

Magneto Telephones

CATALOG BULLETIN NO. 2

AUG. 1, 1912

GENERAL

THERE is a Western Electric type of telephone to satisfactorily meet all standard service conditions. For special requirements such as mines, railways, etc., there are special telephones.

Over 7,000,000 Western Electric telephones are in daily use throughout the world, handling efficiently both local and long distance telephone messages.

Our enormous output enables us to purchase our raw material in large quantities at a low cost. This, together with unequaled manufacturing facilities, makes it possible for us to offer our standard telephones at most reasonable prices.

Large and complete stocks are carried in our distributing houses, which are located in twenty-five principal cities of the United States. This insures prompt filling of orders, together with a saving in transportation, as our prices are f. o. b. the distributing house.

The prices in this bulletin are list.

Design and Construction

Cabinets: The cabinets of all wooden wall telephones are constructed of carefully selected oak, and are given a durable, attractive finish. Nickel-plated trimmings are used throughout.

A special feature of these telephones is the location of the main binding posts inside the cabinet. This prevents trouble from tampering with the connections.

The backboards of the wall sets are slotted to permit of the line wires entering the set either from above or below. All the interior wiring is in cable form. A wiring diagram is furnished with each set.

Desk Stands: The desk stands are carefully designed and constructed of the best materials obtainable. The working parts are held firmly within the upright tube or handle, and by taking out only one screw can be removed as a unit for the purpose of connecting or disconnecting the cords or for inspection.

The finish of our desk stands is either heavy nickel plate or a special dull finish black japan.

Transmitters: Western Electric transmitters are uniform in quality, and will retain their efficiency over long periods of service. They have high transmission efficiency over long as well as short lines. They are designed to be insensible to extraneous noises which, if picked up, render conversation difficult.

For local battery service, two cells of dry battery are all that will be required for ordinary service. Three cells are recommended, however, when maximum transmission is desired, as in the case of long distance connections.

Receivers: The receivers are efficient, compact, and even if subjected to severe usage require no adjustment after leaving the factory.

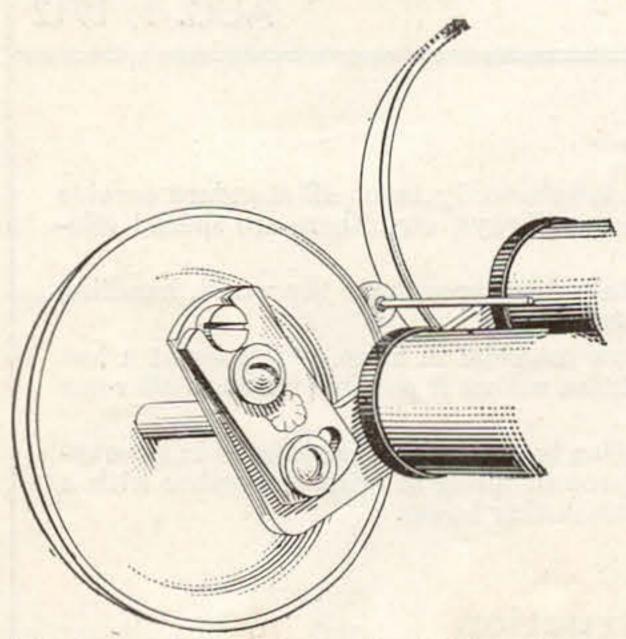
Ringers: The bells or ringers have a specially loud, clear tone, and operate on minimum current. The impedance of our ringers is extremely high, thus making it possible to connect large numbers of sets on one circuit without interfering with signaling or transmission efficiency. They are so designed that it is almost impossible for them to get out of adjustment. Their construction and arrangement are such that adjustment, when necessary, can be made easily and quickly.

Design and Construction (Continued)

Our No. 38 type ringer has 3-inch loud-ringing gongs. To adjust these, it is only necessary to use an ordinary screw driver. The clamping screws need merely be loosened and the eccentric turned.

The adjustment of the armature is equally simple and is accomplished by manipulating the centra screw.

Generators: The 5-bar magneto generator used in our magneto telephones is the strongest 5-bar hand generator made, and under working conditions has been found to be from 13 to 70% more efficient than any other 5-bar hand generator on the market. It is of compact, durable construction, with large bearings for revolving parts. The armature is automatically disconnected from the line when not in use, and is normally short-circuited to protect it from lightning. The generator will ring the equivalent of more than 40 of our 2500-ohm ringers on a 30-mile full metallic circuit of No. 12-BWG iron wire. The generator crank is made in one piece and is strong, durable, and neat in appearance.



Adjustment of Gongs on the No. 38 Type Ringer Accomplished by Means of a Screw-driver

Magneto Signaling Systems

In the code ringing system, a large number of parties may be connected to one line, all of the ringers at the telephone stations and the central office drop being bridged across the line. Whenever a party on the line operates his hand generator, all of the ringers in the other telephone sets and the central office drop are operated. When the central office operator rings on the line, all the bells are sounded. The party wanted is called by a code system made up of various numbers of long and short rings.

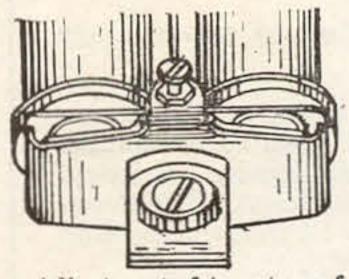
In the harmonic selective ringing system, selective signaling is secured by properly tuning the ringers to operate on different frequencies. Four frequencies at a constant voltage are used, 16% cycles, 33% cycles, 50 cycles, and 66% cycles. Special keys are provided at the switchboard so that either four parties with bridged ringers or eight parties with grounded ringers can be signaled selectively. For outgoing calls, the central office only can be signaled.

