. Screw | . 01 | 24562 Transmitter |  |
| 8943 Term. Assem. | . 30 | 26738 Trans. Shell | . 70 |
| 9924 Diaphragm | . 05 | 26739 Clamp. Ring | 75 |
| 11788 Ear Cap | . 16 | 26740 Phenol Ring | 25 |
| 11789 Coil | .45 | , 26741 Felt Ring | . 04 |
| 11790 Coil | . 45 | 26743 Handle Assem. | 2.00 |
| 12005 Collar | . 49 | 26745 Term. Block | . 10 |
| 13416 Receiver | 3.10 | MC-2-C Cord, 19-C, 1 |  |
| 13604 Slide | . 11 | MC-3-B Cord, 19-L |  |

No. 20 Handset


The No. 20 Type Handset is used with No. 1222 and No. 1223 Handset Telephones. Well balanced, attractive and compact, it houses the highly efficient transmitter and receiver described below in further detail. The handle, mouthpiece, and earcap are made of tough molded material which retains the original finish indefinitely.
The Transmitter is patterned after those used with previous handsets, which have gained well deserved recognition in the telephone field. High in fidelity and unusually good on long and short lines, reproducing the voice naturally in any position in which it is held, it retains the clear articulation demanded by modern telephone practice. Spring-pressure contacts in the transmitter compartment enable the transmitter to be dropped in position and to make reliable connections when the mouthpiece is screwed into position.
The Receiver used in the No. 20 Type Handset was designed especially for this unit. It is of the capsule type and provides a smoother, less resonant response frequency characteristic than any previous Stromberg-Carlson receiver. Improved articulation is secured by placing the resonant peak at approximately 2000 cycles per second while at the same time introducing sufficient damping. When mounted in the handset, two circular contacts engage two spring points, no matter in which position it is placed. This assures positive circuit contacts under spring-pressure as soon as the earcap is screwed down.

Code No.

| Code No. | Description |
| :--- | :--- |
| $\mathbf{2 0}$ | Handset |
| $\mathbf{2 1}$ | Handset |
| $\mathbf{2 2}$ | Handset |

## Parts of the No. 20 Type Handset

|  | Description | Price <br> Eoch |
| :--- | :--- | :---: |
| Code No. | Screw, Contact Springs | $\$ .005$ |
| $\mathbf{2 3 2 6 4}$ | Transmitter Unit | 2.50 |
| $\mathbf{2 4 5 6 2}$ | Spring, Receiver. | .05 |
| $\mathbf{3 1 9 1 6}$ | Spring, Receiver | .05 |
| $\mathbf{3 1 9 1 7}$ | Hande | 2.75 |
| $\mathbf{3 2 8 6 2}$ | Mouthpiece | .45 |
| $\mathbf{3 2 8 6 3}$ | Ear Cap | .35 |
| $\mathbf{3 2 8 6 4}$ | Spring, Transmitter | .06 |
| $\mathbf{3 2 8 8 4}$ | Spring, Transmitter | .07 |
| $\mathbf{3 2 8 8 6}$ | Connector | .005 |
| $\mathbf{3 2 8 8 7}$ | Receiver | 3.00 |
| $\mathbf{3 4 2 3 0}$ | $4^{\prime} 6^{\prime \prime}$, No. 22 Handset | $*$ |
| MC-2G | $4^{\prime} 6^{\prime \prime}$, No. 20 Handset | $*$ |
| MC-3G | $4^{\prime} 6^{\prime \prime}$, No. 21 Handset | $*$ |
| MC-4G |  |  |

*For prices, see Cord Section of Coded Parts.

Nos. 1155 and 1157 Type Wall Telephones


No. 1155 Type Wall Telephone
The No. 1155 and No. 1157 Wall Telephones are compact and neat in appearance, making them adaptable for use in residences and hotels.

The pressed steel, black enameled case provides an accessible mounting layout for the No. 46 or No. 47 Type Ringer, No. 21 Condenser, No. 44 Type Induction Coil, No. 27-A Receiver and MR-2G 3 ft . Cord, No. 20 Transmitter and No. 13824 Hookswitch.
The No. 1155 is arranged for manual service and the No. 1157 for dial service. The No. 1157 accommodates dials of A. E., W. E., or N. E. Type. The net weight of the instrument is $71 / 2 \mathrm{lbs}$.


