

A decorative border separates the RCA logo from the title. It features a white zigzag line with black floral or scrollwork motifs at the peaks, set against a dark red background.

The RCA
Radiotron
Broadcast
Station
Directory

The RCA Radiotron Broadcast Station DIRECTORY

AMERICAN BROADCASTING STATIONS

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WAAD	Cincinnati, Ohio Divides time with WSRO	25	1420	211.1	
WAAF	Chicago, Ill.	500	920	325.9	
WAAM	Newark, N. J. Divides time with WGPC-WODA	500	1250	239.9	
WAAT	Jersey City, N. J.	300	1070	280.2	
WAAW	Omaha, Nebr.	500	660	454.3	
WABC	W. of Cross Bay Blvd., Queens Co., L. I., N. Y.	5000	860	348.6	
WBOQ	Kingston, Pa.	250	1440	208.2	
WABF	Divides time with WRAX Bangor, Me.	100	1200	249.9	
WABI	See WHEC				
WABO	New Orleans, La.	100	1200	249.9	
WABZ	Divides time with WJBW Akron, Ohio	1000	1320	227.1	
WADC	Detroit, Mich.	100	1500	199.9	
WAFD	Royal Oak, Mich.	50	1310	228.9	
WAGM	Divides time with WBMH Columbus, Ohio	5000	640	468.5	
WAIU	Willow Grove, Pa.	50	1500	199.9	
WALK	Divides time with WHBW- WPSW Birmingham, Ala.	5000	1140	263.0	
WAPI	Divides time with KVOO Grand Rapids, Mich.	250	1270	236.1	
WASH	Divides time with WOOD Lafayette, Ind.	500	1400	214.2	
WBAA	Divides time with WCMA-WKBF Harrisburg, Pa.	500	1430	209.7	
WBAK	Divides time with WMBS-WCAH Glen Morris, Md.	10000	1060	282.8	
WBAL	Divides time with WTIC				

RCA Radiotrons—the preference of radio experts

The Importance of a High Quality Vacuum Tube



RCA Radiotrons are primarily instruments of precision—the most sensitive ever manufactured and sold on a large scale. They might well be called electrical eyes; for they “see” waves to which human eyes are unresponsive—the waves which carry radio entertainment to the home.

The amount of energy received by a radio set may be only a few millionths of a millionth of that broadcast, but Radiotrons respond to it and amplify it millions, even billions, of times. Despite its sensitivity this extraordinary artificial sense organ is so sturdy that it withstands ordinary usage and it is made in large quantities, so that its price is low.

One of the functions of a Radiotron is to control the flight of billions of electrons— invisible bits of electricity, so small that they bear the same size-relation to atoms that a football bears to a large dirigible balloon. A stream of electrons speeding from filament to plate is instantly and automatically influenced by the waves from the broadcasting station which affect the grid. What we hear is a duplicate of what is broadcast.

A few years ago high-capacity storage batteries were required for satisfactory heating of the filament. Radiotrons of today contain improved filaments for operation from inexpensive trickle-charge storage batteries,

Improve your radio set with RCA Radiotrons

AMERICAN BROADCASTING STATIONS (Continued)

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WBAO	Decatur, Ill.	100	1120	267.7	
WBAP	Fort Worth, Tex.	10000	800	374.8	
WBAW	Divides time with KTHS	5000	1490	201.2	
	Nashville, Tenn.				
WBAX	Divides time with WLAC	100	1210	247.8	
	Wilkes-Barre, Pa.				
WBBC	Divides time with WJBU	500	1400	214.2	
	Brooklyn, N. Y.				
WBBL	Divides with WSGH-WSDA-	100	1370	218.8	
	WCGU-WLTH				
Richmond, Va.	100	1370	218.8		
WBBL	Glenview, Ill.	10000	770	389.4	
WBMM	Divides time with KFAB	1000	1300	230.6	
WJBT	Rossville, N. Y.				
WBRR	Divides time with WHAZ-	100	1200	249.9	
	WHAP-WEVD				
WBWW	Norfolk, Va.	75	1200	249.9	
WBBY	Charleston, S. C.	100	1200	249.9	
WBBZ	Ponca City, Okla.	500	1410	212.6	
WBCM	Bay City, Mich.	500	1360	220.4	
WBET	Medford, Mass.	500	1360	220.4	
WBIS	Divides time with WMAF	100	1310	228.9	
	See WNAC				
WBMH	Detroit, Mich.	250	1450	206.8	
WBMS	Divides time with WAGM	250	1450	206.8	
	Fort Lee, N. J.				
WBNY	Divides time with WNJ-WIBS-	250	1350	222.1	
	WKBO				
WBOQ	New York, N. Y.	250	1350	222.1	
	Divides time with WCDA-				
WBOW	WKBO-WMSG	100	1310	228.9	
See WABC					
WBRC	Terre Haute, Ind.	500	930	322.4	
WBRE	Birmingham, Ala	100	1310	228.9	
WBRL	Wilkes-Barre, Pa.	500	1430	209.7	
WBSO	Tilton, N. H.	250	780	384.4	
WBT	Wellesley Hills, Mass.	5000	1080	277.6	
WBZ	Divides time with WBZA	15000	99	302.8	
	Charlotte, N. C.				
WBZA	East Springfield, Mass.	500	990	302.8	
	Divides time with WBZ				
WCAC	Boston, Mass.	250	600	499.7	
	Divides time with WTC				
	Storrs, Conn.				
	Divides time with WTC				

When experts agree on RCA Radiotrons—why take chances?

compact dry cells, and, more economical, AC supply from the lighting mains.

These improvements result from ceaseless research conducted to make Radiotrons more and more efficient. More electrons are emitted from the improved Radiotron filaments in spite of the fact that less power is required to heat them.

An air or gas molecule is immense compared with an electron; it would stop an electron in its flight from the filament to the plate. Even the finest vacuum pumps will not remove all air molecules. Research showed how obstructing air molecules could be swept out of the bulb—a triumph of the laboratories that stand behind the Radio Corporation of America.

Research has made Radiotrons what they are today—made them not only sense-organs of radio but made them so inexpensive that they can be sold over the counter like scores of other products much more easily manufactured.

The manufacture of Radiotrons is exacting. Each Radiotron must pass through many stages, and at each stage it must be rigorously inspected and tested. If it fails to measure up to RCA standards it is rejected. For this reason every Radiotron leaves the factory a faultless and matchless radio detector or amplifier—a supreme achievement of research, engineering, and manufacturing.

That is why the leading makers of radio sets sold on a quality basis use Radiotrons throughout and specify them for replacement.

RCA Radiotrons—the standard equipment in fine radio sets of leading manufacturers

An RCA Radiotron for Every Purpose



RCA Radiotrons are classified in six distinct groups and the prospective user may, without any confusion, select the tube that is just suited for any particular function.

Special Detector: Extremely sensitive Radiotrons designed particularly for detection and not to be used for other purposes.

Special Amplifier: Under this heading will be found the new four electrode Radiotron for use as radio-frequency or resistance-coupled audio-frequency amplifiers.

Detector-Amplifiers: In this group may be found the Radiotrons that can be used interchangeably as detectors or amplifiers with excellent results.

AC Radiotrons: Detectors and amplifiers that require no "A" batteries. The filaments of these Radiotrons are operated from the alternating current lighting socket by means of small stepdown transformers.

Power Amplifiers: These Radiotrons will handle, without distortion, extraordinary volume built up by preceding stages of amplification and are advantageous in the last audio stage only.

Rectifiers: These Radiotrons are the tubes that are used to supply uni-directional current, from an alternating current source, for the elimination of radio batteries.

Special Radiotrons: This group contains the Radiotrons that are designed for the automatic regulation of voltage and current.



Give your receiving set a chance—use
RCA Radiotrons

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WCAD	Canton, N. Y.	500	1220	245.8	
WCAE	Pittsburgh, Pa.	500	1220	245.8	
WCAH	Columbus, Ohio	250	1430	209.7	
	Divides time with WMB5-WBAK				
WCAJ	Lincoln, Nebr.	500	590	508.2	
	Divides time with WOW				
WCAL	Northfield, Minn.	1000	1250	239.9	
	Divides time with KFMX-WRHM-WLB				
WCAM	Camden, N. J.	500	1280	234.2	
	Divides time with WOAX-WCAP				
WCAO	Baltimore, Md.	250	600	499.7	
WCAP	Asbury Park, N. J.	500	1280	234.2	
	Divides time with WCAM-WOAX				
WCAT	Rapid City, S. D.	100	1200	249.9	
WCAU	Byberry, Pa.	1000	1170	256.3	
WCAX	Burlington, Vt.	100	1200	249.9	
	Divides time with WNBX				
WCAZ	Carthage, Ill.	50	1070	280.2	
WCBA	Allentown, Pa.	250	1440	208.2	
	Divides time with WSAN				
WCBD	Zion, Ill.	5000	1080	277.6	
	Divides time with WMBI				
WCBM	Baltimore, Md.	100	1370	218.8	
WCBS	Springfield, Ill.	100	1210	247.8	
	Divides time with WTAX				
WCCO	Anoka, Minn.	7500	810	370.2	
WCDA	Cliffside Park, N. J.	250	1350	222.1	
	Divides time with WBNY-WKBQ-WMSG				
WCFL	Chicago, Ill.	1500	970	309.1	
WCGU	Coney Island, N. Y.	500	1400	214.2	
	Divides with WSGH-WSDA-WLTH-WBBC				
WCLB	Long Beach, N. Y.	100	1500	199.9	
	Divides time with WMBQ-WLBX-WWRL				
WCLO	Kenosha, Wis.	100	1200	249.9	
WCLS	Joliet, Ill.	100	1310	228.9	
	Divides with WEHS-WKBB-WKBI-WHFC				
WCMA	Culver, Ind.	500	1400	214.2	
	Divides time with WBAA-WKBF				
WCOA	Pensacola, Fla.	500	1120	267.7	
WCOC	Columbus, Miss.	500	880	340.7	

