

INSTRUCTIONS FOR
~~CROSLEY~~
RADIO RECEIVERS

MODELS 40S - 41S - 42S - 82S
FOR A. C. LIGHT SOCKET
OPERATION



INSTRUCTIONS *for* CROSLEY RADIO RECEIVERS

Models 40S, 41S, 42S, 82S

POWEL CROSLEY, JR.
PRESIDENT

CROSLEY

CABLE ADDRESS
"LISTENIN"

THE CROSLEY RADIO CORPORATION

CINCINNATI

Dear Crosley Owner:

I hope that this receiver will bring you many hours of pleasure and entertainment.

You may be sure that you have made a wise decision in purchasing a Crosley. Every effort has been made and no expense has been spared to make this receiver the finest that can be built. I want you not only to be satisfied with it, but to be proud of its performance in every way.

Sincerely yours,



Powel Crosley, Jr.
President
THE CROSLEY RADIO CORPORATION

THE CROSLEY RADIO CORPORATION
CINCINNATI, OHIO

GUARANTEE

This instrument is guaranteed for 30 days from date of purchase against faulty material and workmanship. Should your dealer be unable to make repairs he will return it through his jobber. Within this period repairs will be made without charge provided the set has not been abused, changed or tampered with and the "Purchaser's Identification Card" has been sent to us properly filled out within five days after the purchase of the equipment.

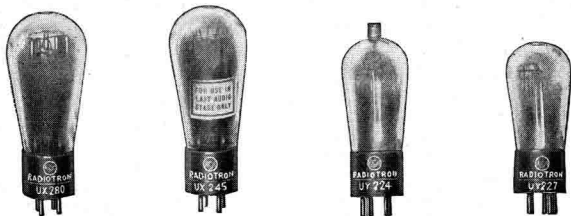
CROSLY RADIO INSTRUCTIONS

GENERAL INFORMATION

Type of Receiver

Model 40S, 41S, 42S, and 82S Crosley receivers differ only in the type of case or cabinet in which they are mounted.

These receivers obtain their power direct from alternating current, electric house-lighting circuits. Each model is made in three types for operation from lighting circuits of different voltages and cycles frequency. When the receiver is purchased the dealer should see that it is of suitable voltage and frequency rating for your lighting circuit. If you move to another community have a competent dealer or service man see that the receiver is of the proper rating for your new lighting circuit, or else check this yourself before connecting the receiver. The voltage and frequency rating are marked on the top of one of the shields, inside of the receiver. The company from whom you purchase electricity will furnish information regarding your lighting system.



Tubes for Models 40S, 41S, 42S, 82S

Accessories Required

For operating these receivers certain accessories are required, as follows:

MATERIAL FOR AN AERIAL. If "outdoor" aerial (see page 5) is to be erected, the following material will be required:

- 50 to 100 feet of No. 14 copper wire or other aerial wire approved by the National Board of Fire Underwriters.
- 2 aerial insulators.
- 1 lead-in insulator.
- 1 approved lightning arrester.

If "indoor" aerial is to be erected, not less than 40 feet of insulated copper wire, No. 16, 18, 20, or 22, will be required. Flexible wire may be handled more easily.

MATERIAL FOR A GROUND.

- 1 ground clamp if connection is to be made to a water pipe.
- Sufficient insulated copper wire, preferably No. 14 or 16, for connecting to the ground.

EIGHT TUBES, AS FOLLOWS:

Three	(3)	Radiotron UY 224 or Cunningham C 324.
Two	(2)	Radiotron UY 227 or Cunningham C 327.
Two	(2)	Radiotron UX 245 or Cunningham CX 345.
One	(1)	Radiotron UX 280 or Cunningham CX 380.

DYNACOIL SPEAKER, TYPE M, Model 262 for Model 40S receiver, and Model 260 for Model 41S receiver. Models 42S and 82S are equipped with built-in Dynacoil speakers (Type M, Model 261).

THE GROUND

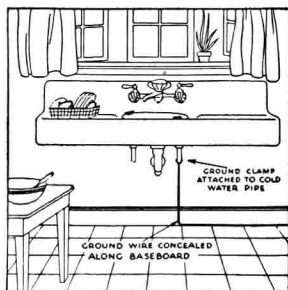
The "ground" is a wire connection made from the receiver to some object that eventually makes good electrical contact with the earth. A good ground is even more essential than a good aerial.