Wiring Diagram_ofjiNo. $\mathbf{1 1 1 5 5}$ Type Wall Telephone


Booster Circuit
(METALLIC RINGING) Straight Line
Code No.
Manual
1155-BY
1155-BZY

Code No.
Dial Description
Code No. Price

| Manual | Dial | Description |  | Code No. |
| :---: | :---: | :---: | :---: | :---: |
| 1155-BY |  | Price |  |  |
| 115ger | Each |  |  |  |
| 11000 | Ohms, Straight | $46-A$ | $\$ 12.85$ |  | 1155-BZY 1157-BZY 1000 Ohms, Biased 49-A 12.85

Standard Marmonic

| $\dagger \mathbf{1 1 5 5 - E Y}$ | $\dagger 1157-E Y$ | $162 / 3$ Cyc., 4th Pty. | $47-\mathrm{E}$ | 13.40 |
| :--- | :--- | :--- | :--- | :--- |
| $\dagger \mathbf{1 1 5 5 - F Y}$ | $\dagger \mathbf{1 1 5 7 - F Y}$ | $331 / 3$ Cyc., 1st Pty. | $47-\mathrm{F}$ | 13.40 |
| $\dagger \mathbf{1 1 5 5 - G Y}$ | $\dagger \mathbf{1 1 5 7 - G Y}$ | 50 Cyc., 2nd Pty. | $47-\mathrm{G}$ | 13.40 |
| $\dagger \mathbf{1 1 5 5 - H Y}$ | $\dagger \mathbf{1 1 5 7 - H Y}$ | $662 / 3$ Cyc., 3rd Pty. | $47-\mathrm{H}$ | 13.40 |
| $\mathbf{1 1 5 5 - N Y}$ | $\mathbf{1 1 5 7 - N Y}$ | 25 Cyc., 5th Pty. | $47-\mathrm{N}$ | 13.40 | Specially tuned ringers of other frequencies can be furnished.

## Anti-Side-Tone

## (PROVISION MADE FOR DIVIDED CIRCUIT RINGING)

| Straight Line |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Code No. Manual | $\begin{aligned} & \text { Code No. } \\ & \text { Dial } \end{aligned}$ | Description | Code No. of Ringe | $\begin{aligned} & \text { Price } \\ & \text { Eac } \end{aligned}$ |
| 1155-AB |  | 1000 Ohms, Straight | 46-A | \$12.85 |
| 1155-ABZ | 1157-ABZ | 1000 Ohms, Biased | $49-\mathrm{A}$ | 12.85 |
| Standard Harmonic |  |  |  |  |
| $\dagger$ 1155-AEY | $\dagger 1157-A E Y$ | 162/3 Cyc., 4th Pty. | 47-E | 13.40 |
| 1155-AFY | -1157-AFY | 331/3 Cyc., 1st Pty. | 47-F | 13.40 |
| +1155-AGY | +1157-AGY | 50 Cyc., 2nd Pty. | 47-G | 13.40 |
| $\dagger 1155-\mathrm{AHY}$ | $\dagger 1157-A H Y$ | 662/3 Cyc., 3rd Pty. | 47-H | 13.40 |
| 1155-ANY | 1157-ANY | 25 Cyc., 5th Pty. | 47-N | 13.40 |
| 1155-AF |  | 2500 Ohms |  | 13.40 |

$\dagger$ Used with either rotary, multi-cycle ringing machines or converters.

D-2930 Package Assembly-For the conversion of the No. 1155 or the No. 1157 Wall Telephone into a Handset Type Wall Telephone, the D-2930 Package Assembly is available.

| Code | Description | Price |
| :--- | :---: | :---: |
| No. | Each |  |
| D-2930 | Equipment for converting |  |
|  | No. 1155 or No, N157 to |  |
|  | Handset Wall Telephone $\$ 8.10$ |  |

Parts of No. 1155 Wall Telephone

| Code | Description | Price |
| :--- | :--- | ---: |
| No. | Each |  |
| 15015 | Base | $\$ .85$ |
| 15018 | Cover Assembly | 1.40 |
| 20 | Transmitter | $*$ |
| 27-A | Receiver | $*$ |
| 44--B | Induction Coil | $*$ |
| 46047 | Type Ringer | $*$ |
| 8741 | Hook | $*$ |
| 12038 | Transmitter Back | $*$ |
| 12047 | Gong | $*$ |
| 13824 | Hookswitch Assembly | $*$ |

*For prices, See Coded Parts Section.

