



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 WSRQ	25	1420	211.1	
WAAF	Chicago, Ill.	500	920	325.9	
WAAM	Newark, N. J. Divides time with WGCP-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	
WABF	Kingston, Pa. Divides time with WRAX	250	1440	208.2	
WABI	Bangor, Me.	100	1200	249.9	
WABO	See WHEC				
WABZ	New Orleans, La. Divides time with WJBW	100	1200	249.9	
WADC	Akron, Ohio	1000	1320	227.1	
WAFD	Detroit, Mich.	100	1500	199.9	
WAGM	Royal Oak, Mich. Divides time with WBMH	50	1310	228.9	
WAIU	Columbus, Ohio	5000	640	468.5	
WALK	Willow Grove, Pa. Divides time with WHBW- WPSW	50	1500	199.9	
WAPI	Birmingham, Ala. Divides time with KVOO	5000	1140	263.0	
WASH	Grand Rapids, Mich. Divides time with WOOD	250	1270	236.1	
WBAA	Lafayette, Ind. Divides time with WCMA-WKBF	500	1400	214.2	
WBAK	Harrisburg, Pa. Divides time with WMBS-WCAH	500	1430	209.7	
WBAL	Glen Morris, Md. Divides time with WTIC	10000	1060	282.8	

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

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

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

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 Divides time with WMBS-WBAK	250	1430	209.7	
WCAJ	Lincoln, Nebr. Divides time with WOW	500	590	508.2	
WCAL	Northfield, Minn. Divides time with KFMX-WRHM-WLB	1000	1250	239.9	
WCAM	Camden, N. J. Divides time with WOAX-WCAP	500	1280	234.2	
WCAO	Baltimore, Md.	250	600	499.7	
WCAP	Asbury Park, N. J. Divides time with WCAM-WOAX	500	1280	234.2	
WCAT	Rapid City, S. D.	100	1200	249.9	
WCAU	Byberry, Pa.	1000	1170	256.3	
WCAX	Burlington, Vt. Divides time with WNBX	100	1200	249.9	
WCAZ	Carthage, Ill.	50	1070	280.2	
WCBA	Allentown, Pa. Divides time with WSAN	250	1440	208.2	
WCBD	Zion, Ill. Divides time with WMBI	5000	1080	277.6	
WCBM	Baltimore, Md.	100	1370	218.8	
WCBS	Springfield, Ill. Divides time with WTAX	100	1210	247.8	
WCCO	Anoka, Minn.	7500	810	370.2	
WCDA	Cliffside Park, N. J. Divides time with WBNY-WKBO-WMSG	250	1350	222.1	
WCFL	Chicago, Ill.	1500	970	309.1	
WCGU	Coney Island, N. Y. Divides with WSGH-WSDA-WLTH-WBBC	500	1400	214.2	
WCLB	Long Beach, N. Y. Divides time with WMBQ-WLBX-WWRL	100	1500	199.9	
WCLO	Kenosha, Wis.	100	1200	249.9	
WCLS	Joliet, Ill. Divides with WEHS-WKBB-WKBI-WHFC	100	1310	228.9	
WCMA	Culver, Ind. Divides time with WBAA-WKBF	500	1400	214.2	
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 RCA Radiotrons

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
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.	50000	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-WSBC	100	1210	247.8	
WEDH	Erie, 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 } WBCN }	Chicago, Ill. Divides time with WLS	50000	870	344.6	
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 Radiotrons—the hallmark of a good radio set

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-mu 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

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	Jeffersontown, 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 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—standard for every use

