

CONNECTICUT TELEPHONES for INTERIOR USE

CATALOG NO. 29



Telephones, Annunciators

and

Electrical Specialties

CATALOG

No. 29



CONNECTICUT **ELECTRIC COMPANY,

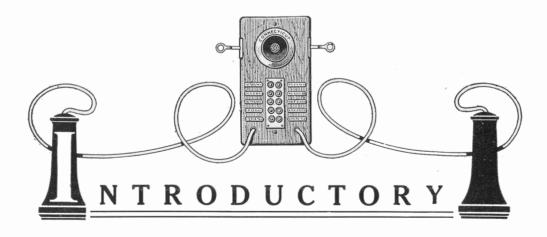


MERIDEN, CONN., U. S. A.

ESTABLISHED, 1894

CABLE ADDRESS, "TELEPHONE," A. B. C. or W. U. CODE

1921



TERMS AND SPECIAL INFORMATION

TERMS: All shipments are F. O. B., Meriden. Net cash 30 days or 2% ten days. Those unknown to us, unless satisfactorily rated by the Commercial agencies should send references with order. No invoice rendered for less than 25c.

GUARANTEE: Connecticut apparatus is guaranteed free from electrical and mechanical defects for a period of 2 years. In case of defect, apparatus will be repaired or replaced (at our option) without cost to the purchaser, providing said apparatus is returned without expense to our factory, with RETURNED GOODS SLIP. This Company will not be responsible for the cost of repairs made by other than its own workmen.

RETURNED GOODS: No goods can be returned for credit without our permission—they must be in salable condition and all transportation charges prepaid, and returned under the following conditions:

- 1. That you receive from us RETURN GOODS SLIP and pack with shipment.
- 2. A minimum service charge of 10% will be made to cover handling and testing.
- 3. No credit will be given for apparatus of special finish, design or capacity.
- 4. No goods can be returned which have been out of the factory over 60 days.
- If goods returned, require repairs or refinishing, we shall deduct this cost from the credit memo.

INSTRUMENT WIRING: Apparatus is wired for stock to our standard diagrams, and prices are based on such—special diagrams involve additional manufacturing costs, and we are compelled to make an additional charge.

ENGINEERING ADVICE: We will furnish on request, necessary advice as to selection of apparatus and installation of same—we will assist you in your engineering problems.

CLAIMS: Claims for shortages, breakages, etc., must be reported within ten days from receipt of goods, or we shall reserve the right to reject them. All goods are carefully inspected and checked before shipping.

EXPERIENCE: We have been manufacturing electrical instruments and telephones exclusively for over twenty-five years, and have gained a reputation with the trade which makes our name the "Standard of quality."

FINISH: Owing to the large number of wood finishes required, we have adopted as our standard, dark golden oak, and for flush metal phones, brush brass, metal wall phones, dull black. These we consider as standard and will be furnished unless otherwise specified.

SPECIAL FINISHES: All finishes other than those listed as standard are considered special, and will bear an additional charge.



No. 3940W

DUPLEX 2 LINE TELEPHONES

The duplex two line telephones are designed to connect two points, they can be used for service between two offices, house and garage, office and factory, etc. The use of this outfit is almost unlimited. No other telephone is better known than the duplex for the reason it was the first low priced telephone on the market. Each year has brought new improvements in design, so that this telephone represents unquestionable value. The case is metal and the finish dull black. The duplex is made in one style, No. 3940W, with induction coil.

Code Word List Price

Depex No. 3940W Duplex, 2 line, per pair \$26.70



No. 6446W

LINE WIRING NO !

No. 6440W HAND TELEPHONE SET

Furnished with Inside Buzzer

This telephone makes a very convenient type for pair service, as the hand telephone can be held in any position while in use. It is wired regularly for service with 3940W duplex.

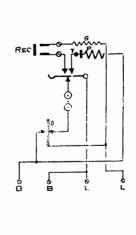
Code Word List Price

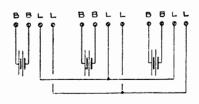
Use only three telephones on line-wiring 3 or 4. For four or more, see diagram 10-C, page 38.

SYSTEM No. 40

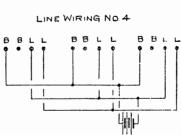
PRIVATE LINE WIRING

WITH INDUCTION COIL





LINE WIRING NO 3



THE CONN TEL AND ELEC CO INC



No. 3512W No. 3592W

No. 96W Weatherproof Telephone



No. 5612W No. 5692W

AUTOMATIC TELEPHONES

These instruments are recommended as the highest standard for intercommunicating service. The operation of this system is automatic. Pushing button calls party desired; hanging up receiver restores button automatically. No special restoring or ringing buttons are required.

This system is non-interfering although a common return circuit is used, see page 35. Standard finish for wood work is golden oak. Special finish bears an extra charge.

METALLIC CIRCUIT TELEPHONES Can be used for Exchange Connection

Any of our different types of automatic telephones are furnished for Metallic Circuit, System No. 3, page 36. This system should always be used when absolutely non-interfering service is desired. All metallic circuit phones may be used to connect with one or more trunk lines to a public telephone exchange. When this service is desired two buttons are used for each trunk line, one to connect to the trunk and the other termed a retaining button for holding the trunk line while calling another party. One trunk retaining relay will be required for each set of retaining buttons, for common battery. No. 479W List Price, \$16.00.

No. 96W Weatherproof Iron Box telephone is designed for operation with any of our automatic telephones described pages 4, 5, and 6. It can be installed for factory yard use, grain elevators, or in fact any place where a telephone is subject to weather conditions. Prices on application.

No. 3512W AND 3592W WALL TYPE

This illustrates our standard wall automatic—it is furnished with our long distance transmitter and receiver and is our most popular type for intercommunicating work. Switch mechanism is designed and guaranteed to stand years of hard service.

Code Word	Style No.	No. of Buttons	System No.	List Price
Aber	3512W	8	1	\$35.50
Abor	3514W	12	i	41.20
Abir	3515W	16	1	46.70
Abar	3516W	20	1	52.40
Amer	3592W	8	3	39.90
Amor	3594W	12	3	48.00
Amir	3595W	16	3	56.00
Amar	3596W	20	3	64.30
Amur	3597W	24	3	72.40

No. 5612W AND 5692W WITH HAND TELEPHONE

This set is furnished with the Connecticut hand microphone which can be located on the wall within easy reach. The hand phone is convenient, it can be held in any position while in use.

Code Word	Style No.	No. of Buttons	System No.	List Price
Ator	5612W	8	1	\$46.10
Atir	5614W	12	i	51.70
Ater	5615W	16	1	57.20
Atar	5616W	20	i	63.10
Arto	5692W	8	3	47.30
Arti	5694W	12	3	55.50
Arte	5695W	16	3	63.50
Arta	5696W	20	3	71.70
Artu	5697W	24	3	79.90

MASTER CALL BUTTON

The master call is used for ringing a number of telephone bells simultaneously. The master call is used in connection with the main or office station and by the use of a code of signals, the superintendent, or any other person can be located immediately. The calls are answered by calling the master station from the nearest telephone. For this service telephones must be ordered with 20-ohm bells.

No. 340W, 1-button for 8 station capacity	\$13.50
No. 341W, 2- " " 16 " "	16.90
No. 342W, 2- " " 20 " "	20.30
No. 4705-A, 20-Ohm bells, extra per telephone.	1.60

No. 5902W No. 5992W

AUTOMATIC TELEPHONES—Cont.

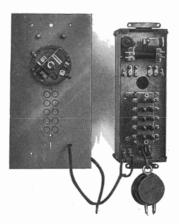
No. 5902W AND 5992W FLUSH TYPE

This type is the highest standard for residence service. It is fitted with our highest grade long distance parts throughout, and the Connecticut automatic switch. The front plate is of heavy brass with beveled edges. Heavy stamped metal outlet boxes are included with knockout holes, in top and bottom, which allows the use of iron conduit, also when cable is installed between partitions.

Outlet boxes can be ordered in advance if desired and placed in position while building is in course of construction. Name cards are protected by transparent celluloid. Size of metal face plate, for 8 buttons is 12" x 6½". Make wai opening 103%" x 4" x 43%". Length of plate and wall opening increases 1½ inch for each 2 buttons above 8.

Code Word	Style No.	No. of Buttons	System No.	List Price
Adin	5902W	8	1	\$50.10
Adan	5904W	12	1	56.00
Aden	5905W	16	1	61.90
Adon	5906W	20	1	68.00
Avis	5992W	8	3	54.80
Aves	5994W	12	3	63.50
Avas	5995W	16	3	71.90
Avos	5996W	20	3	80.40
Avus	5997W	24	3	88.90

Prices include metal outlet boxes.

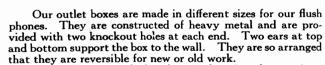


Open View of No. 5902W

No. 5902W AUTOMATIC WITH FRONT PLATE REMOVED

We illustrate herewith our flush automatic telephone with front plate removed. While installing, this plate is taken off so that all connections can be made with the least amount of labor. The automatic switch and working parts are assembled on a mounting board which is placed in the outlet box. Wires are connected direct to the contact springs by machine screws doing away with all soldered connections. Heavy metal outlet boxes are included. If desired, these boxes may be shipped in advance of the telephones and placed in position while building is in course of construction.

METAL OUTLET BOXES



Inside of box is marked to show the location of transmitter when phone is mounted in place. Contractors will find this is of help in locating the height of boxes in new buildings.

No. 5556A Outlet box for telephones 5402W, 5902W, 4.00

Knockout holes are 13/2" for 3/4" conduit and T and B bushings.

When ordering outlet boxes without telephones, state style of phone and number of buttons. Wall depth required for all sizes, 43%".



No. 5556A

No. 3802W No. 3822W



No. 5602W No. 5622W



No. 3872W No. 3882W



No. 3812W No. 3892W

AUTOMATIC TELEPHONES

No. 3802W AND 3822W FLUSH TYPE

This set is designed principally for residence systems, the automatic button box being flush for wall mounting in connection with writing desks or other suitable locations. Standard finish of plate is brush brass, but metal parts can be furnished in any desired finish at a slight additional charge.

Size of plate for 8 buttons is $8\frac{1}{8}$ " x $6\frac{1}{4}$ ". Heavy stamped metal outlet box is included with the above. Make wall opening $6\frac{3}{8}$ " x 4". Length of plate and wall opening increases 11 16 " for each 2 buttons above 8.

Code Word	Style No.	No. of Buttons	System No.	List Price
Aristo	3802W	8	1	\$64.10
Arista	3804W	12	1	70.00
Ariste	3805W	16	1	75.90
Aristi	3806W	20	1	81.70
Aristan	3822W	8	3	68.80
Aristen	3824W	12	3	77.30
Aristin	3825W	16	3	85.90
Ariston	3826W	20	3	94.30
Aristun	3827W	24	3	102.80

No. 5602W AND 5622W FLUSH TYPE

This set is similar to style No. 5612W with the exception that the working parts are made up special for flush mounting. It is particularly adapted for bedroom use, or in times of sickness as the hand phone can be held in any position while in use. Prices are based on standard finish of brush brass. Any finish can be supplied at a slight additional charge.

Size of plate for 8 buttons or less is $7\frac{3}{4}$ " x $6\frac{1}{4}$ ". Steel outlet box is included with the above. Make wall opening 6" x 4". Length of plate and wall opening increases 11 16 " inch for each 2 buttons above 8.

Furnished with inside buzzer.

Code Word	Style No.	No. of Buttons	System No.	List Price
Astor	5602W	8	1	\$61.30
Aster	5604W	12		67.20
Astir	5605W	16	1	73.10
Astar	5606W	20	1	79.10
Astant	5622W	8	3	65.90
Astent	5624W	12	3	74.40
Astint	5625W	16	3	82.80
Astont	5626W	20	3	91.30
Astunt	5627W	24	3	99.90

No. 3812W AND 3892W DESK TYPE

This style of full automatic desk phone is to be preferred over other automatic desk phones which are arranged with push buttons in base, which are apparently handy, but mechanically incorrect. With this style the ordinary desk cord can be used, thus doing away with the liability of broken wires in desk stand cable. It is absolutely positive in its action and can be mounted on the wall, or used in connection with roll or flat top desks.

Style No.	Style No.	No. of Buttons	System No.	List Price
3812W	3872W	8	1	\$47.90
3814W	3874W	12	1 ,	53.20
3815W	3875W	16	1 '	58.70
3816W	3876W	20	1	64.00
3892W	3882W	8	3	52.10
3894W	3884W	12	3	59.90
3895W	3885W	16	3	67.60
3896W	3886W	20	3	75 30
3897W	3887W	24	3	83.10

INTERCOMMUNICATING CABLE

Good cable is as important as good telephones—for this purpose we carry two styles for intercom service, one with outside braid treated with fire-proof paint for interior dry places, and intercom cable lead covered for use outside, also inside where there is the least trace of dampness. All line wires are No. 22 B and S tinned copper with single silk and single cotton insulation of different colors to permit of quick testing, Battery wires are No. 18 gauge.

In ordering specify Braided or Leaded cable.



Cable with Outside Braid

LIST PRICE PER 100 FEET.

								Ap	•	Ap-
								prox		prox.
No.			No.			No.	Braided	Dia.	Leaded	Dia.
477W	6	only	22,	and	4	18,	\$24.50	1/4"	\$45.80	数
415W	- 11	only	22.	••	4	18.	34.00	32"	57.50	3/8' .
421W	17	only	22,	"	4	18,	45.30	1 1 1 6	71.00	$\frac{13}{32}$
480W	26	only	22.	**	4	18,	62.30	64	93.70	31'.
425W	10	pair	22,	**	4	16,	60.40	·· 64//	90.60	· · 64 ,
431W	13	pair	22,	••	4	16.	71.70	33"	104.20	1/2
436W	16	pair	22,	**	4	16,	81.20	21"	114.80	33 '
46 I W	22	pair	22.		4	16.	96.30	. 32	129.90	16
462W	32	pair	22,		4	16,	134.00	/2"	170.00	5/8'.
47 I W	10	pair	22,				43.40	64	85.50	23',
466W	20	pair	22.				81.80	13"	142.40	1/2"
484 W	25	pair	22.				100.50	$\frac{1}{16}$ "	169.80	$\frac{17}{32}''$
490W	50	pair	22,				173.40	5/8"	297.30	3/1"
481W	100	pair	22,				343.20	31"	539.10	31"

CONNECTICUT 3 AND 4 CONDUCTOR CABLE Conductors are No. 19 Gauge.

						LIS	T PI	RIC	E	PI	ER	100	FEET.
No.	485W,	2-cond	twisted,	olive	green	interior	cabl	е					\$5.00
No.	486W.	3-cond	**	••	• **	••	••						6.90
No.	487 W.	4-cond	••	**		••	••			٠.			9.10
No.	488W,	2-cond.,	twisted	pair,	weath	erproof e	exteri	ior e	cal	ole			5.30

Prices subject to change without notice.



Cable with Outside Lead Sheath

No. 1584-A

No. 1584-A—CONNECTING STRIP

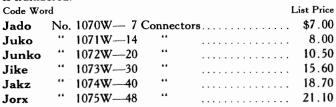
This strip can be used for all kinds of telephones, button and bell work, made up in multiples of 7 connectors. Illustration shows 2 No. 1584 A mounted together, can also be mounted end to end. Each clip has 2 screw and 2 soldered connectors.