Nos. 1182 and 1208 Desk Stands


No. 1182 Desk Stand


No. 1208 Desk Stand

The Stromberg-Carlson No. 1182 Desk Stand Telephone is thoroughly modern in design and appeals instantly to users. Light weight, rugged, built to stand long life and hard usage, with four outstanding features.
A No. 20 Transmitter-high efficiency, which operates equally well on short lines with large amounts of current available and long lines with small amounts of current.

Fixed Transmitter Arm-This reduces the number of parts and removes the necessity for various adjustments.

Dependable Hookswitch employing sure contact springs with heavy wire terminals for circuit connections and phenol compound insulators gives very reliable service.

All Black Enamel Finish-This greatly improves the appearance and simplifies maintenance with respect to refinishing. This telephone has no nickel parts to be removed and replated.

Net Weight-3 $1 / 2 \mathrm{lbs}$.

Code No.
1182
Desk Stand Tescription
Price
Each Equipped with 3 Cond. Duratex Cord. Takes 1156, 1217, 1218 or other Desk Set Boxes. Equipped with No. 27-A Receiver.
1182-A
Anti-Side-Tone Desk Stand TelephoneEquipped with 4 Cond. Duratex Cord. Takes 1156-A, 1217, 1218, 1226, or 1230 Desk Set Boxes. Equipped with No. 27-A Receiver.

The No. 1208 Stromberg-CarIson Desk Stand Telephone resembles the No. 1182 in general appearance but its column is off-center to make room for the installation of a dial when desired. Takes same desk set boxes as No. 1182.

Net Weight-31/2 lbs.
Desk Stand Telephone-Booster CircuitEquipped with 3 Cond. Duratex Cord and with No. 27-A Receiver. Dial opening not covered.
1208-A
Anti-Side-Tone Desk Stand TelephoneEquipped with No. 27-A Receiver. Dial opening not covered.
1208-M Same as 1208 except dial opening is blanked.
1208 Desk Stand Telephone-Booster Circuit- $\$ 8.85$

Same as 1208 except dial opening is blanked.


| Parts of Nos. 1182 and 1208 Desk Stands |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Code No. | Description | Price Each | Code No. | Description | Price <br> Each |
| 3038 | Lock Nut | \$ . 16 | MD-3-F | F $6^{\prime} 6^{\prime \prime}$ Cord, | * |
| 6579 | Base, Manual | . 55 |  | 3 Cond. |  |
| 11115 | Base, Dial | . 40 | MD-4-F | F $6^{\prime} 6^{\prime \prime}$ Cord, |  |
| 17628 | Spider | . 22 |  | 4 Cond. |  |
| 19725 | Hook | . 55 | MR-2-J | J $39^{\prime \prime}$ Rec. Cord | * |
| 22322 | Cover, Base | . 60 | *See | Cords, under | oded |
| 34988 | Head | . 90 | Parts for | Prices. |  |

## WIRING DIAGRAMS

FOR No. II82 TELEPHONE, MANUAL TYPE, BOOSTER CIRCUIT


NOTE: FOR SIDE TONE REDUCTION REVERSE RED AND YELLOW CONDUCTORS ON CONNECTING RACK

No. II82-A TELEPHONE, MANUAL, ANTI-SIDE-TONE CIRCUIT


NOTE: WHEN IIB2-A TEL. IS USED WITH 1156 BELL BOX CONNECT RED OF LINE CORD TO L-2 AND YELLOW OF LINE CORD TO 2-R.

## Desk Set Boxes

No. 1230 Desk Set Box


No. 1230 Type Desk Set Box, closed

Handsets and Desk Stands used in connection with this Desk Set Box provide efficient two-piece telephone installations.

A Base of pressed steel permits the telephone units to be mounted in an accessible and convenient manner for inspection and servicing.

The Cover of wood with black duco finish or black enameled pressed steel may be entirely removed from the base by loosening two screws. This allows freedom of action for the installer or maintenance man.