In the four-party selective ringing system using pulsating current, four telephones may be connected to a metallic circuit and signaled selectively. The ringers in these telephone sets are biased, and two ringers are connected to ground from each side of the line. One ringer on each side of the line is arranged to operate on positive pulsating current and the other ringer on each side of the line is arranged to operate on negative pulsating current. The cord circuits at the central office are so wired that positive or negative pulsating current may be sent out over either side of the line to ground by means of a special key for each cord circuit or a master key for an operator's position.

The center checking system is used on toll lines where it is desired to have several stations on one line and yet require all of them to secure connections through one office. The ringers at the stations are all biased one way and bridged across the line. They are operated from the central office either by alternating current or by pulsating current in one direction only. The generators at the stations are all arranged to furnish pulsating current of the polarity which does not ring the bells, and accordingly it is impossible for one party on the line to call another except through the center checking operator. The central office has a bridged drop operated by the pulsating current, and the central office operator signals the parties on the line by means of a code system.

In the selective central office signaling system, a large number of subscribers may be connected on one line and arranged so that they can call each other without signaling the central office, or they may call the central office without notifying the other parties on the line. This is accomplished by bridging

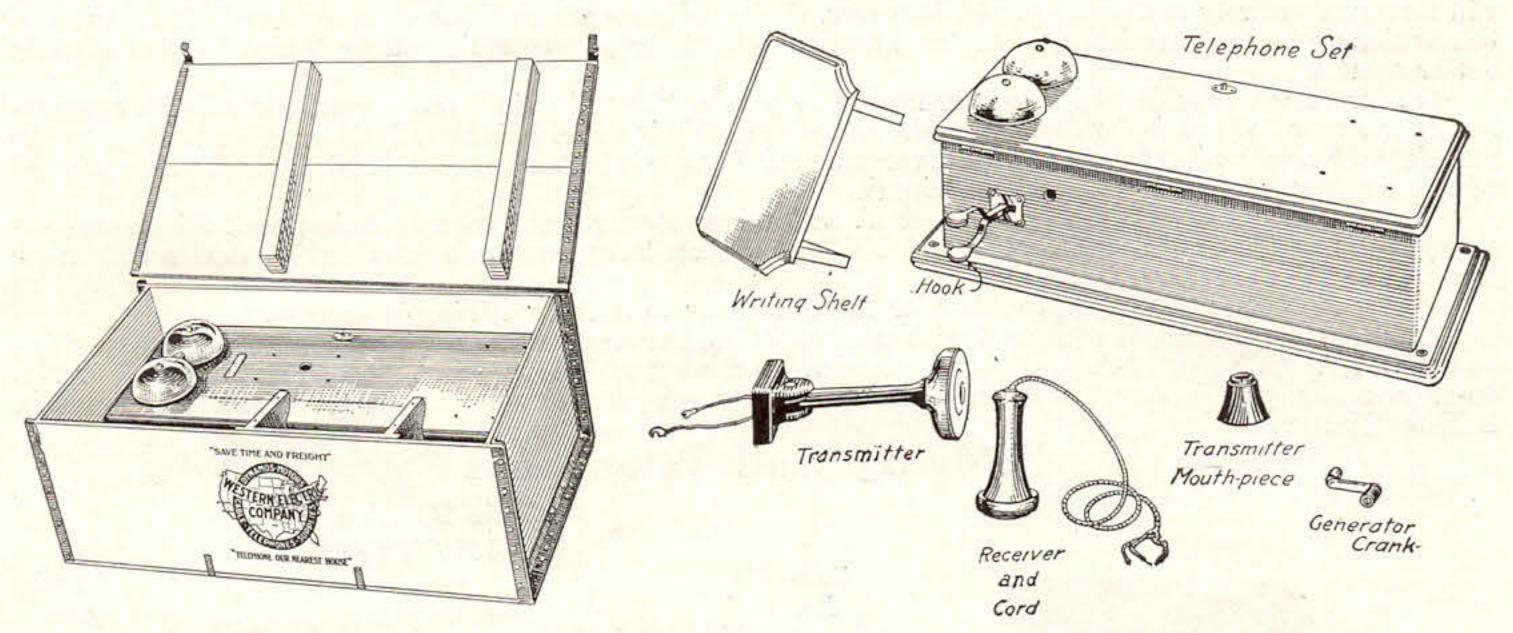
the telephones across the line and wiring them so that the generator is normally connected to the two sides of the line, but may be switched by the subscriber so that it is bridged between one side of the line and ground. At the central office, the drop is connected between one side of the line and ground.



Adjustment of Armature of No. 38 Type Ringer is Accomplished by Means of a Screw-driver

If the subscriber operates the generator in the usual way without operating the switch, he will ring the other bells on the line. If, however, he operates the switch before turning the generator crank, he will throw the drop at the central office and the bells on the line will not sound. Some telephone sets are equipped with push buttons for signaling the central office, and other sets are provided with extra contacts on the switch hook, so that if the generator crank is turned after the receiver has been removed from the switch hook, the central office will be called.

Simplified Packing



No. 1317-Type Telephone in Individual Packing Case

No. 1317-Type Telephone Removed from Packing Case before assembling

All No. 1317-type telephones are shipped semi-knockdown, in individual packing cases measuring approximately 8 x 12 x 22 inches. The transmitter, receiver, writing shelf, generator crank, and mouth-piece are detached and, with the exception of the writing shelf, are packed inside the cabinet. This method economizes a great deal of storage space, amounting to nearly 30% over the old method of packing telephones with the transmitter and writing shelf attached.