No.	1584-A	per	strip	of	7	connectors	mounted	on	
	black co	mpo	sition	bas	se.	Each Li	st		\$1.90



Our junction box is designed for use in places where splices in telephone cables, bells or annunciator wiring occur. Not only is this box a labor saver but all connections may be inspected at any time. From any junction box, circuits may be opened and tested without the use of a soldering iron.

The brass connections are so arranged that wires may be soldered or fastened with machine screws. Each connector is numbered.





No. 1071W

No. 520W

No. 5200W



No. 5270W



No. 5210W

MULTIPLE TELEPHONES

These telephones are not non-interfering but are used on a common talking circuit, the talking circuit of all instruments being connected to one pair of wires common to all stations. It will be understood that only two telephones on a system can be in use at the same time. See diagram 6 page 37. Card holders are furnished with transparent celluloid strips to protect name cards.

Standard cabinet finish is golden oak. Special finishes bear an extra charge.

No. 520W WALL TYPE

This is the standard wall type multiple telephone. It is efficient, well finished, and fitted with our long distance transmitter and with standard or watch case receiver.

Code Word	Style No.	No. of Buttons	Receiver	List Price
Cole	520W	4	Standard	\$26.90
Cola	522W	8	••	29.70
Colo	524W	12	"	32.50
Cala	527W	4	Watch Case	23.90
Cale	528W	8	" "	26.50
Calo	529W	12		29.50

Note—Furnished for Systems 6, 12-A, and 19. Specify system in ordering.

No. 5200W AND 5220W DESK TYPE

This style is furnished with a push button block with card holder as illustrated, also 6 feet of green silk cord to desk stand. Button block can be furnished with weighted base if desired for portable use. It is furnished complete with buzzer. No. 5220W has flush button block.

Style No.	Style No.	No. of Buttons	System Nos.	List Price
5200W	5270W	4	6,12A,19	\$38.10
5202W	5272W	8	6,12A,19	40.90
5204W	5274W	12	6.12A.19	43.70
5220W		4	6.12A.19	41.10
5222W		8	6.12A.19	43.90
5224W		12	6.12A.19	46.70

Weighted button block for portable use extra.

List \$2.50

Note—When 5200W desk type is used for school centerphone systems 12-A and 19, with portable button block, we can supply any length of green silk cord between button block and wall connection, also a wall or flush type terminal box.

Flexible cable from Button block to wall in any lengths, extra, per foot per button \$.14.

No. 5210W DESK TYPE

This style is furnished with buttons mounted in base of stand for calling, and 6 feet of flexible green silk cable to desk stand. Equipment includes terminal box with buzzer and line terminals.

Illustration shows handle of phone equipped with special directory plate which is included without extra charge.

Code	Style	No. of	System	List
Word	No.	Buttons	Nos.	Price
Conu	5210W	4 8	6,12A,19	\$48.30
Cono	5212W		6,12A,19	54.90
Cona	5213W	10	6,12A,19	58.30



No. 5400W

No. 62W



No. 6270W



No. 32W

MULTIPLE TELEPHONES—Cont.

No. 5400W FLUSH TYPE

Working parts of this phone are covered by a heavy tin casing protecting them from dirt, etc. In cases where iron conduit is used metal outlet boxes are necessary. The buttons are not automatic—special single point push buttons are furnished. Standard finish is brush brass.

Front plate is of beveled brass, for 4 buttons $10\frac{3}{4}$ " x $6\frac{1}{4}$ ". Make wall opening for 4-button size $9\frac{1}{4}$ " x 4" x $4\frac{3}{4}$ ". Size of plate for 8 buttons, 12" x $6\frac{1}{4}$ ", wall opening $10\frac{1}{2}$ " x 4" x $4\frac{3}{4}$ ". Length of plate and wall opening increases $1\frac{1}{16}$ " for each two buttons above four.

Code	Style	No. of	System	List
Word	No.	Buttons	Nos.	Price
Dota	5400W	4	6. 12A, 19	\$34.70
Dote	5402W	8	6, 12A, 19	40.00
Doto	5404W	12	6, 12A, 19	45.30

Metal outlet box, No. 5556A, page 5, extra,

\$3.20

No. 62W WALL TYPE

This illustration shows one of our most popular multiple telephones. It is furnished with heavy stamped metal case, finished in dull black with 5 buttons only. If desired, this telephone may be used in place of our No. 520W wall phone.

No. 62W Wall Phone, 5 buttons \$27.60 Furnished for Systems 6, 12-A and 19. Specify system in ordering.

HAND TELEPHONES

6270W WALL AND 6250W FLUSH TYPES

These two types are designed to fill the demand for common talking hand telephone sets. Case is metal finished dull black.

Code Word	Style No.	No. of Buttons	System Nos.	List Price
Homa	6270W	4	Wall type	\$38.10
Home	6272W	8	Wall type	40.90
Homi	6274W	12	Wall type	43.70
Homo	6250W	4	Flush type	45.90
Homu	6252W	8	Flush type	51.20
Homw	6254W	12	Flush type	56.50

Furnished for systems 6, 12A and 19. Specify system number in ordering.

No. 32W WALL TYPE

This is a high grade low price intercommunicating telephone. See desk telephone 5200W, page 8. Standard finish of cabinet is golden oak and made with 5 buttons only.

No. 32W Wall Type..... \$21.20

Furnished for systems 6, 12A, 19. Specify system in ordering.



No. 1580A 3-Gang Size 7" x 15"

HITTERS.

Letter Box, No. 1924A Size 9" x 43/4"



No. 1581A 4-Gang Size 7" x 187/8"

APARTMENT HOUSE SYSTEMS TWO, THREE AND FOUR GANG NESTED LETTER BOXES

The advantage of our nested letter boxes is greater mail capacity and the fact that each unit takes up less wall space than a similar number of single letter boxes. The letter box opening is wider than ordinary boxes—envelopes up to $4\frac{1}{2}$ " x 11" can be inserted without folding. Furthermore the outfit can be installed in one-third the time required for a similar number of single letter boxes. On page 14 we illustrate the method of mounting letter boxes with our flush telephones. No outside border mat is required as the face plate of these letter boxes has a sufficient margin to take care of a large overlap. We furnish these units so that no keys will be the same on any grouping. Standard finish is brush brass,

Code Word		List Price
Lentox	No. 5842A—2-Gang Letter Box Unit	\$13.80
Lettox	No. 1580A—3 " " " "	20.70
Lettex	No. 1581A—4 " " " "	27.70
Lbox	No. 1924A Center Letter Box	6.90
Lote	No. 1923A—Left End Letter Box	6.90
Loze	No. 1922A—Right " "	6.90

No. 86W, No. 83W and 84W Telephones can be furnished same height as No. 1924A at prices quoted. See pages 12 and 13.

LETTER BOXES WITH CALL BUTTONS.

Code Word Lebox	No. 5839A—2 Gang	List Price . \$16.30
Letor	No. 5840A—3 "	. 24.50
Lanot	No. 5841A—4 "	. 32.70

DESCRIPTION OF SERVICE

We list in our catalog several systems for apartment house service which we find covers all practical needs for this class of service. We are in a position, however, to design special systems, but our experience has been that the systems listed cover the majority of installations. Complete wiring diagrams are packed with each shipment.

Common Talking System No. 22, page 43—designed for apartment house service where it is only desired between vestibule and suites and where it is not important that the system be non-interfering.

Common Talking Cordless System No. 24, page 44—designed for service between vestibule and suites similar to system No. 22, using cordless vestibule set No. 86W, page 12. Where janitor's service is desired similar to system No. 21 use diagram No. 27 page 47.

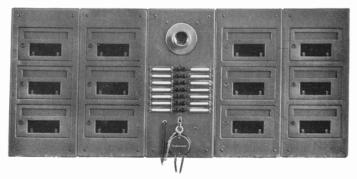
Non-Interfering System No. 11, page 39—designed for apartment house service where it is only desired between vestibule and suites and where it is an advantage to prevent any suite telephones from listening to conversations between vestibule and another suite.

Common Talking System No. 21, page 42—designed for apartment house service where it is desired between vestibule, suites, and janitor, also trade telephone and where it is not important that the system be non-interfering.

Non-Interfering System No. 26, page 46—designed for apartment house service where it is desired between vestibule, suites, janitor and trade telephone and where it is important that any number of conversations be held at the same time without interference.

VESTIBULE TELEPHONE SETS

NON-INTERFERING



No. 85W Vestibule Telephone grouped with No. 4 1580-A Units Flush mouthpiece will be furnished when so specified.

Our style No. 85W is somewhat similar to style No. 83W and 84W illustrated page 13. with the exception it is fitted with our automatic switch for non-interfering service. This allows the use of any combination of stations at the same time without interference. Vestibule, suite telephones, as well as suite and janitor's telephone can be in use at the same time without any of the other telephones listening to the conversation. Our janitor's annunciator, described and illustrated page 15 is designed to use in connection with the above with system No. 26.

No. 85W Vestibule Telephone only, Brush Brass, 8 buttons. List Price \$57.00 Add \$6.40 for each two additional buttons above 8.

Complete with Letter Boxes.

The cost of any size vestibule outfit can be figured by adding the required number of 2, 3 or 4 Gang letter boxes to cost of vestibule telephone.

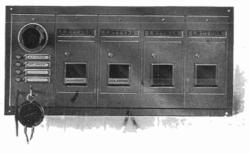
Code	Style No.	Letter Box	System	Designed		tside ensions	Wall O	pening	List Price Brush	
Word	85W	Units	No.	For	Height in.	Width in.	Height in.	Width in.	Brass	
Vestibel	858	2-4 Gang	11 or 26	8 Suites	187/8"	21"	163/4 H	20"	\$112.40	
Vestumt	8512	4-3 "	11 or 26	12 "	151	35"	131	34"	152.90	
Vestube	8516	4-4 "	11 or 26	16 "	187/8"	35"	163/1	34"	193.50	
Vurbure	8518	6-3 "	11 or 26	18 "	15"	4911	13#	48"	213.70	
Ventout	8520	5-4 "	11 or 26	20 "	187/8"	42"	163/4"	41"	234.00	
Veslote	8524	6-4 "	11 or 26	24 "	187/8"	4911	1634"	48"	274.40	
Vestobe	8528	7-4 "	11 or 26	28 "	187/8"	63"	1634"	62"	315.10	

Price for outfit over 28 suites on request.

Prices include extra button for calling janitor.

Prices are based on Brush Brass finish, other finishes bear an additional charge.

See page 14 for mounting dimensions.



No. 744-Metal Frame Mounting

No. 74W VESTIBULE OUTFIT

Common Talking

For small vestibule outfits we recommend our No. 74W mounted on metal frame with our No. 1924-A letter boxes. This makes a very compact and extremely handsome outfit. It is furnished if desired mounted as a unit with letter boxes on a metal mat. Standard finish is Brush Brass-other finishes bear a slight additional charge.

No. 74W—Only	, 2	Buttons.						\$27.80
No. 74W— "	3	" .						29.00
No. 74W "	4	"						30.20

Furnished with or without metal frame as required—Capacity 2 to 4 buttons only.

Code	Style No.	System No.	Designed For	Outside D	imensions	Wall C	pening	List Price Without	List Price	
Word				Height in.	Width in.	Height in.	Width in.	Frame	WithFrame	
Mond	742—22	22	2 suites	105/8	16¾	81/4	15	\$57.60	\$41.60	
Mide	74322	22	3 suites	105/8	211/8	81/4	197/8	67.00	49.70	
Meld	744—22	22	4 suites	105/8	26	81/4	247/8	76.50	57.80	

CORDLESS VESTIBULE SET Common Talking



No. 86W Cordless Vestibule Telephone grouped with 3 No. 1580-A Letter Box units.

Our new cordless set is designed to eliminate theft of receivers and cords, also possible bending and breaking of switch hooks. It will be noted that the front of this cordless telephone is absolutely flush—there is nothing on the face plate except the card holders, buttons, and perforated sound openings which are protected by a bug proof brass screen.

There is no question but what the new cordless set will revolutionize the construction of vestibule telephones. It is not only theft proof but simple in construction and operation therefore not liable to get out of order. To operate it is simply necessary to push the button of the party wanted. The answer will be received through the perforated sound openings and conversation can be carried on just the same as though the party was in front of you. This is made possible by a specially constructed loud talking transmitter and receiver mounted behind the front plate.

No. 86W Cordless Vestibule telephone only. 3 Buttons, Brush Brass. List Price \$58.90 Complete With Letter Boxes

Code	Style No.	Letter Box	System	Designed	_	tside ensions	Wall O _I	List Price Brush		
Word	86W	Units	No.	For	Height in.	Width in.	Height in.	Width in.	Brass	
Vecord	863	1-3 Gang	24 or 27	3 Suites	15 "	12"	13 "	11"	\$79.60	
Vorlit	864	1-4 "	24 or 27	4 "	187/8"	12"	163/1	11"	87.90	
Veles	866	2-3 "	24 or 27	6 "	15 "	19"	13	18"	104.15	
Vantob	868	2-4 "	24 or 27	8 "	187/8"	19 ⁿ	163/4"	18"	120.70	
Vetut	869	3-3 "	24 or 27	9 "	15 "	26"	13 ⁿ	25"	128.70	
Vatol	8612	3-4 "	24 or 27	12 "	187/8"	26 ¹¹	163/4"	25"	153.50	
Volos	8615	5-3 "	24 or 27	15 "	15 "	42"	13 "	41"	177.75	
Venlit	8616	4-4 "	24 or 27	16 "	187/8"	35"	163/4"	34"	186.35	
Vbcord	8618	6-3 "	24 or 27	18 "	15 "	49"	13	48 ¹¹	202.30	
Vacolt	8620	5-4 "	24 or 27	20 "	187/8"	42"	163/4"	41"	219.15	
Veltal	8624	6-4 "	24 or 27	24 "	187/8"	49 ¹¹	1634"	48 [#]	252.00	

Prices are based on Brush Brass Finish, other finishes bear an additional charge.

Prices include extra button for calling janitor.

Note—No. 86W can be furnished same height as 1924-A letter boxes, page 10, at prices quoted.

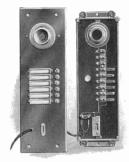
Our cordless sets are furnished for common talking circuit systems only.

Mounting dimensions same as No. 83W see page 14.

VESTIBULE TELEPHONE SETS Common Talking



No. 83W Vestibule Telephone grouped with 2 No. 1580A units Flush mouthpiece will be supplied when so specified



No.83W with front removed showing accessibility of removable front after phone is mounted on wall.

Our No.83W and 84W vestibule telephones are made with regard to simplicity—the general construction of these two instruments being similar. However, our style No. 84W has a flexible armoured receiver cord to protect telephone receiver against theft. It will be noted

that the receiver does not hang over the card holders so the names are not hidden from view.

These telephones are the same height as the letter boxes and are carefully insulated against short circuits. The working parts are mounted as a unit to back of telephone and are protected with a heavy close fitting tin box. In case of increase a new letter box unit can be readily added to the vestibule set. All telephones are fitted with large card holders and push buttons are numbered. All vestibule sets have unbreakable metal mouthpiece which is permanently attached to the front plate.



No. 84W with flexible armour-ed receiver cord.

No. 83W Vestibule Telephone only Brush Brass—2 Buttons—List Price \$27.80

Add \$1.20 for each additional button above 3.