The Equipment Arrangement of the No. 1230 Desk Set Box is somewhat similar to the base of the No. 1223 Handset Telephone. Two terminal strips are furnished; one for the line and one for the handset or desk set cord. Mounting facilities are provided for the installation of the Vincent Rare Gas Relay or the W. E. No. 333-A Tube, when it is desired to isolate the ground from the ringer circuit except when ringing current is applied to the line. An extra charge is made for these parts when required.


Open View of No. 1230 Desk Set Box

## No. 1230 Desk Set Boxes

## Code No. <br> 1230-C 1230-S <br> 1230-EY <br> 1230-FY <br> 1230-GY <br> 1230-HY <br> 1230-NY

| $\quad$Description | Code <br> Ringer <br> Res. | Price <br> Each |
| :--- | :---: | ---: |
| Straight Line Bias | $61 \mathrm{~A}-1800$ | $\$ 7.20$ |
| Straight Line Bias | $61 \mathrm{~S}-4850$ | 7.75 |
| $162 / 3$ Cyc. Harmonic | $47 \mathrm{E}-2500$ | 7.75 |
| $331 / 3$ Cyc. Harmonic | $47 \mathrm{~F}-474$ | 7.75 |
| 50 Cyc. Harmonic | $47 \mathrm{G}-474$ | 775 |
| $662 / 3$ Cyc. Harmonic | $47 \mathrm{H}-474$ | 7.75 |
| 25 Cyc. Tuned | $47 \mathrm{~N}-474$ | 7.75 |

The No. 1230-S Desk Set Box is used extensively on long rural central energy lines.
When the Vincent Rare Gas Relay is required add "Y" to the code. When the W. E. 333-A Tube is required add "T" to the code. When the No. 1230 Desk Set Box is to be wired for use with Western Electric Desk Telephones prefix the letter "W" to the code.

Example: W-1230-CT Desk Set Box indicates a straight line biased ringer, 1800 ohm resistance, with a W. E. 333-A tube and wired to take a W. E. Desk Stand.

Net Weight-47/8 lbs.


Drawing Showing Parts

## Parts of the No. 1230 Desk Set Box

| Piece No. Nor | Description | Price | $\begin{gathered} \text { Piece } \\ \text { No. } \end{gathered}$ | Description $\begin{gathered}\text { Price } \\ \text { Each }\end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1145 | Nut | \$ . 01 | $\begin{gathered} \text { 46-A (32943) } \\ \text { Ind. Coil } \end{gathered}$ |  |
| 15020 | Screw | . 11 |  |  |
| 15021 | Nut | . 02 | 48 (33970) |  |
| 15575 | Washer | . 02 |  |  |
| 22092 | Spacer | . 05 | 12047 | Gong, Har. Ringer |
| 32872 | Bracket | . 10 | 28569 | Gong, St. Line |
| 32873 | Bracket | . 10 | 47 | Type Hamoni |
| 33965 | Term. Strip | . 40 |  | Ringers as per code * |
| 33967 | Screw | . 02 | 61 | Type Straight |
| 33969 | Term. Strip | . 45 |  | Line, Ringers as per code |
| 34534 | Bracket | . 05 |  | Coded Parts Section | of Catalogue for Prices.

## Desk Set Boxes



No. 1156 Type Desk Set Box

## No. 1156 Type Desk Set Box

Case of pressed steel, black enamel finish or steel base with wood cover, black Duco finish. Gongs mounted inside leave a neat, sanitary exterior. Equipment consists of No. 46 Straight Line or No. 47 Type Harmonic Ringer, No. 21 Condenser and No. 44-B or 44-D Induction Coil.
A convenient retaining screw, loosened a few turns, opens the box, exposing all the working parts for inspection or repairs.

Ringer is accurately adjusted and equipped with cleartoned concealed gongs. When ordering specify the Code Number of Desk Set Box.

Net Weight - 5 lbs .

