Color Television

RCA Victor
RCA PIONEERED AND DEVELOPED COMPATIBLE Color Television

The information in this booklet will assure you greater enjoyment of the fine RCA Victor instrument you have selected.

*receives both color and black-and-white telecasts.
This is a finely-engineered instrument designed for the compatible reception of natural Color and superb black-and-white television programs. This receiver provides the largest color picture that it is at present possible to produce.

Full range Color programs are easily “tuned-in” with just two color controls, when your receiver has been properly adjusted for black-and-white reception.

This instrument will receive all present or proposed VHF television stations (and all UHF stations if the receiver is so equipped), broadcasting black-and-white or color programs, within range.

For your listening enjoyment, there is the exclusive RCA Victor “Golden Throat” Balanced Fidelity Sound System—the coordination and exact balance of amplifier, speaker and cabinet. Exceptional picture quality, ease of tuning and the Balanced Fidelity Sound System of reproduction provide truly outstanding performance.

You will be proud and glad you chose an RCA Victor!
COMPATIBLE COLOR TELEVISION was pioneered and developed by RCA. Webster defines compatibility as “capable of existing together”. The RCA compatible system permits the owner of a black-and-white set to automatically receive all programs as a black-and-white picture, whether being broadcast in color or in black-and-white. Compatibility was extended further, into the design of this color receiver, thus permitting reception of programs in full color or in black-and-white. When a station transmits a program in black-and-white, it is automatically received in black-and-white on your receiver. Then, with the color controls adjusted as directed in these instructions, a program transmitted in color is automatically seen in color. Compatible color television simply means that this circuit system provides reception of black-and-white television programs as well as colorcasts, without any modification of the receiver.

THE COLOR TUBE, or tri-color kinescope, produces the necessary basic red, green, and blue colors which “paint” the picture electronically on the viewing screen. It is capable of reproducing any mixture and intensity of colors throughout the entire visible color spectrum, thus providing superb natural reception of color programs. With all colors mixed in proper intensities, the viewing screen will appear white, and a black-and-white broadcast program will be constructed, providing “compatibility” or presence of both color and black-and-white pictures.

COLOR BROADCASTING—The number and kinds of color programs being broadcast are rapidly and constantly on the increase. NBC, for example, is now presenting a substantial number and variety of colorcasts, with many more planned for the future. To avoid missing a color program which could be of interest to you, it is suggested that you check program listings which appear frequently in daily newspapers and weekly program magazines published in the area in which you reside.

POWER SOURCE
This instrument is designed to operate from 115 volts AC, 60 cycle, power outlet. Do not attempt to operate on a different AC rating, or from a DC (direct current) source.
Tuning in **BLACK** and **WHITE** programs

**OFF VOLUME** control—Turn to right to turn set "on", and advance about one-third way for medium volume. Allow about 30 seconds for warm-up; adjust volume later as desired.

**CHANNEL** selector—Rotate channel number to appear in selector window.

*UHF tuning (for Models with UHF built-in tuner)* is explained inside back cover.

**CONTRAST** control (in concealed panel)—Must be advanced at least halfway through its range.

**BRIGHTNESS** control—Adjust to average screen brightness (for shaded portions in the picture).

**BRIGHTNESS** control, and concealed panel controls (including CONTRAST), seldom require adjustment following initial installation settings.

**TUNING**—A black and white picture can be obtained over a wide TUNING range . . . However, **For Best Picture Quality . . .**

Turn TUNING control to right until harsh interference occurs, and picture starts to disappear. Then slowly turn back, stopping as soon as all interference disappears.

**Note:** This TUNING control setting will enable the receiver to automatically reproduce color (with color control previously adjusted) on the same channel. Only minor adjustments of the Color controls may be necessary for normal color picture.

If slight color streaking is present (in weak signal areas), remove by turning COLOR control to left until a "click" is heard.

Following warm-up, slight TUNING readjustment may be required.
This is NORMAL picture

Correction May Be Necessary

if horizontal lines slant across screen

if vertical movement of the picture exists

A  B

Turn HORIZ. hold control to right if lines slant as in "A", or to left if lines slant as in "B", until the correct picture appears. (Several turns may be necessary.)

Turn VERT. hold control fully right, then slowly left, until picture becomes steady.
To adjust CONTRAST and BRIGHTNESS

If the picture appears too dark and contrasty, turn CONTRAST control to left and/or BRIGHTNESS control to right, until a pleasing picture is obtained.

