

SEE The  
artist  
You are hearing  
.....  
Your Home  
is a  
Theatre  
with  
JENKINS  
RADIOVISION





# The Air Is Full Of Pictures

**YOU** can have Television in your home today. From behind the smoke screen of misinformation the Jenkins Television Corporation brings forth these facts:

**You don't have to be an engineer.** You don't have to know mathematics—You don't have to understand electricity—You don't need to be a mechanic to enjoy these sets. The Jenkins Radiovisions are as easy to operate as any Broadcast receiver.

**You don't need a room full of equipment.** You don't have to have a laboratory—You don't need a lot of hay wire—tubes—coils—condensers and gimcracks to receive pictures. The complete equipment is as small as a Radio set.

**You don't have to throw away your present radio.** You don't have to sell it. You don't have to trade it in. You don't have to give it away—Dust it off—Have it checked up—You are going to need it. The Television sets bring in only the picture, your present radio set will bring in the words and music.

**You don't have to wait for pictures.** You won't have to wait until you are old and gray. You won't have to will it to your children. You can use it now. Two stations in New York are broadcasting on regular schedule, two more are in operation in Chicago, and five more are under definite consideration. You can receive pictures today.

**You don't have to be a millionaire.** These Television sets cost a little more than you would pay for a good broadcast receiver.

**You are on the threshold of a new era.** Sight is being added to sound and your living room will be a theatre every evening in the week where you can relax and enjoy the best talents the world has to offer.



Model 300 Radiovisor, \$225 ~~195.00~~  
For use with J-S receiver only

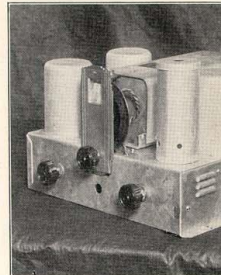
Jenkins Self-Synchronizing Receiver, \$225 ~~175.00~~  
Type J-S



**RADIOVISION** means the transmitting and receiving of moving pictures by radio. Living persons at the studio face the radio-vision pick-up as well as the microphone, and we hear radio talkies, or synchronized sight and sound broadcasting. For this, two transmitters are employed, one for the picture signals on short waves, and the other for the sound signals on the broadcast wave lengths. At the receiving end, a short wave receiver and radiovisor receives the pictures, and a standard broadcasting receiver the sound accompaniment, tuned in to their respective transmitters.

The image to be transmitted is separated into thousands of tiny light units for conversion into electrical impulses. This action called **SCANNING** is accomplished by separating the image into a series of lines and then into many small sections. These impulses are reassembled when received by the radiovisor in their proper order to re-create the picture. Our present practice uses 48-line scanning repeated 15 times per second. It is at once evident that the scanning disc at the transmitter and receiver must be absolutely in step with each other. This is called **SYNCHRONIZING**. This is one of the most difficult problems of television. This has been accomplished to a limited degree by means of synchronous motors operating on the same power supply, as the transmitter but it frequently happens that good signal strength is available in districts whose power system is foreign to that of the transmitter. There are several **SELF-SYNCHRONIZING** systems known but their cost is prohibitive. An economical solution to this problem has been developed by the Jenkins Television Corporation in the form of a small synchronous motor which operates at picture speed and obtains its timing impulses from the received signal. Briefly, this self synchronizer is a phonic motor, operating on the strong 720-cycle scanning frequency present in the usual 48-line, 15 pictures-per-second radiovision signal. This synchronizer comprises a toothed rotor on the drive shaft of the radiovisor, together with an electro-magnet or field coil furnished with this energy supplied by an extra amplifier in the radiovision receiver. The 720-cycle component is filtered out, amplified, and fed to the phonic motor field.

A 60-cycle eddy current motor supplies most of the power to drive the radiovisor scanning disc. The synchronizer is used to keep it in perfect step with the distant transmitter. An adaption of this system is used in the **JENKINS RADIOVISOR MODEL No. 300**. A special neon lamp allows an enlargement of the picture without loss of brilliance or contrast. These pictures are enlarged by means



Jenkins Special 1



# Now Self-Synchronizing

of specially corrected lenses so that several people may view the pictures at the same time. This model No. 300 can only be used with a **JENKINS SELF-SYNCHRONIZING RECEIVER**. Self-synchronizing increases the number of programs available by eliminating the comparatively small geographical limitations imposed by the many independent power companies.

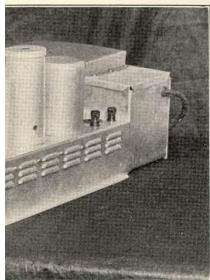
The Jenkins Model 200 Radiovisor might well be termed the salon' console of television. It represents intricate laboratory technique reduced to the simplest form for practical home entertainment, yet without sacrifice of results. Extreme precision in design and construction makes for maximum pictorial detail within the limitations of present-day radiovision. Essentially intended for those interested in radiovision programs and not in radiovision experimentation, the operation has been made exceptionally easy.