## Mełallic Ringing

| Metallic Ringing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Anti-Side |  |  |  |  |
| Booster Code No. | $\begin{aligned} & \text { Tone } \\ & \text { Code No. } \end{aligned}$ | Description | de No. Ringer | . Price Each |
| 1156-BY | 1156-ADB | 1000 Ohms Straight | 46-A | \$6.75 |
| 1156-BYZ | 1156-ADBZ | 1000 Ohms Biased | 49-A | 6.75 |
| Standard Harmonic |  |  |  |  |
| $\dagger$ 1156-EY | $\dagger$ 1156-ADEY | 162/3 Cyc., 4th Pty. | 47-E | 7.30 |
| $\dagger 1156-F Y$ | 1156-ADFY | 331/3 Cyc., 1st Pty. | 47-F | 7.30 |
| $\dagger 1156-G Y$ | $\dagger 1156-A D G Y$ | 50 Cyc., 2nd Pty. | 47-G | 7.30 |
| $\dagger 1156-H Y$ | $\dagger 1156-A D H Y$ | $662 / 3$ Cyc., 3rd Pty. | 47-H | 7.30 |
| 1156-NY | 1156-ADNY | 25 Cyc., 5th Pty. | 47-Y | 7.30 |
|  | 1156-ADF | 2500 Ohms Straight | 46-F | 7.30 |

For dial systems specify No. 1156-BYZ or No. 1156-ADBZ which are equipped with biased ringers to prevent tapping of bells.
These desk set boxes may also be furnished in frequencies of $30-42-54-66$, and 16 cycles when ordered.

## Grounded Ringing (Divided CCT)



## No. 1158 Type Desk Set Box

This is the same as the No. 1156 Type, except that it has no induction coil. It is designed for use with desk stands or handsets having the induction coil mounted in base of stands. May also be used as an extra extension bell.

Net Weight- $41 / 2 \mathrm{lbs}$.
(LOCAL SECONDARY CIRCUIT-METALLIC RINGING)

|  | Straight Line <br> Description of <br> Ringer |  | Code No. |
| :--- | :---: | :---: | ---: | | Price |
| ---: |
| Each |

These desk set boxes may also be furnished in frequencies of $30,42,54,66$ and 16 cycles when ordered.
$\dagger$ Used with either rotary, multi-cycle ringing machines or converters.


Open View of No. 1156 Type Desk Set Box
The ringers, condensers, terminals, terminal blocks, $\sqrt{2}$ and their parts are the same as those of the No. 1155 Wall Telephone.


No. 1226 Desk Sef Box


Closed View of No. 1226 Desk Set Box

The No. 1226 Type Desk Set Box is a compact connecting unit which permits the use of standard anti-side-tone handsets or desk stands for use as extension telephones when installed within hearing range of the main telephone signal.
The Box has its equipment units mounted on a $43 / 4^{\prime \prime} \times 5^{\prime \prime}$ wooden base. A pressed steel case with black enameled finish and supported by two mounting studs, covers the apparatus. Overall height is $21 / 8^{\prime \prime}$.

The Equipment consists of a No. 46-A Induction Coil, a P-34173 2.25 mf . capacitor and a five point connecting terminal block. When connected to the telephone instrument in accordance with standard wiring, the circuit is of the


Open View of No. 1226 Desk Set Box
anti-side-tone type. The No. 1226 does not include a ringer as the called party is signalled by the ringer at the main telephone. Only a single pair of wires is necessary for making the connection between the main telephone and the extension.

The Telephones suitable for use with No. 1226 Desk Set Box are the No. 1197-A Handset and No. 1182-A Desk Stand. The No. W-1226 is suitable for use with Western Electric Anti-side-tone Handset or Desk Telephones.

| Code No. | Description | Price <br> Each |
| :--- | :--- | ---: |
| 1226 | Used with No. 1197-A and 1182-A Telephones | $\$ 3.45$ |
| W-1226 | Used with W. E. Anti-side-tone Telephones | 3.45 |



Wiring Diagram of No. 1226 Desk Set Box


Wiring Diagram of No. W-1226 Desk Set Box

# Chime Signal Boxes (Desk Set Boxes) 

(Anti-Side-Tone)


No. 1217-A
Type Chime Signal Box


Inside of Cover
Interior-Showing Base
Stromberg-Carlson Chime Bell Boxes were designed for subscribers who prefer signals having mellow musical tones instead of the ringing tones of the ordinary telephone. They fit in with the requirements of refinement and good taste.