The ground wire should be insulated copper wire, as described above. It is best to run it in as short and direct a route as possible to the object used as a means of grounding.

Pipes

A connection to a water pipe is one of the most efficient and convenient grounds. The ground wire may be connected to the pipe by means of a "ground clamp." This is a device for clamping onto the pipe, provided with a terminal for the ground wire. Preferably connect to a cold water pipe. Hot water pipes, steam radiator or water radiator pipes may be used. Never use gas pipes.

Before attaching the ground clamp, scrape or sand paper the pipe until it is clean and bright where the clamp is to be attached. Tighten the clamp securely over this cleaned portion. Scrape off the covering from the end of the ground wire. Scrape the bare wire until it is bright, and attach this bared end to the terminal on the ground clamp.

**Wells and Streams**

If no water pipe or radiator is available the next best ground is a well or stream. The scraped end of the ground wire may be soldered to a galvanized sheet of iron, or to a piece of bright metal pipe, and dropped into the water.

Ground Rods

A piece of bright metal pipe, or bright metal rod, driven into the earth in a damp location may be used as ground. Wire fences have been used as fair substitutes for grounds. The ground wire should preferably be soldered to such objects.

THE AERIAL

The "aerial" is a wire, connected to the receiver, for intercepting the radio programs. The best aerial to use depends upon the distance from broadcasting stations, and upon the nature of the surroundings, as described below. This receiver may be operated without an aerial by connecting the ground wire (page 4) to the receiver aerial terminal (pages 6, 7).

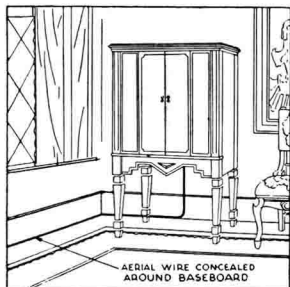
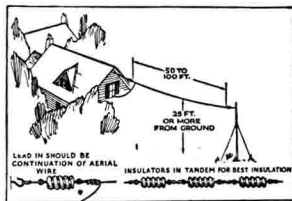
Outdoor Aerials

In localities far from broadcasting stations (for example in some of the western and southern states) or if surrounded by tall buildings, a very large outdoor aerial may give best results.

To erect an outdoor aerial, choose two convenient supports between which a wire 50 feet or more in length may be stretched. In the open country or in residential sections made up mostly of detached dwellings, the aerial should be 25 feet, or more, above the ground. The house may serve as one support, and a tree, pole, or other building as the second support. If you live in an apartment building, the aerial may be stretched above the roof. It should preferably be at least ten feet above the roof.

To erect the aerial, fasten an aerial insulator to each support by means of a piece of wire or rope. Attach the aerial wire to the free end of the insulator farthest from the place where you wish to bring the lead wire into the house. Run the wire through the free hole in the other insulator, and stretch the aerial taut, securing it by a few twists of the excess wire about the stretched portion. Use the free length of wire, that is left over, as a "lead in" wire, to connect the aerial to the receiver. This is preferable to splicing a lead-in to the aerial. The lead-in should enter the building through a porcelain tube or other lead-in insulator.

The aerial should be protected by an approved lightning arrestor. Follow the directions for installation packed with the arrestor.



Indoor Aerials

In localities near broadcasting stations (as for example, in many cities) unless one is in a steel building or is surrounded by tall steel buildings, an indoor aerial will usually be found quite satisfactory. A small wire concealed along the baseboard serves quite well for this purpose. If powerful broadcasting stations are located within a few miles, a wire not less than 40 feet long may be found best. For more distant reception, indoor aerials 50 feet or more in length may be used. The longer aerials may be stretched along a hallway, or through several rooms; the wire being laid out so that its full length extends in one direction, if practicable.

CONNECTING THE RECEIVER

Do not connect receiver to lighting circuit until all other connections have been made, and tubes are in sockets.

After you have located the receiver where you wish it, erected the aerial and made the ground connection (as described on pages 4 and 5), you are ready to connect and operate the receiver.