Progress in the radio art is measured by the
development of R.C.A. Radiotrons

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WCOH	Greenville, N. Y. Divides time with WJBI-WGBB-WINR	100	1210	247.8	
WCRW	Chicago, Ill. Divides time with WSBC-WEDC	100	1210	247.8	
WCSH	Portland, Me.	500	940	319.0	
WCSO	Springfield, Ohio Divides time with KQV	500	1380	217.3	
WCX	See WJR				
WDAE	Tampa, Fla. Divides time with WDBO	1000	620	483.6	
WDAF	Kansas City, Mo. Divides time with WOQ	1000	610	491.5	
WDAG	Amarillo, Tex. Divides time with KGRS	250	1410	212.6	
WDAH	El Paso, Tex.	100	1310	228.9	
WDAY	W. Fargo, N. Dak. Divides time with WEBC	1000	1280	234.2	
WDBJ	Roanoke, Va.	500	930	322.4	
WDBO	Orlando, Fla. Divides time with WDAE	1000	620	483.6	
WDEL	Wilmington, Del.	250	1120	267.7	
WDGY	Minneapolis, Minn. Divides time with WHDI	500	1390	215.7	
WDOD	Chattanooga, Tenn.	1000	1280	234.2	
WDRC	New Haven, Conn.	500	1330	225.4	
WDSU	New Orleans, La.	1000	1270	236.1	
WDWF	Cranston, R. I.	100	1210	247.8	
WLSI	Divides time with WPAW				
WDZ	Tuscola, Ill.	100	1070	280.2	
WEAF	Bellmore, N. Y.	5000	660	454.3	
WEAI	Ithaca, N. Y.	500	1270	236.1	
WEAM	No. Plainfield, N. J. Divides time with WELK	100	1370	218.8	
WEAN	Providence, R. I.	250	550	545.1	
WEAO	Columbus, Ohio Divides time with WKRC	750	550	545.1	
WEAR	Cleveland, Ohio Divides time with WTAM	1000	1070	280.2	
WEBC	Superior, Wis. Divides time with WDAY	1000	1280	234.2	
WEBE	Cambridge, Ohio	100	1210	247.8	
WEBQ	Harrisburg, Ill. Divides time with KFVS	50	1210	247.8	

Every Radiotron is tested and inspected in 41 different ways before it is approved

RCA Radiotron UX-200-A

Detector



Radiotron UX-200-A is the most sensitive and efficient detector ever placed on the market. It is not at all critical to the adjustment of the plate voltage. The use of this Radiotron in the detector socket of a radio set employing Radiotrons UX-201-A will produce additional sensitivity and volume ap-

proximately equal to that which would be obtained by the addition of one stage of radio frequency amplification. The advantage becomes readily apparent on receiving signals from *distant* stations. The characteristics of this Radiotron are such that no changes in the set itself are required, when it is used to replace Radiotron UX-201-A. The filament consumption and the plate voltage required are identical to those of Radiotron UX-201-A.

Radiotron UX-200-A \$3.50

Radiotrons are the heart of your radio set

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WEBR	Buffalo, N. Y.	100	1310	228.9	
WEBW	Beloit, Wis.	350	600	499.7	
WEDC	Chicago, Ill. Divides time with WCRW-WSCB	100	1210	247.8	
WEDH	Eric, Pa.	30	1420	211.1	
WEEI	Boston, Mass.	500	590	508.2	
WEHS	Evanston, Ill. Divides with WHFC-WKBI-WCLS-WKBB	100	1310	228.9	
WELK	Philadelphia, Pa. Divides time with WEAM	100	1370	218.8	
WEMC	Berrien Springs, Mich.	1000	590	508.2	
WENR	Chicago, Ill.	50000	870	344.6	
WBCN	Divides time with WLS				
WEPS	Gloucester, Mass. Divides time with WKBE	100	1200	249.9	
WEVD	Woodhaven, N. Y. Divides time with WBBR-WHAP-WHAZ	500	1300	230.6	
WEW	St. Louis, Mo.	1000	760	394.5	
WFAA	Dallas, Tex. Divides time with KRLD	500	1040	288.3	
WFAN	Philadelphia, Pa. Divides time with WIP	500	610	491.5	
WFBC	Knoxville, Tenn.	50	1200	249.9	
WFBE	Cincinnati, Ohio	100	1200	249.9	
WFBG	Altoona, Pa. Divides time with WHBP	100	1310	228.9	
WFBJ	Collegeville, Minn.	100	1370	218.8	
WFBL	Syracuse, N. Y. Divides time with WMAK	750	900	333.1	
WFBM	Indianapolis, Ind. Divides time with WSBT	1000	1230	243.8	
WFBR	Baltimore, Md.	250	1270	236.1	
WFDF	Flint, Mich.	100	1310	228.9	
WFI	Philadelphia, Pa. Divides time with WLIT	500	560	535.4	
WFIW	Hopkinsville, Ky.	1000	940	319.0	
WFJC	Akron, Ohio Divides time with WJAY	500	1450	206.8	
WFKD	Frankford, Pa. Divides time with WNAT	50	1310	228.9	
WFLA WSUN	Clearwater, Fla.	1000	750	333.1	

RCA Radiotron UX-222

Radio-Frequency Amplifier



Radiotron UX-222 is a new four-electrode Screen-Grid tube particularly designed for radio-frequency amplification. With proper shielding of the radio-frequency circuit, neutralizing and stabilizing devices are unnecessary. The shielding "Screen Grid" between the usual or "control grid" and plate not only eliminates the effect of plate to grid feedback capacity, but also increases the mutual conductance of the tube.

Radiotron UX-222 may also be used in a totally different role as an audio-frequency amplifier in resistance coupled circuits. Higher overall amplification at audio frequencies is possible with this Radiotron without greater plate resistance than with three electrode high- μ tubes.

The filament of the UX-222 operates at 3.3 volts and .132 amperes, but with a series resistor of 15 ohms it can be connected in parallel with the 5 volt filaments of other Radiotrons. Thus it may be used in either dry or storage battery receivers of correct design.

Radiotron UX-222 \$6.50

RCA Radiotrons—the hallmark of a good radio set

To maintain high quality performance in your radio set—use RCA Radiotrons

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WGAL	Lancaster, Pa. Divides time with WRAP	15	1310	228.9	
WGBB	Freeport, N. Y. Divides time with WJBI-WINR-WCOH	100	1210	247.8	
WGBC	Memphis, Tenn. Divides time with WNBR	500	1430	209.7	
WGBF	Evansville, Ind. Divides time with WOS-KFRU	500	630	475.9	
WGBI	Scranton, Pa. Divides time with WQAN	250	880	340.7	
WGBS	Astoria, L. I., N. Y.	500	1180	245.1	
WGCM	Gulfport, Miss.	100	1210	247.8	
WGCP	Newark, N. J. Divides time with WODA-WAAM	250	1250	239.9	
WGES	Chicago, Ill. Divides time with WJKS	500	1360	220.4	
WGH	Newport News, Va.	100	1310	228.9	
WGHP	Fraser, Mich.	750	1240	241.8	
WGL	Ft. Wayne, Ind.	100	1370	218.8	
WGMS	See WLB				
WGN	Elgin, Ill.	25000	720	416.4	
WLIB					
WGR	Buffalo, N. Y.	1000	550	545.1	
WGST	Atlanta, Ga. Divides time with WMAZ	500	890	336.9	
WGY	South Schenectady, N. Y.	50000	790	379.5	
WHA	Madison, Wis. Divides time with WNAX-WPCC-WIBO	750	570	526.0	
WHAD	Milwaukee, Wis. Divides time with WISN	250	1120	267.7	
WHAM	Victor Township (Roch.) N. Y.	5000	1150	260.7	
WHAP	Carlstadt, N. J. Divides time with WBBR-WEVD-WHAZ	1000	1300	230.6	
WHAS	Jeffersonstown, Ky.	5000	820	365.6	
WHAZ	Troy, N. Y. Divides time with WBBR-WHAP-WEVD	500	1300	230.6	
WHB	Kansas City, Mo. Divides time with KMBC-KLDS	1000	950	315.6	
WHBC	Canton, Ohio	10	1200	249.9	
WHBD	Bellefontaine, Ohio	100	1370	218.8	

RCA Radiotrons—standard for every use

RCA Radiotron UX-201-A

Detector Amplifier



Radiotron UX-201-A is the equivalent of the well-known UV-201-A equipped with the new standard UX base. UX-201-A will fit both the old Navy socket and the new Push Type socket. This sturdy Radiotron has long been the accepted standard of every radio engineer, amateur and broadcast listener. It is the

standard, all-around, flexible storage-battery tube of radio, good in detector and radio or audio-frequency amplifier circuits, and sure to give the best results at the lowest operating cost.

The experimenter is referred to the data on pages 23 and 24 of this booklet in which is set forth the characteristics of Radiotron UX-201-A to serve as a guide to its proper use in a circuit.

All the results of modern electron-tube research are embodied in UX-201-A. Thus its filament has an electron emission which is not simply high, but extraordinarily high—and this at low current consumption and with long life.