There is also a considerable saving due to the fact that a telephone can be delivered complete to the subscriber in its original box. There is much less danger of its becoming scratched or broken in handling between the stock room and the subscriber's premises. It further saves many delays, because the installer is sure to have all the necessary parts on hand when he is ready to place the instrument and connect it to the line.

Each box is plainly marked with the code number of the telephone which it contains.

Assembly

It must not be assumed, however, that a great amount of work is necessary to assemble the telephone after unpacking, as the following operations only are necessary:

- 1. Fasten the writing shelf on the door of the cabinet. The necessary screws are furnished and holes are drilled in the door.
- 2. Fasten the transmitter on the door. The necessary screws are furnished and holes are drilled.
- 3. Attach the two wires leading from the transmitter arm to the screw terminals on the back of the door.
- 4. Connect up the receiver and place it on the hook.
- 5. Screw the mouthpiece and generator crank in place.

Time consumed, 10 minutes; a screw-driver the only tool used.



No. 1317-Type Telephone Completely Assembled

Magneto Telephones

Western-Electric

MAGNETO TELEPHONES General Information

Batteries are not shipped with telephones unless specified on the order. We recommend two or three cells of Blue Bell dry battery, according to the service. For a local exchange and toll service, two cells will be found entirely satisfactory. If, however, the telephones are to be used on extremely long distance connections where transmission is of the greatest importance, three cells will be found to give slightly better results.

On rural lines, trouble sometimes occurs due to parties "listening in" whenever their bells ring regardless of whether the call is for them or not. Whenever this is done, it is usually impossible to ring on the line after the receiver is off the hook. To overcome this feature it is customary to furnish telephones equipped with a condenser wired in the receiver circuit.

The Nos. 1317 R. & S. and 1305 S. & T. wall telephones and the corresponding desk telephones are so equipped, and all other Nos. 1317 and 1305 telephones have terminals provided so that a condenser can be connected at any time.

can be connected at any time.

Screw mounting holes are provided for the condenser so that no drilling is necessary.

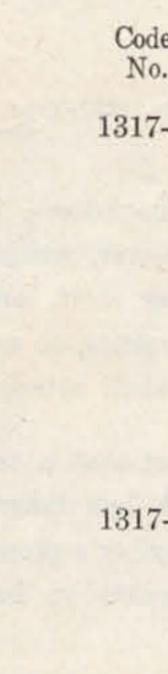
Our telephones are not equipped with protectors, and protectors are not furnished unless so specified on the order. Our No. 12-A protector is standard for magneto telephone service. The No. 60-A or No. 60-E protectors are also used when a lightning arrester only is desired. These protectors are listed in Bulletin No. 12.

Bridging Wall Telephones

Code Ringing No. 1317 TYPES



No. 1317 - Type Telephone



1317-R TI No. 1317-R TI No. 38 A. No. 1317-S TI No.

No. 1317 N or P, Open

Meridian Eligibete

е		List Price
	Description	each
	No. 1317-N. For moderate load service	
-N	This telephone does the same work as the No	
	1305-R. It is arranged to be equipped with	a
	condenser wired in the receiver circuit	
	When so equipped it is known as the No	
	1317-R. Includes 1 No. 38-FG 1600-ohn	n
	ringer, 1 No. 48-A 5-bar A. C. generator	
	1 No. 13 induction coil, 1 No. 143-A switch	ń
	hook, 1 No. 250-W transmitter, 1 No. 143-W	V
	receiver, 1 receiver cord, 2 battery connect	-
	ing cords	.\$15.40
	Same, equipped with No. 122-W or 144-V	V
	receiver	15 7

No. 1317-P. For heavy load service

This telephone does the same work as the No. 1305-M and No. 6004-B. It is arranged to be equipped with a condenser wired in the receiver circuit. When so equipped it is known as the No. 1317-S. Includes 1 No. 38-BG 2500-ohm ringer, 1 No. 48-A 5-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 2 battery connecting cords.......... 15.40

No. 1317-R. For moderate load service
This telephone does the same work as the No. 1305-S. It is equipped with a condenser wired in the receiver circuit. Includes 1 No. 38-FG 1600-ohm ringer, 1 No. 48-A 5-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 21-W condenser, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 2 battery connecting cords.

Same, equipped with No. 122-W or 144-W receiver.

No. 1317-S. For heavy load service

1317-S This telephone does the same work as the No. 1305-T. It is equipped with a condenser wired in the receiver circuit. Includes 1 No. 38-BG 2500-ohm ringer, 1 No. 48-A 5-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 21-W condenser, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 2 battery connecting

