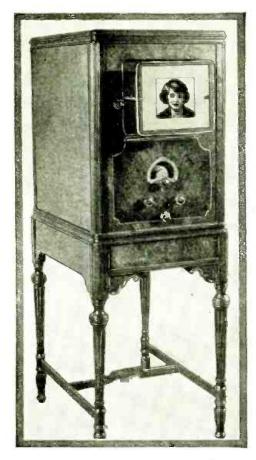
#### Nov.-Dec., 1931



New Jenkins large image console.

**P**ROVIDING a large, brilliant, undistorted screen image that may be viewed by the largest home group, as contrasted with the peep-hole image and the handful of lookers-in of previous equipment, the latest Jenkins Projector Radiovisor marks an important step forward.

The new projector radiovisor comprises a lens scanning disc, DeForest spot-source neon crater tube, translucent screen, driving motor, focusing adjustment, framing handle and motor controls, mounted in neat and compact chassis form.

The unique feature of this radiovisor is the 12-inch scanning disc with

# JENKINS NEW HOME GIVES LARGE IMAGE

## Crater tube plus lens disc gives large brilliant image.

60 lenses, each of 7/16-inch diameter. The intense spot of light provided by the crater neon tube is focused, by means of a condensing lens, on to the lens scanning disc, which in turn throws a flying spot on the reverse side of a ground glass screen, to weave the picture. The scanning disc is rotated by the driving motor which is synchronized with the intercepted television signal, either by using a common A.C. power system or by the carrier beat of 1200 cycles.

The DeForest crater neon tube is an entirely new and startling development, aimed at producing a highly responsive and concentrated light source for projected television pictures. The screen picture may be adjusted and focussed for any size from  $3 \ge 3\frac{1}{2}$  inches up to  $8\frac{3}{8} \ge 10$  inches. The focusing control is on the front of the radiovisor chassis, as is also the small handle for framing the pictures.

The driving motor is of unique design, assuring constant speed and silent operation. It offers no interference for the television receiver, which may be placed in close proximity for compactness of the entire television set.

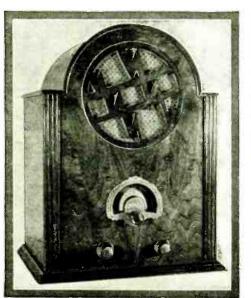
The projector radiovisor is available in chassis form or mounted, in combination with the receiver, in a handsome walnut console cabinet for living-room use.



Side-view of new home projector with Crater lamp and lens disc.

#### New Dual Range Television Receiver

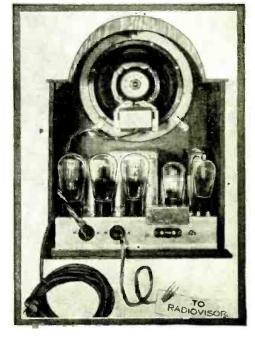
M EETING the first prerequisite of an ideal television tuner and amplifier, the new Jenkins Model JD-30 receiver in addition serves as a com-(Continued on page 380)





- Above-Chassis of "Dual-Range" television and short wave receiver.
- Left—Front of "Dual Range" television receiver.

Rear of receiver showing loud speaker and television terminals.



Jenkins New Home Projector (Continued from page 353) bined broadcast and short-wave re-

ceiver by the simple expedient of changing the unique ganged plug-in coil units. It is a truly universal re-ceiver not only in the matter of covering different wave bands, but

also in providing the ideal degree of

selectivity for each class of reception. For television reception, the Jenkins receiver covers the wave band

from 80 to 200 meters, with the neces-

sary broadness of tuning for maximum pictorial detail. Additional plugin coils conveniently ganged and housed in a metal casing as single

units, to facilitate rapid change from

one band to another, can be employed to cover the "broadcast" and the

The receiver includes two stages of

tuned radio-frequency amplification. with single-dial tuner for simplified operation. A knob controls power

switch and output volume, while another knob switches the output from loud-speaker to radiovisor. The re-sistance-coupled amplifier delivers an

output of 55 milliamperes for the op-

eration of the DeForest crater neon lamp in the Jenkins Projector Radio-

visor. A dynamic speaker is included.