The chime box is $7 \frac{15}{15} 6^{\prime \prime}$ high by $71^{\prime \prime}$ wide and is finished in black crackle with light finished guards behind open louvers. It may be used with any Stromberg-Carlson anti-side-tone telephone which has a separate bell box and which operates on straight line ringing. The chime box is not suitable for harmonic or other tuned frequency ringing.

Standard chime boxes are equipped with one high and one low tone which alternate-one chime signal when ringing is impressed, and the other chime signal upon the release of the ringing current.

| Code No. | Deseription | Price <br> Each |
| :--- | :--- | ---: |
| 1217-A | 331/3 Cycles, with Induction Coil | $\$ 12.50$ |
| 1218-A | 16-20 Cycles, with Induction Coil | 12.50 |
| †W-1218-A | 16-20 Cycles, with Induction Coil | 12.50 |
| 1219-A | $331 / 3$ Cycles, less Induction Coil | 11.50 |
| 1220-A | 16-20 Cycles. less Induction Coil | 11.50 |
| 28463 | Condenser for 1217-A and 1218-A | $*$ |
| 33231 | Condenser for W-1218-A | $*$ |
| 45-A | Ind. Coil for 1217-A and 1218-A | $*$ |
| 46-A | Ind. Coil for W-1218-A | $*$ |
| Add "B" to code number when two low tones are desired. |  |  |
| Add "C" to code number when two high tones are desired. |  |  |
| *For prices, see Coded Parts under Coils and Condensers. |  |  |
| †Designed especially for Western Electric anti-side-tone |  |  |
| telephones, with four conductor line cords. |  |  |



Wiring Diagram of No. 1217-A and No. 121.8-A Chime Signal Boxes


Wiring Diagram of No. 1220-A
Chime Signal Box


Wiring Diagram of No, W-1218-A
Chime Signal Box


The Stromberg-Carlson No. 896 Magneto Wall Telephone is adapted to any magneto service requirement-long lines, short lines, town lines, or heavily loaded rural lines. Every part of this telephone is built for efficiency, durability and convenience.

The Transmitter is of granular carbon cup type. The front and mouthpiece are combined in a single unit of black molded phenol compound which retains its finish indefinitely.

The Receiver is of the bi-polar, long distance, magnetic type; provided with phenol compound ear cap shell.

The Induction Coil is double wound over a laminated soft iron core and is highly efficient on low battery voltage.

The Ringer is built for sensitive operation; provided with clear toned black enamelled gongs and a quick "one screw" adjustment.

The Generator is furnished in powerful 3 and 5 bar types.
The Wiring is of the universal type. This permits the telephone being carried in stock connected for regular bridging service but readily convertible to any of the following five additional kinds of service without either adding or splicing conductors.

## "Bridging Service with Sure-Ring Condenser" <br> "Bridging Service with Non-Interfering Push Button" <br> "Bridging Service with Silent Ringer" <br> "Bridging Service with Divided Circuit Ringing" <br> "Bridging Service with Harmonic Ringing"

A single cable contains all wiring. Every conductor is accessible, readily traceable by means of color code and in plain view. Hinged joints and "back board" groove wiring are entirely eliminated. The conductors are all covered with braided insulation.

The Cabinet is built of quarter-sawed dull golden oak, richly finished, easy of access and provided with-door hinged on the left-writing shelf inclined at a convenient angle -bushed holes for wall mounting screws and a handy screw lock-ample room for 2 or 3 dry cells as required by individual conditions.

The Shipping Weight packed in standard individual packing box, less dry cells, is 31 pounds.

## Additions

For Sure-ring Condenser (on 5 bar telephone only) order by adding letter " K " to code number.

For Non-interfering Push Button add letter "P" to code numbers (on 5 bar telephones and on metallic, two wire, circuits only).

|  |  |
| :--- | :---: |
|  |  |
| Code <br> No. |  |
| 896-I | 5 bar |
| $\mathbf{8 9 6}$ |  |
| $\mathbf{8 9 6 - L}$ | 5 bar |
| $\mathbf{8 9 6 - R}$ | 3 bar |

## Bridging Type

"K" added to code indicates Sure-ring Condenser - . 65 " P " added to code indicates Non-interfering Push Button . 50

## Harmonic Type

No. 896 Stromberg-CarIson Magneto Wall Telephone equipped with three bar hand generator will be furnished as additions to existing systems only in $16 \frac{2}{3}, 331 / 3,50$, and $66 \frac{2}{3}$ cycle frequencies. In seeking quotations and ordering it is necessary to specify frequency.