Aerial and Ground

Scrape off the covering from the ground and aerial wires for about half an inch from their ends, and scrape the bared wire until it appears bright. You will find three screw terminals at the back of the receiver, toward the right as viewed from the front of the receiver. To the one marked "A" connect the scraped end of the aerial lead-in wire, tightening the terminal screw until the wire is fastened securely. To the one marked "G" connect the ground wire, in a similar manner. The terminal marked "P" is for use only with phonographic pick up devices, as explained on page 10.

Loudspeaker

Insert the plug on the end of the Dynacoil loudspeaker cord in the socket at the rear of the chassis. This socket is at the right of the supply cord, as viewed from the front of the receiver.

Inserting the Tubes

At the rear of the receiver, toward the right (as viewed from the front), there are three shields, with removable covers held in place by thumb screws. Remove these covers and insert a UY 224 (or C 324) tube in the socket inside each shield. The numbers of the tubes are marked on the tube cartons and on the base of each tube (see also pictures of the tubes on page 3). Note the arrangement of prongs on the tubes and the location of the holes in the sockets, and be sure that you have the prongs lined up properly with the holes before you try to insert each tube. After the tubes have been inserted, connect the wire inside each shield to the top of the tube in that shield (placing the wire as near the center of the shield as possible) and replace the shield covers. Insert the UY 227 (or C 327) tubes, the UX 245 (or CX 345) tubes, and the UX 280 (or CX 380) tube in their sockets, as marked on the Diagram of Connections, being sure to register the prongs and socket holes as described above.

Connecting to Light Circuit

Insert the plug on the end of the supply cord in a convenient light socket or receptacle (see second paragraph, page 3). On the bottom of the receiver there is a fuse. This may be inserted in its clips so as to adapt the receiver to operation from lighting circuits of high voltage (110-125 for 110 volt receivers; 220-250 for 220 volt receivers) or of low voltage (100-115 for 110 volt receivers; 200-230 for 220 volt receivers), as marked on the chassis of the receiver. Your dealer will measure your lighting circuit voltage for

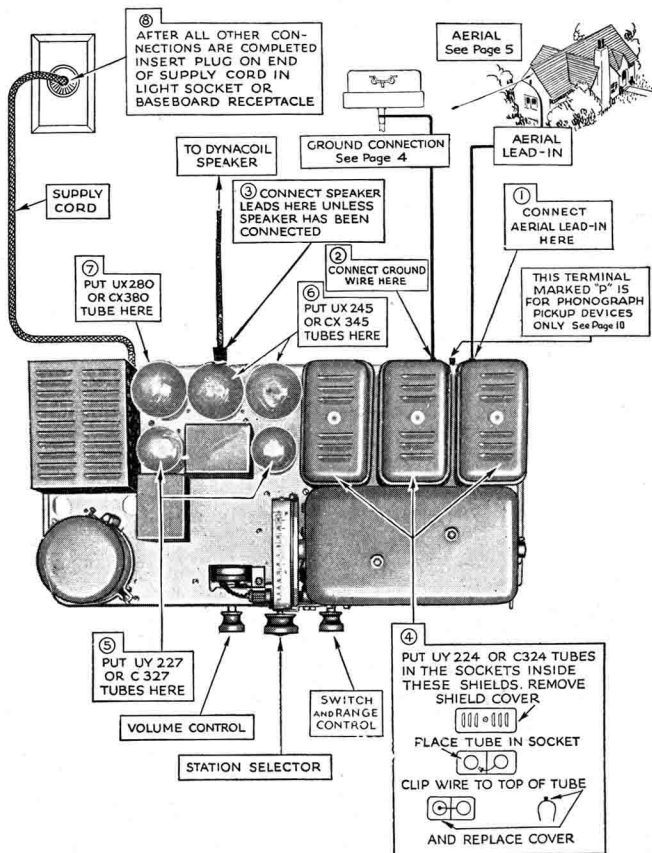


DIAGRAM OF CONNECTIONS

MODELS 40S, 41S, 42S, 82S.