Bridging Wall Telephones

	Code Ringing	
	No. 1317 TYPES (Continued)	
Code	List Price	
No.	Description each	
	This telephone does the same work as the No. 1305-P and No. 6003-B. It is arranged to be equipped with a condenser wired in the receiver circuit, and will be so furnished when specified on the order. Includes 1 No. 38-AG 1000-ohm ringer, 1 No. 22-A 3-bar A.C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 2 battery connecting cords\$12.40	
	Same, equipped with No. 122-W or No. 144-W receiver	No. 1317-AH. Open
	No. 1305 TYPES	List Price
	No. 1305-M. For heavy load a	service each
1305-M	This telephone does the same work as the No. 1317-P at to be equipped with a condenser wired in the receiver of known as the No. 1305-T set. Includes 1 No. 38-BG 25 A. C. generator, 1 No. 13 induction coil, 1 No. 143-W sw bracket, 1 No. 229-W transmitter, 1 No. 143-W receiver, cord	and No. 6004-B. It is arranged circuit. When so equipped, it is 00-ohm ringer, 1 No. 48-A 5-bar itch hook, 1 No. 3-A transmitter 1 receiver cord, 1 No. 179 5½"
	Same, equipped with No. 122-W or 144-W receiver	
	No. 1305-P. For light load se	ervice
1305-P	This telephone does the same work as the No. 1317-AH to be equipped with a condenser wired in the receivalished when specified on the order. Includes 1 No. 3 22-A 3-bar A. C. generator, 1 No. 13 induction coil, 1 3-A transmitter bracket, 1 No. 229-W transmitter, 1 No. 1 No. 179 5½" cord	and No. 6003-B. It is arranged ver circuit, and will be so fur- 88-AG 1000-ohm ringer, 1 No. No. 143-A switch hook, 1 No. 143-W receiver, 1 receiver cord,
	Same, equipped with No. 122-W or 144-W receiver	
		· I D
1305-R	No. 1305-R. For moderate load service This telephone does the same work as the No. 1317-N. It is arranged to be equipped with a condenser wired in the receiver circuit. When so equipped, it is known as the No. 1305-S. Includes 1 No. 38-FG 1600-ohm ringer, 1 No. 48-A 5-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 3-A transmitter bracket, 1 No. 229-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 1 No. 179 5½" cord	\$15.40
	No. 1305-S. For moderate load	service
1305-S	This telephone does the same work as the No. 1317-R. wired in the receiver circuit. Includes 1 No. 38-FG 160 A. C. generator, 1 No. 13 induction coil, 1 No. 143-A sw. bracket, 1 No. 21-W condenser, 1 No. 229-W transmitter, cord, 1 No. 179 5½" cord	1 No. 143-W receiver, 1 receiver
	No. 1305-T. For heavy load s	ervice
1305-T	This telephone does the same work as the No. 1317-S. wired in the receiver circuit. Includes 1 No. 38-BG 250 A. C. generator, 1 No. 13 induction coil, 1 No. 143-A sw bracket, 1 No. 21-W condenser, 1 No. 229-W transmitter cord, 1 No. 179 5½" cord	It is equipped with a condenser 00-ohm ringer, 1 No. 48-A 5-bar itch hook, 1 No. 3-A transmitter 1, 1 No. 143-W receiver, 1 receiver
	Same, equipped with No. 122-W or 144-W receiver.	
	K	Magneto Telephones

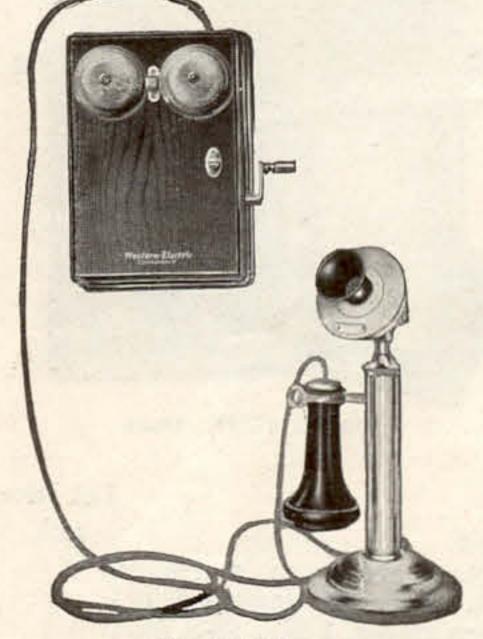
Bridging Desk Telephones

Code Ringing

PORTABLE AND FLEXIBLE ARM TYPES

Code

No.



No. 6003-B No. 6004-B

Portable Stand Type

Description

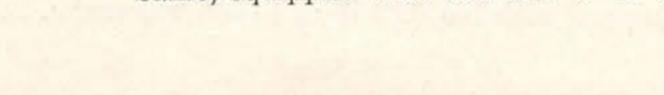
List Price each

No. 6003-B. For light load service

Same, equipped with No. 122-W or 144-W receiver 13.75

No. 6004-B. For heavy load service

Same, equipped with No. 122-W or 144-W receiver 17.35



FLEXIBLE ARM TYPE

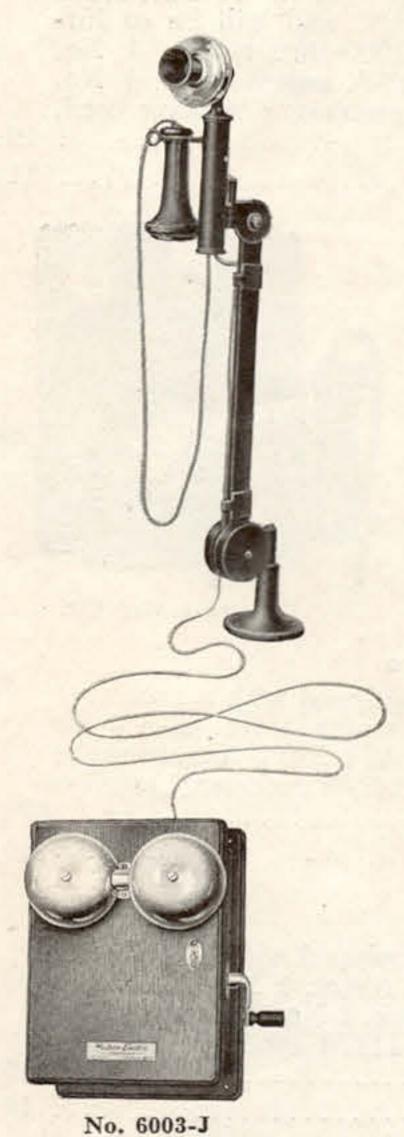
No. 6003-J. For light load service

Includes 1 No. 315-H desk set box (oak), containing 1 No. 38-AG 1000-ohm ringer, 1 No. 22-A 3-bar A. C. generator, 1 No. 13 induction coil, and 1 No. 1046-AA, AB, or AC telephone arm, depending on whether arm is to be mounted on the side of a roll-top desk, the side of a flat-top desk or the wall, or on the top of a flat-top desk, comprising 1 No. 271-W transmitter, 1 No. 143-W receiver, 1—3' No. 408 cord, 1—6' No. 409 cord, 1—9½" No. 426 cord, and 1—9½" No. 427 cord....\$20.15

In ordering be sure to specify the type of mounting desired, that is, whether for roll-top desk, wall or flat-top desk.