Radiotron UX-201-A \$1.40

RCA Radiotrons set the standard for all radio tubes

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WHBF	Rock Island, Ill.	100	1210	247.8	
WHBL	Sheboygan, Wis.	500	1410	212.6	
	Divides time with KFLV				
WHBP	Johnstown, Pa.	100	1310	228.9	
	Divides timewith WFBG				
WHBQ	Memphis, Tenn.	100	1370	218.8	
WHBU	Anderson, Ind.	100	1210	247.8	
WHBW	Philadelphia, Pa.	100	1500	199.9	
	Divides time with WALK- WPSW				
WHBY	West De Pere, Wis.	100	1200	249.9	
WHDH	Gloucester, Mass.	1000	830	361.2	
WHDf	Calumet, Mich.	100	1370	218.8	
WHDI	Minneapolis, Minn.	500	1390	215.7	
	Divides time with WDGy				
WHDL	Tupper Lake, N. Y.	10	1420	211.1	
WHEC	Rochester, N. Y.	500	1440	208.2	
WABO	Divides time with WOKO				
WHFC	Cicero, Ill.	100	1310	228.9	
	Divides with WCLS-WKBB- WKBI-WEHS				
WHK	Cleveland, Ohio	1000	1390	215.7	
WHN	New York, N. Y.	250	1010	296.9	
	Divides time with WRNY- WQAO-WPAP				
WHO	Des Moines, Iowa	5000	1000	299.8	
	Divides time with WOC				
WHPP	Englewood Cliffs, N. J.	10	1420	211.1	
	Divides time with WLBH-WMRJ				
WHT	Deerfield, Ill.	5000	1480	202.6	
	Divides time with WJAZ- WORD				
WIAS	Ottumwa, Iowa	100	1420	211.1	
WIBA	Madison, Wis.	100	1210	247.8	
WIBG	Elkins Park, Pa.	50	930	322.4	
WIBM	Jackson, Mich.	100	1370	218.8	
	Divides time with WJBK				
WIBO	Desplaines, Ill.	1500	570	526.0	
	Divides time with WPCC- WNAX-WHA				
WIBR	Steuenville, Ohio	50	1420	211.1	
	Divides time with WQBZ				
WIBS	Elizabeth, N. J.	250	1450	206.8	
	Divides with WBMS-WNJ- WKBO				

A radio set can be no better than its vacuum tubes—
Use RCA Radiotrons

RCA Radiotron WX-12

Detector Amplifier

The WD-11 and the WX-12 differ only in their bases. Both have coated filaments and the electrical characteristics of these Radiotrons are exactly the same. Hence what is said about WD-11 applies in a radio sense to WX-12. But Radiotron WD-11 fits only a WD-11 socket, while WX-12 fits the standard Push Type socket and the Navy socket as well.



RCA Radiotron WD-11

Detector Amplifier

The "WD-11" was the first dry-cell Radiotron ever introduced and although many different types of Radiotrons have since been developed, this pioneer is still very popular and widely used both as detector and amplifier.



Radiotrons WD-11 or WX-12 . . . \$2.50

There's an RCA Radiotron for every purpose

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WIBU	Boynette, Wis.	100	1310	228.9	
WIBW	Near Topeka, Kans. Divides time with KFH	2000	1300	230.6	
WIBX	Utica, N. Y.	300	1200	249.9	
WIBZ	Montgomery, Ala.	15	1500	199.9	
WICC	Easton, Conn.	500	1190	252.0	
WIL	St. Louis, Mo.	250	1420	211.1	
WILL	Urbana, Ill. Divides time with KFNF-KUSD	500	890	336.9	
WILM	Wilmington, Del.	100	1500	199.9	
WINR	Bay Shore, N. Y. Divides time with WJBI-WGBB-WCOH	100	1210	247.8	
WIOD	Miami Beach, Fla. Divides time with WQAM	1000	1240	241.8	
WIP	Philadelphia, Pa. Divides time with WFAN	500	610	491.5	
WISN	Milwaukee, Wis. Divides time with WHAD	250	1120	267.7	
WJAD	Waco, Tex. Divides time with KTAT	1000	1240	241.8	
WJAG	Norfolk, Nebr.	1000	1060	282.8	
WJAK	Kokomo, Ind. Divides time with WLBC	50	1310	228.9	
WJAR	Providence, R. I.	250	890	336.9	
WJAS	Pittsburgh, Pa.	1000	1290	232.4	
WJAX	Jacksonville Fla.	1000	1260	238.0	
WJAY	Cleveland, Ohio Divides time with WFJC	500	1450	206.8	
WJAZ	Mt. Prospect, Ill. Divides time with WHT-WORD	5000	1480	202.6	
WJBC	La Salle, Ill. Divides time with WJBL	100	1200	249.9	
WJBI	Red Bank, N. J. Divides time with WGBB-WINR-WCOH	100	1210	247.8	
WJBK	Ypsilanti, Mich. Divides time with WIBM	50	1370	218.8	
WJBL	Decatur, Ill. Divides time with WJBC	100	1200	249.9	
WJBO	New Orleans, La.	100	1370	218.8	
WJBT	See WBBM				
WJBU	Lewisburg, Pa. Divides time with WBAX	100	1210	247.8	

RCA Radiotron UX-199

Detector Amplifier



Radiotron UX-199 is adaptable to either portable or home dry battery operated sets. It is equally serviceable as a detector or as a high-efficiency radio or audio frequency amplifier. Economy of operation is particularly pronounced when it is used in circuits having more than three tubes.

Radiotron UX-199 . . \$2.00

RCA Radiotron UV-199

Detector Amplifier



UV-199 and UX-199 are electrically identical, differing only in their bases. UV-199 will fit only the UV-199 socket and UX-199 will fit only the standard Push Type socket.

Both Radiotrons operate at low filament temperature so that the dry cells of the "A" battery are subjected to very slight drain.

Radiotron UV-199 \$2.25

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WJBW	New Orleans, La. Divides time with WABZ	30	1200	249.9	
WJBY	Gadsden, Ala.	50	1210	247.8	
WJJD	Mooseheart, Ill.	20000	1180	245.1	
WJKS	Gary, Ind. Divides time with WGES	1250	1360	220.4	
WJR WCX	Silver Lake Village, Mich.	5000	750	399.8	
WJSV	Mt. Vernon Hills, Va.	10000	1460	205.4	
WJZ	New York, N. Y.	30000	760	394.5	
WKAQ	San Juan, P. R.	500	890	336.9	
WKAR	E. Lansing, Mich.	500	1040	288.3	
WKAV	Laconia, N. H.	100	1310	228.9	
WKBB	Joliet, Ill. Divides with WEHS-WCLS- WKBI-WHFC	100	1310	228.9	
WKBC	Birmingham, Ala.	10	1310	228.9	
WKBE	Webster, Mass. Divides time with WEPS	100	1200	249.9	
WKBF	Indianapolis, Ind. Divides time with WBAA-WCMA	500	1400	214.2	
WKBH	La Crosse, Wis. Divides time with KSO	1000	1380	217.3	
WKBI	Chicago, Ill. Divides with WCLS-WKBB- WHFC-WEHS	50	1310	228.9	
WKBN	Youngstown, Ohio Divides time with WSMK	500	570	526.0	
WKBO	Jersey City, N. J. Divides with WBMS-WNJ-WIES	250	1450	206.8	
WKBP	Battle Creek, Mich.	50	1420	211.1	
WKBQ	New York, N. Y. Divides time with WBNY- WMSG-WCDA	250	1350	222.1	
WKBS	Galesburg, Ill. Divides time with WLBO	100	1310	228.9	
WKBV	Brookville, Ind.	100	1500	199.9	
WKBW	Amherst, N. Y.	5000	1470	204.0	
WKBZ	Ludington, Mich.	50	1500	199.9	
WKEN	Grand Island, N. Y.	1000	1040	288.3	
WKJC	Lancaster, Pa. Divides time with WPRC	100	1200	249.9	
WKRC	Cincinnati, Ohio Divides time with WEAO	500	550	545.1	

RCA Radiotron UX-112-A

Power Amplifier and Detector Amplifier



Radiotron UX-112-A is an improved general purpose storage-battery tube. While it was primarily designed as a power amplifier for use in the last audio stage, it may also be used for detection or amplification as evidenced by its characteristics which will be found on pages 23 and 24.

It is extremely sensitive as a detector and is an excellent radio-frequency or audio-frequency amplifier.

Radiotron UX-112-A has a coated filament which operates at such a low temperature that only a dull red glow is visible. Its low current consumption of only one quarter ampere permits very economical operation.

Radiotron UX-112-A is unique in the general purpose class. Never before has a single tube been capable of such all around use.

Radiotron UX-112-A \$2.50

RCA Radiotrons are your best insurance against tube troubles

RCA Radiotrons—the preference of radio experts

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WEY	Oklahoma City, Okla.	1000	900	333.1	
WLAC	Nashville, Tenn. Divides time with WBAW	5000	1490	201.2	
WLAP	Louisville, Ky.	30	1200	249.9	
WLB WGMS	Minneapolis, Minn. (Call WGMS used by WCCO when broadcasting over WLB) Divides time with WCAL- KFMX-WRHM	500	1250	239.9	
WLBC	Muncie, Ind. Divides time with WJAK	50	1310	228.9	
WLBG	Kansas City, Kans.	100	1420	211.1	
WLBG	Petersburg, Va.	100	1200	249.9	
WLBH	Farmingdale, N. Y. Divides time with WHPP-WMRJ	30	1420	211.1	
WLBL	Stevens Pt. Wis.	2000	900	333.1	
WLBO	Galesburg, Ill. Divides time with WKRS	100	1310	228.9	
WLBV	Mansfield, Ohio	100	1210	247.8	
WLBW	Oil City, Pa.	500	1260	238.0	
WLBX	Long Island City, N. Y. Divides time with WCLB- WWRL-WMBQ	100	1500	199.9	
WLBZ	Bangor, Me.	250	620	483.6	
WLCI	Ithaca, N. Y.	50	1210	247.8	
WLX	Lexington, Mass. Divides time with WSSH	250	1420	211.1	
WLIB	See WGN				
WLIT	Philadelphia, Pa. Divides time with WFI	500	560	535.4	
WLOE	Chelsea, Mass. Divides time with WMES	100	1500	199.9	
WLS	Crete, Ill. Divides time with WENR-WBCN	5000	870	344.6	
WLSI	See WDFW				
WLTH	Brooklyn, N. Y. Divides with WCGU-WSGH- WSDA-WBBC	500	1400	214.2	
WLW	Mason, Ohio	50000	700	428.3	
WLWL	Kearny, N. J. Divides time with WPG	5000	1100	272.6	
WMAC	Cazenovia, N. Y. Divides time with WSYR	250	570	526.0	
WMAF	S. Dartmouth, Mass. Divides time with WBET	500	1360	220.4	

RCA Radiotron UX-240

(High-Mu)
**Detector
Amplifier**



Radiotron UX-240 is designed for use in resistance or impedance-coupled amplifier circuits as either detector or amplifier.