'24 A.C. screen-grids, one '27 A.C. detector, two '45 power tubes, and one '80 rectifier. The Jenkins receiver is

designed for 110-120 volt A.C. operation. Its components are fully shielded. The receiver is available in chassis

form or in a beautifully finished

walnut console cabinet, alone or with the Jenkins Projector Radiovisor.

The tube equipment comprises four

"short-wave" bands as well.

TELEVISION TIME-TABLE					
Furnished by U. S. Dept. of Commerce, Radio Division, Washington, D. C.					
Location of Transmitter	Lines per Frame	Call Signal	Frequency in kilocycles (meters in parentheses)	Power (watts ir antenna)	
California :					
Gardens (noor) Illinois: Chicago	48	WOYS W9XAA	2,100 (142.9 to 2,200 (136.4) 2,000 (150) to 2,100 (142.9),		Don Lee (Inc.)
			2,750 (109.1) to 2,850 (105.3)		Chicago Federation of Labor.
	45	W9XAO	2,000 (150) to 2,100 (142.9)	500	Western Television Corp., 6312 Bway,
Downers Grove	45 24	W9XAP W9XR	2.100 (142.9) to 2.200 (136.4) 2.850 (105.3) to 2.950 (101.7)		Corp., 6312 Bway. Chicago Daily News
Indiana:		WJAR	2.000 (100.0) (0 2.000 (101.7)	2,000	Great Lakes Broad- casting Co., 72 W. Adams St., Chicago.
West Lafayette	—	W9XG	2,750 (109.1) to 2,850 (105.3)	1,500	Purdue University, 400 Northwestern
lowa: Iowa City		W9XAZ	2,000 (150) to 2.100 (142.9)	500	Ave, State University of Iowa
Maryland: Silver Springs	60	W3XK	2.000 (150) to 2,100 (142.9),	5.000	Jenkins Laboratories, 1519 Connecticut Ave., Washington, D. C.
Massachusetts: Boston	60	WIXAV	2.850 (105.3) to 2.950 (101.7)	1,000	Shortwave and Tele- vision Laboratory (Inc.)
New Jersey: Allwood	60	W2XCI	2,000 (150) to 2,100 (142.9), 2.850 (105.3) to 2,950 (101.7)	2,000	Freed-Eisemann Radio Corp., Junius St. & Liberty Ave., New York, N. Y.
Camden	60	W3XAD	2,100 (142,9) to 2,200 (136,4), 43,000 (6.97) to 46,000(6.52), 48,500 (6,18) to 50,300 (5,96), 0 000 (5) to 80,000 (3,75)	500	R. C. A. Victor Com- pany (Inc.)
Passaic New York:	60	W2XCD		5,000	De Forest Ralio Co.
Beacon Long Island City	48	W2XBU W2XBO	2,000 (150) to 2,100 (142.9) 2,750 (109.1) to 2,850 (105.3)	$\begin{array}{c}100\\500\end{array}$	Harold E. Smith. United Research Corp., 39 Van Pelt Ave.
66 66 68	60	W2XR	2,100 (142.9) to 2,200 (136.4), 2.850(105.3) to 2,950(101.69)	500	Radio Pictures, Inc.,
New York	60	W2XAB	2.750 (109.1) to 2,850 (105.3)	500	3101 Northern Blvd. Atlantic Broadcasting Corp., 485 Madison
48 68	60	W2XBS	2.100 (142.9) to 2.200 (136.4)	5,000	Ave. National Broadcasting Co. (Inc.), 711 Fifth
44 44	60	W2XCR	2.000 (150) to 2.100 (142.9),	5.000	Ave. Jenkins Television
Ossining Schenectady Pennsylvania :	-	W2XX W2XCW	2.000 (150) to 2.100 (142.9) 2.100 (142.9) to 2.200 (136.4)	100 20.000	Corp. 655 5th Ave. Robert F. Gowen. General Electric Co.
East Pittsburgh	60	W8XAV	2.100 (142.9) to 2.200 (136.4)	20,000	Westinghouse Electric
66 68	60	W8XT	660 (455)	25,000	& Mfg. Co. Westinghouse Electric & Mfg. Co.
Wisconsin : Milwaukeo	-	W9XD	43,000 (6.97) to 46,000 (6.52), 48,500 (6.18) to 50.000 (5.96), 60,000 (5) to 80,000 (3.75)	500	The Journal Co. (Mil- waukee Journal).