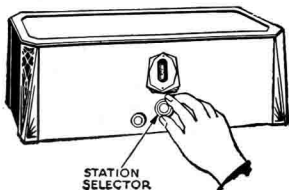
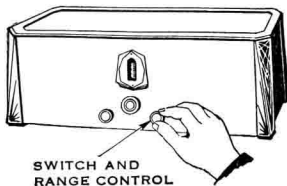
BE SURE TO MAKE CONNECTIONS IN THE CORRECT ORDER AS NUMBERED ABOVE

you and insert the fuse in the proper clips, or you may obtain this information from your light company and see that the fuse is inserted properly. If the line voltage is not known, the fuse should be inserted in the "high line" clips. *Never put your hand in the receiver without first disconnecting the power cable from the light circuit.*

OPERATION

To Turn On Receiver

Pull the switch and range control knob toward you (do not turn it). The dial light should light up, and the set should be in operating condition in about one minute (this is the time required for the tubes to heat up).*

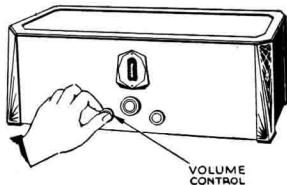


To Tune to Stations

Turn the station selector *slowly*, with the volume control turned all the way on (to the right). When a program is heard, carefully adjust the station selector for maximum loudness. The secret of receiving many stations is *slow, careful* adjustment of the station selector.

To Adjust Volume or Loudness

The signals from the broadcasting stations vary enormously in strength, depending on the distance, the power of the stations and other factors. Two methods of control are provided to adjust the receiver for these different signals. One, the range control, is operated by *rotating* the switch knob. There is a white spot on the knob which indicates the position of the range control. To control extremely strong signals, *turn* the range control all the way to the *left*. For very weak signals, *turn* it all the way to the *right*. The middle position is suitable for the average antenna, and for maximum selectivity. If there are no powerful nearby stations, the middle, or in some cases the right hand position of the range control can be used. The volume control adjusts the amplification of the receiver. To increase the volume or loudness, turn the volume control knob to the right (clockwise). To decrease the volume, turn the volume control knob to the left (counter clockwise).



To Turn Off Receiver

Push the switch and range control knob toward the receiver (do not turn it). When the dial light goes out the power is off.

*Note: When the receiver is first installed or after it has been standing idle for a number of weeks it may require fifteen minutes or more before it will operate with full efficiency.

FURTHER INFORMATION

Care of the Receiver

The following rules will help you to get the best results:

1. Turn off the receiver when not in use. This will save tubes and electricity.
2. Tune carefully. Turn the station selector slowly. In this way you will receive the greatest number of stations.
3. Never put your hand inside the receiver without first disconnecting the supply cord from the light socket.
4. *Do not connect the supply cord to a light socket unless the loudspeaker is connected. Do not disconnect the loudspeaker without first disconnecting the supply cord. This will prevent possible serious damage to the receiver.*

If Receiver Does Not Operate Properly

Crosley radio receivers are carefully constructed of the best materials throughout. They undergo extremely rigid inspection before they are shipped from the factory. Properly installed and properly operated they will give satisfactory service indefinitely. Certain difficulties of operation, which have nothing to do with the receiver itself, occasionally arise, however. The causes of these difficulties are quite simple and are easily remedied, as outlined below. Your radio dealer or service man will be glad to take care of such matters for you, or you may do it yourself if you prefer.

IF DIAL LIGHT FAILS TO LIGHT WHEN SWITCH IS TURNED ON: Examine the tubes inside the receiver. If they are burning, the dial light is either loose in its socket or is burnt out. If screwing it tighter in its socket does not cause it to light, it should be replaced (use a Mazda, miniature base-bulb, 2½ volt No. 41, for replacement). If the tubes are not lighted, the power may be off at the light socket. To check this, disconnect the receiver from the light circuit, and connect a table or floor lamp in its place. If the lamp lights, when turned on, the power is on at socket. In this case the fuse in the receiver probably needs to be replaced. This fuse may be reached from the bottom of the receiver. To replace it, a one ampere, automobile light fuse is required.

IF YOU DO NOT RECEIVE STATIONS—Read footnote at bottom of page 8. If this trouble occurs on first installing receiver, pull out the plug at once and carefully check the connections and installation throughout. If none of the tubes light when the switch is turned on, the power is probably off at the socket, or the fuse in the receiver is burnt out. These possibilities may be checked and remedied as outlined in the preceding paragraph. If some tubes light but others fail to light, be sure that those not lit are firmly seated in their sockets. If they are, then they are probably burnt out, and need to be replaced by new ones.