Having an Amplification Factor (Mu) of 30, Radiotron UX-240 will be welcomed, particularly by set builders who prefer resistance-coupled amplification. Where

tubes of the general purpose type have heretofore been used in resistance-coupled circuits, improved amplification may now be obtained by the use of one or two Radiotrons UX-240.

The UX-240 may be used in the popular types of resistance-coupled amplifier circuits without change in plate coupling resistances, but with superior results. The best performance is obtained, however, when resistance values recommended in the instruction sheet are employed.

Radiotron UX-240 consumes less than one tenth the plate current of the average general purpose tube. The filament is identical to that of Radiotron UX-201-A.

Radiotron UX-240 \$2.00

When experts agree on RCA Radiotrons—why take chances?

Improve your radio set with RCA Radiotrons

RCA Radiotron UX-226 Amplifier

Radiotron UX-226 is an amplifier tube, the AC filament of which is operated from alternating current. It can be used for radio or transformer-coupled audio-frequency amplification. It is not, however, ordinarily suited for detection.



Radiotron UX-226 contains a plate, a grid, and a heavy filament of the coated type designed to operate at a relatively low filament voltage, which is one of the outstanding features of this tube. Except for the fact that its filament is designed to be AC operated and the fact that it is not generally suitable for use as detector, Radiotron UX-226 possesses characteristics very similar to those of Radiotron UX-201-A, as may be seen from a comparison of their characteristics as found on pages 23 and 24.

Radiotron UX-226 is equipped with the large standard UX base.

Radiotron UX-226 \$2.00

Progress in the radio art is measured by the development of RCA Radiotrons

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WMAK	Martinsville, N. Y. Divides time with WFBL	750	900	333.1	
WMAL	Washington, D. C.	250	630	475.9	
WMAN	Columbus, Ohio	50	1210	247.8	
WMAQ	Addison, Ill.	5000	670	447.5	
WMAY	St. Louis, Mo. Divides time with KFWF	100	1200	249.9	
WMAZ	Macon, Ga. Divides time with WGST	500	890	336.9	
WMBA	Newport, R. I.	100	1500	199.9	
WMBC	Detroit, Mich.	100	1420	211.1	
WMBD	Peoria Heights, Ill. Divides time with WTAD	1000	1440	208.2	
WMBF	Miami Beach, Fla.	500	560	535.4	
WMBG	Richmond, Va.	100	1210	247.8	
WMBH	Joplin, Mo.	250	1420	211.1	
WMBI	Addison, Ill. Divides time with WCBD	5000	1080	277.6	
WMBJ	Wilkinsburg, Pa.	100	1500	199.9	
WMBL	Lakeland, Fla.	100	1310	228.9	
WMBM	Memphis, Tenn.	10	1500	199.9	
WMBO	Auburn, N. Y.	100	1370	218.8	
WMBQ	Brooklyn, N. Y. Divides time with WCLB-WWRL-WL BX	100	1500	199.9	
WMBR	Tampa, Fla.	100	1210	247.8	
WMB S	Lemoyne, Pa. Divides time with WCAH-WBAK	500	1430	209.7	
WMC	Memphis, Tenn.	500	780	384.4	
WMCA	New York, N. Y. Divides time with WNYC	500	570	526.0	
WMES	Boston, Mass. Divides time with WLOE	50	1500	199.9	
WMMN	Fairmont, W. Va.	500	890	336.9	
WMPC	Lapeer, Mich.	30	1500	199.9	
WMRJ	Jamaica, N. Y. Divides time with WL BH-WHPP	10	1420	211.1	
WMSG	New York, N. Y. Divides time with WBNY-WCDA-WKBQ	250	1350	222.1	
WMT	Waterloo, Iowa Divides time with KFJB	250	1200	249.9	

RCA Radiotrons—the standard equipment in fine radio sets of leading manufacturers

AVERAGE CHARACTERISTICS OF RECEIVING RADIORONS

GENERAL				DETECTION				AMPLIFICATION											
MODEL	USE	CIRCUIT REQUIREMENTS	BASE	MAXIMUM POWER INPUT	MAXIMUM OVERALL GAIN	*A SUPPLY	FLAMENT TERMINAL VOLTAGE	FLAMENT CURRENT (AMPERES)	DETECTOR GRID RETURN LEAD TO	BIAS LINK (OHMS)	"B" DETECTIVE VOLTAGE	DETECTOR PLATE CURRENT (MILLIAMPERES)	AMPLIFIER "B" BATTERY VOLTAGE	AMPLIFIER "B" BATTERY PLATE CURRENT (MILLIAMPERES)	AMPLIFIER "A" PLATE CURRENT (MILLIAMPERES)	A.C. PLATE RESISTANCE (OHMS)	MUTUAL INDUCTANCE (MICROHENRIES)	VOLTAGE AMPLIFICATION FACTOR	MINIMUM SENSITIVITY (MICROAMPERES)
RADIORON UX-11	Detector or Amplifier	Transformer Coupling	WD-11 Base	4-1/2" x 1-1/2"	1-1/2"	110 V	1.1	.25	+	3	23 to 45	1.5	175	10	2.5	15,000	440	6.6	15
RADIORON UX-12	Detector or Amplifier	Transformer Coupling	Large Standard UX Base	4 1/2" x 1 1/2"	1-1/2"	110 V	1.1	.25	+	3 to 5	23 to 45	1.5	90	4 1/2	2.5	15,000	425	6.6	7
RADIORON UX-12-A	Detector or Amplifier	Transformer Coupling	Large Standard UX Base	4 1/2" x 1 1/2"	1-1/2"	110 V	1.1	.25	+	3 to 5	23 to 45	1.5	90	4 1/2	2.5	15,000	440	6.6	7
RADIORON UX-195	Detector or Amplifier	Transformer Coupling	UX 195 Base	3 1/2" x 1 1/2"	1-1/2"	110 V	3.0	.60	0	3 to 5	45	1.5	130	9	7	5,000	1,600	8	120
RADIORON UX-195-A	Detector or Amplifier	Transformer Coupling	UX 195 Base	3 1/2" x 1 1/2"	1-1/2"	110 V	3.0	.60	0	3 to 5	45	1.5	90	4 1/2	2.5	15,000	425	6.6	7
RADIORON UX-201-A	Detector	Range in Base	Large Standard UX Base	4 1/2" x 1 1/2"	1-1/2"	110 V	3.0	.25	+	2 to 3	45 to 150	1.5	50	4	2.5	15,000	666	20	—
RADIORON UX-201-B	Detector or Amplifier	Transformer Coupling	Large Standard UX Base	4 1/2" x 1 1/2"	1-1/2"	110 V	3.0	.25	+	2 to 3	45 to 150	1.5	135	11 1/2	1.5	11,000	720	8	13
RADIORON UX-222	Detector or Amplifier	Range in Base	Large Standard UX Base	5 1/2" x 1 1/2"	2 1/2"	110 V	3.3	.132	—	—	—	—	150	11 1/2	3	150,000	400	60	—
RADIORON UX-222-A	Detector or Amplifier	Range in Base	Large Standard UX Base	5 1/2" x 1 1/2"	2 1/2"	110 V	3.3	.132	—	—	—	—	150	11 1/2	3	150,000	350	300	—
RADIORON UX-222-B	Detector or Amplifier	Range in Base	Large Standard UX Base	5 1/2" x 1 1/2"	2 1/2"	110 V	3.3	.132	—	—	—	—	150	11 1/2	3	150,000	400	60	—
RADIORON UX-226	Amplifier	Transformer Coupling	Large Standard UX Base	4 1/2" x 1 1/2"	1-1/2"	Transformer 115 V	1.5	1.05	—	—	—	—	90	6	3.7	9,400	875	8.2	20
RADIORON UX-227	Detector or Amplifier	Transformer Coupling	UX 227 Base	4 1/2" x 1 1/2"	1-1/2"	Transformer 215 V	2.5	1.75	0	—	—	—	135	9	6	7,400	1,100	8.2	70
RADIORON UX-240	Detector or Amplifier	Range in Base	Large Standard UX Base	4 1/2" x 1 1/2"	1-1/2"	Storage 215 V	5.0	.25	+	2 to 5	135 to 160	3	140	3	2	150,000	250	30	—
RADIORON UX-150-A	Power Amplifier	No L.S.C. Required	Large Standard UX Base	4 1/2" x 1 1/2"	1-1/2"	Storage 115 V	5.0	.25	—	—	—	—	135	9	7	5,000	1,600	8	120
RADIORON UX-150-B	Power Amplifier	No L.S.C. Required	Small Standard UX Base	4 1/2" x 1 1/2"	1-1/2"	Storage 115 V	3.0	.125	—	—	—	—	150	11 1/2	9.5	4,700	1,700	8	275
RADIORON UX-150-C	Power Amplifier	L.S.C. Required	Large Standard UX Base	4 1/2" x 1 1/2"	1-1/2"	Storage 115 V	5.0	.25	—	—	—	—	135	22	6.5	6,600	500	3.3	110
RADIORON UX-190	Power Amplifier	L.S.C. Required	Large Standard UX Base	5 1/2" x 2 1/2"	2 1/2"	Transformer 75 V	7.5	1.25	—	—	—	—	250	16	10	6,000	1,410	6	360
RADIORON UX-200	Power Amplifier	L.S.C. Required	Large Standard UX Base	6 1/2" x 2 1/2"	2 1/2"	Transformer 75 V	7.5	1.25	—	—	—	—	250	21	13	2,600	1,510	8	600