# Behind the Scenes in a Television Studio

(Continued from page 337)

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eyes are focused almost straight into the optical pick-up; each sheet of manuscript is dropped on the floor as soon as it has been read. The righthand picture shows how a piano bench and "baby" upright piano are mounted on stilts, so that the artist's face (and occasionally the hands also) can be "picked up" by the televisor.

### **Light-Controlling Means** (Continued from page 372)

effect is in the opposite sense for each traverse. The passage twice through the crystal doubles the effect of a voltage across the condenser plates in rotating the plane of polarization and valving light. The system may also be used in a straightforward manner. without the double-passage feature. by inserting an idle piezo crystal in the path of the ray, so orientated as to cancel the dispersion due to the active crystal.

(3.75) PORTABLE 43.000 8.000 (6.977) to 46,000 (6.522), 48,500 (6.186) to 50,300 (5.964), 60,000 (5), 80,000 (3.75) Shortwave & To vision Corp, Broakline Ave. Massachusetta: 60 WIXG 30 Tele-Boston New Jersey: Passaic 60 W2XAP 2,000 (150) to 2,100 (112.9) 250 Jenkins Television Corp. Bound Brook 60 W3XAK 2 100 (142.9) to 2,200 (136.4) National Broadcasting 5.000 Co., Inc. National Broadcasting 8,000 (6.977) to 46,000 (6.522), 48,500 (6.186) to 50,300 (5.964), 60,000 (5). New York State: W2XBT 43,000 750 Co., Inc. 80,000 (3.75) United States: W10XG 43.000 (6.977) to 46.000 (6.522), 18 500 (6.186) to 50.000 (5.964), 60,000 (5), 80,000 (3,75) De Forest Radio Co.. Passaic, N. J. (Throughout) 60 500 80.000 (3.75)
Time on the Air: The daily newspapers in the larger cities—Chicago, New York and Boston, for example—carry television programs and time schedules. Experimental television stations, such as those operated by the N. B. C., Westinghouse, General Electric Co., etc., are on the air practically every day, testing, and can be picked up. The Jenkins stations' time schedules are as follows:
W2XCR—N. Y. City. 3 to 5 and 6 to 8 P.M. daily; 6 to 8 P.M. Sunday. Voice transmitted over WdBS, on 384.4 meters or 780 k c.
W3XK—Washington, D. C., 7 to 9 P.M. and 10:30 to 11:30 P.M. daily (D.S.T.). 60 holes. W2XAP—Passaic (Portable transmitter). 60 line, 20 frames per second "standard"—Time irregular—Experimental.
W2XCD—Passaic (De Forest Radio Corp.). 9 to 10 P.M. daily. Sound accompaniment transmitted on 1.601 k.c.
Columbia Broadcasting System (W2XAB) went on daily transmission schedule July 21st, 60 holes, 20 frames (revs.) per second (or 1.200 r.p.m.). Voice transmitted on 6,120 k.c. (49.02 meters) W2XE. Short Wave and Television Corp., Boston, Mass., transmits image (W1XAV) daily, 60 holes.

Short Wave and Television Corp. Boston, Mass., transmits image (W1XAV) daily, 60 holes. 20 frames per second, and voice accompaniment on 1604 k.c. or 187 meters (W1XAU). It is understood, of course, that two receiving tuners or sets are required to pick up voice and image, such as from W2XCR and WGBS, one set tuned to 117.5 meters for reception of the image and one set tuned to WGBS or 381.4 meters to pick up the voice. Daily image programs are broadcast by the Boston station W1XAV, and also by the Chicago stations W9XAA, W9XAO and W9XAP.