NOISY RECEPTION—A raspy sound in receiving powerful signals may be caused by turning on the volume so far that the speaker is overloaded, and "blasts." Crackling and crashing sounds are usually due to static (light-

ning, disturbances from nearby electric light and power circuits, etc.) Occasionally they are caused by loose connections, such as a ground wire loosely clamped to a pipe or loosely fastened to the terminal on the receiver. Whistling or screeching notes received only at certain settings of the station selector are due to broadcasting stations interfering with one another, or to other forms of outside interference, beyond the control of the listener. A ringing or howling sound gradually building up in intensity is due to jarring of the tubes. To overcome it, see that the receiver is firmly supported and that the tubes are properly seated in their sockets. Noisy reception may also be caused by faulty installation, faulty tubes, or tubes nearing the end of their life.

DISTORTED RECEPTION—If the reception does not “sound natural,” the fault usually lies at the broadcasting station. Programs are occasionally broadcast imperfectly, and some stations broadcast with better tone quality than others. Faulty tubes, or tubes nearing the end of their life, may also cause distorted reception.

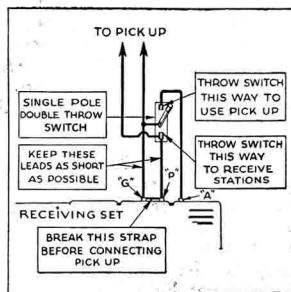
LACK OF VOLUME—The volume of distant stations may often be improved by a longer aerial, differently located aerial, or by an improved ground system. Old tubes, nearly worn out, or faulty tubes will cause lack of volume.

Dynacoil Speaker

The Dynacoil speakers used with these receivers are properly adjusted at the Crosley factory and should need no further adjustment. If for any reason you believe that your speaker needs regulation, do not attempt to adjust it yourself, but have your dealer examine it.

Phonograph Pick Up

The terminal marked “P,” between the Antenna (“A”) and Ground (“G”) terminals, is for use with phonograph pick-up devices, for reproducing phonograph records through the radio receiver and loudspeaker. The pick-up device must be equipped with a single-pole, double-throw switch, connected as shown in the diagram. Crosley Distributors can supply Crosley pick-up devices equipped with switches of this type. Other types of pick-up may be used if they are connected to the receiver through a single-pole, double-throw switch as shown. *The strap connecting the Ground (“G”) terminal to the pick-up (“P”) terminal must be broken before the leads from the pick-up switch are connected to the receiver.* If the pick-up is disconnected from the receiver at any time, the “P” and “G” terminals must be connected with a short wire before signals may be received.



A LIST OF BROADCASTING STATIONS

Below is a condensed list of broadcasting stations. In the columns below record for future reference, the station selector settings at which you receive stations. The column headed "Frequency" refers to the broadcasting frequency or wave length assigned to the station by the Federal Radio Commission. The higher frequencies will be received at the smaller numbers on the station selector drum and the lower frequencies at the larger numbers. The kilocycles (frequency), as specified on the dial in red numerals, are not absolute. They are merely to be used as a guide to help the listener identify the various stations.