MODEL	USE	CIRCUIT REQUIREMENTS	BASE	MAXIMUM POWER INPUT	MAXIMUM OVERALL GAIN	PURPOSE
RADIORON UX-713	Full-Wave Rectifier	Full-Wave Circuit	Large Standard UX Base	5 1/2" x 2 1/2"	2 1/2"	Rectification in Eliminator, particularly designed for this Radiotron
RADIORON UX-713-A	Half-Wave Rectifier	Half or Full Wave Circuit	Large Standard UX Base	5 1/2" x 2 1/2"	2 1/2"	Rectification in Eliminator, particularly designed for this Radiotron
RADIORON UX-780	Full-Wave Rectifier	Full-Wave Circuit	Large Standard UX Base	5 1/2" x 2 1/2"	2 1/2"	Rectification in Eliminator, designed for this Radiotron or Radiotron UX-713
RADIORON UX-791	Half-Wave Rectifier	Half or Full Wave Circuit	Large Standard UX Base	6 1/2" x 2 1/2"	2 1/2"	Rectification in Eliminator, designed for this Radiotron or Radiotron UX-713
RADIORON UX-874	Voltage Regulator	Series Resistor	Large Standard UX Base	5 1/2" x 2 1/2"	2 1/2"	Designed to keep output voltage of all eliminators constant when different values of "R" cores are supplied
RADIORON UX-875	Current Regulator (Ballast Tube)	Transformer Primary of 270 Ohm Ballast Tube	Standard Ballast Tube Socket	8" x 2 1/2"	2 1/2"	Designed to insure constant input to power operated radio receivers despite fluctuations in line voltage
RADIORON UX-896	Current Regulator (Ballast Tube)	Transformer Primary of 60 Ohm Ballast Tube	Standard Ballast Tube Socket	8" x 2 1/2"	2 1/2"	Designed to insure constant input to power operated radio receivers despite fluctuations in line voltage

2-60 Note: All grid voltages are (below)

Note: All grid voltages are given with respect to cathode or negative terminal unless otherwise noted.

Mac Values not to be exceeded.

Max. Values not to be exceeded.

2-60 Note: All grid voltages are (below)

1. Mean Grid - 1 1/2 Volts, Heater Grid + 45 Volts, 15.88 Milliamperes

2. Cathode Grid - 1 1/2 Volts, Heater Grid + 22 Volts, 8.8 Milliamperes

3. Applied plate circuit resistance of 25,000 Ohms

4. Grid voltage is given with respect to mid-point of filament

Every Radiotron is tested and inspected in 41 different ways before it is approved

Give your receiving set a chance—Use RCA Radiotrons

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WNAC WBIS WNAD	Boston, Mass.	500	1230	243.8	
WNAT	Norman, Okla. Divides time with KGGF Philadelphia, Pa.	500	1010	296.9	
WNAX	Yankton, S. D. Divides time with WFKD Divides time with WIBO- WPCC-WHA	100	1310	228.9	
WNBF	Binghamton, N. Y.	1000	570	526.0	
WNBH	New Bedford, Mass.	50	1500	199.9	
WNBK	Knoxville, Tenn.	100	1310	228.9	
WNBO	Washington, Pa.	50	1310	228.9	
WNBQ	Rochester, N. Y.	15	1200	249.9	
WNBZ	Memphis, Tenn. Divides time with WGBC	15	1500	199.9	
WNBW	Carbondale, Pa.	500	1430	209.7	
WNBX	Springfield, Vt.	5	1200	249.9	
WNBZ	Divides time with WCAZ Saranac Lake, N. Y.	10	1290	232.4	
WNJ	Newark, N. J. Divides time with WBMS- WIBS-WKBO	250	1450	206.8	
WNOX	Knoxville, Tenn.	1000	560	535.4	
WNRC	Greensboro, N. C.	500	1440	208.2	
WNYC	New York, N. Y. Divides time with WMCA	500	570	526.0	
WOAI	San Antonio, Tex.	5000	1190	252.0	
WOAN	Lawrenceburg, Tenn. Divides time with WREC	500	600	499.7	
WOAX	Trenton, N. J. Divides time with WCAM-WCAP	500	1280	234.2	
WOBT	Union City, Tenn.	15	1310	228.9	
WOBU	Charleston, W. Va. Divides time with WSAZ	250	580	516.9	
WOC	Davenport, Iowa Divides time with WHO	5000	1000	299.8	
WOCL	Jamestown, N. Y.	25	1210	247.8	
WODA	Paterson, N. J. Divides time with WGCP-WAAM	1000	1250	239.9	
WOI	Ames, Iowa Divides time with KFEQ See WMBB	3500	560	535.4	
WOK WOKO	Mt. Beacon, N. Y. Divides time with WHEC-WABO	500	1440	208.2	

RCA Radiotron UY-227

Detector-Amplifier



Radiotron UY-227
—A general purpose tube containing a heater element which permits operation from alternating current. It is especially recommended for detection in sets using Radiotron UX-226 in the radio and first audio stages of amplification.

In the usual three electrode tube the filament serves two purposes. First it converts energy received from the "A", Battery into heat which brings the filament itself to an incandescent temperature. Second it

forms a mechanical support for, and an electrical connection to, the electron-emitting surface layer.

In Radiotron UY-227 these two functions are accomplished by two different elements. The heater, consisting of a plain tungsten wire, serves only to raise the cathode to emitting temperature. The cathode serves as a mechanical support and electrical connection to the coating.

Radiotron UY-227 \$3.00

Radiotrons are the heart of your radio set

RCA Radiotrons—The hallmark of a good radio set

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WOL	Washington, D. C.	100	1310	228.9	
WOMT	Manitowoc, Wis.	100	1210	247.8	
WOOD	Furnwood, Mich. Divides time with WASH	500	1270	236.1	
WOQ	Kansas City, Mo. Divides time with WDAF	1000	610	491.5	
WOR	Newark, N. J.	5000	710	422.3	
WORD	Batavia, Ill. Divides time with WJAZ-WHT	5000	1480	202.6	
WOS	Jefferson City, Mo. Divides time with WGBF-KFRU	1000	630	475.9	
WOV	Secaucus, N. J.	1000	1130	265.3	
WOW	Omaha, Neb. Divides time with WCAJ	1000	590	508.2	
WOWO	Ft. Wayne, Ind. Divides time with WWVA	10000	1160	282.8	
WPAP	See WQAO				
WPAW	Pawtucket, R. I. Divides time with WDFW-WLSI	100	1210	247.8	
WPCC	Chicago, Ill. Divides time with WHA-WIBO-WNAX	500	570	526.0	
WPCH	Hoboken, N. J.	500	810	370.2	
WPG	Atlantic City, N. J. Divides time with WLWL	5000	1100	272.6	
WPOR	See WTAR				
WPRC	Harrisburg, Pa. Divides time with WKJC	100	1200	249.9	
WPSC	State College, Pa.	500	1230	243.8	
WPSW	Philadelphia, Pa. Divides time with WALK-WHBW	50	1500	199.9	
WPTF	Raleigh, N. C.	10000	680	440.9	
WQAM	Miami, Fla. Divides time with WIOD	750	1240	241.8	
WQAN	Scranton, Pa. Divides time with WGBI	250	880	340.7	
WQAO	Cliffside, N. J.	250	1010	296.9	
WPAP	Divides time with WHN-WRNY				
WQBC	Utica, Miss.	300	1360	220.4	
WQBJ	Clarksburg, W. Va.	65	1200	249.9	

RCA Radiotron UX-120

Power Amplifier



This dry-cell power amplifier Radiotron is to be used in the last stage of audio-frequency amplification.

Owners of Radiola Super-Heterodyne (semi-portable), Super VIII, Radiolas 25 and 28, and practically all dry-battery operated receivers may enjoy greatly increased loudspeaker volume and clarity with Radiotron UX-120.

This Radiotron is manufactured with the small standard UX base. Adapters are available which permit its use in practically any tube socket and which provide connections in many cases for the additional plate and grid voltages so that changes in wiring within the receiver are unnecessary.

All dry-battery operated set owners should avail themselves of the advantage of improved quality at high volume which is provided by this efficient but low-priced amplifier. The high-emission filament is one of the features of this Radiotron.