* Nickel-plated desk stands are furnished unless otherwise specified

If black finish desk stands are wanted, they will be furnished at the
same price provided the order reads "with black finish desk stands."



Magneto Telephones

Bridging Desk Telephones (Continued)

Code Ringing

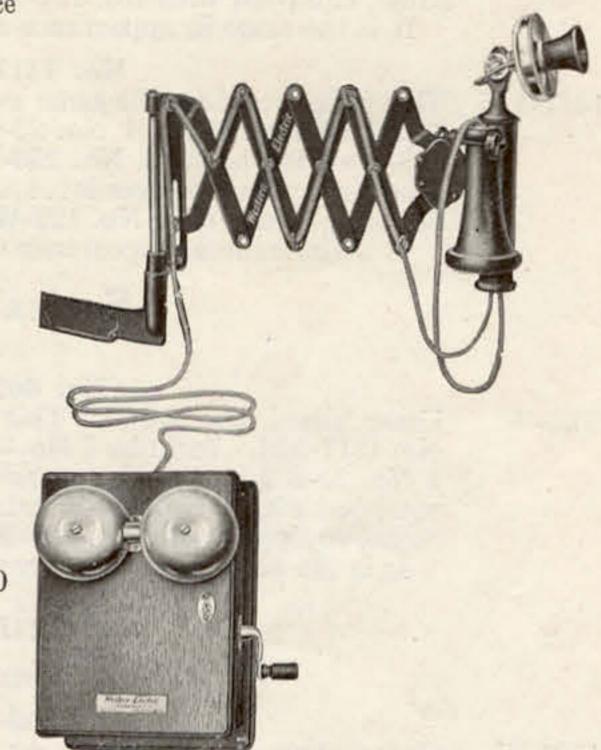
FOLDING AND SWINGING ARM TYPES

No. 6003-G. Folding Type

List Price Code No. Description each 6003-G For lightly loaded, bridging, magneto telephone lines, using No. 1048 type telephone arm. Includes 1 No. 315-H desk set box (oak), containing 1 No. 38-AG 1000-ohm ringer, 1 No. 22-A 3-bar A. C. generator, 1 No. 13 induction coil, and 1 No. 1048-AA, AB, or AC telephone arm, depending on whether arm is to be mounted on the side of a roll-top desk, the side of a flat-top desk or the wall, or on the top of a flat-top desk, comprising 1 No. 229-W transmitter, 1 No. 143-W receiver, 1-6' No. 180 cord, 1-21/2' No. 389 cord, and 1—9½" No. 390 cord\$15.70 Same, equipped with No. 122-W or No. 144-W receiver...... 16.05

In ordering, be sure to specify the type of mounting desired.

That is, whether for roll-top desk, wall or flat-top desk.



No. 6003-G

No. 6003-H. Swinging Type

6003-H For light load service on flat-top desks using swinging telephone arms. Includes 1 No. 315-H desk set box containing 1 No. 38-AG 1000-ohm ringer, 1 No. 22-A 3-bar A. C. generator, 1 No. 13 induction coil, and 1 No. 1020-AC transmitter arm comprising 1 No. 20-A telephone arm, 1 No. 229-W transmitter, 1 No. 143-W receiver, 1 No. 310 cord......\$18.85

Desk Stand, Telephone Arm, or Hand Set Combination

Either the No. 1020-BC desk stand, No. 1046-AA, AB, AC, No. 1048-AA, AB, AC, No. 1020-AC telephone arms, or No. 1002-A hand set can be used in connection with any of the standard magneto or central battery desk set boxes, listed in Catalog Bulletin No. 12, to meet any service requirement.



No. 1002-A Hand Set Magneto Telephones

Series* Wall Telephones

Code Ringing

While we do not recommend the use of series telephones, because of the fact that the bridging telephones are so much more efficient both in transmitting and signaling, we are prepared to furnish them if required.

