

B-12-12-42

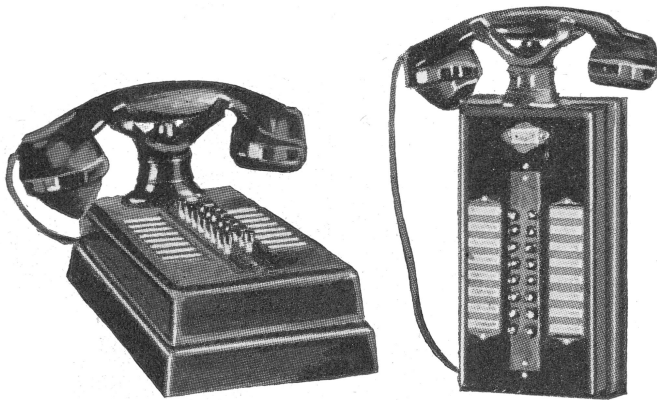
## Graybar Inter-Communicating Systems Less Exchange Trunks

The Stromberg-Carlson Tel. Mfg. Co. is an appointed distributor for **Graybar Inter-Phone Systems**. These Systems have gained universal recognition for providing reliable telephone communication in installations requiring limited local service and not requiring outside or city connections. Offices, factories, stores, schools, apartments, and institutions find these Systems efficient and convenient.

### No. 1-A System

This System features selective ringing and selective talking service and provides as many separate simultaneous conversations as there are pairs of telephones installed. The total number of stations which may be connected is 25.

### No. 6140-C Telephone



No. 6140-C 16 Desk Telephone      No. 6140-C 16 Wall Telephone

The No. 6140-C comes in two styles, desk and wall. When ordering, specify the style of instrument desired.

| Code No.        | No. of Buttons | Station Capacity | Description          | Price |
|-----------------|----------------|------------------|----------------------|-------|
| <b>6140-C6</b>  | 6              | 7                | Sel. Ring, Sel. Talk | *     |
| <b>6140-C12</b> | 12             | 13               | Sel. Ring, Sel. Talk | *     |
| <b>6140-C16</b> | 16             | 17               | Sel. Ring, Sel. Talk | *     |
| <b>6140-C20</b> | 20             | 21               | Sel. Ring, Sel. Talk | *     |
| <b>6140-C24</b> | 24             | 25               | Sel. Ring, Sel. Talk | *     |

### Accessories†

The No. 1-A System requires the following material for completing an installation:

- Cable**—With suitable conductors, (2 pairs No. 18 gauge for battery supply, and 1 pair No. 22 gauge, for each station in the system). Lead covered cable is recommended for all locations where moisture is present or where cable may be exposed to mechanical injury.
- Stranded flexible cable** is used where it is necessary to move the desk telephone about upon a desk. Conductors required depend upon number of buttons in the key box.
- Cable Terminals**—Cable Terminals should be provided wherever there is a junction between cables and usually at desk mountings.
- A Rectifier** is recommended in place of dry cells wherever reliable 110 volt AC is available.

\*Prices will be provided upon application. Indicate System and Types of instruments in which you are interested.

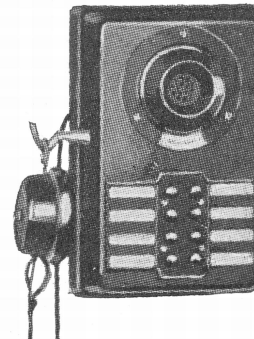
†Accessories are described in further detail following System descriptions.

### No. 11 System

The No. 11 System provides selective ringing and common talking operation. This system is adaptable to establishments where conversations can be limited to one at a time. It is used extensively in residences, banks, warehouses and stores.

### No. 2527 Telephone

The No. 2527-C is a wall type telephone suitable for surface wall mounting. The No. 2539-C is a flush type wall telephone which is combined with a metal outlet box and a set of outlet box hangers.