No. 84W Vestibule Telephone, same price as No. 83W.

No. 414A Flexible armoured receiver cord only complete with receiver\$9.30 NOTE—No.83W and 84W can be furnished same height as 1924-A Boxes, page 10 at prices quoted.

Prices Complete with Letter Boxes

The cost of any size vestibule outfit can be figured by adding the required number of 2, 3 or 4 Gang letter boxes to cost of vestibule telephone.

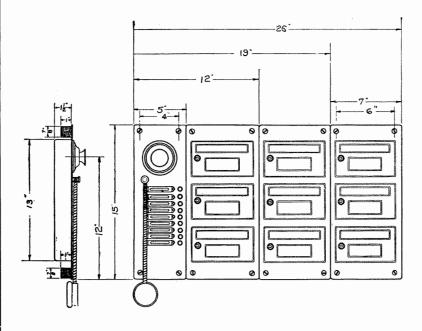
C 1	Style	Lette		C .		n		Outside Dimensions		Wall O	pening	List Price
Code Word	No. 83W	Box Unit		Syste No.			igned or	Height in.	Width in.	Height in.	Width in.	Brush Brass
Ventro	832	1-2 G	ang	21, 22,	25	2.5	Suites	111/8"	12"	83/4"	11"	\$ 41.30
Vertel	834		"	21, 22,	25	4	**	111/8"	19"	834"	18"	57.60
Vestib	836		"	21, 22,	25	6	**	15 "	19"	13 "	18"	74.00
Vombar	838	2-4	**	21, 22,	25	8	"	187/8"	19"	163/4"	18 ¹¹	90.40
Vestut	839		**	21, 22,	25	9	**	15 "	26"	13 "	2511	98.50
Votule	8312	3-4	**	21, 22,	25	12	**	187/8"	26"	163/411	25"	122.90
Volbar	8315		44	21, 22,	25	15	"	15 "	42"	13 "	41"	147.40
Valtot	8316		"	21, 22,	25	16	**	187/8"	35"	163/4"	34"	155.60
Vestilt	8318		"	21, 22,	25	18	**	15 "	49"	13 "	4811	172.00
Valtule	8320		**	21, 22,	25	20	**	187/8"	42"	163/4"	41"	188.30
Valbot	8324	1	**	21, 22,	25	24	**	187/8"	49"	163/4	48"	220.90

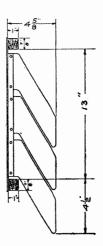
Prices on outfits over 24 suites on request.

Prices include extra button for calling janitor.

Prices are based on Brush Brass Finish, other finishes bear an additional charge.

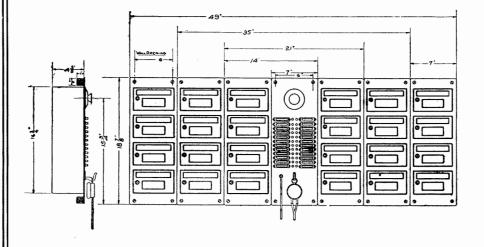
See page 14 for mounting dimensions.

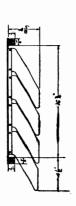




Vestibule Telephone No. 84W with No. 1580A 3-Gang Letter Boxes

These dimensions also apply for No. 83W and No. 86W Vestibule outfits for 10 buttons or less





Vestibule Telephone No. 85W with No. 1581A 4-Gang Letter Boxes

Capacity of No. 85W as shown above 24 buttons

The measurements and diagrams illustrated herewith are for the guidance of the contractor and architect for the proper installation of our vestibule telephones and letter boxes. Full dimensions as well as depth of letter boxes and telephones are given.



No. 330W



No. 332W



Type D



Type J

JANITOR AND TRADESMAN TELEPHONES for Apartment House Service

No. 330W TRADESMAN'S TELEPHONE

These telephones are placed at the dumb waiter or rear entrance of an apartment house and are provided with buttons so that tradesmen can call any of the suites or janitor. No. 330W is designed for systems No. 21 and 25 described pages 42 and 45.

Code Wor	rd.	List Price
Java	No. 330W 4 buttons	\$26.00
	Buttons above 4. each list	.80

No. 332W JANITOR'S TELEPHONE

These telephones are placed in the janitor's office of an apartment house and are so arranged that any suite may call the janitor. This telephone is also provided with buttons for calling the suites. No. 332W is designed for system No. 21 described page 42.

Code W	ord		List Price
Jada	No. 332W	4 buttons	\$26.00
		e 4. each. list	

TYPE "D"-JANITOR'S ANNUNCIATOR

Our type D represents a complete janitor's telephone with annunciator drops. The chief advantage of this outfit is the fact that the number of the telephone calling is registered on the annunciator, also in case of the absence of the janitor, the telephone call is recorded so that he can call the suite upon his return. There is a button on the annunciator for calling each suite, also card holders for the names of the tenants. There is an extra button for electrically resetting the drops, also a button to operate electric door opener lock at vestibule. This annunciator is arranged for use with common talking systems No. 25 and 27 described pages 45 and 47.

TYPE "J"-JANITOR'S ANNUNCIATOR

This outfit is similar to our type D with the exception that calls are received and given through an answering cord and plug. In answering or giving a call the janitor plugs in the jack which corresponds with the drop displayed. This annunciator is designed for use with our non-interfering system No. 26 described page 46.

PRICES TYPES D AND J JANITOR ANNUNCIATORS

Type D	Type J	No. of	List
Style No.	Style No.	Drops	Price
7016W	7116W	16	\$130.00
7020W	7120W	20	148.40
7025W	7125W	25	171.60
7030W	7130W	30	194.70
7036W	7136W	36	222.00
7042W	7142W	42	250.50
7050W	7150W	50	282.90

Intermediate sizes bear price of next highest size listed.

No. 39W Hinged Back.

No. 41W



No. 2500W



No. 127W

No. 39W TELEPHONE

Our No. 39W represents unquestionably the best value upon the market. It is fitted with high grade transmitter, double pole watch case receiver, green silk cord, induction coil, etc. The case is metal and the finish dull black with nickel trim. It is especially well adapted for apartment house service. This telephone can be wired for the following systems:—10-C, 11, 12-A, 19, 21, 22, 24, 25, 26, 27, 30, 31, 32.

Code Word

List Price
Tuvalt No. 39W

No. 41W TELEPHONE

Our No. 41W telephone is designed for heavy service—the case is metal and the finish dull black with nickel trim. It is fitted with our standard long distance 90A transmitter, induction coil and 221A receiver. This represents unquestionably the highest grade telephone of its kind upon the market. It is used very extensively for schools, etc. This telephone can be wired for the following systems—10-C, 11, 12-A, 19, 21, 22, 24, 25, 26, 27, 30, 31, 32, 33 and 40.

Code Word	List Price
Tuvau No. 41W Telephone	\$19.90
Price includes one button—extra buttons each	1.34
No. 41W Telephone, System No. 33	32.00

No. 2500W TELEPHONE

No. 2500W is furnished with our standard long distance 90A transmitter, induction coil, and 221A receiver. The base handle and hook is finished in dull black—the transmitter is nickel. Price includes 6 feet of green silk cord with terminal block and buzzer. Cords are green silk. This telephone can be wired for the following systems—10-C, 11, 12-A, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33 and 40.

Code Word	List Price
Desko No. 2500W Desk Telephone	\$28.70
Price includes one button—extra buttons each	1.34
For system 33 see page 20 No. 200W.	

No. 127W SCHOOL TELEPHONE—BOSTON TYPE

A semi-flush room telephone for schools, so designed that dust cannot penetrate the case. The hinged front is gasketed and the hook switch of special design making the outfit dust and chalk proof. The transmitter is mounted on a short adjustable arm with metal mouthpiece. Transmitter is complete with metal outlet box permanently attached and with terminal connections inside. Standard finish is dull black. Outside dimensions 75% wide x 101% high x 11% deep. Dimensions of outlet box 57% wide x 91% high x 35% deep.

No. 127W School telephone, each list....... \$46.00 (In ordering specify whether for concealed or surface conduit.)



No. 647W

No. 645W



No. 60W

No. 647W HAND TELEPHONE

This is a very convenient type and is especially adapted for bedroom use, owing to the fact that the hand telephone can be held in any position while in use. This outfit is constructed to withstand hard use The wall mounting is composed of a steel box, finished in dull black. No. 645W is similar to No. 647W except the wall mounting, which has a flush brass plate arranged to fit a standard outlet box. These telephones can be wired for the following systems—10-C, 11, 12-A, 19, 21, 22, 24, 25, 26, 27, 30, 31, and 32.

Code Word		List Price
Handu	No. 647W Hand Telephone Set	\$22.30
Hflus	No. 645W with flush wall plate	24.00
No. 6	45W includes inside buzzer.	
Price	s include one button. Extra buttons, each	\$1.34

No. 60W FLUSH TELEPHONE

Our No. 60W is designed for house and apartment use—the front plate is furnished regularly in brush brass. The receiver, transmitter and all working parts are well manufactured and will stand up under hard usage. All parts are carefully insulated from the front plate and back of telephone is protected by a heavy tin box. No. 5159A wood frame is furnished regularly with this outfit. No. 1596A heavy metal outlet box is supplied only when ordered. This telephone can be wired for the following systems—10-C, 11, 12-A, 19, 21, 22, 24, 25, 26, 27, 30; 31, 32 and 40.

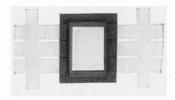
Size of plate 65%" x 4½"—make wall opening 53%" x 37%". NOTE—The use of No. 1596-A outlet box requires a special construction of the telephone and its use must be specified.

Code Word	List Price
Sixfus No. 60W Flush Telephone with No. 5159A	
wood frame	\$15.20
Price includes one button—Extra buttons, each	1.34

No. 1596-A OUTLET BOX

This box is required only where the wiring is installed in conduit, otherwise it is not essential. Dimensions, width 37_8 " x height $5\frac{3}{4}$ " x depth, $4\frac{3}{8}$ ".

Code We	ord Li	ist Price
Oubx	No. 1596-A Outlet Box for No. 60W	\$2.70
Frod	No. 5159-A Wood frame for No. 60W	. 40



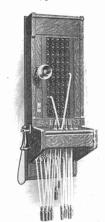
No. 5159-A. Wood Frame for No. 60W



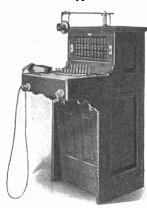
No. 1596-A

THE STATE OF THE S

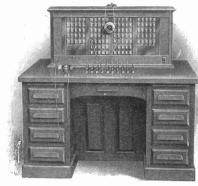
Type "B"



Type "C"



Type "A"



Туре "Е"

TELEPHONE SWITCHBOARDS

MAGNETO AND COMMON BATTERY

Any of these styles can be arranged for magneto system No. 37 page. 52, or common battery systems Nos. 32 and 33, which are designed principally for private interior systems in hotels, factories, hospitals, etc.

SWITCHBOARD PRICES

The following standard switchboard cabinets may be equipped with magneto drops or target signals for common battery system.

Cabinets are fully wired and include operator's telephone, hand generator, night bell, etc., with terminals in back of cabinet or 15 feet of cable.

Note: Add to cabinet prices, number of drops and cord pairs.

TYPE A	List Price
9050W, 50 line cabinet fully wired	\$306.50
9000W, 100 line cabinet fully wired	387.20
ТҮРЕ В	
9110W, 10 line cabinet fully wired	117.30
TYPE C	
9225W, 25 line cabinet fully wired	177.50
9250W. 50 line cabinet fully wired	225.90
•	223,70
TYPE E	
9425W, 25 line cabinet fully wired	371.10
9450W, 50 line cabinet fully wired	419.50
9400W, 100 line cabinet fully wired	500.10
Special cabinets and finishes furnished at slight a	additional
charge.	
TYPE F	
9525W, 25 line cabinet fully wired	\$177.50
9550W, 50 line cabinet fully wired	225.90
9500W, 100 line cabinet fully wired	338.80
Add to price of switchboard cabinets for	each line
equipped as follows:	cacii iiic
No. 5188A, Series magneto drops, per bank of 5	\$40.30
No. 5281A, Bridging magneto drops, bank of 5	
No. 5282A, Visual Target signals for common battery	
per bank of 5	40.30

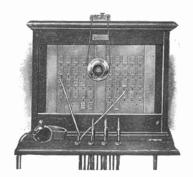
KEY EQUIPMENT

Add to price of switchboard cabinet for each set of key cords, and plugs as follows: List Price \$22.70 Magneto key and cord equipment, each..... Magneto Double ringing key and cord equipment, 26.70 each..... Common battery key and cord equipment, single 24.30 30.70 38.70 80.00 Note:—In figuring switchboard prices, first select style of cabinet and whether a magneto or common battery board is desired. Example—A 50-drop Type A switchboard cabinet

Example—A 50-drop Type A switchboard cabinet fully wired with 35 common battery visual signals installed (single supervisory) and four pair of cord circuits would figure as follows:

50-drop Type A cabinet fully wired	\$306.50
7 Banks, visual signals	282.10
4 pair key and cord circuits, single supervisory	97.20
List Price	\$685.80

This board has a capacity of 15 extra drops for future addition.



Type "F"



Self-Restoring Magneto
Drops, Mounted on Metal Strip



No. 5282-A Common Battery Visual Target Signals Mounted on Metal Strip.



No. 726-A



No. 1779-A

TELEPHONE SWITCHBOARDS

MAGNETO DROPS

These are of the latest self-restoring type and can be supplied for series or bridging. They are mounted on plates in banks of five. The coils in each drop are removable without the use of tools. Night bell contacts are accessible from front of drop.

COMMON BATTERY VISUAL SIGNALS

Prices on Lamp signal boards sent on request.

The construction of this signal is somewhat similar to the magneto type, with the exception that the action of the armature moves an aluminum target which arises in an opening at the front of the drop, thus giving a signal which is clearly visible. This type of signal is to be preferred for common battery over the lamp signal type on account of its simplicity and the fact that it does away with all relays and auxiliary contacts.

Note.—Cord circuits for magneto boards are equipped with clearing out drops. Visual signal boards can be fitted with single or double supervisory.

For ordinary service one pair of cord circuits will be sufficient for each ten lines, more or less can be used to suit the conditions, but no board should be fitted with less than two cord circuits.

In ordering, specify number of cord circuits and if common battery whether single or double supervisory.

Type "F" board is designed with apron for use if desired with desk supplied by the purchaser.

Standard Cabinet finish is golden oak.

SWITCHBOARD PLUGS

Code Word	I	List Price
Pleg	No. 107-D 2 conductor plugs	\$2.60
Plige	No. 5613-A 2 conductor jacks only	2.70
Plugo	No. 726-A 2 conductor switchboard plugs	2.90

SWITCHBOARD CORDS

We furnish linen switchboard cords with triply reinforced plug end.

Code Word			List Price
Civum	No. 1551-A	Metallic circuit, 4 ft	\$2.50
Cilto	No. 1552-A	Metallic circuit, 6 ft	3.30
Cint	No. 420-W S	witchboard transmitter cords,	,
	per pair		3.30

SWITCHBOARD CORD WEIGHTS

	SWITCHBU	DARD CORD WEIGHTS	
Code Word			List Price
Watol	No. 5168-A.		\$2.50
			•
	RINGING	AND LISTENING KEYS	
Code Word			List Price
Kevot	No. 1779-A	Ringing and listening	\$6.10
Kelto	No. 1776-A	Double ringing	6.10
Kento	No. 1778-A	Double listening	6.10

No. 1775-A Single ringing

No. 1777-A Single listening.....

