

The two sets must be connected as shown in Wiring Diagram 1. Notice that the terminal marked "B" connects with the positive or center terminal on one dry cell, and that the terminal marked "B" on the other set connects with the negative or outside terminal on the other dry cell. The center terminal "BL" in one case connects to the negative on one dry cell, and to the positive on the other. Notice that at each instrument the center or positive terminal of one cell always connects to the outside terminal of the other.

If you would like to locate all the dry cell batteries in one place, you will need three wires between the sets, connected as shown in Wiring Diagram 2.

For smooth reception, wires should run direct from instrument to instrument without a splice. If necessary to splice, scrape both ends of the wire bright, twist together, solder and cover with rubber and then friction tape.

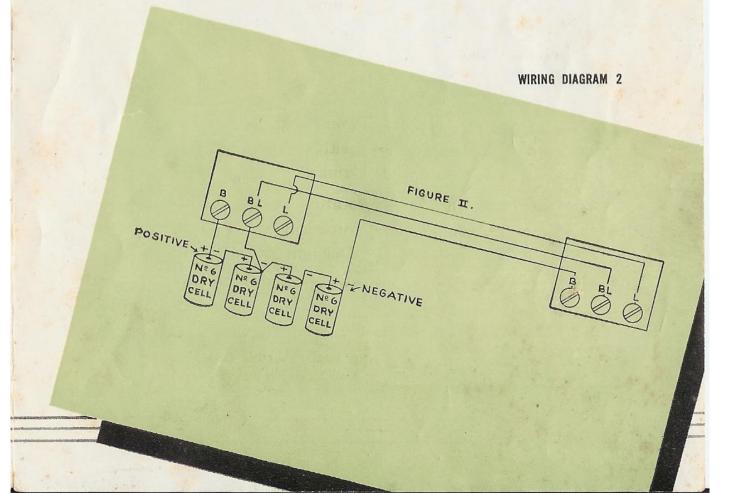
## General Operating Hints

The Connecticut Duplex Telephone Set operates only on direct current such as that furnished by a No. 6 dry cell. Never hook them up to a transformer connected with your lighting current.

Mount the phones at the proper height from the floor so that the user speaks directly into the mouthpiece. They must be mounted flat on the wall, as the phone will not operate properly otherwise.

Only fresh batteries should be used when installed. Their life depends on how much the telephone is used. Never leave the receiver off the hook when not using the telephone, as this uses up the batteries.

If the line is long or higher than surrounding objects, radio-type arresters may be installed at each end between the two telephone lines.



## Greater Distance?

The installation instructions given on the preceding pages apply to installations where the phones are 200 feet apart, or less. If you would like to use the phones at a greater distance, you will need heavier wire, more dry cells or a combination of both. On the other hand, if you plan to use Connecticut Duplex Telephones over a comparatively short distance—for example, from one room to a second adjoining room—you can use a 4½ volt "C" battery.

The following chart shows sizes of wire and numbers of batteries which will provide satisfactory service at the given distances.

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Distance Between Telephones, Feet	Sizes Copper Wires Used	No. of Dry Cells Used at Each Telephone
250	19	2
500	19	3
	16	2.
750	19	4
	16	2
1000	18	4
	16	3
	14	2
1250	16	4
	14	3
1500	16	4
	14	3
1750	16	5
	14	4
2000	16	5
	14	4