

Hoffman "Colorcasters" for 1957

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The "Commodore," a table model, is the lowest priced set in the Hoffman line.



Owner appeal, convenient operation, and quality performance are the goals of this manufacturer.

ONE enthusiastic manufacturer of color TV receivers, Hoffman Electronics Corp., is now featuring its third series of color models. The first two were the 15- and 19-inch shadow-mask tube versions of several years ago; the latest series of receivers uses the 21AXP22 exclusively. This tube is the round metal envelope improved shadow-mask version used in RCA, Emerson, and many other late-model color sets. In all Hoffman "Colorcasters" the picture tube is mounted in the cabinet and shipped in place.

Four basic receiver models comprise the new "Colorcaster" line, each available in mahogany, limed oak, and Salem maple veneers with prices varying according to the type of finish. Basically equipped with a v.h.f. tuner, each receiver is also furnished for full 82-channel reception at a slight increase in price. When a u.h.f. tuner is included, the model number remains the same but with the letter "U" added.

The lowest priced model is the "Commodore," a table model costing from \$365 to \$645, depending on the finish and whether or not it includes a u.h.f. tuner. The "General" is an open-faced console with the speaker panel below the screen; while the "Ambassador" is a lowboy style cabinet with the speaker mounted alongside the picture tube. An elaborate three-

most expensive model, the "President," Table 1 lists the recommended retail prices on the Hoffman color line.

Like some of the new RCA color receivers, the Hoffman "Colorcasters," with the exception of the "President" model, have the station selector and "on-off"-volume control at the upper side panel. The "President" has all controls on a vertical front panel alongside the screen. An unusual and novel feature is the addition of color dials to the hue and chroma-gain controls. As indicated in Fig. 1, the hue control background dial has a red and green section at the sides with a flesh color setting in the center. This helps the customer to remember that, by turning the knob to the right, greenish hues will predominate, while turning it to the left will increase the emphasis on the reds. The correct position of the hue control is indicated in the viewed picture by the naturalness of the flesh colors. When the flesh tones in the picture appear too reddish, the customer will have no difficulty in deciding in which direction the hue control should be turned.

The action of the chroma gain or "color brilliance" control is made graphic as well. Three color stripes, which taper from the weakest chroma gain to the saturation point where the stripes are thickest, are shown in Fig.

ing in illustrating the purpose and action of the hue and chroma controls should avoid many service calls due to customer misunderstanding.

Another control that is not found in many other color receivers is the "Town and Country" switch included in every model. The action of this switch is basically the same as the "local-distance" switch used in many familiar monochrome TV receivers. Its presence in a color set, however, is new and will be a considerable help in locations of either excessive signal strength or in fringe areas.

In the "President" model, the chassis is mounted on its side, with the tubes pointing toward the picture tube and the bottom of the chassis accessible when the side panel of the cabinet is removed. The other three models have the chassis mounted underneath the picture tube, but with the feature that the entire chassis slides out at the rear for easy servicing. In addition to the customer-operated controls, almost all of the other adjustments are located under the removable small subpanel below the screen. These controls, together with some adjustments accessible from the rear of the receiver, permit the service technician to adjust for optimum monochrome and color performance.

Service and Installation

Hoffman's policy is that TV receiver installation and all service is the function of its distributors and dealers. De-

siderable basic instruction in color TV, have been furnished by the factory and, in addition, each receiver is supplied with a diagram (complete with frequencies, voltages, and waveforms) fastened on the inside of the cabinet.

The standard warranty for one full year on the picture tube and 90 days on all parts is provided by the manufacturer. Regular installation and service contracts are available from local dealers. Prices of these service contracts depend on the individual store and local labor charges.

Each "Colorcaster" is shipped complete and ready to operate but the average purchaser will still require an expert to install the set. Aside from the availability of a usable antenna, the color purity, convergence, and synchronizing controls almost invariably require adjustment.

Circuit Features

All of the *Hoffman* color receivers use basically the same receiver chassis with only minor modifications, usually involving the number of speakers, u.h.f. tuner, etc. This chassis employs circuitry described in detail in the September 1956 issue of this magazine and is quite similar to the *ECA Victor* receiver described in the March 1955 issue. One of the outstanding differences is in the action of the contrast and chroma-gain controls. By coupling these two controls together and by some modifications in the video circuitry, the usual problem of balancing out contrast with chroma gain is eliminated. Whenever the contrast control setting is changed, a corresponding change takes place in the chroma section with the result that color and Y-signal gain track closely.