6.10

6.10

Kamo

Kolto



No. 140W

MAGNETO TELEPHONES

These phones are designed for farmers and all long distance telephone lines; also for short lines where the distance is too long for battery call telephones. For heavy lines the ring thru condenser is recommended. Prices do not include batteries.

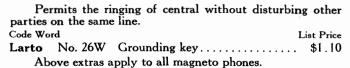
Code Wor	d			List Price
Loto	No.	140W	Series, 3-bar generator, 80 ohm	
		ring	er	\$39.10
Ling	No.	144W	Bridging, 3-bar generator, 1,000	
_		ohn	n ringer	40.60
Lave	No.	142W	Bridging, 4-bar generator, 1,000	44 50
- .		ohn	n ringer	41.50
Lizo	No.	143W	Bridging, 4-bar generator, 1,600	
_		ohn	n ringer	42.70
Lont	No.	148W	Bridging, 5-bar generator, 1,600	
_		ohn	ringer	45.10
Lito	No.	149W	Bridging, 5-bar generator, 2,500	
		ohn	n ringer	46.30

RING THRU CONDENSER

In receiver circuit, permits bells to ring thru even though receivers are left off the hook.

Code Wo	rd		List Price
Linto	No. 27W	Ring thru condenser	\$1.70

GROUNDING KEY



No. 900W MAGNETO TELEPHONE

This type combines all the qualifications of our highest grade long distance instruments, the only difference being in the cabinet design.

the cabi	net design.				
Code Word					
Lite	No. 900W Series, 3-bar, 80 ohm ringer	\$33.70			
Lovo	No. 901W Bridging, 3-bar, 1,000 ohm ringer	35.20			
Lert	No. 902W Bridging, 4-bar, 1,000 ohm ringer	36.40			
Lent	No. 903W Bridging, 4-bar, 1,600 ohm ringer	37.60			
Leve	No. 904W Bridging, 5-bar, 1,600 ohm ringer	40.00			

COMMON BATTERY TELEPHONES

For common battery service, our type A desk telephone is supplied with a pressed steel heavy enameled bell box which contains a one thousand ohm polarized ringer and condenser. This telephone is designed for our system No. 33 described page 52, but can be used with any two wire common battery or bell system.

IIIOII De	ettery or ben system.		
Code Word			
Dalt	No. 41W-33 wall telephone	\$32.00	
Doler	No. 200W desk telephone complete with call		
	bell and condenser	37.20	
Diler	No. 300W desk telephone complete, without		
	call bell and condenser	21.40	

Note.—Our 270W and 370W Hand Phones can be used in place of desk phone.



No 900W



No. 200W



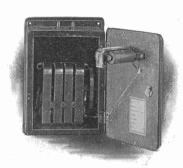
No. 5820W

MAGNETO CALL DESK TELEPHONES

This stand is a thoroughly modern equipment. Where a complete phone is required for receiving and giving a call, the desk phone should be purchased with magneto bell, or if desired, the magneto and ringer can be furnished separately, see No. 880W extension bell. If an extension phone only is required for receiving a call, use No. 500W or No. 300W less call bell.

Code Wor	d	List Price
Dako	No. 500W Desk phone without magneto	
	bell, series or bridging	\$20.60
Duke	No. 5820W-3 Bar - 80 ohm Series	46.80
Durne	No. 5824W-3 " - 1000 " Bridging	48.20
Dovo	No. 5822W-4 " - 1600 " "	49.70
Dort	No. 5823W-5 " - 1600 " "	50.90
Divan	No. 5828W	53.30
Don	No. 5829W-5 " - 2500 " "	54.50
Dalva	No. 135-A Induc. coil only, mounted on	
	oak block	3.50

NOTE-Magneto Bells are wired complete with Induction Coils.



No. 8250W Magneto Bell

MAGNETO BELLS

Code Wo	rd	List Price			
Dirant	No. 8250W Series, 3-bar generator, 80 ohm				
	ringer	\$28.80			
Divant	No. 8254W Bridging, 3-bar generator, 1,000	30.00			
Dodo	ohm ringer	30.00			
Dodo	ringer	30.00			
Dudd	No. 8252W Bridging, 4-bar generator, 1,000	50.00			
	ohm ringer	31.40			
Duve	No. 8253W Bridging, 4-bar generator, 1,600				
D.11.	ohm ringer	32,60			
Dilt	No. 8258W Bridging, 5-bar generator, 1,600	35.00			
Delv	ohm ringer No. 8259W Bridging, 5-bar generator, 2,500	JJ.00			
Deiv	ohm ringer	36.20			
Divez	No. 8260W Extra generator cranks	1.10			
NOTE—These Magneto Bells do not include Induction Coils.					



No. 880W Extension Bell

EXTENSION BELLS

Consists of the standard Connecticut polarized magneto ringer mounted in steel case, finish dull black.

Code Word						List Price		
Delt	No. 8	880W	extension	bell,	80	ohm	ringer.	\$7.00
Delto	No. 8	881W	**	**	1000	**		10.20
Deto	No. 8	382W	44	"	1600	"	" .	11.80
Deat	No. 8	383W	"	"	2500	**	" .	13.60
Ditel	No. 2	229W	Commor	ı bat	tery.	1000	ohms,	
polarized ringer, 2 M. F. condenser								14.40
Fancy gongs, extra							2.00	



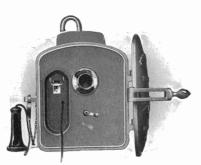
4-Bar Generator

CONNECTICUT GENERATORS

Code Word			
Duot	No. 1715-A, Series, 3-bar generator	\$17.40	
Duig	No. 1718-A, Bridging, 3-bar generator	17.40	
Doss	No. 2096-A, Series, 4-bar generator	18.60	
Donn	No. 1700-A, Bridging, 4-bar generator	18,60	
Dolt	No. 1719-A, Bridging, 5-bar generator	19.80	



No. 120W Door height 14"



No. 120W Open view

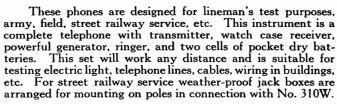
WEATHER-PROOF IRON BOX TELEPHONES

These telephones are designed for mine, street railway and police systems. This is a complete telephone with powerful 4-bar generator, ringer, induction coil, transmitter, receiver, lightning arrester, etc.; all parts of which have been specially treated to withstand weather conditions. Bells are mounted on top—if preferred they can be mounted inside. Working parts are mounted on an insulated metal plate and can be removed as a unit. They are also protected by two waterproof rubber gaskets.

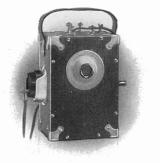
Styles No. 122W and No. 123W can be fitted with plunger cut-out so when the door is closed the telephone is automatically cut off the line. There is no possibility of a burnout or cross. All outside corners are rounded so dust and dirt will not collect. This outfit is unquestionably the best the market affords. Also arranged for central energy if desired. Prices do not include batteries.

Code Word	d 1	List Price
Iris	No. 120W Series, complete with 80 ohm	
	ringer and gongs	\$88.20
Ister	No. 121W Bridging, complete with 1,000	
	ohm ringer and gongs	91.20
Iver	No. 122W Series, without ringer and gongs	86.40
Ivet	No. 123W Bridging without ringer and	
	gongs	86.40

PORTABLE MAGNETO TELEPHONES



Code Word				
Iter	No. 310W 80 ohm series	\$37.90		
Inte	No. 311W 1,000 ohm, bridging	42.10		
Iten	No. 312W 1,600 ohm, bridging	44.50		
Itov	No. 270A Long carrying strap, extra			
Inze	No. 5139A Extra Type D test set batteries	.96		
Iront	No. 53W Weather-proof jack box	11.60		
Irent	No. 5169A 6-foot cord and plug, extra	6.60		



No. 310W



No. 101W

NO. 101W PORTABLE MAGNETO TELEPHONE

Designed for railroad, army or field service. They are fitted with non-breakable hand telephone set, generator, ringer, capacity for two standard dry batteries, shoulder strap, also substantial leather carrying handle. Case is hard maple with heavy aluminum corners. Prices do not include batteries.

Code Word	List Price
Inot No. 101W 80 ohm series	. \$82.70
Ivot No. 102W 1,000 ohm bridging	. 90.50
Iton No. 103W 1,600 ohm bridging	. 93.70
Itol No. 104W 2,500 ohm bridging	



No. 91 1/2-A

RINGERS

These polarized ringers are designed for our magneto telephones—standard gongs are 2½ inch.

Code Word						List Price
Dorr	No. 91½-A	80	ohm	ringe	r	. \$4.20
Dovel	No. 94½-A		**			
Dovir	No. 95½-A	1600	"	"		. 5.60
Divro	No. 96½-A	2500	**	**		. 6.20
Gongs, bell posts and screws, extra						



No. 550W

BATTERY RELAYS

All relays have local connection for auxiliary set of batteries and bell. Case is steel, finished in dull black.

No. 550W PERIOD RELAY—to ring extension bell on battery telephone system momentarily while button is pressed on telephone. List Price, \$7.20,

No. 551W CONTINUOUS RINGING RELAY—to ring extension bell continuously on battery telephone system until restoring button on relay is pressed. List Price, \$7.20.

No. 552W CONTINUOUS RINGING RELAY—to ring extension bell continuously on magneto telephone system until drop is restored. List Price, \$10.80.

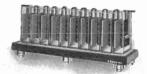


No. 5180-A 6 inch Gongs

LOUD RINGING EXTENSION BELLS

A loud ringing extension bell designed for use with our magneto or common battery telephones, where an extension bell is used in connection with common battery telephones—a 2 M. F. condenser must be included—Gongs are 6 inch.

Code Word			List Price
Dulo	No. 5180-A	80 ohm	\$22.40
Dulto	No. 5181-A	1000 ohm	22.40
Dunor	No. 5182-A	1600 ohm	23.10
Durat	No. 5183-A	2500 ohm	23.30
Dutto	No. 5186-A	Common battery 1000 ohm	
	ringer and	2 M. F. condenser	24.00



Type CT

STORAGE BATTERIES

Designed for common battery systems 32 and 33, pages 50 and 51. Can also be supplied for our interior telephone systems where heavy duty is required. Prices on application.

No. 90-A

No. 470W Lineman's Test Phone



No. 270W With Switch in Handle

TRANSMITTERS

Quality, Volume, Clearness

No. 90-A. This instrument is the result of many years of careful experiments and is considered by experts to be mechanically and electrically correct. They are fitted with the finest imported mirror carbon electrodes and no expense has been spared to make it absolutely perfect. Every transmitter goes through a series of rigid tests before shipment, and all parts are carefully measured by a micrometer gauge to insure uniformity, thus the purchaser is assured of perfect results. This transmitter is guaranteed to work perfectly over hundreds of miles of toll lines or for interior telephone Furnished for magneto or central energy at prices service. quoted.

Code Wo	rd I	List Price
Tarto	No. 90-A Transmitter, with back shell	\$5.30
Turo	No. 5175-A Transmitter, with short adjustable arm	7.90
Tive	No. 5685-A Operator's switchboard transmitter only	7.90
Ture	No. 53-A Mouthpiece for No. 90-A	.54
Torf	No. 1273-A Short mouthpiece for 90-A	.54
Toer	No. 1525-A Flush metal mouthpiece	1.05
Trel	No. 1273½-A Full " "	1.05

Our No. 90-A transmitter is mounted on an adjustable arm for magneto phones with No. 112-A long Arm finished in heavy black enamel (see No. 5176-A).

Code Wor	rd		List Price
Tint	No. 5176	6-A Complete	\$8.50
Tarm	No. 112	2-A Arm and base only for N	No. 5176-A 3.20

TYPE H HAND TELEPHONE

This type consists of a combined transmitter and receiver mounted together to be used as a hand telephone. Parts are all metal and the outfit is therefore unbreakable. eliminated the curved mouthpiece and have mounted the transmitter in a slanting position, therefore eliminating breakage of mouthpiece and without loss of voice transmission. Can be supplied for any system.

Code Wo	rd List Price
Tono	No. 270W, for common battery, see 200W page 20
Tavo	No. 370W, for common battery, see 300W page 20
Toge	No. 470W, Lineman's test telephone with cord and clips
Toto	No. 570W, for magneto service without bell 22.90
For page 21	price of 570W with magneto bell see No. 5820W
Code Wo	rd List Price
Tano	No. 5177-A Receiver diaphragm for type H. \$.26
Tont	No. 408-A Receiver cap for type H54
Toer	No. 1525-A Flush metal mouthpiece for type
	H 1.06
Toor	No. 393-A Receiver complete for type H 4.00



No. 729-A

No. 221-A



No. 773-A



No. 1855-A

RECEIVERS

STYLE NO. 288-A

This double pole watch case receiver has the working parts mounted in the shell. The magnets are circular and will retain their magnetism permanently. They are fully as efficient as the long type.

Code Wo	rd	1	List Price
Tuto	No.	288-A 80 ohms nickel case	\$3.20
Toze	No.	729-A 80 ohms composition case	3.20
Tyle	No.	161½-A Caps for Duplex or No. 288-A	. 54
Tand	No.	5177-A Diaphragms for No. 729-A	. 32
Tano	No.	162-A Diaphragms for No. 288-A	. 32
Tont	No.	408-A Caps for No. 729-A	.54

STYLE NO. 221-A RECEIVER

This receiver is unquestionably the highest grade on the market. The shell is rubberoid and all metal parts of the same are self-contained and can be removed as a unit. Cannot possibly be affected by temperature changes.

Code Wo			ist Price
Talt	No.	221-A Receiver with $2\frac{1}{2}$ or 3 ft. wors-	
		ted cord	\$4.10
Tent	No.	220-A Complete receiver shells	1.06
Tred	No.	5178-A Extra receiver caps	.54
Tode		215-A Receiver diaphragms	.26

RECEIVER CORDS

Code Wo	rd	List Price
Trot	No. 4501-A 2½ ft. worsted	. \$.66
Tret	No. 4505-A 3 ft. worsted	
Tink	No. 4576-A 2½ ft. 2 cond. silk	94
Tilo	No. 4507-A 3 ft. 2 cond. silk	1.06
Trak	No. 4511-A 6 ft. 2 cond. silk	1.70

DESK SET CORDS

Code Word	List Price
Tilton No. 4517-A 6 ft. 3 cond. green silk	. \$2.30
Tivelt No. 4522-A 6 ft. 4 cond. green silk	3.10
Tonker No. 4526-A 6 ft. 5 cond. green silk	3.50
Telver No. 4532-A 6 ft. 6 cond. green silk	4.00
Special cords furnished on request.	

OPERATOR'S HEAD RECEIVERS

This receiver is specially designed for switchboard use. Head band is of steel, leather covered. Receiver is adjustable to fit any head. Comfortable, light and efficient.

