



# TUBE TIPS

## Color Kit Contains 10 Component Types for Deflection, Convergence, And Focus Circuits for RCA-15GP22 Tricolor Kinescope

A kit of 10 types of electronic components for the deflection, high-voltage, convergence, and focus circuits for RCA's 15GP22 tricolor kinescope is now available to broadcast stations through RCA distributors.

Identified as the RCA-203Y1, this TV color kit contains two RCA-218R1 Width Controls plus one each of the following RCA types: 223D1 Deflecting Yoke; 224D1 Purifying Coil, Beam-Positioning Magnets, and Neck-Shield Assembly; 225D1 Field-Neutralizing Coil; 216R1 Horizontal-Dynamic-Convergence Phase Control; 219R1 Vertical Isolation Inductor; 240T1 Horizontal-Output and High-Voltage Transformer; 241T1 Vertical Dynamic-Converging and Dynamic-Focusing Transformer, 242T1 Horizontal Dynamic-Converging and Dynamic-Focusing Transformer, and 243T1 Vertical-Deflection-Output Transformer.

Suggested User Price of the RCA-203Y1 Color Kit is \$145.94. Since all of the above-mentioned RCA electronic components contained in this Color Kit are also being made available individually, here are their respective Suggested User prices:

Type	Sugg. User	Type	Sugg. User	Type	Sugg. User
223D1	\$60.00	224D1	\$36.00	225D1	\$9.60
216R1	1.20	218R1	2.10	219R1	2.10
240T1	12.00	241T1	14.00	242T1	3.00
243T1	3.84				

In addition to the kit of components listed above, the RCA color deflection circuit requires the use of one each of the following RCA "black-and-white" TV components: 205R1 Horizontal Oscillator and Sync Stabilizer Coil; 208T9 Vertical Blocking Oscillator Transformer; 212R1 Width Control (used as Horizontal Coupling Choke), and 213R1 Horizontal Linearity Control.

Suggested User prices of these types are:

Type	Sugg. User	Type	Sugg. User	Type	Sugg. User
205R1	\$1.44	208T9	\$2.40	212R1	\$.90
213R1	.75				

## Now in RCA Line: Triple Diode Useful in DC Restorer Circuits Of Color TV Receivers

Type 6BC7 was recently added to the RCA receiving tube line. A triple diode of the 9-pin miniature type containing three independent diode units in one envelope, this tube is particularly useful in dc restorer circuits of color television receivers. It may also be used in the AM/FM radio receivers as a combination FM discriminator and AM detector tube. Suggested List Price of the RCA-6BC7 is \$3.20.

## RCA-892-R Power Triode Sets Long Life Record

Another long life record set by an RCA power tube in broadcast service was reported recently by Robert E. Miller, assistant chief engineer, KALB, Alexandria, La. Mr. Miller pointed out that an RCA-892-R was retired last January 12th after serving 43,967 hours as a modulator in the station's RCA-BTA-5F transmitter. Manufactured at RCA's Lancaster, Pa., plant, the 892-R – a forced-air-cooled power triode – was initially installed at KALB on July 17, 1947.

## New RCA Tube Types

**RCA-6197** is a sharp-cutoff pentode of the 9-pin miniature type having very high transconductance. It is designed especially for frequency-divider and pulse amplifier circuits in electronic computers and other "on-off" control applications involving long periods of operation under cutoff conditions.

In such control service, the 6197 maintains its emission capabilities even after long periods of operation under cutoff conditions, and will supply a high minimum value of plate current during its "on" cycles. Furthermore, consistency of cutoff bias is maintained because of the stable cutoff characteristic of the 6197 as well as its freedom from grid-No. 1 emission.

The 6197 utilizes radiating fins on grid No. 2 to increase its dissipation capabilities, a getter shield to minimize interelectrode leakage, and a pure-tungsten heater to give long life under conditions of frequent "on-off" switching. Separate base-pin connections are provided for grid No. 3 and cathode.

The use of production controls correlated with typical electronic computer operating conditions, and rigorous tests for shorts and leakage, insure long and dependable performance from the 6197.

Suggested Industrial Price of the RCA-6197 is \$2.55.



**RCA-6342** is a head-on type of vacuum multiplier phototube for use in scintillation counters for the detection and measurement of nuclear radiation, and in other applications involving the measurement of low-level, large-area light sources. Its relative freedom from after-pulses and its small spread in electron-transit time make this vacuum multiplier phototube particularly useful for fast coincidence scintillation counting.

Design features of the 6342 include a semi-transparent cathode having a diameter of  $1\frac{1}{2}$  inches; a flat face to facilitate the mounting of flat phosphor crystals in direct contact with the surface; 10 electrostatically focused dynode stages; and a focusing electrode with external connection. The material of which the dynodes are made has stable, high-current-carrying capabilities and permits tube processing to minimize regenerative effects, such as after-pulses.

The flat-cathode area permits excellent optical coupling between the phosphor and the cathode. As a result, a maximum number of photo-electrons are produced for each scintillation. This feature is important in nuclear radiation spectroscopy because it offers the advantage of minimum statistical spread in output-pulse heights. Furthermore, the focusing electrode permits optimizing the magnitude, uniformity, or speed of the response in critical applications. Having high sensitivity to blue-rich light, the 6342 is well suited for use with organic phosphors such as anthracene as well as with inorganic materials such as thallium-activated sodium iodide.

Suggested Industrial Price of the RCA-6342 is \$81.00.



The RCA 833-A, the Power Triode  
for 1-Kw AM transmitters

## "Old Reliable" of the 1-KW's



WIDELY USED in 1-Kw AM transmitters, the RCA-833-A has become famous over the 14 years of its existence for its superior performance at low cost.

This power triode features a giant zirconium-coated anode for greater dissipation, shielding that eliminates bulb bombardment, and a husky filament that has tremendous emission reserve for peak loads.

It's hard to beat the dependability of operation, long service life, and operating economy of the 833-A; and it's harder still to beat the price. RCA-833-A's now cost you less than 60% of what they did originally.

**For fast tube service, call your local RCA Tube Distributor.**



**RADIO CORPORATION of AMERICA**  
ELECTRON TUBES

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