Radiotron UX-120 \$2.50

RCA Radiotrons—standard for every use

To maintain high quality performance in your radio set—use RCA Radiotrons

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WQBZ	Weirton, W. Va. Divides time with WIBR	60	1420	211.1	
WRAF	La Porte, Ind. Divides time with WWAЕ	100	1200	249.9	
WRAK	Erie, Pa.	50	1370	218.8	
WRAW	Reading, Pa. Divides time with WGAL	100	1310	228.9	
WRAX	Philadelphia, Pa. Divides time with WABF	250	1020	293.9	
WRBC	Valparaiso, Ind.	500	1240	241.8	
WRBI	Tifton, Ga. Divides time with WTHS	20	1310	228.9	
WRBJ	Hattiesburg, Miss.	10	1500	199.9	
WRBL	Columbus, Ga.	50	1200	249.9	
WRBQ	Greenville, Miss.	100	1210	247.8	
WRBT	Wilmington, N. C.	50	1370	218.8	
WRBU	Gastonia, N. C.	100	1210	247.8	
WRBW	Columbia, S. C.	15	1310	228.9	
WRC	Washington, D. C.	500	950	315.6	
WREC	Whitehaven, Tenn. Divides time with WOAN	500	600	499.7	
WREN	Lawrence, Kans. Divides time with KFKU	1000	1220	245.8	
WRHM	Fridley, Minn. Divides time with WCAL-KFMX-WLB	1000	1250	239.9	
WRJN	Racine, Wis.	100	1370	218.8	
WRK	Hamilton, Ohio	100	1310	228.9	
WRNY	Coytesville, N. J. Divides time with WQAO-WPAP-WHN	250	1010	296.9	
WRR	Dallas, Tex.	500	1280	234.2	
WRUF	Gainesville, Fla.	5000	1470	204.0	
WRVA	Richmond, Va.	1000	1110	270.1	
WSAJ	Mason, Ohio	5000	800	374.8	
WSAJ	Grove City, Pa.	100	1310	228.9	
WSAN	Allentown, Pa. Divides time with WCBA	250	1440	208.2	
WSAR	Fall River, Mass.	250	1450	206.8	
WSAZ	Huntington, W. Va. Divides time with WOBU	250	580	516.9	
WSB	Atlanta, Ga.	10000	740	405.2	
WSBC	Chicago, Ill. Divides time with WEDC-WCRW	100	1210	247.8	

RCA Radiotron UX-171-A

Power Amplifier



Radiotron UX-171-A is a power amplifier tube of extremely low output impedance for use in the last audio stage only. It employs a coated low-temperature filament.

Since the plate current of Radiotron UX-171-A is exceptionally high at maximum voltage, as can be seen from the characteristics table, some form of loudspeaker coupling such as an output transformer or a choke coil and by-pass condenser should be used to prevent DC from passing through the loudspeaker.

The output of the UX-171-A at 90 volts is exceptionally high, but at this voltage the usual direct connection to the loudspeaker may be used, omitting the loudspeaker coupling mentioned above.

UX-171-A was designed to handle great volume without distortion. This is accomplished very economically since the filament consumption is only .25 ampere.

Radiotron UX-171-A \$2.50

RCA Radiotrons set the standard for all radio tubes

A radio set can be no better than its vacuum tubes—
Use RCA Radiotrons

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WSBT	South Bend, Ind. Divides time with WFBM	500	1230	243.8	
WSDA	See WSGH				
WSEA	Portsmouth, Va. Divides time with WTAR-WPOR	500	780	384.4	
WSGH } WSDA }	Brooklyn, N. Y. Divides time with WCGU-WLTH-WBBC	500	1400	214.2	
WSIS	Sarasota, Fla.	250	1010	296.9	
WSIX	Springfield, Tenn.	100	1210	247.8	
WSM	Nashville, Tenn.	5000	650	461.3	
WSMB	New Orleans, La.	500	1320	227.1	
WSMD	Salisbury, Md.	100	1310	228.9	
WSMK	Dayton, Ohio Divides time with WKBN	200	570	526.0	
WSPD	Toledo, Ohio	500	1340	223.7	
WSRO	Middletown, Ohio. Divides time with WAAD	100	1420	211.1	
WSSH	Boston, Mass. Divides time with WLEX	100	1420	211.1	
WSUI	Iowa City, Iowa Divides time with KSCA	500	580	516.9	
WSUN	See WFLA				
WSVS	Buffalo, N. Y.	50	1370	218.8	
WSYR	Syracuse, N. Y. Divides time with WMCA	250	570	526.0	
WTAD	Quincy, Ill. Divides time with WMBD	500	1440	208.2	
WTAG	Worcester, Mass.	250	580	516.9	
WTAM	Cleveland, Ohio Divides time with WEAR	3500	1070	280.2	
WTAQ	Eau Claire, Wis. Divides time with KSCJ	1000	1330	225.4	
WTAR } WPOR }	Norfolk, Va. Divides time with WSEA	500	780	384.4	
WTAW	College Station, Tex. Divides time with KUT	500	1120	267.7	
WTAX	Streator, Ill. Divides time with WCBS	50	1210	247.8	
WTAZ	Chesterfield Hills, Va.	15	1210	247.8	
WTBO	Cumberland, Md.	50	1420	211.1	
WTFI	Toccoa, Ga.	500	1450	206.8	

There's an RCA Radiotron for every purpose

RCA Radiotron UX-210

Power Amplifier

Radiotron UX-210 is a high-power amplifying tube. It is capable of handling far greater volume without distortion than any receiving vacuum tube on the market except Radiotron UX-250

The filament of the UX-210 is normally operated from the 7.5 volt winding of a transformer, and its plate supply is usually obtained from a high-voltage B eliminator.

The high plate current of this Radiotron makes a loudspeaker coupling device, such as described for use with the UX-171-A, a necessity. This device should be so connected as to prevent the high plate voltage from reaching the loudspeaker leads.

Radiotron UX-210 \$9.00



Change your tubes once a year—use RCA Radiotrons

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
WTHS	Atlanta, Ga. Divides time with WRBI	100	1310	228.9	
WTIC	Hartford, Conn. Divides time with WBAL	250	600	499.7	
WTMJ	Brookfield, Wis.	2500	620	483.6	
WWAE	Hammond, Ind. Divides time with WRAF	100	1200	249.9	
WWJ	Detroit, Mich.	1000	920	325.9	
WWL	New Orleans, La. Divides time with KWKH	500	850	352.7	
WWNC	Asheville, N. C.	1000	570	526.0	
WWRL	Woodside, N. Y. Divides time with WMBQ-WLBY-WCLB	100	1500	199.9	
WWVA	Wheeling, W. Va. Divides time with WOWO	250	1160	258.5	
KDB	Santa Barbara, Cal.	100	1500	199.9	
KDKA	E. Pittsburgh, Pa.	50000	980	305.9	
KDLR	Devils Lake, N. D.	100	1210	247.8	
KDYL	Salt Lake, Utah	1000	1290	232.4	
KEJK	Beverly Hills, Cal.	500	1250	239.9	
KELW	Burbank, Cal. Divides time with KTM	500	780	384.4	
KEX	Portland, Ore. Divides time with KOB	5000	1180	245.1	
KFAB	Lincoln, Nebr. Divides time with WBBM-WJBT	5000	770	389.4	
KFAD	Phoenix, Ariz.	500	620	483.6	
KFBB	Great Falls, Mont. Divides time with KGIR	500	1360	220.4	
KFBK	Sacramento, Cal.	100	1310	228.9	
KFBL	Everett, Wash. Divides time with KVL-KKP	50	1370	218.8	
KFBU	Laramie, Wyo.	500	600	499.7	
KFCB	Phoenix, Ariz.	250	1310	228.9	
KFDM	Beaumont, Tex.	500	560	535.4	
KFDY	Brookings, S. Dak. Divides time with KFYR	500	550	545.1	
KFEC	Portland, Ore. Divides time with KFJI	50	1370	218.8	
KFEL	Denver, Colo. Divides time with KFXF	250	940	319.0	

RCA Radiotron UX-250

Power Amplifier

Radiotron UX-250 is the largest and most powerful amplifier Radiotron for radio reception. It is capable of handling over three times as much undistorted energy as the UX-210, long the favorite power amplifier tube for maximum volume and tone quality from radio receiving sets.



Obviously, while the new tube is capable of enormous volume it may be employed at but a fraction of its full capacity, thus securing undistorted output at all times with ample reserve power.

The output of the UX-250 cannot be fed directly to the ordinary loudspeaker. It is necessary to utilize some form of loudspeaker coupling system either in the form of an output transformer or a choke and by-pass filter.

Radiotron UX-250 \$11.00

For better radio reception—use RCA Radiotrons

RCA Radiotrons are your best insurance against tube troubles

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
KFEQ	St. Joseph, Mo. Divides time with WOI	2500	560	535.4	
KFEY	Kellogg, Idaho	10	1210	247.8	
KFGQ	Boone, Iowa Divides time with KFJY-KWCR	100	1310	228.9	
KFH	Wichita, Kans. Divides time with WIBW	1000	1300	230.6	
KFHA	Gunnison, Colo.	50	1200	249.9	
KFI	Los Angeles, Cal.	5000	640	468.5	
KFIF	Portland, Ore.	100	1420	211.1	
KFIO	Spokane, Wash.	100	1230	243.8	
KFIU	Juneau, Alaska	10	1310	228.9	
KFIZ	Fond du Lac, Wis.	100	1420	211.1	
KFJB	Marshalltown, Iowa Divides time with WMT	100	1200	249.9	
KFJF	Oklahoma City, Okla.	5000	1470	264.0	
KFJI	Astoria, Ore. Divides time with KFEC	50	1370	218.8	
KFJM	Grand Forks, N. Dak.	100	1370	218.8	
KFJR	Portland, Ore. Divides time with KTBR	500	1300	230.6	
KFJY	Fort Dodge, Iowa Divides time with KWCR-KFGQ	100	1310	228.9	
KFJZ	Fort Worth, Tex.	100	1370	218.8	
KFKA	Greeley, Colo. Divides time with KPOF	500	880	340.7	
KFKB	Milford, Kans.	5000	1130	265.3	
KFKU	Lawrence, Kans. Divides time with WREN	1000	1220	245.8	
KFKX	See KYW				
KFKZ	Kirksville, Mo.	50	1200	249.9	
KFLV	Rockford, Ill. Divides time with WHBL	100	1410	218.8	
KFLX	Galveston, Tex.	100	1370	218.8	
KFMX	Northfield, Minn. Divides time with WCAL-WRHM-WLB	1000	1250	239.9	
KFNF	Shenandoah, Iowa Divides time with WILL-KUSD	1000	890	336.9	
KFOR	Lincoln, Nebr.	100	1210	247.8	

RCA Radiotron UX-281

Half-Wave Rectifier



Radiotron UX-281 is a half-wave rectifier tube of the coated-ribbon filament type. As in the case of Radiotron UX-280 the filament of UX-281 is very sturdy and gives unusually high emission.