This device is intended for the reception of 48-line, 15-pictures-per-second signals. Synchronizing is accomplished by operating on the same 60-cycle power system as that supplying the transmitter, this method having been found the simplest and most satisfactory at this time. Your dealer can advise you on the question of the power system, and what stations you can receive.

The mechanism is enclosed in an attractive walnut cabinet, and is readily accessible by opening the hinged top. The compact Jenkins scanning drum and selector shutter disk are included, thereby obtaining the most accurate cut-off of scanning lines and insuring a clear, sharp image. An over-sized synchronous motor supplies the driving power. Accurately meshed gears, well lubricated, make for quiet operation. Although a special Jenkins television lamp is provided, the lamp holder is designed to take any standard television lamp. Necessary adjustments are available for the proper centering of any standard television lamp for maximum and uniform illumination of the screen.

The front of the cabinet contains a shadowbox lens system through which the radiovision images are viewed in enlarged form. As many as six persons may enjoy the pictures at one time.

A small panel, below the lens, carries the two main controls in the form of toggle snap switches. The first switch throws the receiver either to the «Speaker» position for tuning in signals, or to the «Picture» position for viewing the radiovision images. The second switch starts and stops the motor, and also serves for the vertical framing of pictures. A handle on the right side of the cabinet serves for horizontal framing.



Television Chassis



Jenkins Radiovisor Model 200, ~~\$395.00.00~~  
Jenkins Special Television Receiver, ~~\$175.50.00~~



**T**HE Jenkins Radiovision Receiver is a special form of short wave radio receiving set designed to meet the peculiar and exacting requirements of radiovision reception in the simplest and yet most efficient manner. This design eliminates the main causes of poor radiovision reception which are usually traceable to an inadequately designed receiver and amplifier. While some results may be obtained with the average short wave radio set, good half-tone pictures are generally impossible. The Jenkins Radiovision Receiver, however, in combination with a Jenkins Radiovisor provides good radiovision results in the home where sufficient signal strength exists.

In keeping with standard receiver practice, the Jenkins Radiovision Receiver is of the complete A.C. type and is entirely self-contained with power amplifier and power pack. There is a single tuning control as well as volume and coupling controls. The tuning range is from 95 to 180 meters covering the radiovision wave length band without requiring several sets of interchangeable coils.

The Jenkins Radiovision Receiver employs three stages of tuned screen grid radio frequency amplification. A band-pass filter serves to pass the full radiovision signal without stripping the side bands which are so essential to picture detail. This is followed by a non-regenerative linear power detector (regeneration definitely ruins picture reception), which feeds into a two-stage resistance coupled audio amplifier employing 424 type screen grid tubes. The final or power stage is of the 450 type. This amplifier employs a special resistance net work which amplifies uniformly over a range from 15 to 30,000 cycles as compared with the better broadcast receivers which cover from 60 to 5,000 cycles. The chassis construction is of the totally shielded type which eliminates the greater part of local interference and back door reception and is responsible for the exceedingly stable operation of this receiver.

This chassis slides into a neat walnut table and is of the right size and height to hold the Radiovisor most satisfactorily or will make a beautiful occasional table for the living room.

# For the Experimenter



**THE JENKINS MODEL 100 RADIOVISOR** is a simplified and most economical piece of equipment in stripped form, capable of providing excellent results although necessarily on a modest scale. In the absence of a cabinet, the mechanism is mounted on a cast metal base and attractively finished. It is so quiet in operation that it can be heard but a few feet away. The radiovisor may be mounted in a suitable cabinet if preferred, although it is intended primarily for the radiovision experimenter who is not so much concerned with appearance but, rather, prefers a device permitting of experimental alterations and applications. The Jenkins Model 100 Radiovisor provides satisfactory results from the start, while not discouraging the experimental phase of radiovision.

This device is intended for the reception of 48-line, 15-pictures-per-second signals. Synchronizing is accomplished by operating the same 60-cycle power system as that supplying the transmitter, this method having been found the simplest and most satisfactory at this time. Your dealer can

advise you on the questions of power system and stations you can receive from.

The Jenkins Model 100 Radiovisor may be employed in combination with any standard short-wave receiver covering the radio television broadcast band of 100 to 150 meters and provided with a satisfactory power amplifier. For best results, however, the Jenkins Radiovision Receiver should be employed.

This model can also be employed to translate the 45 or 60-line pictures.