Code Wo	rd	I	List Price
Tako	No.	773-A with 6 ft. green silk cord	\$6.70
Tors	No.	739-A without cord	5.20
Tect	No.	727-A head band only	2.40
Takl	No.	5311-A receiver for 773-A	3.30

DOUBLE OPERATOR'S HEAD RECEIVERS For Telephone and Wireless Service

Adopted during war as a U. S. Government Standard. This material consists of two adjustable receivers with head band.

nead band.	
Code Word	List Price
Trod No. 1855-A with 6 ft. cord	
Takl No. 5311-A receiver for 1855-A or 773-A	
Trud No. 4579-A cord for No. 1855-A	. 2.90
Trok No. 1856-A-Wireless 2000 ohms	
Tore No. 1857-A " 3000 ohms	
Toff No. 5312-A-1000 ohm receiver for 1856-A.	
Tolk No. 5313-A-1500 " " 1857-A.	
Prices on application.	



Multiple Push on Oak Base



Flush Multiple Push Metal Mat



No. 9121/2-A and No. 9111/2-A



No. 1489A Pendant Push Button with Cord and Plug



No. 1532A Nurse's Call Plate Size 4½" x 2½"

MULTIPLE PUSHES

We illustrate and list herewith our new multiple pushes. There is no question but what these have the best design and construction of any pushes yet placed on the market. They have long positive wiping contacts. Wires are connected direct to the contact springs with machine screws, doing away with all soldered connections. Card holders are furnished with transparent celluloid strips to protect name cards. Multiple pushes of 12 buttons or over have double row of buttons.

MULTIPLE PUSHES ON OAK BASE

Code				List	Code	:			List
Word	No.			Price	Wor	d N	э.		Price
Puld	2110W	4 Bu	ttons					Buttons	\$10.50
Pulo	2111W	6	**	5.40	Porl	2115V	V 16	**	13.80
Putt	2112W	8	"	7.50	Pide	2116V	V 20	**	15.50
Puto	2113W	10	**	9.00					
S	pecial fi	nishe	s ext	ra.					

MULTIPLE PUSHES WITH WEIGHTED OAK BASE

These are the same as our wood base type but have a weighted felt covered base on the underside so that they may be used on desks as a portable push.

Code			-	List	Code				List
Word	No.			Price	Word	No.			Price
Pora	2150W	4 Bu	ttons	\$6.60	Pude2	154W	12	Buttons	12.60
Poro	2151W	6	**	7.30	Pone2	155W	16	**	16.20
Pett	2152W	8	"	9.00	Pund2	156W	20	**	19.00
Peto	2153W	10	"	10.60					
S	pecial f	inishe	s, ext	ra.					

Green silk covered flexible cord extra per ft. per button \$0.14

FLUSH MULTIPLE PUSHES

FLUSH MULTIPLE PUSHES ON OAK MATS

These are the same as our flush multiple pushes but are mounted on wood mats with felt base for desk use. The finished brass face make a very handsome combination.

Code Wo	rd													List Price
Pave	No.	223W	4 Bu	ttons										\$15.60
Pulg	No.	224W	6	**										18.90
Pulp	No.	225W	8	"										22.00
Pulr	No.	226W	10	••										25,20
Pado	No.	227W	12	44										28.20
Pern	No.	228W	16	"										34.60
Sta	ndard	finish	brush	hrase	2	Sn	ec	ial	fi	ni	sh	60	ev	rtra

CARD HOLDERS

Code Work	d	I	List Price
Pevo	No.	912½-A Card holder, opening ¼ " x 1¼"	
		nickel	\$0.12
Pent	No.	911½-A Card holder, opening 5/16" x 2"	
		nickel	. 26
		PENDANT PUSH BUTTON	

This outfit consists of a brush brass plate with jack and button which is set flush in the wall. A ten-foot cord and white celluloid pendant push and metallic plug are attached. The button on plate is used to restore the annunciator drops at the nurse's quarters. No. 1532A plate is drilled to fit No. 37 Bossert cover.

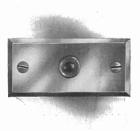
Price
8.50
2.00
.30
4.70
5.90
3.30



No. 435-A Patented



No. 2105W



No. 250W



No. 258W



No. 5278-A

No. 435-A PUSH BUTTON

This button is unquestionably the best yet placed upon the market. It is fitted with long self-cleaning contact springs with positive double wipe contacts which are protected from loose wires by a heavy metal guard—lugs on the side of binding post screws keep wire connections in proper position—no soldering is necessary. Push button has a large oval center %6" diameter which has a solid stop. Entire button is solidly built and is practically indestructible. Can be mounted singly or in groups.

Code Word	List Price
Poltent	No. 435-A with black center \$.46
Porvelt	No. 399-A " white "
Poulter	No. 394-A " pearl "
St	tandard packages of 25. Fits 5/8" hole.
Engra	ving on pearl push buttons, each letter or
figu	re extra

Standard metal rim finishes are nickel and brush brass—other finishes bear additional charge. Nickel will be furnished unless otherwise specified.

No. 2101W PORTABLE PUSH BUTTON

Our No 2101W Portable Push Button is designed for use in offices and other places where neatness and finish are essential. The weighted felt base is approximately 1" thick, mahogany finish, and presents a very pleasing appearance. Mahogany Base is fitted with bushing for green silk cord, which can be supplied in any length at slight additional charge. Furnished with one to five buttons only—Push Buttons have pearl centers.

Code Word	Style No.	No. of Buttons	List Price
Pabl	2101W	1	\$2.70
Paot	2102W	2	3.70
Pobt	2103W	3	5.00
Ponr	2104W	4	5.90
Potf	2105W	5	7.00

FLUSH BUTTON PLATES

EQUIPPED WITH NO. 394-A PEARL BUTTON

We show here a few styles of flush button plates which are stock sizes.

Code Word	List Price	
Vont	No. 250W One-button plate, 1½" x 3¼" \$1.00	
Vilt	No. 258W One-button plate, $1\frac{1}{2}$ " x $1\frac{1}{2}$ " 1.00	
Vust	No. 5278-A One-button plate	

Standard Finish, brush brass.



Magneto Test Bell

MAGNETO TEST BELLS

These bells are designed for locating grounds, open circuits, etc., in electric wiring. They are fitted with the well-known Connecticut generators and ringers, and with inside bells. The opening on the side is arranged so that the bells can be heard, this opening is also protected from dust and insects by a wire gauze. The bells are guaranteed to ring through the resistance specified. Cabinets are oak and of very substantial construction and are fitted with heavy nickel plated brass corners.

Code Word				
Honk	No. 90W Magneto test bells,	10,000 ohms	\$32.50	
Heto	No. 91W Magneto test bells,	25,000 ohms	33.10	
Haze	No. 93W Magneto test bells,	50,000 ohms	33.90	
Hobo	No. 95W Magneto test bells,	100,000 ohms	39.50	

Prices include heavy metal corners.



No. 5170-A

HOOK SWITCHES

No. 5170-A hook switch is designed for use with watch case receiver and particularly where space is limited. The contacts are positive and proper care has been given to insulation.

Ccde Wo		List Price
Hoke	No. 5170-A Hook switch	. \$2.30



No. 5171-A

No. 5171-A. This type is used in our wall phones, both battery and magneto call. The switch is self-contained and assembled as a unit. The hook springs are long and of good action—receiver hook is removable.

No. 5171-A Hook switch..... \$2.80

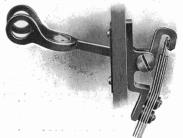
List Price

No. 5174-A. This type is designed with short lever hook
for our standard long receiver. The contact springs are posi-
tive-hook is designed for right or left service-pivot screw
can enter from either side.
C I W I

 Hiter
 No. 5174-A
 Hook switch
 \$2.30

 Hotor
 No. 1600-A
 Hook lever only
 .92

No. 490-A Hook lever only—8 inch.....



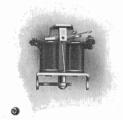
No. 5174-A

INDUCTION COILS						
Code Wo		List Price				
Hovit	No. 2005-A Length 2½", resistance 75 ohms.	\$2.40				
Hivor	No. 2004-A Length 4", resistance 100 ohms.	2.80				
Hinot	No. 2000-A Length 2½", 16 ohm primary, 30)				
	ohm secondary for common battery	2.40				

Code Word

Hike

Heke



No. 586-A
Top View of Drop
Patented



Elevator Type Cover Removed

CONNECTICUT ELECTRIC RESET ANNUNCIATORS

The Connecticut Electrical Reset Annunciator Drop is simplicity itself. It consists of only two independent magnet coils. One operates the drop and the other resets it. There are no permanent magnets of any kind. By a unique and positive arrangement only the independent reset magnet is in the restoring circuit after a drop has been operated. Each drop is a self-contained unit, and can be removed from the annunciator by disconnecting two wires and removing one machine screw. All drops are mounted on a vertical metal mounting strip which gives a rigid and substantial construction. As will be seen by the cut, all parts including drops. bell, and reset buttons are mounted on the back board so that when the front of the cabinet is removed they are accessible in their working condition. This is an ideal arrangement for the contractor. All drops are wired to terminals on the back board with machine binding screws for connecting to line wires. The reset button is also wired to two terminals so that an extension reset button may be used, if so desired.

One reset button for any size annunciator.

Occupies less space than most other drops.

The most sensitive drop—small current consumption.

Broken glass does not require remarking of drops.

One set of batteries for call or reset.

Drops are reset singly or in groups.



Annunciators are made up and carried in stock with drops marked from one up, with exception of elevator types. Any other markings, alphabetical indications, names, cabinet designs and finishes must be made up to order, for which there will be an additional charge.

Special drop markings, extra, per drop \$.40

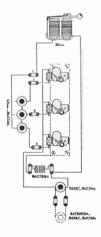
No extra charge for special drop markings on annunciators of special cabinet design and finish.

Placing of customer's names on annunciators extra ... \$6.00

Annunciators will be marked with numbers or letters which we consider suitable.

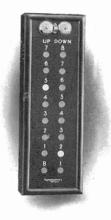
We can supply drop markings of $\frac{1}{2}$ or $\frac{3}{8}$ in numbers only not to exceed 3 figures.

Drop letters and numbers will be furnished in type sizes of $\frac{1}{4}$ and $\frac{5}{16}$.

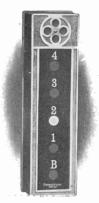




Type "L"



Type "A"



Type "LM"



No. 316W

ELEVATOR ANNUNCIATORS

ELECTRIC RESET

They are furnished with the signals arranged in one or two rows, as desired. If more than ten drops are required, signals will be furnished in double rows. All drops are electrically reset by a push button on the annunciator—an extension reset button can be located in any desired position. All parts including the drops, bell, and reset buttons are mounted on the back board so that when the front is removed they are accessible in their working conditions. No spring cover contacts are used. Furnished with bell or buzzer. Standard finish of Types L and A is ebony. Special finish extra.

ELEVATOR ANNUNCIATOR SINGLE ROW. TYPE "L" AND "LM"

Type L Wood Case		Type LM Metal Case		No. of	Over All Dimensions	
StyleNo.	Price	Style No.	Price	Drops	Type L	Type LM
723 W 724 W	\$28.35 31.80	813W 814W	\$31.15 35.00	3	53/8 x 143/4 53/6 x 143/	3½ x 12½
725W 726W	35.25 38.70	815W 816W	38.75 42.55	5	53/8 x 143/4 53/8 x 18	3½ x 12½
727W 728W	42.30 45.90	817W 818W	46.55 50.50	7	53/8 x 18 53/8 x 23 1/2	31/8 x 163/4
729W 7210W	49.65 53.40	819W 8110W	54.60 58.75	9	53/8 x 23 1/2	3½ x 21¼

ELEVATOR ANNUNCIATOR DOUBLE ROW. TYPE "A" AND "AM"

Type A Wood Case		Type AM Metal Case		No. of	Over All Dimensions		
StyleNo.	Price	Style No.	Price	Drops	Туре А	Type AM	
736W 738W 7310W 7312W 7314W 7316W 7318W 7320W 7324W 7330W	\$38.70 45.90 53.40 60.30 67.65 75.00 82.50 90.00 104.95 127.50	826W 828W 8210W 8212W 8214W 8216W 8218W 8220W 8224W 8230W	\$42.55 50.50 58.75 66.35 74.40 82.50 90.75 99.00 115.45 140.25	6 8 10 12 14 16 18 20 24	67% x 14 7/6 67% x 14 7/6 67% x 16 3/6 67% x 20 3/6 67% x 20 3/6 67% x 24 3/6 67% x 24 3/6 67% x 24 3/6 67% x 2811/6 67% x 3315/6	413/6 x 12 3/8 413/6 x 12 3/8 413/6 x 12 3/8 413/6 x 16 7/8 413/6 x 16 7/8 413/6 x 22 1/2 413/6 x 22 1/2 413/6 x 3011/6 413/6 x 3011/6 413/6 x 3011/6	

NOTE.—Types A and AM have double rows of drops, use two drops less than double number of floors including basement. Example—for basement and four floors, use an 8 drop.

METAL CASE

This style represents the neatest and most compact elevator annunciator. It is made up with drops mounted in single or double rows, the width of the single row type being only 3 inches. Illustration shows type "LM" with buzzer and sound opening protected by bug-proof screen. Standard finish is statuary bronze. Other finishes to order. Can be furnished with bell or buzzer, as specified.

ELEVATOR CALL BUTTONS

This is without question, the handsomest design yet placed upon the market. The lines are simple and in keeping with the finest appointed interiors. Our standard finish is statuary bronze. The parts are well arranged and the cover can be easily removed in case of installation or adjustment. Furnished in both flush and wall types.

Code Word

Pudto

No. 315W One button—for top or bottom floor \$4.00

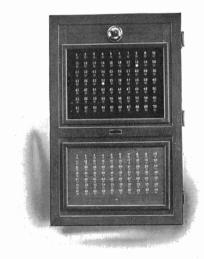
Pulze

No. 316W Up and down elevator push.... 5.10

Pudzo

No. 317W Up and down elevator push, flush

Note.—Connecticut annunciators will operate successfully with a 12 volt bell ringing transformer, please specify.



Type "R"



No. 303W



Туре "К"



Type "P"

RETURN CALL ANNUNCIATOR ELECTRIC RESET. TYPE "R"

The general cabinet design of our style "R" annunciator is the same as our style "T" telephone annunciator, page 32. The lines of this cabinet are rich and the finish strictly high class, in keeping with the most modern office furniture. Return call buttons are mounted in a panel under the drops and are numbered to correspond, the reset button being mounted at the bottom of the panel. Annunciators have hinged back and front. Stock finish, golden oak. Special finishes are extra. Wired for two direct and one common wire from each return call push to annunciator unless otherwise specified.—see page 34.

Style No.	Style No.	List Price
7412W 12-Drop\$111.30	7450W 50-Drop	.\$282.90
7416W 16-Drop 130.00	7456W 56-Drop	. 315.30
7420W 20-Drop 148.40	7464W 64-Drop	. 352.50
7425W 25-Drop 171.60	7472W 72-Drop	. 404.40
7430W 30-Drop 194.70	7481W 81-Drop	. 431.30
7436W 36-Drop 222.00	7490W 90-Drop	. 473.20
7442W 42-Drop 250.50	7400W 100-Drop.	519.50
Extra drops over 100 each		\$4.50

AUTOMATIC SELF-SETTING DEVICE

All annunciators can be arranged with a self-resetting device, so that the last call will reset the previous drop displayed.

COMBINATION RETURN CALL AND PUSH

This is without question the handsomest design yet placed upon the market. The lines are simple and in keeping with the finest appointed interiors. Standard finish is statuary bronze. Special finishes to order. The parts are well arranged and the cover can be easily removed in case of installation or adjustment. Furnished in both flush and wall types, as illustrated. Sound opening is protected by a bug-proof brass screen.