As in the case of Radiotron UX-280 the plate of this Radiotron has a specially treated surface which

causes rapid dissipation of heat. While the maximum rated output of the UX-281 is 85 milliamperes, a value of 65 milliamperes is recommended to insure the greatest possible period of usefulness.

Radiotron UX-281 \$7.25

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
KFOX	Long Beach, Cal. Divides time with KEJK	1000	1250	239.9	
KFPL	Dublin, Tex.	15	1310	228.9	
KFPM	Greenville, Tex.	15	1310	228.9	
KFPW	Siloam Springs, Ark.	50	1340	223.7	
KFPY	Spokane, Wash. Divides time with KWSC	500	1390	215.7	
KFQA	See KMOX				
KFQD	Anchorage, Alaska	100	1230	243.8	
KFQU	Holy City, Cal. Divides time with KGTT	100	1420	211.1	
KFWW	Seattle, Wash.	100	1420	211.1	
KFQZ	Hollywood, Cal.	250	850	352.7	
KFRC	San Francisco, Cal.	1000	610	491.5	
KFRU	Columbia, Mo. Divides time with WOS-WGBF	500	630	475.9	
KFSD	San Diego, Cal.	1000	600	499.7	
KFSG	Los Angeles, Cal. Divides time with KMIC	500	1120	267.7	
KFUL	Galveston, Tex. Divides time with K TSA	1000	1290	232.4	
KFUM	Colorado Springs, Colo.	1000	1270	236.1	
KFUO	Clayton, Mo. Divides time with KSD	500	550	545.1	
KFUP	Denver, Colo. Divides time with KFXJ	100	1310	228.9	
KFUR	Ogden, Utah	50	1370	218.8	
KFVD	Culver City, Cal.	250	700	428.3	
KFVS	Cape Girardeau, Mo. Divides time with WEBQ	100	1210	247.8	
KFWB	Hollywood, Cal. Divides time with KPSN	1000	950	315.6	
KFWC	Ontario, Cal. Divides time with KPPC	100	1200	249.9	
KFWF	St. Louis, Mo. Divides time with WMAY	100	1200	249.9	
KFWI	San Francisco, Cal. Divides time with KFWM	500	930	322.4	
KFWM	Oakland, Cal. Divides time with KFWI	500	930	322.4	
KFXD	Jerome, Idaho	50	1420	228.9	
KKFX	Denver, Colo. Divides time with KFEL	250	940	319.0	

RCA Radiotron UX-280

Full-Wave Rectifier

Radiotron UX-280 is a new and improved full-wave rectifying tube that contains a coated ribbon filament. This filament is extremely sturdy both electrically and mechanically and gives exceptionally high emission.



The plate of this Radiotron has a specially treated surface (to be noted by its dark appearance) which causes rapid dissipation of heat.

Radiotron UX-280 is highly evacuated and has many advantages over the gas type rectifiers. The maximum output of Radiotron UX-280 is 125 milliamperes.

Radiotron UX-280 \$3.50

When experts agree on RCA Radiotrons—why take chances?

RCA Radiotrons—the standard equipment in fine radio sets of leading manufacturers

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
KFXJ	Edgewater, Colo. Divides time with KFUP	50	1310	228.9	
KFXR	Oklahoma City, Okla.	100	1310	228.9	
KFXY	Flagstaff, Ariz.	100	1420	211.1	
WFYO	Abilene, Tex.	100	1420	211.1	
KFYR	Bismarck, N. D. Divides time with KFDY	500	550	545.1	
KGA	Spokane, Wash.	5000	1470	204.0	
KGAR	Tucson, Ariz.	100	1370	218.8	
KGB	San Diego, Cal.	250	1360	220.4	
KGBU	Ketchikan, Alaska.	500	900	333.1	
KGBX	St. Joseph, Mo. Divides time with KWKC	100	1370	218.8	
KGBY	See KGBZ				
*KGBZ	York, Nebr. Divides time with KMA *Stations KGBZ, KGES, KGBY, KGEO, and KGDW to com- bine as KGBZ	1000	930	322.4	
KGCA	Decorah, Iowa Divides time with KWLC	50	1270	236.1	
KGCB	Enid, Okla. Divides time with KGFG	100	1370	218.8	
KGCI	San Antonio, Tex. Divides time with KGRC	100	1370	218.8	
KGCN	Concordia, Kans.	50	1420	211.1	
KGCR	Brookings, S. Dak.	100	1210	247.8	
KGCU	Mundan, N. Dak.	100	1200	249.9	
KG CX	Vida, Mont.	10	1420	211.1	
KGDA	Dell Rapids, S. Dak.	50	1370	218.8	
KGDE	Fergus Falls, Minn.	50	1200	249.9	
KGDM	Stockton, Cal.	50	1150	260.7	
KGDP	Pueblo, Colo.	10	1210	247.8	
KGDR	San Antonio, Tex.	100	1500	199.9	
KG DW	See KGBZ				
KG DY	Oldham, S. Dak.	15	1200	249.9	
KG EF	Los Angeles, Cal. Divides time with KTBI	1000	1300	230.6	
KG EK	Yuma, Colo. Divides time with KGEW	50	1200	249.9	
KG ER	Long Beach, Cal.	100	1370	218.8	
KG ES	See KGBZ				
KG EW	Fort Morgan, Colo. Divides time with KGEK	100	1200	249.9	

Special RCA Radiotrons

Special Purpose Radiotrons

This group contains the Radiotrons that are designed for uses quite different from those of the vacuum tubes listed on the previous pages. The following Radiotrons are designed for the automatic regulation of voltage and current respectively. They are the "Electrical Brains" of modern super-power radio receivers and radio power devices.

RCA Radiotron UX-874

Voltage Regulator

Radiotron UX-874 is a voltage regulator tube designed to maintain constant voltage supplied by B eliminators at different current drains. UX-874 is so made that when properly connected it maintains a constant potential of 90 volts to the radio receiver.

Radiotron UX-874 . . \$4.75



RCA Radiotrons UV-876 and UV-886

Ballast Tubes

Radiotron UV-876 is a current regulator used in the rectifier-power-amplifier unit of Model 104 Loudspeaker and Radiola 30 and 30-A when operated from 50 to 75 cycle AC. Radiotron UV-886 is for use in the same equipment when operated from 40 to 45 cycle AC and in Radiola 32 when operated from 60 cycle AC.

Radiotron UV-876 or UV-886 \$6.50



Progress in the radio art is measured by the development of RCA Radiotrons

Give your receiving set a chance—Use RCA Radiotrons

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
KGEZ	Kalispell, Mont.	100	1310	228.9	
KGFF	Alva, Okla.	100	1420	211.1	
KGFG	Oklahoma City, Okla. Divides time with KGCB	100	1370	218.8	
KGFFH	Glendale, Cal.	250	1000	299.8	
KGFI	San Angelo, Tex.	100	1310	228.9	
KGFIJ	Los Angeles, Cal.	100	1420	211.1	
KGFK	Hallock, Minn.	50	1200	249.9	
KGFL	Raton, N. M.	50	1370	218.8	
KGFW	Ravenna, Nebr.	50	1420	211.1	
KGFX	Pierre, S. Dak.	200	580	516.9	
KGGF	Picher, Okla.	500	1010	296.9	
KGHH	Divides time with WNAD Cedar Grove, La.	50	1310	228.9	
KGGM	Divides time with KRMD Albuquerque, N. M.	100	1370	218.8	
KGHB	Honolulu, Hawaii	250	1320	227.1	
KGHD	Missoula, Mont.	50	1420	211.1	
KGHF	Pueblo, Colo.	250	1320	227.1	
KGHG	McGehee, Ark.	50	1310	228.9	
KGHI	Little Rock, Ark.	100	1500	199.9	
KGHL	Billings, Mont.	500	950	315.6	
KGHX	Richmond, Tex.	50	1500	199.9	
KGIO	Idaho Falls, Idaho Divides time with KGIQ	250	1320	227.1	
KGIQ	Twin Falls, Idaho Divides time with KGIO	250	1320	227.1	
KGIR	Butte, Mont.	250	1360	220.4	
KGIW	Divides time with KFBB Trinidad, Colo.	100	1420	211.1	
KGJF	Little Rock, Ark.	250	890	336.9	
KGKB	Brownwood, Tex.	100	1500	199.9	
KGKL	San Angelo, Tex.	100	1370	218.8	
KGKO	Wichita Falls, Tex.	250	570	526.0	
KGO	Oakland, Cal.	7500	790	379.5	
KGRC	San Antonio, Tex.	100	1370	218.8	
KGRS	Divides time with KGCI Amarillo, Tex.	1000	1410	212.6	
KGTT	Divides time with WDAG San Francisco, Cal.	50	1420	211.1	
KGU	Divides time with KFQU Honolulu, Hawaii	500	940	319.0	