No. 2527-C 8 Wall Telephone

| Code No.        | Code No.        | No. of Buttons | Station Capacity | Description          | Price |
|-----------------|-----------------|----------------|------------------|----------------------|-------|
| <b>2527-C 2</b> | <b>2539-C 2</b> | 2              | 3                | Sel. Ring, Com. Talk | *     |
| <b>2527-C 3</b> | <b>2539-C 3</b> | 3              | 4                | Sel. Ring, Com. Talk | *     |
| <b>2527-C 4</b> | <b>2539-C 4</b> | 4              | 5                | Sel. Ring, Com. Talk | *     |
| <b>2527-C 6</b> | <b>2539-C 6</b> | 6              | 7                | Sel. Ring, Com. Talk | *     |
| <b>2527-C 8</b> | <b>2539-C 8</b> | 8              | 9                | Sel. Ring, Com. Talk | *     |

### No. 6247-C Telephone

The No. 6247-C type telephone is a surface mounting wall type instrument. The housing is of molded phenol compound with the push button unit mounted at the top. The transmitter and receiver are made up in the form of a handset.



No. 6247-C 8 Wall Telephone

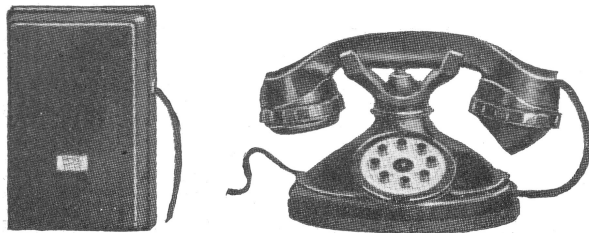
| Code No.        | No. of Buttons | Station Capacity | Description          | Price |
|-----------------|----------------|------------------|----------------------|-------|
| <b>6247-C 4</b> | 4              | 5                | Sel. Ring, Com. Talk | *     |
| <b>6247-C 8</b> | 8              | 9                | Sel. Ring, Com. Talk | *     |

## Graybar Inter-Communicating Systems Less Exchange Trunks

### No. 11 System (Cont.)

#### No. 6245-C Telephone

The No. 6245-C type telephone consists of a Handset Telephone Desk Set with push buttons mounted in the base together with an apparatus box containing a bell and connecting block.

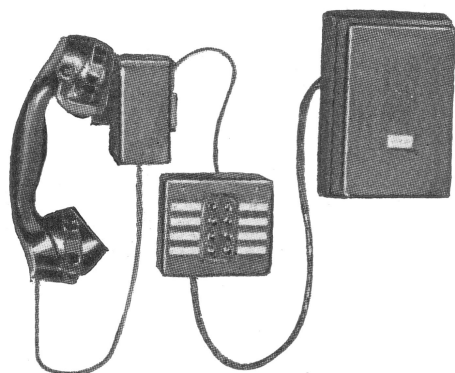


No. 6245-C 8 Handset Telephone

| Code No. | No. of Buttons | Station Capacity | Description          | Price |
|----------|----------------|------------------|----------------------|-------|
| 6245-C 4 | 4              | 5                | Sel. Ring, Com. Talk | *     |
| 6245-C 8 | 8              | 9                | Sel. Ring, Com. Talk | *     |

#### No. 6239-C Telephone

The No. 6239-C type telephone consists of a Handset, Hook Switch Box, Push Button Block and Apparatus Box. The Hook Switch Box upon which the Handset mounts is a unit which can be readily mounted at the side of a desk, on a wall or any vertical surface.



No. 6239-C 8 Handset Telephone

| Code No. | No. of Buttons | Station Capacity | Description          | Price |
|----------|----------------|------------------|----------------------|-------|
| 6239-C 4 | 4              | 5                | Sel. Ring, Com. Talk | *     |
| 6239-C 8 | 8              | 9                | Sel. Ring, Com. Talk | *     |

#### No. 6034 Telephone

The No. 6034 type telephone consists of a Handset having a metal handle and a "Press-To Talk" Lever, a Push Button Block and an Apparatus Box. The Handset can be hung on a hook or pin driven into a wall.

| Code No. | No. of Buttons | Station Capacity | Description          | Price |
|----------|----------------|------------------|----------------------|-------|
| 6034-BG  | 4              | 5                | Sel. Ring, Com. Talk | *     |
| 6034-BH  | 8              | 9                | Sel. Ring, Com. Talk | *     |

#### Accessories†

The following material is necessary to complete the installation of a No. 11 System:

- 1 No. 51-H Retardation Coil**, to be installed near the battery of each system.
- Cable**—3 Common Wires, No. 18 Gauge, and one individual wire, No. 22 Gauge, for each station.
- Dry Cells**—5 cells required. If 110 volt A. C. current is available, a 6 volt rectifier may be employed.

