

DU MONT

COLOR MONITOR

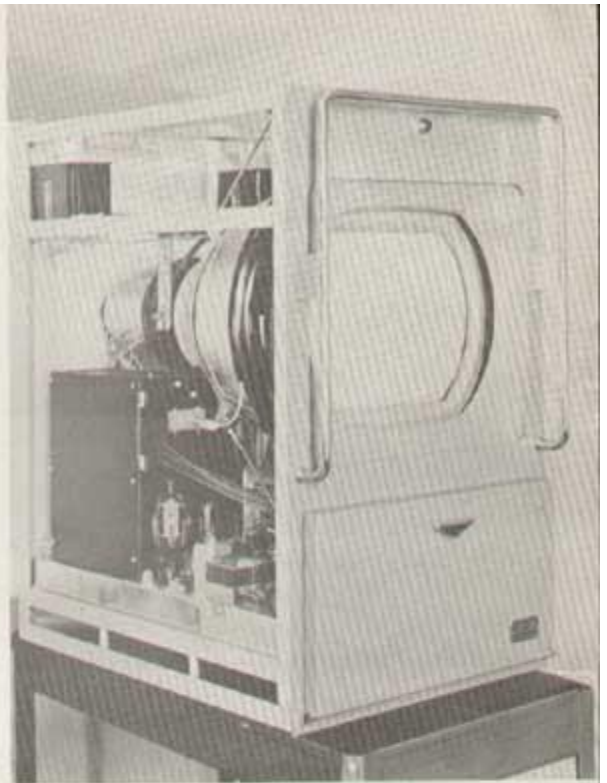
TYPE 2401-TIC

The Type 2401 Color Monitor is a broadcast color picture monitor using a 15" three gun, shadow mask, direct view tri-color kinescope.

FEATURES:

1. Input provisions for either encoded or unencoded color signals, and thus can be used to view a color picture either before or after system encoding.
2. Inputs can be either composite or non-composite.
3. Separate sync input for use when a non-composite signal is viewed.
4. Electronically-regulated high voltage and low voltage dc power supplies, the low voltage supply located external to the monitor housing.
5. Electrostatic convergence and focus along with dynamic modulation of kinescope anodes.
6. Quartz crystal AFC color synchronization.
7. Low level color demodulation using quadrature technique.
8. D.C. restoration.
9. Color "killer" to disable color channel during monochrome transmission.
10. Gain-stabilized output amplifiers in each color channel.
11. All controls are located in the front panel directly below the kinescope face.

The monitor is 17" wide, 29" high and 24" deep, and can be either console, rack, or cabinet mounted. Carrying handles are provided for ease of transportation and demountable sides facilitate servicing and adjustment.



Continued.

PICTURE DISPLAY

Horizontal resolution approximately 300 lines. (Limited by kinescope resolution capability.)
Convergence 3/64" over face of kinescope.
Picture tube size 15".

INPUT SIGNALS:

One encoded signal input. (.5v. minimum video level, bridging.)
One unencoded signal input (separate red, green and blue, bridging.)
Sync (optional)
All video inputs compensated to provide low bridging capacitance.

DIMENSIONS

Monitor - 17" wide, 29" high, 24" deep. (Cabinet, rack, or console mounting.)
Low Voltage Supply - 19" wide, 7" high, 6" deep. (Rack mounting.)

WEIGHT

175 lbs. approximately.

POWER INPUT

117 Volts AC, 60 Cycles, 500 Watts total.

Television Transmitter Department
ALLEN B. DU MONT LABORATORIES, INC.
CLIFTON, NEW JERSEY

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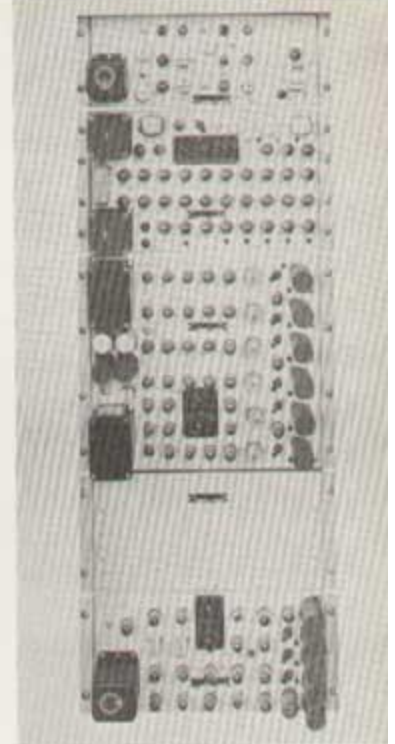
COLOR SYNCHRONIZING GENERATOR

TYPE 2203-TIC

This equipment provides the basic driving signals for a complete color signal generating system and, in addition, provides convergence signals to align the three beams in tri-color picture tubes.

The type 2203 Synchronizing Generator delivers the following 8 output signals, each at a voltage level at 4 V P-P (adjustable 3, 5 to 4.5 V.) black negative, plus a convergence signal at 1.4 V P-P level, each feeding into 75 ohms from a 75-ohm source impedance.

- 1) Composite Sync. (Negative)
- 2) Composite Blanking. (Negative)
- 3) Horizontal Drive. (Negative)
- 4) Vertical Drive (Negative)
- 5) Color Sub-carrier - 3.579545 MC sine wave.
- 6) Clamp - or additional Horizontal Drive. (Negative)
- 7) Linearity and Blanking - A blanking signal to which has been added 900 cps and 315 kc signals, thus providing horizontal, vertical, or composite linearity bars, or dots.
- 8) Burst Key (also known as "Burst Flag") - Used to key in color sync burst.
- 9) Convergence - This signal is used to align the three beams in a tri-color tube. It is composed of white dots or bars having a width of about 10 - 15% of the bar spacing, and switchable to either 15 x 20 or 7 x 10 dots or bars. Convergence is provided as a composite signal at 1.4 V P-P level.



(continued)

FEATURES:

- * Binary dividers from 31.5 kc to 60 cps - no adjustments required.
- * All horizontal timing controlled by precision delay line.
- * Precision oven-controlled crystal. Stability $\pm 0.0003\%$ with a rate of change of the color subcarrier frequency less than 0.1 cps/sec.
- * 500 kc pulse output from divider chain for easy checking of color subcarrier frequency against WWV.
- * Sync signal timing and shaping controlled by binary divider chain.
- * All delay line taps wired to plug-in jacks to facilitate pulse width and timing adjustment.
- * For studio use, horizontal drive and blanking may be adjusted to allow for up to 1000 feet of cable delay.
- * Meets all applicable RETMA and NTSC specifications.
- * Each output level adjustable over 3.5 - 4.5 volt range.
- * All D. C. voltages electronically regulated.

<u>Qty.</u>	<u>Units Included</u>	<u>Rack-Mounting Height</u>	<u>Power Requirements</u>			
1	2217-TIC Sub-Carrier Generator	7"	+ 250v.	90ma.		
1	2211-TIC Timer	10-1/2"	+ 250v.	210ma.	-150v.	15ma.
1	2212-TIC Shaper	15-3/4"	+ 250v.	400ma.	-150v.	190ma.
1	2213-TIC Delay Line	8-3/4"				
1	2216-TIC Convergence & Burst Ke Generator	8-3/4"	+ 250v.	40ma.	-150v.	35ma.
3	2560-TIC Power Supplies	15-3/4" Total				
1	2555-TIC Power Supply Regulator	5-1/4"				

AC Power Required - 7 amperes input.

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