Code Wo	ord Lis	t Price
Pwot	No. 303W Return call buzzer and push	\$6.90
Ptow	No. 304W Return call bell and push	6.90

TYPE "K" TWO-DROP DOOR INDICATOR

Our special two-drop indicator is designed principally for house use the targets corresponding to the front and rear doors. It is generally located in the kitchen. Only the last call made will be registered. It is unique in size and design. Furnished with bell or buzzer, as ordered.

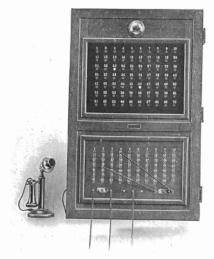
Code Wo	rd				L	ist Price
Akoz	842W	2-Drop,	each.	 	 	\$7.10

TYPE "P" METAL CASE ELECTRIC RESET

Our type "P" compact annunciator is put up in a metal case with hinged cover—capacity two to four drops. The reset button is mounted on side of case, dimensions of case $7 \times 5\frac{1}{4}$ inches. Finish, dull black. Furnished with bell.

Style No.	List Price
852W 2-Drop	\$20.70
853W 3-Drop	
854W 4-Drop	25.70
Automatic self-setting device extra per drop	48

Note.—Connecticut annunciators will operate successfully with a 12 volt bell ringing transformer, please specify.



Type "T"

TELEPHONE ANNUNCIATORS ELECTRIC RESET

This annunciator is fitted with the most substantial and efficient drop in the market.

These instruments are equipped with the Connecticut double spool annunciator drop signals and are designed for a low priced switchboard equipment for schools, hotels, apartment houses, etc. Standard finish of case is golden oak. Annunciators are not regularly fitted with intercommunicating cord pairs, unless so ordered. They are made up and wired for two different systems, Nos. 30 and 31. No. 30 requires a push button on phones for calling. No. 31 is automatic, removing receiver displays signal at annunciator.

LIST PRICES, TYPE "T" SYSTEM 30

Prices include Operator's Transmitter and Receiver attached to Case.

7512W—12 Drop\$111.30	7550W 50 Drop\$282.90
7516W—16 " 130.00	7556W— 56 " 315.30
7520W—20 " 148.40	7564W— 64 " 352.50
7323 W23 [7].60	/5/2W /2 404.40
7530W—30 " 194.70	7581W— 81 " 430.70
	7590W— 90 " 473.20
7542W—42 " 250.50	7500W—100 " 519.50
Extra for desk telephone or hand	d microphone operators set 8.70

Intermediate sizes bear price of next highest size listed.







No. 39 W

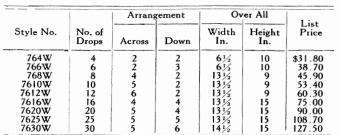
CROSS CONNECTING CORD PAIRS

For connecting telephones through annunciator

	R. and L. keys, no supervisory signals, R. and L. keys, single supervisory.	\$13.30 16.30
No. 39W-For System	s 30 and 31	\$13.70
No. 60W-For System	s 30 and 31	15.20

SURFACE WALL TYPE ANNUNCIATOR ELECTRIC RESET. TYPE "S"

The cabinet design of our type "S" annunciator is rich and in keeping with the most modern office furniture. The electric reset button is mounted on the bottom of the case—an extension reset button, however, can be located in any desired position. Furnished with bell or buzzer.



Standard Finish Golden Oak and Mahogany. Special finishes extra. For each additional drop over 30 add. \$4.50. Automatic self-setting device extra, per drop \$.48. See page 32.

TYPE "G" DESK ANNUNCIATOR ELECTRIC RESET



Type "S"



Type "G"

15 18 19 20 25 23

Type "O"

18 19 20 23

Type "W"



No. 75W Connecticut Multi-Phone



No. 100W

HOSPITAL ANNUNCIATORS

ELECTRIC RESET

We are prepared to furnish special service for hospitals. The usual method is to have one Master Annunciator which is placed in the super-intendent's office or head nurses' quarters or both, a number of smaller annunciators are placed in the various wards. Each patient is supplied with a pendant push outfit (see page 26), pushing this pendant button operates a common drop on the Master Annunciators, also in the nurses' ward indicating the bed number. When the nurse returns to the patient she pushes a button on the pendant wall plate which restores electrically all the corresponding drops on the various annunciators. This outfit serves as an absolute check on the service rendered.

Telephone service can also be installed, if desired—our hand telephone can be arranged to plug in on a special pendant push plate.

HOSPITAL WALL ANNUNCIATOR

TYPE "O"

Style No.	No. of	Arrangement		Ove	Price	
	Drops	Across	Down	Width In.	Height In.	rnce
784W	4	2	2	61/2	81/2	\$31.8
786W	6	2	3	61/2	81/2	38.7
788W	8	4	2	131/2	9	45.9
7810W	10	5	2	131/2	9	53.4
7812W	12	6	2	131/2	9	60.3
7816W	16	4	4	113/4	12	75.0
7820W	20	5	4	113/4	12	90.0
7825 W	25	5	5	171/4	16	108.7
7830W	30	6	5	171/4	16	127.5
7836W	36	6	6	171/4	16	154.5
7840W	40	8	5	171/4	16	172.5

Standard finish is dark golden oak and mahogany.

Automatic self-setting device extra, per drop. See page 31.

Note.—Connecticut annunciators will operate successfully with a 12 volt bell ringing transformer, please specify.

HOSPITAL FLUSH ANNUNCIATOR

TYPE "W"

C+1-	No. of	Arrangement		Ov	er All	Price	Price
Style No.	Drops	Across	Down	Width In.	Height In.	Wood Mat.	Metal Mat.
794W	4	2	2	11	13	\$66.40	\$66.40
796W	6	2	3	11	14	75.60	75.60
798W	8	4	2	141/2	13	84.80	84.80
7910W	10	5	2	161/4	13	95.20	95.20
7912W	12	6	2	18	13	104.40	104.40
7916W	16	4	4	141/2	16	124.80	124.80
7920W	20	5	4	161/4	16	148.00	148.00
7924W	24	6	4	18	16	172.00	172.00
7930W	30	6	5	18	18	208.00	208.00
7936W	36	6	6	18	20	244.00	244.00
7940W	46	8	5	211/2	18	268.00	268.00

Standard finish for wood mats, dark golden oak and mahogany.

Standard finish for metal mats, brush brass.

Metal outlet boxes for Type W, are not required, but can be furnished at a slight additional charge.

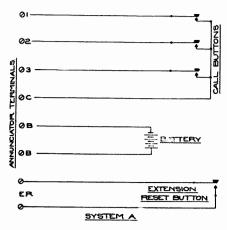
CONNECTICUT MULTI-PHONE

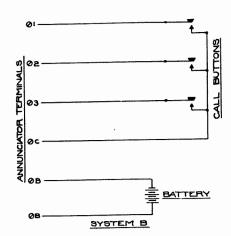
Note.—Cords are furnished with No. 4504A snap clips to fit receivers with outside binding posts, also No. 4589A with "U" clips to fit type with concealed binding posts. In ordering, specify style of cord required.

No. 100W CHOKE COIL

33

CONNECTICUT ANNUNCIATOR DIAGRAMS ALL ELECTRIC RESET





For Type "S" Annunciator, See page 32. System-A

Regular service with Reset button mounted on case, only one reset button required Operation for any size annunciator (Connecticut Patent). Extra terminals for extension reset button. Two or more annunciators can be operated in multiple if specified on order.

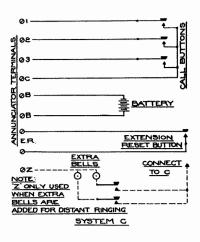
Diagram on request.

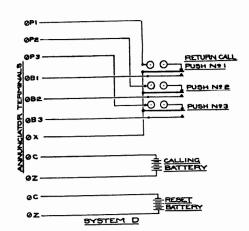
Battery One set of 4 or more dry cells or 12 volt bell ringing transformer.

Automatic Self Setting, see page 31. System-B

Previous calls automatically reset by last call—only the last call will indicate. Operation

Battery One set of 4 or more dry cells, or 12 volt bell ringing transformer.





System-C Annunciator with additional Bells and Pushes.

Operation System arranged for extra bells and push buttons, without interfering with annunciator drops—all operated from one set of batteries.

One set of 4 or more dry cells. Battery

System-D Return Call, see page 31. Two direct and one common wires. Can be supplied for

2 common and one direct.

Operation Call from distant push, will throw drop at annunciator. Buttons at annunciator

can call combination Bell and Push in Rooms.

Battery One set of 4 or more dry cells, or 12 volt bell ringing transformer.

SYSTEM NO. 1

Automatic Non-Interfering Intercommunicating System Common Return

Suitable for: Factories, Schools, Stores, Large Offices, Hospitals, Residences, etc.

This is a non-interfering intercommunicating system. Any station can communicate with any other on this system. The operation is as follows:

To call and talk with the desired station, press the button corresponding to the party desired. After calling, the button returns to talking position. Hanging up the receiver on wall telephone restores button to normal position. Buttons of desk phone 3812W, are automatically restored by incoming call. In answering a call, there are no special answering buttons to press.

While this system has a common return circuit, we have, by special design of the instruments, secured a circuit which can be considered as non-interfering if properly installed. In fact if any induction should occur, it would be so slight that it would not interfere with the simultaneous use of several groups of stations. This induction is liable to increase with the length of the cable. For positively non-interfering intercommunicating service, we recommend our full metallic systems Nos. 3592W, 5692W, 5992W, 3822W, 5622W, or 3892W, pages 4, 5 and 6.

Telephones: Connecticut automatics Nos. 3512W, 5612W, 5902W, 3802W, 5602W, or 3812W, pages 4, 5 and 6, wall, flush or desk types.

Cable Specifications: See page 7. Use a cable with as many line wires as there are telephones on the system, plus four battery wires. All wires are branched to each telephone, and four battery wires are branched to the batteries. For outside or wet places only lead covered cable should be used. The size of battery wires for large systems should be larger than for small ones, Therefore, for cable up to 300 feet, use No. 18; from 300 to 700 feet, use No. 16; 700 feet or over, use No. 14.

Connecticut Junction Boxes should be placed at the intersection of all cables and all terminals numbered or lettered. (See page 7.)

Batteries: For talking, two dry batteries—for ringing batteries, three or more dry cells, according to the length of cable. Batteries are all centrally located.

SYSTEM No. 3

Automatic Non-Interfering Intercommunicating System Metallic Circuit

Suitable for: Factories, Schools, Stores, Large Offices, Hospitals, Residences, etc., where it is important that the system should be absolutely free from cross talk or induction.

This is a full automatic non-interfering system. Any station can connect with any other, and any number of different conversations can be held at the same time without interference. The operation is as follows:

To communicate with the desired station, press the button corresponding to the party desired. After calling, the button returns to talking position. Hanging up the receiver restores the button to normal position.

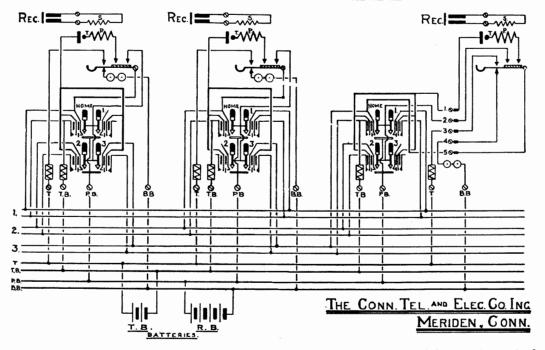
Telephones: Connecticut metallic circuit automatics, Nos. 3592W, 5692W, 5992W, 3822W, 5622W or 3892W, pages 4, 5 and 6, wall, flush or desk types.

Cable Specifications: See page 7. Use a cable with as many twisted pair of wires as there are telephones on the system, plus four battery wires. All battery wires are branched to the battery. For outside or wet places only lead covered cable should be used.

Connecticut Junction Boxes should be placed at the intersection of all cables and all terminals numbered or lettered. (See page 7.)

Batteries: For talking, two dry cells—for ringing, three or more dry cells according to the length of the cable. All batteries are centrally located.

System No. 3 No. 3. Metallic Automatic Non-Interfering System.



NOTE:—When trunk buttons for exchange connection are specified, a special diagram is required which will be sent on request.

SYSTEM No. 6

Multiple Intercommunicating System Common Talking—Selective Ringing

Suitable for: Factories, Stores, Schools, Residences, etc.

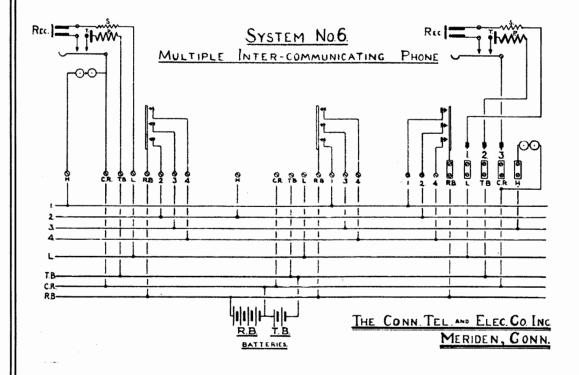
While this system is intercommunicating it is not, however, non-interfering, the talking apparatus of all telephones being connected to one pair of wires limiting the use of only two telephones on the system at the same time. The ringing of these telephones is selective and any one of them can be called by pressing the button corresponding to the party desired.

Telephones: Connecticut multiple phones. Nos. 520W, 5200W, 5210W, 5220W, 5400W, 62W and 32W, pages 12 and 13, wall, flush or desk types.

Cable Specifications: See page 7. All wires are branched to telephones and the four battery wires are branched to the batteries. For outside or wet places only lead cable should be used.

Connecticut Junction Boxes should be placed at the intersection of all cables and all terminals numbered or lettered. (See page 7.)

Batteries: For talking, two dry cells—for ringing, three or more dry cells according to the length of the cable. All batteries are centrally located.



SYSTEM No. 10-C

Multiple System

Common Talking—Multiple Ringing

Suitable for: Factories, Offices, Stores, Residences, etc., where a small system is required.

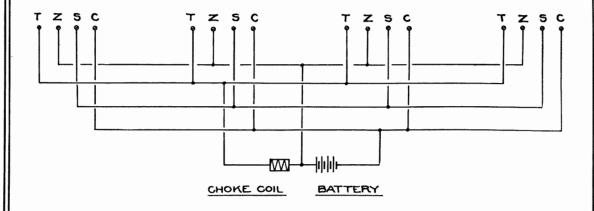
This system is both multiple talking and ringing. The talking apparatus of all telephones is connected to one pair of wires thus limiting the use of only two telephones on the system at the same time. All bells ring at the same time. A code of signals is used, i. e., two rings for station No. 2, and three rings for station No. 3, etc.

Telephones: Connecticut telephones, Nos. 39W, 41W, 2500W, 647W, 645W and 60W, pages 16 and 17, wall, flush or desk types, all of which are furnished with 20 ohm bells.

Cable Specifications: For dry places use a cable composed of four No. 18 B & S copper wires for a circuit up to 500 feet. See No 487 W. cable page 7.

Batteries: Use three to four batteries for four stations or less. Add batteries as required for additional telephones and length of lines.

LINE WIRING FOR Nº 10 C DIAGRAM



SYSTEM No. 11

Apartment House-Non-Interfering

Suitable for: Apartment Houses where service is desired only between vestibules and suites, but where it is an advantage to prevent any suite phone from listening to conversation between vestibule and another suite.