### System Number Twelve

#### Master Station—Common Talking

This system provides for communication from a central point, Master Station, to several outlying stations. The Master Station is equipped with push buttons, one for each outlying station. By operating these buttons each outlying station may be rung separately. The outlying stations are each equipped with one ringing button only, by which they are able to signal the Master Station. Only one conversation can be carried on at one time. The capacity of this system permits the operation of one Master Station and from two to sixteen outlying stations.

#### Instruments for No. 12 System

**Master Stations**—Any of the instruments described under System No. 11 may be used as Master Stations in System No. 12 up to the capacities indicated. The No. 2527-C type telephone may be furnished with 10 to 16 push buttons, to secure greater capacity.

**Outlying Stations**—The same type of instruments described in System No. 11, may be provided for Outlying Stations. These single button instruments are indicated by the following codes:

| Code     | Type          | Code     | Type       |
|----------|---------------|----------|------------|
| 2527-C 1 | Surface Wall  | 6245-C 1 | Cradle     |
| 2539-C 1 | Flush Wall    | 6239-C 1 | Suspended  |
| 6247-C 1 | Surface Hdst. | 6042-K   | Suspended‡ |
|          |               | 6043-E   | Suspended‡ |

‡These instruments have metal handsets. No. 6042-K suspends from a single gang outlet mounted flush in the wall. No. 6043-E suspends from a circular surface mounting box.

#### Accessories†

The following material is required for completing a No. 12 System:

- 1 No. 51-H Retardation Coil**, to be installed near the battery of each system.
- Wire**—Three common wires are required throughout the System, No. 18 or No. 19 gauge. In addition one individual wire between each outlying station and the Master Station, No. 22 Gauge. It will be found economical to use cable when there are long runs or a large number of wires.
- Cable Terminals**—Terminals are desirable at junction points and distribution centers.
- Dry Cells**—Five cells are required when the more distant outlying station is 750 feet or less distant from the Master Station.

\*Prices will be provided upon application. Indicate System and Types of Instruments in which you are interested.

†Accessories are described in further detail following system descriptions.

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## Graybar Inter-Communicating Systems Less Exchange Trunks

### System No. 14 and No. 14C

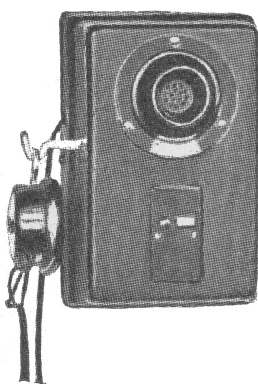
#### Two-Station Private Line

Two-Station Private Line Telephones are used extensively for communication between rooms in a residence, between offices, between shipping room and warehouse and to fill other similar requirements.

The No. 14 System requires two wires for connecting the two telephone instruments and one set of three or four dry cells at each telephone.

The No. 14C System requires three wires for connecting the two telephones and one set of five dry cells connected at one station only.

In either system one station can ring the other by simply depressing the button on the set. Wall or desk sets may be used interchangeably.