If the picture appears too light and weak, turn CONTRAST control to right and/or BRIGHTNESS control to left for most clear and pleasing picture.

FOR BEST PICTURE QUALITY

Turn TUNING control to right, until harsh interference occurs (as shown above) and picture starts to disappear. Then slowly turn back, stopping as soon as all interference disappears. This is the correct setting for TUNING best picture quality.

Note: The Color controls should not be disturbed during black-and-white program reception.
CHECK LOCAL PROGRAM LISTING FOR SCHEDULE OF COLOR BROADCASTS

Best Picture Quality TUNING (as explained on previous page) is particularly essential for best color picture quality explained below.

There are two color controls (HUE and COLOR) located on the panel containing the general adjustment controls.

Make sure COLOR control is set at least halfway (original installation), or at previous color program setting.

FOR BEST COLOR PICTURE QUALITY

When you select a channel on which a color program is being broadcast, a lack of color or harsh interference may be present (as shown below):

Turn TUNING control to the right, until harsh interference occurs and picture starts to disappear. Then slowly turn back, stopping as soon as all interference disappears and color is in the picture.

Adjust HUE control (flesh tones or color of some familiar object), in conjunction with COLOR control, to obtain desired color quality.

Detailed adjustment of these controls is explained on following pages
NORMAL color picture

To adjust HUE control

If HUE control is turned too far left, flesh tones will be too purple.
If HUE control is turned too far right, flesh tones will be too green.

Adjustment of HUE, and proper COLOR setting, will determine “normal” color picture quality.
Adjust COLOR control

If COLOR control is turned too far left, colors will appear “pale” and weak.

If COLOR control is turned too far right, colors will appear “flushed” and too brilliant.

It may be desirable to occasionally readjust the HUE and COLOR controls for the most “natural” rendition of the color program.

Color picture will be sharp and clear when TUNING is set for best color picture quality, and the HUE and COLOR controls are properly adjusted.
Balanced Fidelity Sound

You can now hear and enjoy the rich golden tones of sound reproduction, brought to you through the "Golden Throat" Balanced Fidelity Sound System, an RCA Victor exclusive.

In the "Golden Throat," three elements are co-ordinated and exactly balanced to bring you superb tone. They are:

1. The Electronic Amplifier System
2. The Loudspeaker
3. The Cabinet

Each element is important to the task of bringing the high tonal fidelity that has made the "Golden Throat" famous.

1) THE ELECTRONIC AMPLIFIER SYSTEM Television sound waves are carried through an electronic system which amplifies them over a million times and converts them to electrical energy. Many circuit combinations and ideas were tried and discarded before an amplifier with the present high degree of efficiency was developed.

2) THE LOUDSPEAKER As the electrical energy from the amplifier enters the highly sensitive electrodynamic loudspeaker, it is converted into the audible sound you hear as you listen to your instrument. But the maximum tone quality you enjoy is conditioned by another element . . .

3) THE CABINET Your cabinet, in addition to being designed as a beautiful piece of furniture, possesses certain definite acoustical qualities that make it an ideal acoustical chamber or "sounding board" . . . an exact match for your loudspeaker and electronic amplifier.

ALL THREE ELEMENTS IN BALANCE Only after many years of research have RCA Victor engineers achieved the exact coordination of the three elements which you find in the "Golden Throat." The three elements of the "Golden Throat" give a balanced tone which is pleasing to young and old alike. You and others can enjoy the "Golden Throat" Balanced Fidelity Sound System only in instruments engineered by RCA Victor.
VIRTUALLY NO INTERFERENCE

Every known means of suppressing or eliminating interference has been engineered into your RCA Victor Television receiver.

In some locations one or more of the disturbances illustrated on this page may be encountered. Proper installation and the correct antenna are extremely important in minimizing these effects. Reception problems are given careful consideration by the RCA Service Company technicians.

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**RADIO FREQUENCY**
Moving ripples indicate disturbance from nearby transmitting or receiving short-wave radio equipment.

**DIATHERMY**
A herringbone pattern on the picture indicates the presence of nearby diathermy apparatus. When severe, this effect is very marked and may even obliterate part of the picture.

**WEAK SIGNAL**
A snow effect, as illustrated, indicates in most cases that the receiver is located too far from the transmitting station. When this condition exists, the picture may not hold steady on the screen.