Call Letters	LOCATION	Frequency (Kilo Cycles)	Dial Setting	Call Letters	LOCATION	Frequency (Kilo Cycles)	Dial Setting
KDKA	East Pittsburgh, Pa. . . .	980	.....	KOIL	Council Bluffs, Iowa . . .	1260	.....
KDYL	Salt Lake City, Utah	1290	.....	KOIN	Portland, Oregon	940	.....
KEX	Portland, Oregon	1180	.....	KOL	Seattle, Wash.	1220	.....
KFAB	Lincoln, Nebraska	770	.....	KOMO	Seattle, Wash.	920	.....
KFDY	Brookings, S. D.	550	.....	KPLA	Los Angeles, Calif.	570	.....
KFEQ	St. Joseph, Mo. (day)	560	.....	KPWF	Westminster, Calif.	1490	.....
KFI	Los Angeles, Calif.	640	.....	KPO	San Francisco, Calif.	680	.....
KFJF	Oklahoma City, Okla.	1470	.....	KPRC	Houston, Texas	920	.....
KFKB	Milford, Kansas (day)	1050	.....	KPSN	Pasadena, Calif.	950	.....
KFKU	Lawrence, Kansas	1220	.....	KRLD	Dallas, Texas	1040	.....
KFKX	Chicago, Illinois	1020	.....	KSCJ	Sioux City, Iowa	1330	.....
KFMX	Northfield, Minn.	1250	.....	KSL	Salt Lake City, Utah	1130	.....
KFOX	Long Beach, Calif.	1250	.....	KSO	Clarinda, Iowa	1380	.....
KFRC	San Francisco, Calif.	610	.....	KSOO	Sioux Falls, S. D. (day) . . .	1110	.....
KFUM	Colorado Springs, Colo.	1270	.....	KSTP	St. Paul, Minn.	1460	.....
KFWB	Los Angeles, Calif.	950	.....	KTAT	Fort Worth, Texas	1240	.....
KGA	Spokane, Wash.	1470	.....	KTBI	Los Angeles, Calif.	1300	.....
KGEF	Los Angeles, Calif.	1300	.....	KTBS	Shreveport, La.	1450	.....
KGFX	Pierre, S. D. (day)	580	.....	KTHS	Hot Springs, Ark.	1040	.....
KGGC	San Francisco, Calif.	1420	.....	KTNT	Muscatine, Iowa (day)	1170	.....
KGHI	Little Rock, Ark.	1500	.....	KTSA	San Antonio, Texas	1290	.....
KGIX	Las Vegas, Nevada	1420	.....	KTW	Seattle, Wash.	1270	.....
KGO	Oakland, Calif.	790	.....	KUOA	Fayetteville, Ark.	1390	.....
KGRS	Amarillo, Texas	1410	.....	KVI	Tacoma, Wash.	760	.....
KGW	Portland, Oregon	620	.....	KVOO	Tulsa, Okla.	1140	.....
KHJ	Los Angeles, Calif.	900	.....	KWK	St. Louis, Mo.	1350	.....
KHQ	Spokane, Wash.	590	.....	KWKH	Shreveport, La.	850	.....
KIDO	Boise, Idaho	1250	.....	KYA	San Francisco, Calif.	1230	.....
KJR	Seattle, Wash.	970	.....	NAA	Arlington, Va.	690	.....
KLRA	Little Rock, Ark.	1390	.....	WAAM	Newark, N. J.	1250	.....
KLZ	Denver, Colo.	560	.....	WABC	New York City	860	.....
KMBC	Independence, Mo.	950	.....	WABO	Rochester, N. Y.	1440	.....
KMMJ	Clay Center, Neb. (day)	740	.....	WADC	Akron, Ohio	1320	.....
KMOX	St. Louis, Mo.	1090	.....	WAPI	Birmingham, Ala.	1140	.....
KMTR	Hollywood, Calif.	570	.....	WBAL	Baltimore, Md.	1060	.....
KNX	Los Angeles, Calif.	1050	.....	WBAP	Fort Worth, Texas	800	.....
KOA	Denver, Colo.	830	.....	WBWA	Nashville, Tenn.	1490	.....
KOAC	Corvallis, Oregon	560	.....	WBWM	Chicago, Ill.	770	.....
KOB	State College, N. Mex.	1180	.....	WBZ	Rossville, N. Y.	1300	.....