**JENKINS MODEL 100 RADIOVISOR** with either 48 or 60-line disc (less lamp) . . . . . ~~\$75.00~~ **69.50**  
 Television Lamp . . . . . 7.50  
 Extra 45 or 60-hole discs with attached rotor—each . . . . . 15.00

## Jenkins Self-Synchronizing Motor

The engineers of the Jenkins Television Corporation have succeeded in developing an economical method for synchronizing a receiver disc with the automatic signal. Briefly this is a Phonic wheel consisting of a toothed rotor which attaches to the radiovisor shaft and works in conjunction with an electro-magnet or field coil on the strong 720 cycle component which is inherent in the 48-line, 15-frame television signals. This component is filtered out by a special circuit and amplified sufficiently to definitely lock the radiovisor disc in synchronism. This motor may be attached to the Model No. 100 radiovisor and also to the home Radiovisor Kit. It is necessary to construct a suitable amplifier for use with this motor.

Jenkins Self-Synchronizing Motor . . . . . \$25.00



# Build It at Home



**THE** thrill of the early days of sound broadcasting is available today in receiving the programs now presented by television transmitters. To be sure, the pictures are by no means perfect. They possess only fair detail. Yet there is a satisfaction in taking part in the pioneer days of organized radio television which may never be experienced again because of the rapid progress of the art toward prosaic results.

To enjoy the reception of radiovision programs in the home, certain essentials are required. These are: first, a suitable short wave, non-regenerative receiver, tuning in the 100-150 meter wave band in which radiovision signals are now transmitted; secondly a suitable amplifier capable of handling the exceedingly wide range of audio frequencies, ranging from 15 to 15,000 cycles for fair detail, and up to 30,000 cycles for best detail within the present limitations of the art; thirdly, a suitable radiovisor. Obviously, this equipment requires a satisfactory radiovision broadcasting service within reach of the receiver. Fortunately, there are a number of radio television stations now on the air, and more under construction, in various parts of the country.

The Jenkins Home Radiovisor Kit may be assembled and wired by the average handy man or boy in a few hours' time. All necessary parts and materials, with the exception of the wood and bakelite for the platform or base, are supplied with the kit. All parts are drilled and tapped, so that the work is purely a matter of simple assembly and wiring.

Jenkins Radiovisor Kit No. 1 is . . . . . \$42.50

Off-standard discs may be obtained in the following punchings:

45-hole, 3-spiral and 60-holes, at the cost of, each . . . . . \$15.00

## Magnifying Lens Assembly

Although not included in the regular radiovision kit, the magnifying lens and holder may be obtained separately for the purpose of magnifying the radiovision images instead of viewing them in their original small dimensions.

Jenkins Television Kit No. 11 (Lens Assembly) . . . . . \$5.00





# Electric Eyes

THE photoelectric cell is the very heart of any experimental or commercial work on radiovision and, to a great extent, the progress of the art in this field has been paralleled by the development of more sensitive, more stable, photoelectric cells.

Realizing the importance of this, the Jenkins Laboratory early set up a separate research division for investigating photoelectric phenomena with the definite aim of producing the superior photoelectric cells required for the advancement of the television art. The results of the work of this division have been very happy and a really superior photoelectric cell has been developed and has been in use in our television equipment for some time.

It is apparent that a photocell of high sensitivity, great stability, linear response, and free from noise, is highly desirable for photophone work as well as for many other applications of light sensitive devices which require precision results. To make absolutely certain of the adaptability of the new Jenkins photocells to various classes of work, numerous tests were conducted in the laboratory at audio, ultra audio, and radio frequencies, as well as practical tests where actual installations in theatres were made under the supervision of trained engineers. In these tests the performance of the new Jenkins photocell, in comparison with any cells that the market has offered, has been outstanding; so much so that the Jenkins Television Corporation has placed these photoelectric cells in production and has made them available to engineers and laboratories wherever a cell with these characteristics is wanted.

Extreme care in depositing the photosensitive film during manufacturing and extreme purity of the materials and gases used in the cell, together with a new process of evacuation, have been the developments which have resulted in what we believe to be a real advance in the photoelectric art.

Jenkins Photocell Booklets, each . . . . . \$ .25

## Jenkins Vision Lamp

The brilliance and contrast of television pictures depends largely on the neon lamp used in the Radiovisor. The Jenkins Television Corporation through its research facilities has developed a neon lamp which gives excellent results. It has been found that a low ignition voltage is of great importance. These lamps are very uniform in brilliance and impedance values. Great care is taken to produce a uniform light field, as the slightest imperfection will mar certain sections of the picture. It has also been found desirable to eliminate all flaming of the gas around the electrodes. These lamps are very stable in operation and show no trace of frequency discrimination. They are highly recommended for Television reception where brilliant life like pictures are desired.

Jenkins Vision Lamp . . . . . \$7.50

## JENKINS TELEVISION CORP.

346 Claremont Avenue

Jersey City, N. J.