Other features include the use of a synchroguide horizontal oscillator and a.l.c. stage, instead of the familiar multivibrator circuit. Also, in the interests of producing a quality image, there have been alterations in the color producing portions of the receiver circuit.

Revisions in the latter direction are concerned mainly with providing wider bandpass in the color-signal circuits. As an example, two stages of band-pass amplification now precede the color demodulator circuits, where one was used before.

Also, the widely adopted high-level narrow-band triode demodulators have been abandoned in favor of low-level wide-band stages. The receivers use a pair of color detector stages identified as the X demodulator and the Z demodulator. The X demodulator feeds to the grid of the R-Y amplifier, while output from the Z demodulator is applied to the B-Y amplifier. The G-Y signal is produced from the mixed R-Y and B-Y signals.

Another alteration is intended to facilitate balancing out the outputs of the three guns in the picture tube. In earlier receivers, separate controls were provided for the blue and green guns, but none for the red gun. Balance was achieved by manipulating

NAME	MODEL NO.	TYPE	SCREEN		PRICE**
			SIZE"	FINISH	
Commodore	M2021	Table	21"	Mahogany	\$395.00
	B2021	Table	21"	Lined Oak	\$415.00
	P2021	Table	21"	Salem Maple	\$415.00
General	M4041	Console	21"	Mahogany	\$95.00
	B4041	Console	21"	Lined Oak	715.00
	P4041	Console	21"	Salem Maple	775.00
Ambassador	M4061	Lowboy	21"	Mahogany	775.00
	B4061	Lowboy	21"	Lined Oak	795.00
	P4061	Lowboy	21"	Salem Maple	795.00
President	M4021	"Soundorama" Console	21"	Mahogany	795.00
	B4021	"Soundorama" Console	21"	Lined Oak	\$15.00
	P4021	"Soundorama" Console	21"	Salem Maple	\$15.00

*Disposal measurement.

**Price is suggested retail for manufacturer's local zone (with tax) on v.h.f. models. The u.h.f. models are from \$20 to \$30 higher.

Table 1. The current line of Hoffman "Colorcasters" includes four basic models, available in a choice of three different wood finishes, from \$395 to over \$100.

the blue and green controls along with the master brilliance control, which affected output of all three guns simultaneously. The present arrangement is easier to adjust; there are separate controls for the red, green, and blue guns on the latest "Colorcasters."

For the rest, circuit design and layout do not present any radical departures from the color sets of other manufacturers.

Since installation and service are not under direct control of the manufacturer, with policy being determined locally by distributors, there is no set pattern as to whether the distributor's service personnel or that of the dealer will be responsible for the receivers after they are in the hands of their owners. Nor is there any pattern evident as to whether the receivers will be serviced on an individual-call or contract basis and, if the latter policy is to prevail, what the cost of the contracts will be. With this uncertainty, the set maker has apparently felt obligated to make available the best possible data for use by whomever will be called on to work on the sets. The well-illustrated service

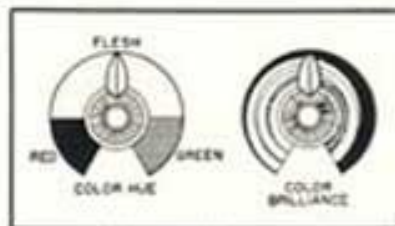


Fig. 1. Use of actual colors on the color hue and color brilliance controls is to make their functions graphic to the technically uninitiated. Note taper of the three color stripes around the color brilliance knob, to indicate range from pastel shades to saturated shades.

booklets on the "Colorcaster" chassis give complete and detailed instructions on procedure and adjustment.

At the time this article was prepared, *Hoffman* had scheduled full production of all the models discussed here. Plans call for the marketing of this color line throughout the 1956-57 business year. Additional models may be released as required but the main line has been planned for current availability.



The "Ambassador" lowboy model available in choice of three finishes, is made to sell for under \$800. Note station selector and on-off volume control on upper side panel, while other controls are under the picture tube, located on the horizontal chassis.



Courtesy of Wallace Dickson