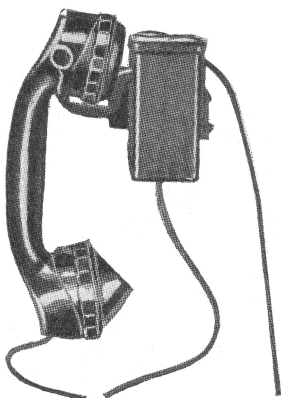
No. 2527-C 1 Wall Telephone



No. 6043-P  
Suspended Wall Telephone

#### Two-Station Private Line Telephones

| Code No. | No. of Buttons | Description            | Price |
|----------|----------------|------------------------|-------|
| 2527-C 1 | 1              | Surface Wall           | *     |
| 2539-C 1 | 1              | Flush Wall             | *     |
| 6245-B 1 | 1              | Handset Desk           | *     |
| 6239-B 1 | 1              | Suspended Wall         | *     |
| 6043-P   | 1              | Surface Wall Suspended | *     |
| 6042-AE  | 1              | Flush Wall Suspended   | *     |
| 6247-C 1 | 1              | Wall Handset           | *     |



No. 6239-B 1  
Suspended Wall Telephone



No. 6042-AE Suspended  
Telephone

### System No. 15

#### Code Ringing—Common Talking

In this system each station is equipped with one push button, which when depressed signals every other station. The various stations are called by signalling each one with a different code ring. Thus two rings signals station No. 2, three rings signals station No. 3, etc. The capacity of this system is two to six stations.

The No. 15 System may be used to advantage where telephone service is limited and where code ringing is not extensive enough to cause annoyance. Stockroom and associated warehouses, grouped green houses, guard stations and similar installations are well served by No. 15 Systems.

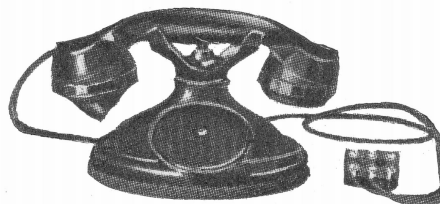
The instruments used have the same general appearance as those shown under System No. 14. They are indicated in the following table:

| Code No. | No. of Buttons | Description            | Price |
|----------|----------------|------------------------|-------|
| 2527-C 1 | 1              | Surface Wall           | *     |
| 2539-C 1 | 1              | Flush Wall             | *     |
| 6245-D 1 | 1              | Handset Desk           | *     |
| 6239-D 1 | 1              | Suspended Wall         | *     |
| 6043-CD  | 1              | Surface Wall Suspended | *     |
| 6042-CD  | 1              | Flush Wall Suspended   | *     |
| 6247-C 1 | 1              | Wall Handset           | *     |

#### Accessories†

Installing Material as follows is required for the No. 15 System.

- (a) **1 No. 51-H Retardation Coil** to be installed near the battery of each system.
- (b) Four wires are required for connecting the Inter-Phones.
- (c) **Dry Cells**—No more than five (5) dry cells connected in series are used for this system.



No. 6245-B 1 Handset Desk Telephone

\*Prices will be provided upon application. Indicate System and Types of instruments in which you are interested.

†Accessories are described in further detail following system descriptions.

## Graybar Inter-Communicating System—Accessories

### Commonly Used Accessories

#### Inter-Phone Cable

All conductors are tinned copper with single silk and single cotton insulation. The cable core is saturated with a wax compound. The overall covering is either painted cotton braid, indicated by the letter B, for dry inside installations or a pure lead sheath, indicated by the letters BS, for outside cable runs or wherever moisture is prevalent.