List Price

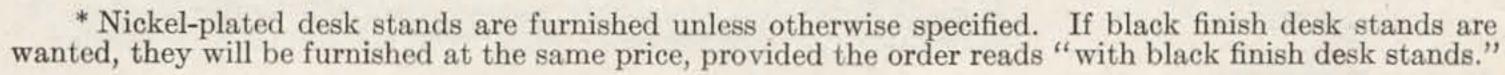
Code No.	Description	each				
1305-N	No. 1305-N. For Series Service This telephone does the same work as the No. 1317-AM and No. 6025-A. Includes 1 No. 38-JG 50-ohm ringer, 1 No. 22-B 3-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-B switch hook, 1 No. 3-A transmitter bracket, 1 No. 229-W transmitter, 1 No. 143-V receiver, 1 receiver cord, 1 No. 179 5½" cord	o. V .\$11.80				
1317-AM	No. 1317-AM. For Series Service This telephone does the same work as the No. 1305-N and No. 6025-A. Includes 1 No. 38-JG 50-ohm ringer, 1 No. 22-B 3-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-B switch hook, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord 2 battery connecting cords. Same, equipped with No. 122-W or No. 144-W receiver. It is the same in appearance as the No. 1317 type telephone shown on page 4.	o. d, .\$11.75				
	Series* Desk Telephones					
	Code Ringing					
6025-A	No. 6025-A. For Series Service Using nickel desk stand. This telephone does the same work as the No. 1305-N an No. 1317-AM. Includes 1 No. 315-G desk set box containing 1 No. 38-JG 50-ohm ringer 1 No. 22-B 3-bar A. C. generator, 1 No. 13 induction coil, and 1 No. 20-H desk stan equipped with 1 No. 229-W transmitter, 1 No. 143-W receiver, 1 No. 232 cord Same, equipped with No. 122-W or No. 144-W receiver	r, d .\$13.70				
	Bridging Wall Telephones					
	Harmonic Selective Ringing					
	No. 1305-W. For Harmonic Service					
1305-W	Operates on 33½ cycle ringing current. This telephone does the same work as the Notation 1317-Y and No. 6031-A. Includes 1 No. 41-SG 460-ohm ringer, 1 No. 22-T 3-bar A. Ogenerator, 1 No. 21-F condenser, 1 No. 13 induction coil, 1 No. 143-A switch hool 1 No. 3-C transmitter bracket, 1 No. 291-W transmitter, 1 No. 143-W receiver, 1 received cord, 2 No. 329 6″ cords. Same, equipped with No. 122-W or No. 144-W receiver.	c. k, er				
	Same, equipped with No. 122-W or No. 144-W receiver					
1305-Y	No. 1305-Y. For Harmonic Service Operates on 50 cycle ringing current. This telephone does the same work as the No. 1317-AA and No. 6031-B. Includes 1 No. 41-TG 460-ohm ringer, 1 No. 22-T 3-ba A. C. generator, 1 No. 21-F condenser, 1 No. 13 induction coil, 1 No. 143-A switch hool 1 No. 3-C transmitter bracket, 1 No. 291-W transmitter, 1 No. 143-W receiver, 1 received cord, 2 No. 329 6" cords	ir K,				
100= 11	No. 1305-AA. For Harmonic Service					
1305-AA	Operates on 66% cycle ringing current. This telephone does the same work as the No 1317-AB and No. 6031-C. Includes 1 No. 41-UG 460-ohm ringer, 1 No. 22-T 3-bar A. Ogenerator, 1 No. 21-F condenser, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No 3-C transmitter bracket, 1 No. 291-W transmitter, 1 No 143-W receiver, 1 receiver cord, 2 No. 329 6" cords. Same, equipped with No. 122-W or No. 144-V receiver.	D. D. D. S. S. \$14.80				
	No. 1305-AB. For Harmonic Service Operates on 16% cycle ringing current. This telephon does the same work as the No. 1317-AC and No. 6031-I Includes 1 No. 41-RG 1800-ohm ringer, 1 No. 22-3-bar A. C. generator, 1 No. 21-F condenser, 1 No. 1 induction coil, 1 No. 143-A switch hook, 1- No. 3-transmitter bracket, 1 No. 291-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 2 No. 329 6" cords	O. T 13 C				

*The term "Series" used in this bulletin in conjunction with Magneto Telephones refers to the method of connecting the ringers, and must not be confused with the term "Series" associated with Central Battery Telephones, which refers to the method of connecting the transmitter and receiver.

Same, equipped with No. 122-W or No. 144-W

No. 1305-W-Y-AA or AB

	Bridging Wall Telephones		
	Harmonic Selective Ringing (Continued)		
Code No.	Description List Price each	Ca () [)	
1317-Y	No. 1317-Y. For Harmonic Service Operates on 33½ cycle ringing current. This telephone does the same work as the No. 1305-W and No. 6031-A. Includes 1 No. 41-SG 460-ohm ringer, 1 No. 22-T 3-bar A. C. generator, 1 No. 21-F condenser, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 270-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 2 battery connecting cords\$15.80 Same, equipped with No. 122-W or No. 144-W receiver		
1317-AA	No. 1317-AA. For Harmonic Service Operates on 50 cycle ringing current. This telephone does the same work as the No. 1305-Y and No. 6031-B. Includes 1 No. 41-TG 460-ohm ringer, 1 No. 22-T 3-bar A. C. generator, 1 No. 21-F condenser, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 270-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 2 battery connecting cords\$15.80 Same, equipped with No. 122-W or No. 144-W receiver	No. 1317-Y-AA-AB-AC	
1317-AB	No. 1317-AB. For Harmonic Service Operates on 66% cycle ringing current. This telephone does the same work as the No. 1305-AA and No. 6031-C. Includes 1 No. 41-UG 460-ohm ringer, 1 No. 22-T 3-bar A. C. generator, 1 No. 21-F condenser, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 270-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 2 battery connecting cords\$15.80 Same, equipped with No. 122-W or No. 144-W receiver		
1317-AC	No. 1317-AC. For Harmonic Service Operates on 16% cycle ringing current. This telephone does 1305-AB and No. 6031-D. Includes 1 No. 41-RG 1800-ohm A. C. generator, 1 No. 21-F condenser, 1 No. 13 induction coil, 1 No. 270-W transmitter, 1 No. 143-W receiver, 1 receiver cord, Same, equipped with No. 122-W or No. 144-W receiver	the same work as the No. ringer, 1 No. 22-T 3-bar 1 No. 143-A switch hook, 2 battery connecting cords\$16.15	
	Bridging Desk Telephones		
	Harmonic Selective Ringing		
	Description List Price each		
6031-A*	No. 6031-A. For Harmonic Service Operates on 33½ cycle ringing current. This telephone does the same work as the No. 1305-W and No. 1317-Y. Includes 1 No. 354-A desk set box containing 1 No. 41-SG 460-ohm ringer, 1 No. 22-T 3-bar A. C. generator, 1 No. 21-F condenser, 1 No. 13 induction coil, and 1 No. 1020-PC desk stand, comprising 1 No. 20-PC desk stand, 1 No. 291-W transmitter, 1 No. 143-W receiver, 1 No. 450 cord \$15.65 Same, equipped with No. 122-W or No. 144-W receiver		
6031-B*	No. 6031-B. For Harmonic Service Operates on 50 cycle ringing current. This telephone		



does the same work as the No. 1305-Y and No.