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. Divides time with KFLV	500	1410	212.6	
WHBP	Johnstown, Pa. Divides timewith WFBG	100	1310	228.9	
WHBQ	Memphis, Tenn.	100	1370	218.8	
WHBU	Anderson, Ind.	100	1210	247.8	
WHBW	Philadelphia, Pa. Divides time with WALK- WPSW	100	1500	199.9	
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. Divides time with WDGY	500	1390	215.7	
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. Divides with WCLS-WKBB- WKBI-WEHS	100	1310	228.9	
WHK	Cleveland, Ohio	1000	1390	215.7	
WHN	New York, N. Y. Divides time with WRNY- WQAO-WPAP	250	1010	296.9	
WHO	Des Moines, Iowa Divides time with WOC	5000	1000	299.8	
WHPP	Englewood Cliffs, N. J. Divides time with WLBH-WMRJ	10	1420	211.1	
WHT	Deerfield, Ill. Divides time with WJAZ- WORD	5000	1480	202.6	
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. Divides time with WJBK	100	1370	218.8	
WIBO	Desplaines, Ill. Divides time with WPCC- WNAX-WHA	1500	570	526.0	
WIBR	Steubenville, Ohio Divides time with WQBZ	50	1420	211.1	
WIBS	Elizabeth, N. J. Divides with WBMS-WNJ- WKBO	250	1450	206.8	

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

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

There's an RCA Radiotron for every purpose

all 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	
WKAO	San Juan, P. R.	500	890	336.9	
WKAR	E. Lansing, Mich.	500	1040	288.3	
WKAU	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-WIBS	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 WEOA	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
WKY	Oklahoma City, Okla.	1000	900	333.1	
WLAC	Nashville, Tenn. Divides time with WBAB	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	
WLBK	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 WKES	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	
WLEX	Lexington, Mass. Divides time with WSSH	250	1420	211.1	
WLBI	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 WDWF				
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	

Improve your radio set with RCA Radiotrons

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?

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	
WMOB	Auburn, N. Y.	100	1370	218.8	
WMBQ	Brooklyn, N. Y. Divides time with WCLB- WWRL-WLBX	100	1500	199.9	
WMBR	Tampa, Fla.	100	1210	247.8	
WMB5	Lemoyme, Pa. Divides time with WCAH-WBAK	500	1430	209.7	
WMC	Memphis, Tenn.	500	780	384.4	
WMDA	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 WLBH-WHPP	10	1420	211.1	
WMSG	New York, N. Y. Divides time with WBNT- 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 RADIOTRONS