Call Letters	LOCATION	Frequency (Kilo Cycles)	Dial Setting	Call Letters	LOCATION	Frequency (Kilo Cycles)	Dial Setting
WBIS	Boston, Mass.	1230		WJZ	New York City	760	
WBT	Charlotte, N. C.	1080		WKAR	East Lansing, Mich. (day)	1040	
WBZ	Springfield, Mass.	990		WKBH	La Crosse, Wis.	1380	
WCAC	Storrs, Conn.	600		WKBW	Buffalo, N. Y.	1470	
WCAI	Northfield, Minn.	1250		WKEN	Grand Isl., N. Y.	1040	
WCAO	Baltimore, Md.	600		WKY	Oklahoma City, Okla.	900	
WCAU	Philadelphia, Pa.	1170		WLAC	Nashville, Tenn.	1490	
WCBD	Zion, Illinois (day)	1080		WLB	Minneapolis, Minn.	1250	
WCCO	Minneapolis, Minn.	810		WLBL	Stevens Point, Wis. (day)	900	
WCDA	New York City	1350		WLBZ	Bangor, Maine	620	
WCFL	Chicago, Ill. (Ltd.)	970		WLIB	See WGN		
WCKY	Covington, Ky.	1480		WLS	Chicago, Ill.	870	
WDAE	Tampa, Fla.	620		WLW	Cincinnati, Ohio	700	
WDAF	Kansas City, Mo.	610		WLWL	New York City	1100	
WDAY	Fargo, N. D.	1280		WMAK	Buffalo, N. Y.	900	
WDBO	Orlando, Fla.	620		WMAQ	Chicago, Ill.	447	
WDGY	Minneapolis, Minn.	1180		WMBI	Chicago, Ill. (day)	1080	
WDOD	Chattanooga, Tenn.	1280		WNAC	Boston, Mass.	1230	
WDSU	New Orleans, La.	1270		WNAX	Yankton, S. D.	570	
WEAF	New York City	660		WNOX	Knoxville, Tenn.	560	
WEAN	Providence, R. I. (day)	550		WNOI	San Antonio, Texas	1190	
WEAO	Columbus, Ohio	550		WOBU	Charleston, W. Va.	580	
WEAR	Cleveland, Ohio	1070		WOC	Davenport, Iowa	1000	
WEBC	Superior, Wis.	1280		WODA	Paterson, N. J.	1250	
WEBW	Beloit, Wis. (day)	600		WOI	Ames, Iowa, (day)	560	
WEEL	Boston, Mass.	590		WOO	Kansas City, Mo.	610	
WEMC	Berrien Springs, Mich.	590		WOR	Newark, N. J.	710	
WENR	Chicago, Ill.	870		WORD	Chicago, Ill.	1480	
WEW	St. Louis, Mo. (day)	760		WOV	New York City (day)	1130	
WFAA	Dallas, Texas	800		WOW	Omaha, Neb.	590	
WFBL	Syracuse, N. Y.	900		WOWO	Fort Wayne, Ind.	1160	
WFBM	Indianapolis, Ind. (Ltd.)	1230		WPG	Atlantic City, N. J.	1100	
WFIW	Hopkinsville, Ky.	940		WPTF	Raleigh, N. C.	680	
WFLA	Clearwater, Fla.	900		WQAM	Miami, Florida	880	
WGHP	Detroit, Mich.	1240		WREN	Lawrence, Kansas	1220	
WGMS	St. Paul, Minn.	1250		WRHM	Minneapolis, Minn.	1250	
WGN	Chicago, Ill.	720		WRUF	Gainesville, Fla.	1470	
WGR	Buffalo, N. Y.	550		WRVA	Richmond, Va.	1110	
WGY	Schenectady, N. Y.	790		WSAI	Cincinnati, Ohio	1330	
WHA	Madison, Wis.	940		WSAZ	Huntington, W. Va.	580	
WHAM	Rochester, N. Y.	1150		WSB	Atlanta, Ga.	740	
WHAP	New York City	1300		WSM	Nashville, Tenn.	650	
WHAS	Louisville, Ky.	820		WSMK	Dayton, Ohio	570	
WHDH	Gloucester, Mass. (day)	830		WSOA	Chicago, Ill.	1480	
WHK	Cleveland, Ohio	1390		WSSH	Boston, Mass.	1420	
WHO	Des Moines, Iowa	1000		WSUN	St. Petersburg, Fla.	900	
WIBO	Chicago, Ill.	570		WSYR	Syracuse, N. Y.	570	
WIBW	Topeka, Kans.	1300		WTAG	Worcester, Mass.	580	
WJAD	Waco, Texas	1240		WTAM	Cleveland, Ohio	1070	
WJAG	Norfolk, Neb. (day)	1060		WTAQ	Eau Claire, Wis.	1330	
WJAS	Pittsburgh, Pa.	1290		WTIC	Hartford, Conn.	600	
WJAX	Jacksonville, Fla.	1260		WTMJ	Milwaukee, Wis.	620	
WJAZ	Chicago, Ill.	1480		WWJ	Detroit, Mich.	920	
WJBT	See WBBM			WWL	New Orleans, La.	850	
WJJD	Mooseheart, Ill. (Ltd.)	1130		WWNC	Asheville, N. C.	570	
WJR	Detroit, Mich.	750		WWVA	Wheeling, W. Va.	1160	
WJSV	Washington, D. C.	1460					

Wherever you are —

TUNE IN ON

WLW

"THE NATION'S STATION"

and **WSAI**

Owned and Operated by

The Crosley Radio Corporation : Powel Crosley, Jr., President