This is a non-interfering apartment house system giving service from vestibule to the different suites. When conversation is being held between the vestibule and any suite phone, none of the others can listen in.

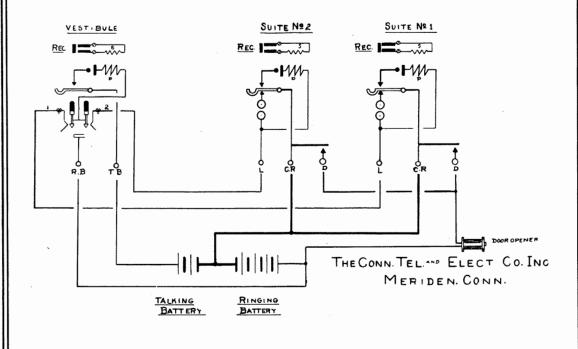
To call any suite from vestibule, press the button corresponding to the suite desired. After calling, the button returns to talking position. Pressing another button or hanging up receiver restores the first to normal position. A button is placed on each suite telephone to operate an electric door opener, if desired.

Telephones: For vestibule telephones, No. 85W, page 11, with or without letter boxes. For suites, single point telephones, Nos. 39W, 41W, 2500W, 645W, 647W and 60W, pages 16 and 17, wall, flush or desk types.

Cable Specifications: Run one common wire CR to all suite telephones and to common side of each battery;—one direct wire L from each suite telephone to vestibule—one direct wire RB from vestibule to ringing battery—one direct wire TB from vestibule to talking battery. If electric door opener button is required on suite phones, run one extra wire from each suite to door opener. Use No. 18 damp-proof office wire for dry places, and rubber-covered wire for wet places. See No. 485W, No. 486W, Cable page 7.

Batteries: For talking, two dry cells—for ringing, three or more dry cells according to the distance between vestibule and suites. Batteries are all centrally located.

Nº 11- NON-INTERFERING APARTMENT HOUSE SYSTEM



SYSTEM No. 12-A

Centerphone System—Common Talking

Central and Outlying Stations

Suitable for: Factories, Schools, Stores, Offices, Hospitals, Residences, etc.

This system consists of a central telephone known as the centerphone and also outlying stations. This central station may call all the outlying stations, and any of the outlying stations may call the centerphone.

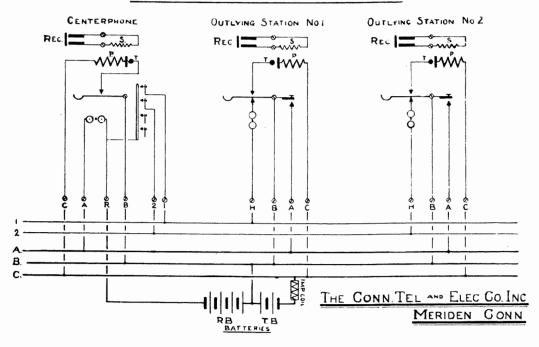
Should any outlying stations desire to talk with one another, they may do so by calling central who will push the button corresponding to the required station. Since this system has a common talking circuit, stations will then be able to converse.

Telephones: For centerphone, use Connecticut multiple telephones, Nos. 520W, 5270W, 5200W, 5210W, 5220W, 5400W, 6270W or 32W, pages 8 and 9, wall, flush or desk types. For outlying stations use Connecticut single point telephones, Nos. 39W, 41W, 147W, 2500W, 60W, 645W or 647W, pages 16 and 17, wall, flush or desk types. One choke coil is required with this system at the battery.

Cable Specifications: One direct wire from each outlying station to centerphone. Two common wires, B and C, branched to all outlying stations, centerphone and batteries; one common wire branched to all outlying stations and centerphone; one direct wire, R, from centerphone to batteries. We recommend the use of No. 18 damp-proof office wire for dry places. Only rubbercovered wire should be used for outside or wet places. See No. 487 W, Cable page 7.

Batteries: For talking, two dry cells—for ringing, three or more dry cells, according to the distance between central and outlying stations.

No. 12. A. CENTERPHONE SYSTEM



SYSTEM No. 19

Centerphone System—Common Talking

Suitable for: Schools.

This system consists of a central phone and outlying stations. The central station or centerphone may call all the outlying stations and any of the outlying stations may call the central. There is located at the central an annunciator with as many drops as there are outlying stations. When an outlying station calls central, the call is recorded on the annunciator so that should the operator be absent from central at the time the call is made this station may be called when he returns.

If one outlying station desires to talk with another they may do so by calling central, who will push button of party desired—stations can then converse for the reason this system has a common talking circuit.

Telephones: For central, Connecticut multiple telephones, wall, flush or desk types Nos. 520W, 5200W, 5210W, 5270W, 5220W, 5400W, 62W or 32W, pages 8, 9 and 17 with our type S annunciator, page 32. For outlying stations use Nos. 39W, 41W, 147W, 2500W, 645W, 647W or 60W, pages 16 and 17. One choke coil is required with this system.

Cable Specifications: No. 18 damp-proof office wire may be used in dry places, but only rubber-covered wire should be used for outside or wet places. Run two wires direct from each outlying station to central, two common wires, C and T, branched to all outlying stations, central and batteries; one wire from central to batteries. See No. 487W, cable page 7.

Batteries: For talking, use two dry cells—for ringing, three or more dry cells according to the distance between stations.

No. 19.

MERIDEN. CONN.

SCHOOL SYSTEM

CENTRAL STATION BUTTON BOARD TELEFRONE RECLEMENT RECLEME

BATTERIES

SYSTEM No. 21

Apartment House-Common Talking

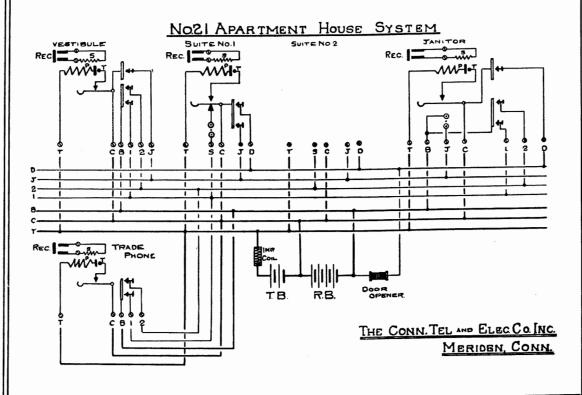
Suitable for: Apartment Houses where service is desired between vestibules, suites, janitor and trade telephone, but where it is not important that the system be non-interfering.

This is a common talking apartment house system. All suites and janitors may be called from the vestibule and also from the trades' phone. The janitor may call all suites and all suites can call the janitor. As this system has a common talking circuit, only two telephones on the entire system can be in use at one time. Suite phones can intercommunicate by pushing the corresponding buttons on janitor's phone simultaneously. On the vestibule and trade telephones there are buttons for calling all suite phones or janitor. Each suite telephone is equipped with a button for calling janitor. When desired, a button for operating an electric door opener is placed on each suite telephone.

Telephones: For vestibule, use vestibule telephones, Nos. 83W or 84W, page 13 with or without letter boxes. For janitor's telephone, No. 332W, page 15. For trade telephone, No. 330W, page 15. For suite telephones, single point telephones, Nos. 41W, 2500W, 60W, 645W, 647W, and 39W, pages 16 and 17, wall, flush or desk types. One choke coil is required with this system.

Cable Specifications: For dry places, No. 18 damp-proof office wire may be used but in wet places only rubber-covered wire should be used. Run one direct wire from each suite to vestibule, branched to trade phone and janitor. One common wire, J, branched to all suites, vestibule, janitor and trade phone. Two common wires, T and C, branched to all suites, vestibule, janitor, trade phone and batteries. One common wire, B, branched to vestibule, janitor, trade phone and batteries. If electric door opener is required, run one common wire, D, branched to all suites and door opener and one direct wire from door opener to batteries. See page 7 for cable.

Batteries: For talking, two dry cells—for ringing, three or more dry cells according to the distance from vestibule to suite telephones. All batteries are centrally located.



SYSTEM No. 22

Apartment House—Common Talking

Suitable for: Apartment Houses where service is only desired between vestibule and suites and where it is not important that the system be non-interfering.

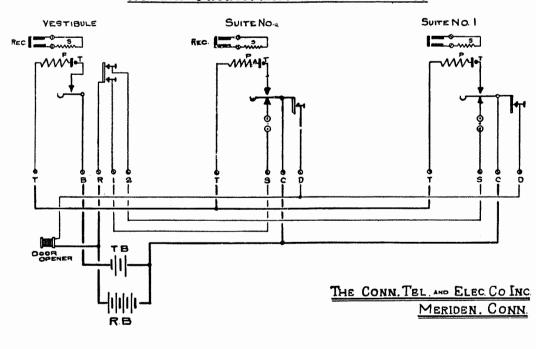
This is a common talking circuit apartment house system giving service from the vestibule to the different suites. As it is not non-interfering, any suite can listen to a conversation between vestibule and any other suite. The vestibule telephone is equipped with buttons for calling all suites. If desired, a button is placed on each suite telephone for operating an electric door opener.

Telephones: For vestibule telephones, Nos. 83W, 84W, and 74W, pages 11 and 12, with or without letter boxes. For suites, single point telephones, Nos. 39W, 41W, 2500W, 60W, 645W, 647W, pages 16 and 17, wall, flush or desk types.

Cable Specifications: Use No. 18 damp-proof office wire for dry places and rubber-covered wire for wet places. Run one direct wire from each suite to vestibule. One common wire T, branched to all suites and vestibules. One common wire, C, branched to all suites and batteries. Two direct wires, B and R, from vestibule to batteries. If electric door opener is required, run one common wire, D, branched to all suites and door opener and one direct wire from door opener to batteries. See No. 487W cable page 7.

Batteries: For talking, two dry cells—for ringing, three or more dry cells according to the distance between vestibule and suites. Batteries are all centrally located.

No. 22 Apartment House System.



SYSTEM No. 24

Apartment House—Common Talking Cordless Vestibule Sets

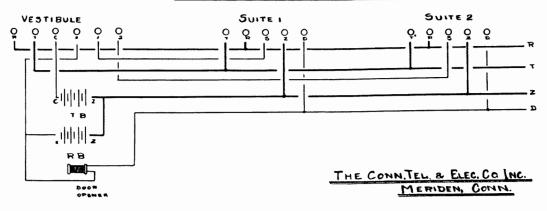
Suitable for: Apartment Houses where cordless service is desired between vestibule and suites only and where it is not important that the system be non-interfering. It is somewhat similar in operation to our system No. 22, page 44. Our cordless set is used for the vestibule and is unique in the fact that the circuit does not require a receiver switch hook. It is also equipped with button for calling all suites. If desired a button is placed on each suite telephone for operating an electric door opener.

Telephones: For vestibule telephone No. 86W, page 12, with or without letter boxes. For suites, Nos. 39W, 645W, 647W, 60W, 41W, and 2500W, pages 16 and 17, wall, flush, or desk types.

Cable Specifications: Use No. 18 damp-proof office wire for dry places and rubber-covered wire for wet places. Run one direct wire from each suite to vestibule. One common wire T, branched to all suites and vestibules. One common wire R, branched to all suites. Two direct wires C and X, from vestibule to batteries. One common wire from all suites to batteries. If electric door opener is required, run one common wire D, branched to all suites and door opener and one direct wire from door opener to batteries. See page 7 for cable.

Batteries: For talking, six dry cells—for ringing, three or more dry cells, according to the distance between vestibule and suites. Batteries are all centrally located.

No 24 APARTMENT HOUSE SYSTEM



SYSTEM No. 25

Apartment House-Common Talking

This is a common talking apartment house system similar to operation in our No. 21 page 43 with the exception our type J telephone annunciator is used at the janitor's quarters instead of No. 332W janitor's telephone. (See page 15). When the janitor is called the number of the station calling is registered on the annunciator so in case of calls being made during his absence, same will be recorded for attention upon his return. On the vestibule and trade telephones there are buttons for calling all the suite phones and janitor. Each suite telephone is equipped with button for calling janitor. If specified a button is placed on each suite phone to operate electric door opener at vestibule. As this system has a common talking circuit, only two telephones on the entire system can be in use at a time.

Sectional Talking System

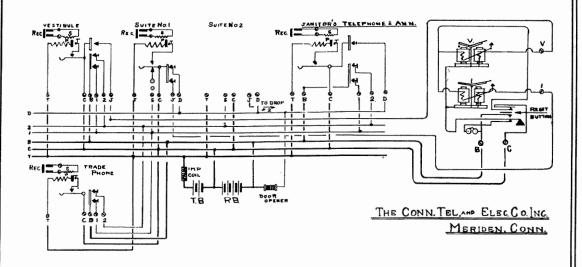
Note: If desired this system can be divided into sections with a separate talking circuit for each section so that a conversation taking place in one section cannot be interrupted by conversation from another section. With this outfit a special janitor's annunciator is required.

Telephones: For vestibule telephones, our No. 83W or 84W, page 13, with or without letter boxes. For trade telephone, No. 330W, page 15. For janitor's telephone, type D telephone annunciator outfit, page 15. For suite telephones, Nos. 41W, 2500W, 60W, 645W, 647W and 39W, pages 16 and 17. One No. 100W choke coil is required with this system.

Cable Specifications: For dry places, No. 18 damp-proof office wire may be used but in wet places only rubber-covered wire should be used. Run one direct wire from each suite to vestibule, branched to trade phone and janitor. One direct wire, J, from all suites, to janitor. Two common wires, T and C, branched to all suites, vestibule, janitor, trade phone and batteries. One common wire, B, branched to vestibule, janitor, trade phone and batteries. If electric door opener is required, run one common wire, D, branched to all suites and door opener and one direct wire from door opener to batteries. See page 7 for cable.

Batteries: For talking, two dry cells—for ringing, three or more dry cells, according to the distance from vestibule to suite phones. All batteries are centrally located.

NO25 APARTMENT HOUSE SYSTEM



SYSTEM No. 26

Apartment House-Non-Interfering

Suitable for: Apartment Houses where service is desired between vestibule, suites, janitor and trade telephones and where it is important that any number of conversations can be carried on at the same time without interference. All suites and janitor may be called from the vestibule and also from the trade telephone. The janitor may call all suites and vice versa. When the janitor is called the number of the station calling is registered on the annunciator so in case of calls being made during his absence, same will be recorded for attention upon his return. If desired cord pairs will be furnished so that the suites can intercommunicate with each other through the annunciator.

Note: When two vestibule telephones are used on one system, a special diagram will be required.

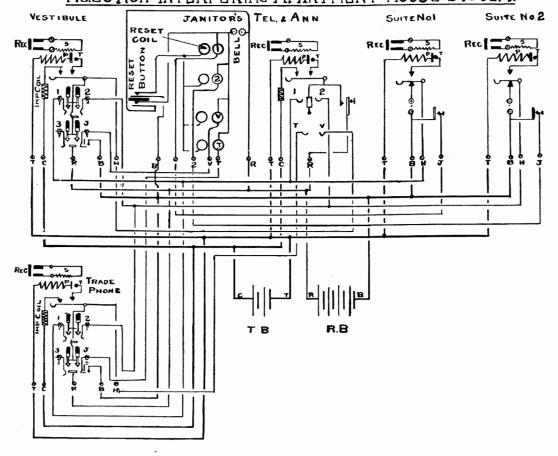
Telephones: For vestibule telephone, No. 85W, page 11, with or without letter boxes. For trade telephone, No. 3512W without bells, page 4. For suite telephones, Nos. 41W, 2500W, 60W, 645W, 647W and 39W, pages 16 and 17. For janitor's telephone, type J. page 15.