MODEL	USE	CIRCUIT REQUIREMENTS	GENERAL			DETECTION						AMPLIFICATION							
			BASE	MAXIMUM OVERALL HEIGHT	MAXIMUM OVERALL DIAMETER	"A" SUPPLY	FILAMENT TERMINAL VOLTAGE	FILAMENT CURRENT (AMPERES)	DETECTOR GRID RETURN LEAD TO +	GRID LEAK (MEG OHMS)	DETECTOR "P" BATTERY VOLTAGE	DETECTOR PLANT CURRENT (MILLIAMPERES)	AMPLIFIER "P" BATTERY VOLTAGE	AMPLIFIER PLANT CURRENT (MILLIAMPERES)	A.C. PLATE RESONANCE (OHMS)	MUTUAL INDUCTANCE (MICROHENRIES)	VOLTAGE AMPLIFICATION FACTOR	MINIMUM UNDISTORTED FREQUENCY (CYCLES PER SECOND)	
RADIOTRON UX-11	Detector or Amplifier	Transformer Coupling	W0-11 Base	4 1/4	1 1/4	By Ohl 11 V Storage 6 V	1.1	25	+	3 to 5	22 to 45	1.5	90 175	4 10	2.5 3.5	15,000 15,000	425 440	6.6 6.6	7 35
RADIOTRON UX-12	Detector or Amplifier	Transformer Coupling	Large Standard UX Base	4 1/4	1 1/4	By Ohl 11 V Storage 6 V	1.1	25	+	3 to 5	22 to 45	1.5	90 175	4 10	2.5 3.5	15,000 15,000	425 440	6.6 6.6	7 35
RADIOTRON UX-12-A	Detector or Amplifier	Transformer Coupling	Large Standard UX Base	4 1/4	1 1/4	Storage 6 V	5.0	25	+	3 to 5	45	1.5	150	9	7	5,000	1,600	8	120
RADIOTRON UX-199	Detector or Amplifier	Transformer Coupling	UV-199 Base	3 1/2	1 1/4	By Ohl 4 1/2 V Storage 4 V	3.0	560	+	2 to 9	45	1.5	150	4 1/2	2.5	15,500	425	6.6	7
RADIOTRON UX-199-A	Detector or Amplifier	Transformer Coupling	Small Standard UX Base	4 1/4	1 1/4	By Ohl 4 1/2 V Storage 4 V	3.0	560	+	2 to 9	45	1.5	150	4 1/2	2.5	15,500	425	6.6	7
RADIOTRON UX-200-A	Detector or Amplifier	Transformer Coupling	Large Standard UX Base	4 1/4	1 1/4	Storage 6 V	5.0	25	+	2 to 3	45	1.5	Following UX-200A Characteristics apply only for Detector Connection	—	—	30,000	666	20	—
RADIOTRON UX-201-A	Detector or Amplifier	Transformer Coupling	Large Standard UX Base	4 1/4	1 1/4	Storage 6 V	5.0	25	+	2 to 9	45	1.5	195	4 1/2	2.5	11,000	725	8	18
RADIOTRON UX-222	Radio Pilot Amplifier	Auto Coupling	Large Standard UX Base	5 1/4	1 1/4	By Ohl 4 1/2 V Storage 4 V	3.3	132	—	—	—	—	135	13 1/2	1.5	85,000	350	300	—
RADIOTRON UX-222-A	Radio Pilot Amplifier	Auto Coupling	Large Standard UX Base	5 1/4	1 1/4	By Ohl 4 1/2 V Storage 4 V	3.3	132	—	—	—	—	180	13 1/2	1.5	150,000	400	60	—
RADIOTRON UX-225	Amplifier A.C. Heater Type	Transformer Coupling	Large Standard UX Base	4 1/4	1 1/4	Transformer 1.5 V	1.5	105	—	—	—	—	90	6 A	3.7	9,400	875	8.2	20
RADIOTRON UX-225-A	Amplifier A.C. Heater Type	Transformer Coupling	Large Standard UX Base	4 1/4	1 1/4	Transformer 1.5 V	1.5	105	—	—	—	—	135	9 A	6	7,400	1,100	8.2	70
RADIOTRON UX-227	Amplifier A.C. Heater Type	Transformer Coupling	5 Pinning Standard UX Base	4 1/4	1 1/4	Transformer 2.5 V	2.5	175	0	2 to 9	45	7	180	13 1/2	7.5	7,000	1,120	8.2	160
RADIOTRON UX-249	Detector or Amplifier	Transformer Coupling	Large Standard UX Base	4 1/4	1 1/4	Storage 6 V	5.0	25	+	2 to 5	135	3	135	11	2	150,000	200	30	—
RADIOTRON UX-104-A	Power Amplifier	No L. S. C. Required	Large Standard UX Base	4 1/4	1 1/4	Stage 6 V	5.0	25	—	—	—	—	135	9	7	5,000	1,600	8	120
RADIOTRON UX-150	Power Amplifier	No L. S. C. Required	Small Standard UX Base	4 1/4	1 1/4	By Ohl 4 1/2 V Storage 4 V	3.0	125	—	—	—	—	157	10 1/2	9.5	4,700	1,700	8	195
RADIOTRON UX-179-A	Power Amplifier	L. S. C. Except at 60 V	Large Standard UX Base	4 1/4	1 1/4	Stage 6 V	5.0	25	—	—	—	—	180	13	9.5	4,700	1,700	8	275
RADIOTRON UX-210	Power Amplifier	L. S. C.	Large Standard UX Base	5 1/4	2 1/4	Transformer 7.5 V	7.5	125	—	—	—	—	250	15 1/2	10	2,500	1,300	3.0	110
RADIOTRON UX-250	Power Amplifier	L. S. C.	Large Standard UX Base	6 1/4	2 1/4	Transformer 7.5 V	7.5	125	—	—	—	—	300	25 1/2	20	2,700	1,300	3.0	200