#### Cable Codes

| Code No.      | Conductors No. 22 | No. 18  | Covering | Approx. Diam.     | Weight, Per C. Ft. | Price |
|---------------|-------------------|---------|----------|-------------------|--------------------|-------|
| <b>161-B</b>  | 7 Singles         |         | Braid    | $\frac{5}{16}$ "  | 3.5 lbs.           | *     |
| <b>161-BS</b> | 7 Singles         |         | Lead     | $\frac{11}{32}$ " | 23.0 lbs.          | *     |
| <b>162-B</b>  | 11 Singles        |         | Braid    | $\frac{11}{32}$ " | 4.5 lbs.           | *     |
| <b>162-BS</b> | 11 Singles        |         | Lead     | $\frac{3}{8}$ "   | 26.6 lbs.          | *     |
| <b>164-B</b>  | 6 Singles         | 2 Pairs | Braid    | $\frac{13}{32}$ " | 5.8 lbs.           | *     |
| <b>164-BS</b> | 6 Singles         | 2 Pairs | Lead     | $\frac{3}{8}$ "   | 26.6 lbs.          | *     |
| <b>244-B</b>  | 8 Pairs           | 2 Pairs | Braid    | $\frac{3}{8}$ "   | 9.0 lbs.           | *     |
| <b>244-BS</b> | 8 Pairs           | 2 Pairs | Lead     | $\frac{13}{32}$ " | 34.0 lbs.          | *     |
| <b>246-B</b>  | 14 Pairs          | 2 Pairs | Braid    | $\frac{27}{32}$ " | 15.0 lbs.          | *     |
| <b>246-BS</b> | 14 Pairs          | 2 Pairs | Lead     | $\frac{64}{64}$ " | 40.0 lbs.          | *     |
| <b>248-B</b>  | 18 Pairs          | 2 Pairs | Braid    | $\frac{29}{32}$ " | 16.0 lbs.          | *     |
| <b>248-BS</b> | 18 Pairs          | 2 Pairs | Lead     | $\frac{64}{64}$ " | 45.0 lbs.          | *     |
| <b>249-B</b>  | 22 Pairs          | 2 Pairs | Braid    | $\frac{31}{32}$ " | 19.0 lbs.          | *     |
| <b>249-BS</b> | 22 Pairs          | 2 Pairs | Lead     | $\frac{33}{32}$ " | 49.0 lbs.          | *     |
| <b>250-B</b>  | 26 Pairs          | 2 Pairs | Braid    | $\frac{33}{32}$ " | 20.0 lbs.          | *     |
| <b>250-BS</b> | 26 Pairs          | 2 Pairs | Lead     | $\frac{35}{32}$ " | 53.0 lbs.          | *     |
| <b>251-B</b>  | 33 Pairs          | 2 Pairs | Braid    | $\frac{9}{16}$ "  | 25.0 lbs.          | *     |
| <b>251-BS</b> | 33 Pairs          | 2 Pairs | Lead     | $\frac{19}{32}$ " | 61.0 lbs.          | *     |

#### Standard Flexible Cable

Used principally with the No. 1A System, between cable terminal and Key-box, when it is necessary to move Key-box and Telephone about on the desk.

| Code No.          | 418 | 430 | 438 | 446 | 454 |
|-------------------|-----|-----|-----|-----|-----|
| Single Conductors | 18  | 30  | 38  | 46  | 54  |

#### Dry Cells

Code No. Gray Label

See Construction Section of Catalogue for prices and descriptions of other primary cells.

See Accessories Section of Telephone Section for Storage Batteries.

#### Battery Boxes

| Code No.          | 2 | 3 | See Construction     |
|-------------------|---|---|----------------------|
| Dry Cell Capacity | 2 | 3 | Section of Catalogue |

#### Cable Terminals

| Code No.    | Number of Circuits | Terminals Per Circuit | Box Dimensions  | Price     |
|-------------|--------------------|-----------------------|---|-----------|
| <b>62</b>   | 14                 | 2                     | 8 x 6 x $2\frac{1}{2}$ in.                                | See Coded |
| <b>63</b>   | 24                 | 2                     | 12 x 6 x $2\frac{1}{2}$ in.                               | Parts     |
| <b>89A</b>  | 28                 | 1                     | $8\frac{3}{32}$ x $6\frac{5}{32}$ x $3\frac{3}{32}$ in.   | "         |
| <b>89B</b>  | 21                 | 1                     | $8\frac{19}{32}$ x $6\frac{5}{32}$ x $3\frac{11}{32}$ in. | "         |
| <b>19AC</b> | 15                 | 2                     | 8 x $5\frac{1}{8}$ x $2\frac{1}{2}$ in.                   | *         |
| <b>19BC</b> | 27                 | 2                     | 14 x $5\frac{1}{8}$ x $2\frac{1}{2}$ in.                  | *         |

#### Terminal Strips and Blocks

See Construction Section of the Catalogue which shows the many different types of strips and blocks as well as boxes available for connecting purposes.

\*Prices furnished upon application.