Cable Specifications: Use No. 18 damp-proof office wire for dry places and rubber-covered

Cable Specifications: Use No. 18 damp-proof office wire for dry places and rubber-covered wire for wet places. One direct wire from each suite to vestibule branched to janitor and trade telephone. One direct wire from each suite to janitor. One common wire, T, branched to all suites, janitor, vestibule, trade telephone and batteries. One common wire, B, branched to all suites, vestibule, trade telephones and batteries. Two common wires, C and R, branched to janitor, vestibule, trade telephones and batteries. Two direct wires from vestibule to janitor. Two direct wires from trade telephone to janitor. If electric door opener is desired one common wire from all suites to door opener and one direct wire from door opener to batteries. See page 7 for cable.

Batteries: For talking, two dry cells—for ringing, three or more dry cells according to the distance between vestibule and suites. All batteries are centrally located.

No.26 Non-Interfering Apartment House System.



SYSTEM No. 27

Apartment House—Common Talking Cordless Vestibule Set

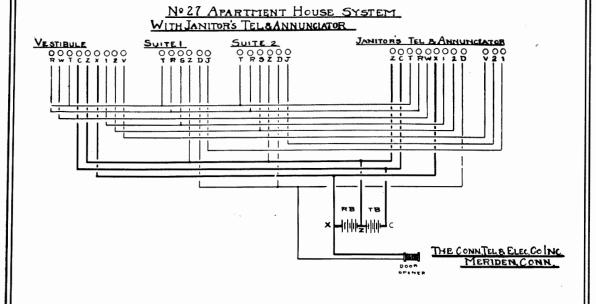
Suitable for: Apartment Houses where cordless service is desired between vestibule, suites and janitor, and where it is not important that the system be non-interfering. All suites and janitor may be called from the vestibule. The janitor may call all suites and all suites can call janitor. As this system has a common talking circuit, only two telephones on the entire system can be in use at the same time. When the janitor is called the number of the station calling is registered on the janitor's annunciator so in case of calls being made during his absence, same will be recorded for attention upon his return. To talk to vestibule, throw key to "V" position—to talk to suite, throw key to "S" position. If desired a button for operating electric door opener is placed on all suite telephones.

We can furnish No. 332W janitor's telephone in place of janitor's annunciator if so ordered.

Telephones: For vestibule telephone, our No. 86W, page 16, with or without letter boxes. For suite telephones, Nos. 41W, 2500W, 60W, 645W, 647W or 39W, pages 16 and 17. For the janitor's outfit, our type D annunciator, page 15.

Cable Specifications: Use No. 18 damp-proof office wire for dry places and rubber-covered wire for wet places. One direct wire from each suite to vestibule branched to janitor's telephone. One direct wire from each suite to janitor. One common wire, T, branched to all suites, janitor and vestibule telephone. One common wire, R, branched to all suites, vestibule and janitor's telephones. One common battery wire, Z, branched to janitor, vestibule, suites and batteries. Two direct wires, W and V from vestibule to janitor. Two battery wires, C and X, from vestibule telephone to janitor to battery. If electric door opener is desired one common wire from all suites to door opener and one direct wire from door opener to batteries.

Batteries: For talking, six dry cells—for ringing, three or more dry cells, according to the distance between vestibule and suites. All batteries are centrally located.



SYSTEM No. 30

Telephone Annunciator

Two Direct and One Common Wire

Suitable for: Hotels, Schools, etc.

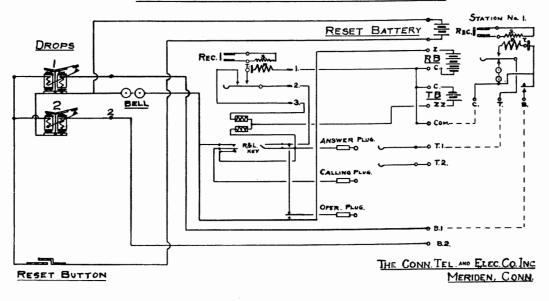
This system consists of a central telephone annunciator to be placed in the office of a hotel and connected to telephones in the different rooms. All rooms can call the annunciator and the annunciator can call all rooms. To call a room insert the operator's plug in corresponding jack and press key to ringing position. When a call is made, the annunciator indicates the room calling and the operator's plug is then inserted in the corresponding jack to answer call. Rooms may be connected together by the use of cross connecting cords and plugs if desired. This system is non-interfering.

Telephones: For central, style T, telephone annunciator, page 32; for room phones, Nos. 39W, 41W, 127W, 2500W, 60W, 645W and 647W, pages 16 and 17.

Cable Specifications: This system requires two direct wires from each room to the annunciator and one common wire branched to all rooms and the annunciator. Four battery wires from annunciator to batteries. For new work we recommend using a three-wire cable from each room to the annunciator, one wire of each of these cables being made common at the annunciator. This cable is made of three No. 18 annunciator wires with rubber tape and weather-proof braid over all. However, this cable should only be used in dry places. For wet places or conduit work only rubber-covered wire should be used. See page 7 for cable.

Batteries: For talking, two dry cells—for ringing, three or more dry cells according to distance from central to rooms. All batteries are centrally located.

NO. 30 ANNUNCIATOR TELEPHONE SYSTEM.



SYSTEM No. 31

Telephone Annunciator

Two Common and One Direct Wire-Automatic Signal

Suitable for: Hotels, Schools, etc.

This system is non-interfering and consists of a central telephone annunciator to be placed in the office of a hotel and connected to telephones in the different rooms. All rooms can call the annunciator and the annunciator can call rooms. To call a room insert the operator's plug in corresponding jack and press key to ringing position. When a call is made the annunciator indicates the room calling and the operator's plug is then inserted in the corresponding jack to answer call. Rooms may be connected together by use of cross connecting cords and plugs if desired. A supervisory signal is so connected to each cord pair that it indicates to the operator when both parties have finished.

Telephones: For central, Style T, telephone annunciator, page 32; for rooms, Nos. 39W, 41W, 2500W, 60W, 645W and 647W, pages 16 and 17, wall, flush or desk types.

Cable Specifications: This system requires one direct wire from each room to the annunciator and two common wires branched to all rooms and annunciator. Six battery wires from annunciator to batteries. For new work we recommend using a three-wire cable from each room to the annunciator, two wires of each of these cables being made common at the annunciator. This cable should consist of three No. 18 annunciator wires with rubber tape and weather-proof braid over all. However, this cable should only be used in dry places. For wet places or conduit work only rubber-covered wires should be used. See page 7 cable.

Batteries: For talking, two dry cells—for ringing, two sets of three or more dry cells according to the distance from central to rooms. All batteries centrally located.

No.31 ANNUNCIATOR TELEPHONE SYSTEM

DROP SINGLE STROKE OPERATOR'S SET VIGRATING REC STATION 2 STATION 1 REC STATION 2 STATION

49

THE CONN. TEL . AND ELEC. CO. INC.

MERIDEN, CONN.

SYSTEM No. 32

Three-Wire Automatic Signal Switchboard

Suitable for: Hotels, Factories, Schools, Colleges, Hospitals, etc.

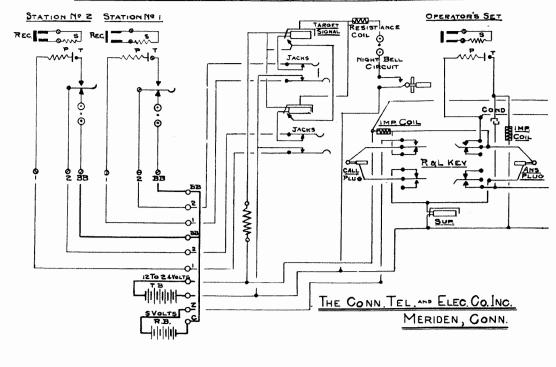
This system consists of a central switchboard of the common battery target signal type with outlying stations. To call central, remove the receiver from the hook. This will display a target signal on the switchboard corresponding to the line which is calling. The operator then inserts the answering plug of one of the cord pairs in the corresponding jack, and places the key in the listening position, which connects operator with line. If another line is wanted, the operator inserts the calling plug of the same pair in the jack of the desired line, places the key in ringing position which rings the telephone required. The key then restores to the normal position. A supervisory signal is so connected to each cord pair that it indicates to the operator when both parties have finished. Switchboards can be equipped with double supervisory signals for each cord pair, so as to show the condition of each line separately when two are connected.

Telephones: For central, switchboards equipped with target signals, either single or double supervisory, Types A, B, C, E, and F, pages 18 and 19. For outlying stations, single point telephones Nos. 39W, 41W, 147W, 2500W, 60W, 645W and 647W, pages 16 and 17, wall, flush or desk types.

Cable Specifications: Run three No. 19 twisted rubber-covered wires from each telephone to switchboard and two pair No. 14 rubber-covered wires from switchboard to batteries. See page 7 for cable.

Batteries: In places where storage cells can be used we recommend an 18 to 24-volt battery for the talking and 8 volts for the ringing.

NO.32 SWITCHBOARD SYSTEM AUTOMATIC SIGNAL



SYSTEM No. 33

Two-Wire Automatic Signal Switchboard

Suitable for: Hotels, Factories, Schools, Colleges, Hospitals, etc.

This system consists of a central switchboard with outlying stations of the automatic signal common battery type. To call central, remove the receiver from the hook. This will display the signal on the switchboard corresponding to the line which is calling. The operator then inserts the answering plug of one of the cord pairs in the corresponding jack and places the key in the listening position which connects operator with line. If another line is wanted the operator inserts the calling plug of the same pair in the jack of the desired line, places the key in ringing position, turns hand generator unless power generator is used, which rings the telephone wanted. The key then restores to normal position. A supervisory signal is so connected to each cord pair that it indicates to the operator when both parties have finished. Switchboards can be equipped with double supervisory signals for each cord pair, these operate independently of each other so as to show the condition of each line when two are connected.

Telephones: For central, Connecticut switchboards, Styles C, A, B, E, and F pages 18 and 19. For outlying stations, Nos. 41W, or 200W, page 20.

Cable Specifications: Run one pair No. 19 twisted rubber-covered wires from each telephone to switchboard and one pair No. 14 rubber covered wires from switchboard to batteries. See page 7 for cable.

Batteries: We recommend the use of a 12 to 24 volts of storage battery.

SYSTEM NO 33 TWO WIRE COMMON BAT TERY SWITCHBOARD SYSTEM STATION NO STATION NO Z OPERATOR'S SET REC S REC HW MM **t**70.0 **Ò**•⊙•⊙ MAIN BATTERY THE CONN. TEL MO ELEC CO INC 12 TO 24 VOLTS MERIDEN CONN. POWER GEN HAND GENERATOR

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SYSTEM No. 37

Bridging and Series Magneto Switchboard

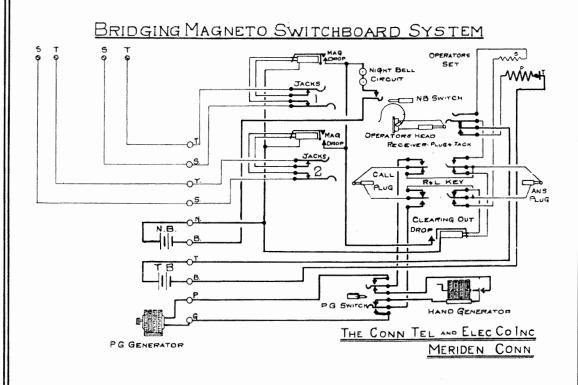
Suitable for: Small Public Exchanges, Farmers' Lines, Large Factories, Colleges, etc.

This is the well known magneto switchboard system and is made for either bridging or series line. The wiring and operation of switchboard is the same except that the drops for series lines are of a low resistance. Ringing any telephone operates a self-restoring drop on switchboard indicating the line calling. The operator then inserts the answering plug of one of the cord pairs in the corresponding jack, which restores the line drop, he then places the key in the listening position, which connects operator with line. If another line is wanted, the operator inserts the calling plug in the jack of the desired line, places the key in ringing position, turns the hand generator (if a power generator is not used) which rings the telephone required. The key then restores to normal position. A clearing out drop is so connected to each cord pair that it shows when stations ring off. Our magneto switchboards are equipped with 5-bar hand generators for ringing, but wired so that a power generator or pole changer may be used

Telephones: Use magneto telephones, Nos. 140W, 900W and 500W, pages 20 and 21, either bridging or series, wall or desk types.

Wiring Specifications: Use two wires for each line or one wire and ground. Use No. 19 twisted pair rubber-covered for all inside work. See page 7 for cable.

Batteries: For talking, two dry cells; for night bell, two dry cells.



INDEX OF SYSTEMS

We group herewith for quick reference, a number of our standard systems. If there is any further information required as regards proper selection of any system, it will be cheerfully given. With inquiry furnish if possible a sketch showing the proposed locations of the instruments, and approximate distances between them, also just what service is required, and we will be pleased to recommend what system will best cover your requirements.

Single Point or Two Line Instruments:—Designed for service between two points not far distant, see diagrams page 3. For lines over 1,000 feet, see magneto phones, pages 20 and 21.

Multiple Systems:—Designed for small systems where more than two phones are required on a line. All bells ring simultaneously when calling. This system has a common talking circuit, see diagrams pages 3 and 38.

Intercommunicating Systems:—On pages 35, 36 and 37 we describe several styles of intercommunicating systems for residences, offices, hospitals, factories, schools, stores, etc. They are designed for common return, metallic or common talking circuit. In calling, only the bell of the party wanted will ring.

Apartment House Systems:—On pages 39, 42, 43, 44, 45, 46 and 47 we describe a number of well balanced systems for apartment house service. There are two classes of service, the common talking circuit and the non-interfering. In both styles provision has been made for entrance, suite, janitor and tradesmans' phones. Systems have also been arranged for service between the vestibule and suites only. Non-interfering service should always be recommended.

Centerphone or School Systems:—We describe on pages 40 and 41 two styles of systems for centerphone service. The central station can call the outlying station, and vice versa. While this system is used principally for schools it is also used for factories, stores, offices, etc., where it is desired to talk to and from a central point.

Hotel Annunciator Systems:—On pages 48 and 49 we describe several annunciator systems designed for a low-priced switchboard equipment. System No. 30 is arranged with push buttons on phones for calling annunciator. System No. 31 is designed for automatic signal, removing the receiver on room phones throws the drop at annunciator automatically. This system is fitted with supervisory signals in connection with the cord pairs.

Switchboard Systems:—Magneto and Common Battery:—On pages 50, 51 and 52 we describe complete switchboard equipment for hotels, factories, schools, colleges, hospitals, etc. Systems Nos. 32 and 33 are operated by centrally located batteries; removing receiver from any phone displays a target signal at switchboard. System No. 32 is designed for interior service or for connecting buildings not far distant. System No. 33 will operate on a longer line and is therefore adapted for a complete city exchange if desired, as well as for interior service. System No. 37 is the well known magneto system; telephones are fitted with a magneto for calling which throws a self-restoring drop on switchboard; this system is designed for both series and bridging work.

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