1317-AA. Includes 1 No. 354-E desk set box, con-

taining 1 No. 41-TG 460-ohm ringer, 1 No. 22-T

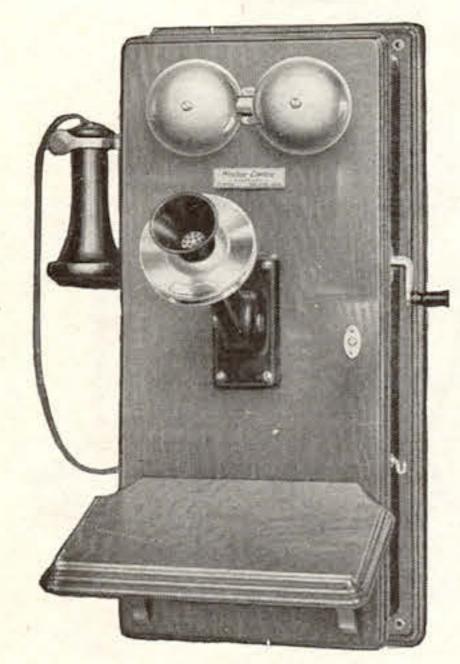
Same, equipped with No. 122-W or No. 144-W

3-bar A. C. generator, 1 No. 21-F condenser, 1 No. 13 induction coil, and 1 No. 1020-PC desk stand, comprising 1 No. 20-PC desk stand, 1 No. 291-W transmitter, 1 No. 143-W receiver, 1 No. 450 cord \$15.65

No. 6031 A or B Desk Telephone

No. 6031-C-D or 6003-C

No. 1305-U



No. 1317-AJ

Magneto Telephones

Bridging Desk Telephones

Harmonic Selective Ringing (Continued)

Description

List Price each

Code No.

6031-C*

6031-D*

1305-U

1317-AJ

6003-C

No. 6031-C. For Harmonic Service Using desk stand. Operates on 66% cycle ringing current. This telephone does the same work as the No. 1305-AA and No. 1317-AB. Includes 1 No. 354-F desk set box containing 1 No. 41-UG 460-ohm ringer, 1 No. 22-T 3-bar A. C. generator, 1 No. 21-F condenser, 1 No. 13 induction coil, and 1 No. 1020-PC desk stand, comprising 1 No. 20-PC desk stand, 1 No. 291-W transmitter, 1 No. 143-W receiver, 1 No. 450 cord....... Same, equipped with No. 122-W or No. 144-W

No. 6031-D. For Harmonic Service Using desk stand. Operates on 16% cycle ringing current. This telephone does the same work as the No. 1305-AB and No. 1317-AC. Includes 1 No. 354-G desk set box containing 1 No. 41-RG 1800ohm ringer, 1 No. 22-T 3-bar A. C. generator, 1 No. 21-F condenser, 1 No. 13 induction coil, and 1 No. 1020-PC desk stand, comprising 1 No. 20-PC desk stand, 1 No. 291-W transmitter, 1 No. 143-W receiver, 1 No. 450 cord......\$16.00 Same, equipped with No. 122-W or No. 144-W

Bridging Wall Telephones

Two- and Four-Party Selective Ringing Using Pulsating Current

No. 1305-U. For Four-party Service This telephone does the same work as the No. 1317-AJ and No. 6003-C. Includes 1 No. 46-BG 2500-ohm biased ringer, 1 No. 22-E 2-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 3-A transmitter bracket, 1 No. 229-W transmitter, 1 No. 143-W receiver, 1 receiver

No. 1317-AJ. For Four-party Service This telephone does the same work as the No. 1305-U and No. 6003-C. Includes 1 No. 46-BG 2500-ohm biased ringer, 1 No. 22-E 2-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord, 2 battery connecting cords. \$12.55 Same, equipped with No. 122-W or No. 144-W

Bridging Desk Telephones

Two- and Four-Party Selective Ringing Using Pulsating Current

For four-party selective service, using desk stand. This telephone does the same work as the No. 1305-U and No. 1317-AJ. Includes 1 No. 315-J desk set box containing 1 No. 46-BG 2500-ohm biased ringer, 1 No. 22-E 2-bar A. C. generator, 1 No. 13 induction coil, and 1 No. 1020-BC desk stand, comprising 1 No. 20-BC desk stand, 1 No. 229-W transmitter, 1 No.

Note.—A nickel-plated desk stand is regularly furnished with this telephone set. If a black finish desk stand is wanted, it will be furnished at the same price provided the order reads "with black finish desk

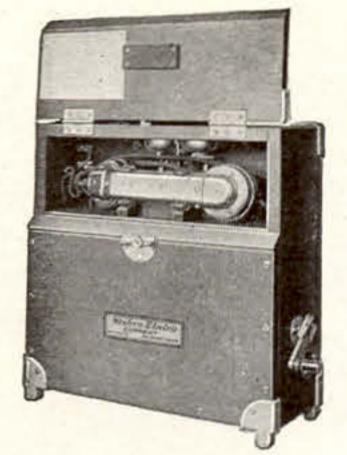
stand." * Nickel-plated desk stands are furnished unless otherwise specified. If black finish desk stands are wanted, they will be furnished at the same price, provided the order reads "with black finish desk stands."