## Dry Cells

Dry Cells are not included with the telephones as described above but should be ordered separately either, 2 or 3 per telephone as needed. Code: No. 6 Dry Cells.

## 896 Wall Type Magneto Telephone (Cont.)



Line Drawings to Show Piece Parts, Their Code Numbers and Dimensions of the $\mathbf{8 9 6}$ Wall Type Magneto Telephone

Piece Parts of the No.' 896 Wall Telephone

*For Prices-See Coded Parts Section.
Wiring Diagram

## No. D-2843 Handset Type Magneto Wall Telephones



The Stromberg-Carlson D-2843 Handset Type Magneto Wall Telephone was designed to give the users of magneto wall telephones the convenience and the superior transmitting and reception qualities of the modern, one unit instrument. The Handset is adaptable to any magneto service requirement-long lines, short lines, heavily loaded lines. Its assembly is the standard, No. 896 Magneto Wall Telephone Cabinet equipped with the No. 16 Handset. The transmitter and receiver are mounted in black phenol compound which permanently retains its glossy finish. A four foot cord allows the user to carry on a conversation while seated, after the operator has been signalled.

Net Shipping Weight without dry cells, 29 lbs.

## Additions

For Sure-ring Condenser (on 5 bar telephones only) order by adding the letter " $K$ " to code number.

For Non-interfering Push Button (on 5 bar telephones and on metallic two wire circuits only) add the letter "P" to code number.

This telephone may be ordered in bridging type as follows:

| Code No. | Génerator | Ringer | Service | Price Each |
| :---: | :---: | :---: | :---: | :---: |
| D-2843-I | 5 bar | 1600 Ohms | Rural | \$23.55 |
| D-2843-L | 5 bar | 2500 Ohms | Heavily Loaded Lines | 23.8 |
| D-2843-R | 3 bar | 1000 Ohms | Town | 22. |

"K" added to code indicates Sure-ring Condenser 65
"P" added to code indicates Non-interfering Push Button . 50

## Dry Cells

Dry Cells are not included in price of telephones, and should be ordered separately. 2 or 3 per telephone as needed.

Code No. 6 Dry Cell
Weight, 2 Pounds each

## D-2842 Package Assembly

For the convenience of those who may wish to convert the standard No. 896 Magneto Wall Telephones to the handset type, we will furnish our D-2842 Package Assembled which contains one No. 16 Handset with cord, the correct switch hook, and all other parts necessary for the complete change.

Code No.
Description
$\stackrel{\text { Price }}{\text { Each }}$
D-2842
Package Assembly
$\$ 8.25$

## No. D-2844 Handset Type Magneto Wall Telephones



This Stromberg-Carlson Handset Telephone for use with magneto exchanges is designed for mounting on wall or desk. It is a single piece unit with all apparatus mounted in a neat golden oak cabinet. The handset is suspended from a hookswitch at side of cabinet convenient to the user.

While this telephone does not replace the standard desk type there are many instances where it may be preferred. There is the advantage of not having a telephone on desk or table, yet within easy reach. The handset also allows the user to move about, to some extent, while talking without getting away from the transmitter.

This telephone is composed of the No. 16 Handset and standard magneto telephone equipment. It will give outstanding performance for either local or long distance service.

Net Shipping Weight, without dry cells, 18 Ibs.

May be ordered in bridging type as follows:

| Code <br> No. | Generator | Ringer |  | Service | Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D-2844-I | 5 bar | 1600 Ohms | Rural |  | \$23.55 |
| D-2844- | 5 bar | 2500 Ohms | Heavily | Loaded Lines | 23.80 |
| D-2844-R | 3 bar | 1000 Ohms | Town |  | 22.65 |

MAGNETO WALL PHONE (HANDSET TYPE)


Wiring Diagram


[^0]:    Line Drawiftg showing a No. 1224-A Telephone connected to a Typical Desk Set Box (No. 1156-ADB)