**AUTOMOBILE IGGNITION**
Speckles on the picture indicate disturbance from the electrical systems of automobiles or from electrical motor appliances. When severe, vertical picture movement may result.

**REFLECTIONS**
Multiple images, sometimes known as echoes or ghosts, indicate that the antenna is receiving a direct signal plus a reflected signal from the same transmitter. Signals can be reflected from objects such as buildings and mountains.

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IT IS RECOMMENDED THAT YOU PURCHASE THE RCA VICTOR FACTORY SERVICE CONTRACT IF YOU LIVE IN THE ZONE OF AN RCA FACTORY SERVICE BRANCH.
WARRANTY

Radio Corporation of America, hereinafter referred to as "RCA", warrants to the purchaser of this instrument that it will repair, or at its option furnish a replacement for, any part thereof which proves upon inspection by RCA to have been defective within ninety days (or within one year in the case of a defective kinescope) from the date of original sale by the RCA Victor dealer, if it was used thereafter solely within the United States of America, in accordance with the terms of this warranty. This warranty shall not apply to any parts of this instrument if it has been installed, altered, repaired or misused in a way that in the opinion of RCA affects the reliability or detracts from the performance of any part of the instrument, or if its serial number or the serial number of any such part has been altered, defaced or removed.

Within ninety days (or within one year in the case of a defective kinescope) from such purchase any such defect must be brought to the attention of the RCA Victor dealer from whom this instrument was purchased. If, upon examination by RCA, the part is found to have been defective within the warranty period, the RCA Victor dealer will furnish the purchaser with a replacement part or return the defective part repaired.

The obligation of RCA hereunder is limited to the repair of a defective part, or making a replacement part available to the purchaser, and does not include the furnishing of any labor involved or connected therewith, such as that required to diagnose trouble or to remove or install any such parts; nor does it include responsibility for any transportation expenses in connection therewith.

The foregoing is in lieu of all other warranties, express, implied or statutory, and RCA neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with the sale of this instrument.
INSTALLATION (including an outdoor antenna when necessary) and adjustments of this instrument with the exception of the operation of the controls described should be made only by qualified personnel.

VIEWING—Your RCA Victor television picture is bright and clear and can be viewed with comfort in any normally lighted room. However, bright lights should not fall directly on the screen or in the eyes of viewers. Viewing of picture in complete darkness is not recommended.

Place the receiver
— to afford easy access for operation and maximum visibility in the seating arrangement of your room.

— to permit convenient connections to an AC electrical outlet of the proper voltage and frequency and to an external antenna when required.

VENTILATION—adequate ventilation openings are provided in the bottom, back, and in some cases, the top of the cabinet. Care should be taken not to allow these holes or slots to be covered or ventilation impeded in any way.

IMPORTANT This instrument is designed to operate on 115 volts AC, 60-cycle power. If in doubt about your power supply, call your power company before plugging in your receiver. The wrong power source may cause damage. For operation on any other power supply, a converter will be necessary. See your RCA Victor dealer.

ANTENNA When the location of the receiver is such that a correctly designed external antenna, properly installed, is essential for good reception, a television antenna which is designed to match the receiver is recommended. The antenna should be installed in accordance with standard practices and applicable local ordinances.

CABINET CARE—To preserve the appearance and finish of the cabinet, give it proper care with the occasional application of a high-grade wax polish.
For Service...

Your RCA Victor television is a rugged instrument engineered to give you dependable, long-life service and enjoyment.

In many areas, RCA furnishes factory branch service for the installation and service of RCA Victor television sets. If trouble is experienced in these areas, check the yellow pages of your telephone directory for the RCA Service Company branch nearest you, or call the dealer from whom you purchased the set. He will be in a position to provide or arrange for service.
*UHF
(channels 14 to 83)

TUNING INFORMATION

For Models with UHF Built-in Tuner

With set turned “on,” CONTRAST set at least halfway and BRIGHTNESS set for average screen brightness, tune in UHF stations in the following manner:

Turn CHANNEL selector to “UHF” function marking, visible in selector window.

Turn UHF selector to desired channel number, adjacent to indicator (•).

For Best Picture Quality—Turn UHF selector slowly to left until harsh interference occurs, and picture starts to disappear. Then slowly turn right, stopping as soon as all interference disappears and best quality picture appears.

Following warm-up, slight UHF tuning readjustment may be required.