MODEL	USE	CIRCUIT REQUIREMENTS	BASE	MAXIMUM OVERALL HEIGHT	MAXIMUM OVERALL DIAMETER	PURPOSE	OPERATING VOLTAGE	STARTING VOLTAGE	OPERATING CURRENT	MEAN VOLTAGE DROP	PERMISSIBLE VARIATION
RADIOTRON UX-213	Full-Wave Rectifier	Full-Wave Circuit	Large Standard UX Base	5 5/8	2 1/2	Rectification in Eliminator particularly designed for this Radiotron	Filament Terminal Voltage.....5 Volts Filament Current.....2.25 Amperes A.C. Plate Voltage.....200 Volts (Max. per plate)	Max. D. C. Output Current (both plates).....65 Milliamperes D. C. Output Voltage at max. current as applied to filter of typical rectifier circuit.....170 Volts			
RADIOTRON UX-218-B	Half-Wave Rectifier	Half or Full Wave Circuit	Large Standard UX Base	5 5/8	2 3/8	Rectification in Eliminator particularly designed for this Radiotron	Filament Terminal Voltage.....7.5 Volts Filament Current.....1.25 Amperes A.C. Plate Voltage.....150 Volts (Maximum)	Max. D. C. Output Current.....65 Milliamperes D. C. Output Voltage at max. current as applied to filter of typical rectifier circuit.....470 Volts			
RADIOTRON UX-280	Full-Wave Rectifier	Full-Wave Circuit	Large Standard UX Base	5 5/8	2 3/8	Rectification in Eliminator designed for this Radiotron or Radiotron UX-2135	Filament Terminal Voltage.....5 Volts Filament Current.....2.25 Amperes A.C. Plate Voltage.....200 Volts (Max. per plate)	Max. D. C. Output Current (both plates).....125 Milliamperes Max. D. C. Output Voltage at max. current as applied to filter of typical rectifier circuit.....400 Volts			
RADIOTRON UX-281	Half-Wave Rectifier	Half or Full Wave Circuit	Large Standard UX Base	6 1/4	2 7/8	Rectification in Eliminator designed for this Radiotron or Radiotron UX-216 (B)	Filament Terminal Voltage.....7.5 Volts Filament Current.....1.25 Amperes A.C. Plate Voltage.....100 Volts (Maximum)	Recommended Maximum D. C. Output Current.....65 Milliamperes D. C. Output Voltage as applied to filter of typical rectifier circuit.....620 Volts			
RADIOTRON UX-874	Voltage Regulator	Series Resistance	Large Standard UX Base	5 5/8	2 3/8	Constant Voltage Device	Designed to keep output voltage of B eliminator constant when different values of "B" current are supplied	Operating Voltage.....50 Volts D.C. Starting Voltage.....125 Volts D.C. Operating Current.....10-50 Milliamperes			
RADIOTRON UX-875	Current Regulator (Ballast Tube)	Transformer Primary of 60 volts for use on 115 Volt Line	Standard Nalco Type Screw Base	8"	2 1/4	Constant Current Device	Designed to insure constant input to power operated radio receivers despite fluctuations in line voltage	Operating Current.....1.7 Amperes Mean Voltage Drop.....50 Volts Permissible Variation.....±10 Volts			
RADIOTRON UX-886	Current Regulator (Ballast Tube)	Transformer Primary of 80 volts for use on 115 Volt Line	Standard Nalco Type Screw Base	8"	2 1/4	Constant Current Device	Designed to insure constant input to power operated radio receivers despite fluctuations in line voltage	Operating Current.....2.05 Amperes Mean Voltage Drop.....50 Volts Permissible Variation.....±10 Volts			

(A) Note other use of this Radiotron above (below)
 * Inner Grid - 1 1/2 Volts, Outer Grid - 45 Volts, 15 Milliamperes
 C Outer Grid - 1 1/2 Volts, Inner Grid - 22 Volts, 6 Milliamperes
 † Applied grid plate coupling resistance of 250,000 Ohms
 ‡ Grid voltage is given with respect to mid-point of filament
 Note All grid voltages are given with respect to cathode or negative filament terminal - not to be exceeded
 Max. Values not to be exceeded
 * Exceed for half ampere filament
 † UX-112 and UX-179 characteristics are identical respectively to UX-412, A and UX-471-A
 ‡ Nalco Cathode
 † L.S.C. - Load Speaker Coupling consisting of either Choke Coil and by Pass Condenser or Output Transformer with 1:1 or step down ratio, recommended minimum plate current (D.C.) exceeds 10 milliamperes.
 M..... With a screen grid tube, in account of circuit variations, the actual voltage amplification obtainable does not fall as high a ratio as the voltage amplification factor as in the case of other pentode tubes.

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

Give your receiving set a chance - Use RCA Radiotrons