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
KGW	Portland, Ore.	1000	620	483.6	
KGW	Lacey, Wash.	50	1200	249.9	
KHJ	Los Angeles, Cal.	1000	900	333.1	
KHQ	Spokane, Wash.	1000	590	508.2	
KICK	Red Oak, Iowa	100	1420	211.1	
KIDO	Boise, Idaho	1000	1250	239.9	
KJBS	Divides time with KXL San Francisco, Cal.	100	1100	272.6	
KJR	Seattle, Wash.	5000	970	309.1	
KKP	Seattle, Wash.	15	1370	211.1	
KLCN	Divides time with KVL-KFBL Blytheville, Ark.	50	1290	232.4	
KLDS	See KMBC				
KLRA	Little Rock, Ark.	1000	1390	215.7	
KLX	Divides time with KUOA Oakland, Cal.	250	1440	208.2	
KLS	Oakland, Cal.	500	880	340.7	
KLZ	Dupont, Colo.	1000	560	535.4	
KMA	Shenandoah, Iowa Divides time with KGBZ	1000	930	322.4	
KMBC	Independence, Mo.	500	950	315.6	
KLDS	Divides time with WHB				
KMED	Medford, Ore.	50	1310	228.9	
KMIC	Inglewood, Cal.	500	1120	267.7	
KMJ	Divides time with KFSG Fresno, Cal.	100	1200	249.9	
KMMJ	Clay Center, Nebr.	1000	740	405.2	
KMO	Tacoma, Wash.	500	1340	223.7	
KMOX	Divides time with KVI				
KFQA	Kirkwood, Mo.	5000	1090	275.1	
KMTR	Hollywood, Cal.	500	570	526.0	
KNX	Divides time with KPLA Hollywood, Cal.	5000	1050	285.5	
KOA	Denver, Colo.	12500	830	361.2	
KOAC	Corvallis, Ore.	1000	560	535.4	
KOB	State College, N. Mex. Divides time with KEX	10000	1180	245.1	
KOCW	Chickasha, Okla.	100	1420	211.1	
KOH	Reno, Nev.	100	1370	218.8	
KOIL	Council Bluffs, Iowa	2500	1260	238.0	
KOIN	Sylvan, Ore.	1000	940	319.0	

Every Radiotron is tested and inspected in 41 different ways before it is approved

Radiotrons are the heart of your radio set

AMERICAN BROADCASTING STATIONS (Continued)

AMERICAN BROADCASTING STATIONS (Continued)

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
KOL	Seattle, Wash. Divides time with KTW	1000	1270	236.1	
KOMO	Seattle, Wash.	1000	920	325.9	
KORE	Eugene, Ore.	100	1420	211.1	
KOW	Denver, Colo.	500	1390	215.7	
KPCB	Seattle, Wash. Divides time with KPQ	100	1210	247.8	
KPJM	Prescott, Ariz.	100	1500	199.9	
KPLA	Los Angeles, Cal. Divides time with KMTR	1000	570	526.0	
KPO	San Francisco, Cal.	5000	680	440.9	
KPOF	Denver, Colo. Divides time with KPFA	500	880	340.7	
KPPC	Pasadena, Cal. Divides time with KFWC	50	1200	249.9	
KPQ	Seattle, Wash. Divides time with KPCB	100	1210	247.8	
KPRC	Houston, Tex.	1000	920	325.9	
KPSN	Pasadena, Cal. Divides time with KFWB	1000	950	315.6	
KPWf	Westminster, Calif.	5000	1490	201.2	
KQV	Pittsburgh, Pa. Divides time with WC50	500	1380	217.3	
KQW	San Jose, Cal.	500	1010	296.9	
KRE	Berkeley, Cal. Divides time with KZM	100	1370	218.8	
KRGV	Harlingen, Tex. Divides time with KWVG	500	1260	238.0	
KRLD	Dallas, Tex.	10000	1040	288.3	
KRMD	Shreveport, La. Divides time with KGGH	50	1310	228.9	
KRSC	Seattle, Wash.	50	1120	267.7	
KSAC	Manhattan, Kans. Divides time with WSUI	1000	580	516.9	
KSBA	Shreveport, La.	1000	1450	206.8	
KSCJ	Sioux City, Iowa Divides time with WTAQ	1000	1330	225.4	
KSD	St. Louis, Mo. Divides time with KFUO	500	550	545.1	
KSEI	Pocatello, Idaho	250	900	333.1	
KSL	Salt Lake City, U	5000	1130	265.3	
KSMR	Santa Maria, Cal.	100	1200	249.9	

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
KSO	Clarinda, Iowa Divides time with WKBH	1000	1380	217.3	
KSOO	Sioux Falls, S. Dak.	1000	1110	270.1	
KSTP	Westcott, Minn.	10000	1460	205.4	
KTAB	Oakland, Cal.	500	550	545.1	
KTAP	San Antonio, Tex.	100	1420	211.1	
KTAT	Ft. Worth, Tex. Divides time with WJAD	1000	1240	241.8	
KTBI	Los Angeles, Cal. Divides time with KGEF	750	1300	230.6	
KTBR	Portland, Ore. Divides time with KFJR	500	1300	230.6	
KTHS	Hot Springs, Ark. Divides time with WBAP	10000	800	374.8	
KTM	Santa Monica, Cal. Divides time with KELW	500	780	384.4	
KTNT	Muscataine, Iowa	5000	1170	256.3	
KTSA	San Antonio, Tex. Divides time with KFUL	1000	1290	232.4	
KTUE	Houston, Tex.	5	1420	211.1	
KTW	Seattle, Wash. Divides time with KOL	1000	1270	236.1	
KUJ	Longview, Wash.	10	1500	199.9	
KUOA	Fayetteville, Ark. Divides time with KLRA	1000	1390	215.7	
KUOM	Missoula, Mont. Divides time with KXA	500	570	526.0	
KUSD	Vermillion, S. Dak. Divides time with KFNF-WILL	500	890	336.9	
KUT	Austin, Tex. Divides time with WTAW	500	1120	267.7	
KVI	Des Moines, Wash. Divides time with KMO	1000	1340	223.7	
KVL	Seattle, Wash. Divides time with KFBL-KKP	100	1370	218.8	
KVOO	Tulsa, Okla. Divides time with WAPI	5000	1140	263.0	
KVOS	Bellingham, Wash.	100	1200	249.9	
KWBS	Portland, Ore.	15	1500	199.9	
KWCR	Cedar Rapids, Iowa Divides time with KPJY-KFGQ	100	1310	228.9	
KWEA	Shreveport, La.	100	1210	247.8	
KWG	Stockton, Cal.	100	1200	249.9	
KWJJ	Portland, Ore.	500	1060	282.8	

RCA Radiotrons—The hallmark of a good radio set

To maintain high quality performance in your radio set—use RCA Radiotrons

AMERICAN BROADCASTING STATIONS (Continued)

Call Letters	TRANSMITTER LOCATION	Power	Kilo-cycles	Meters	Dial Setting
KWK	St. Louis, Mo. Divides time with WIL	1000	1350	222.1	
KWKC	Kansas City, Mo. Divides time with KGBX	100	1370	218.8	
KWKH	Kennonwood, La. Divides time with WWL	20000	850	352.7	
KWLC	Decorah, Iowa Divides time with KGCA	100	1270	236.1	
KWSC	Pullman, Wash. Divides time with KFPY	500	1390	215.7	
KWTC	Santa Ana, Cal.	100	1500	199.9	
KWWG	Brownsville, Tex. Divides time with KRGV	500	1260	238.0	
KWYO	Laramie, Wyo.	500	600	499.7	
KXA	Seattle, Wash. Divides time with KUOM	500	570	526.0	
KXL	Portland, Ore. Divides time with KIDO	500	1250	239.9	
KXO	El Centro, Cal.	100	1200	249.9	
KXRO	Aberdeen, Wash.	75	1420	211.1	
KYA	San Francisco, Cal.	1000	1230	243.8	
KYW KFKX	Chicago, Ill.	5000	1020	293.9	
KZM	Hayward, Cal. Divides time with KRE	100	1370	218.8	

RCA Radiotrons—standard for every use

License Notice

The apparatus and devices which, or the use of which, are covered by patents are sold only under certain specified licenses set forth in a notice attached permanently to the said apparatus and devices, or if this is impracticable on account of size, then on tags or wrappers attached to the said apparatus and devices or on the cartons containing the same. This license notice is as follows:

"In connection with devices it sells, Radio Corporation of America has rights under patents having claims (a) on the devices themselves and (b) on combinations of the devices with other devices or elements, as for example in various circuits and hook-ups.

"The sale of this device carries a license under the patent claims of (a), but only for (1) talking machine uses, (2) radio amateur use, (3) radio experimental uses and (4) radio broadcast reception; and only where no business features are involved.

"The sale does not carry a license under patent claims of (b) except only (1) for legitimate renewals and repairs in apparatus and systems already licensed for use under such patent claims on combinations, (2) for assembly by amateurs and experimenters, and not by others, with other licensed parts or devices, or with parts or devices made by themselves, but only for their own amateur and experimental radio uses where no business features are involved, and not for sale to or for use by others, and (3) for use with licensed talking machines and licensed radio broadcast receiving devices; and only where no business features are involved.

"This device is licensed for no other use unless, by special written contract of sale with Radio Corporation of America, the purchaser has agreed to use it in some other special manner only, as set forth in the contract of sale. The right to employ the device in such special manner is non-transferable except by special agreement with Radio Corporation of America."

300 M-7-3-29