MAGNETO TELEPHONES Bridging Wall Telephones

CENTER CHECKING

Code No.	. Description each
C000 110.	No. 1317-K. For Heavy Load Service
1317-AK	Arranged to be equipped with a condenser wired in the receiver circuit, and will be so furnished when specified in the order. Includes 1 No. 47-BG 2500-ohm biased ringer, 1 No. 48-B 5-bar pulsating generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord
	No. 1317-AU. For Light Load Service
1317-AU	Arranged to be equipped with a condenser wired in the receiver circuit, and will be so furnished when specified in the order. Includes 1 No. 47-BG 2500-ohm biased ringer, 1 No. 22-D 3-bar pulsating generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord
	SELECTIVE CENTRAL OFFICE SIGNALING
	No. 1317-AT. For Moderate Load Service
1317-AT	Used in connection with a double wound drop at the central office. This telephone is equipped with a condenser wired in the receiver circuit. Includes 1 No. 38-FG 1600-ohm ringer, 1 No. 48-A 5-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 21-W condenser, 1 No. 1002-A push button, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord
	10.90
manual was	No. 1317-AY. For Moderate Load Service
1317-AY	Used in connection with a single wound drop at the central office. It is arranged to be equipped with a condenser wired in the receiver circuit, and will be so furnished if specified in the order. Includes 1 No. 38-FG 1600-ohm ringer, 1 No. 48-A 5-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-G switch hook, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord
	receiver
	Note.—The central office is signaled by removing the receiver from the hook and then turning the generator crank.
	No. 1317-BA. For Moderate Load Service
1317-BA	Used in connection with a single wound drop at the central office. It is arranged to be equipped with a condenser wired in the receiver circuit, and will be so furnished if specified in the order. Includes 1 No. 38-FG 1600-ohm ringer, 1 No. 48-A 5-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 1006-A push button, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord\$15.85
	Same, equipped with No. 122-W or No. 144-W receiver
	Note.—The central office is signaled by pushing the button and then turning the generator crank.
	No. 1317-BB. For Heavy Load Service
1317-BB	Used in connection with a single wound drop at the central office. It is arranged to be equipped with a condenser wired in the receiver circuit, and will be so furnished if specified in the order. Includes 1 No. 38-BG 2500-ohm ringer, 1 No. 48-A 5-bar A. C. generator, 1 No. 13 induction coil, 1 No. 143-A switch hook, 1 No. 1001-A push button, 1 No. 250-W transmitter, 1 No. 143-W receiver, 1 receiver cord\$15.85
	Same, equipped with No. 122-W or No. 144-W receiver
	Note.—The central office is signaled by pushing the button and then turning the generator crank.

Portable Telephones



Code No.

No. 1330 Type Telephone. Open

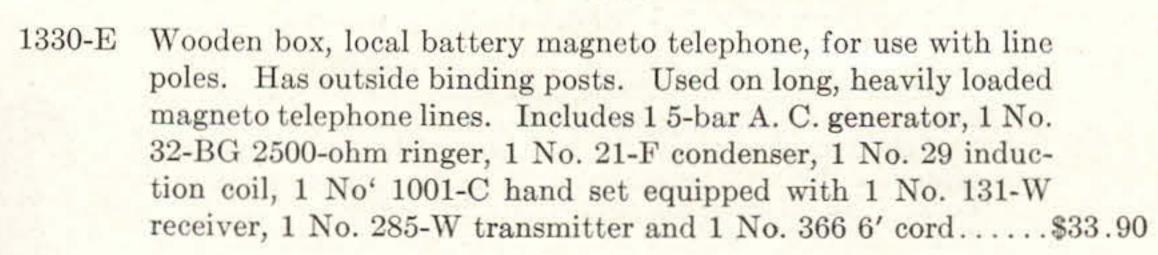
No. 1330 TYPE

List Price each

Description
No. 1330-A

Note.—Arranged for, but not equipped with, 2 Blue Bell batteries and 1 No. 21 type condenser unless specified in order.

No. 1330-E



Note.—Two Blue Bell dry cells furnished when ordered.

No. 1330-F

1330-F Wooden box local battery magneto telephone, similar to No. 1330-E telephone excepting that it is equipped with 1 No. 138 plug and 1 No. 396 6' cord for making line connections......\$39.45

Note.—Two Blue Bell dry cells furnished when ordered.

No. 1331 TYPE

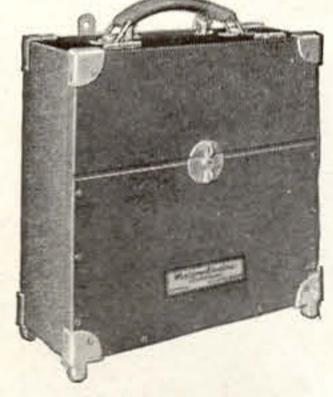
No. 1331-A

No. 1331-E

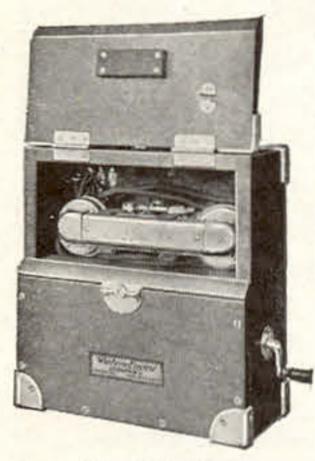
No. 1331-F

*1331-F Wooden box local battery magneto telephone, similar to No. 1331-E telephone, except that it is equipped with 1 No. 138 plug and 1 No. 396 6' cord for making line connections......\$36.45

* Note.—Arranged for, but not equipped with, 2 cells of oval No. 4 Columbia batteries and 1 No. 21-F condenser unless specified in order.



No. 1330 Type Telephone. Closed



No. 1331 Type Telephone. Open



Magneto Telephones