### Relays for Loud Ringing Bells or Lamp Signals

Type ABTX1 Relay provides a means by which loud powerful signals may be applied to Inter-Phone Stations when 110 direct or alternating current is available. The contacts of the relay are rated to carry 6 amperes, 110 volts A.C. or 1 ampere 115 volts D. C.

The ABTX1 Relay is installed in the circuit in place of the bell or buzzer in the set. The loud signal circuit is carried through the relay contacts which close when the station is rung.

#### Transformer

When it is so desired, the ringing current for Inter-Phone Systems may be supplied by using a bell ringing transformer. Type 231-101 transformer will operate on 110-120 volts, 50-133 cycles A.C. Six secondary voltages are available 4, 8, 12, 16, 20 and 24. Weight is 6 lbs. Size  $4\frac{1}{16}$ " x  $3\frac{5}{8}$ " x  $3\frac{1}{16}$ ".

#### Loud Ringing Bells

The No. 17 Economy Bell, equipped with a 6" gong, may be wired directly in place of the signal in an Inter-Phone set. Specify gong size (6") and ringing voltage used. The bell is finished in black and weighs 2 lbs. 14 ozs.

When 110 volt A. C. is available the No. 551 Weatherproof Bell, used in connection with the ABTX1 Relay is recommended.

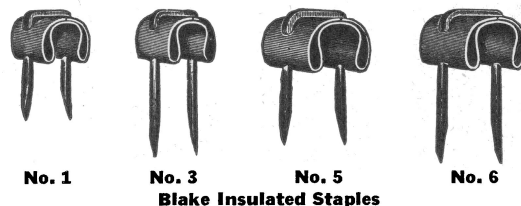
For other loud signal equipment see Construction Section of the Catalogue.

#### Retardation Coils

The No. 51-H Retardation Coil is recommended for use in the Talking Battery Circuit of the No. 11, No. 12 and No. 15 System.

#### Wire and Miscellaneous Equipment

Single, Twisted Pair and Twisted Triple Interior Telephone Wire is available for installation work, as well as Insulated Staples, Telephone Wiring Nails, Pipe Straps and Bridle Rings. Prices furnished upon request. Also see Construction Section of Catalogue.



Inter-Phone Systems suitable for operation with annunciator panels and switchboards are available. Prices and descriptions will be furnished upon application.

### Raytheon Rectifiers

These power filters are used extensively to replace dry cells in the operation of various Inter-Phone Systems. They not only supply a quiet source of talking battery, but also supply ringing current as indicated in the following table:

| Code No.    | D.C. Output Volts | Amps. | A.C. Freq. | A.C. Volts | Ringing Volts A.C. | Width           | Cabinet Size in Depth | Height          | Wt. Lbs. |
|-------------|-------------------|-------|------------|------------|--------------------|-----------------|-----------------------|-----------------|----------|
| <b>1024</b> | 6                 | 0.5   | 50/60      | 115        | 6-12-18-24         | 7               | $6\frac{1}{4}$        | $10\frac{1}{2}$ | 17       |
| <b>1026</b> | 12                | 0.5   | 50/60      | 115        | 6-12-18-24         | 7               | $6\frac{1}{4}$        | $10\frac{1}{2}$ | 19       |
| <b>1027</b> | 24                | 0.5   | 50/60      | 115        | 6-12-18-24         | 7               | $6\frac{1}{4}$        | $10\frac{1}{2}$ | 34       |
| <b>1044</b> | 24                | 1.0   | 60         | 115        | 6-12-18-24-75-100  | $14\frac{1}{2}$ | $7\frac{5}{8}$        | $14\frac{1}{8}$ | 84       |
| <b>1043</b> | 24                | 1.5   | 60         | 115        | 6-12-18-24-75-100  | $14\frac{1}{2}$ | $7\frac{5}{8}$        | $14\frac{1}{8}$ | 90       |
| <b>1040</b> | 24                | 3.0   | 60         | 115        | 6-12-18-24-75-100  | $14\frac{1}{2}$ | $9\frac{5}{8}$        | $14\frac{1}{8}$ | 90       |