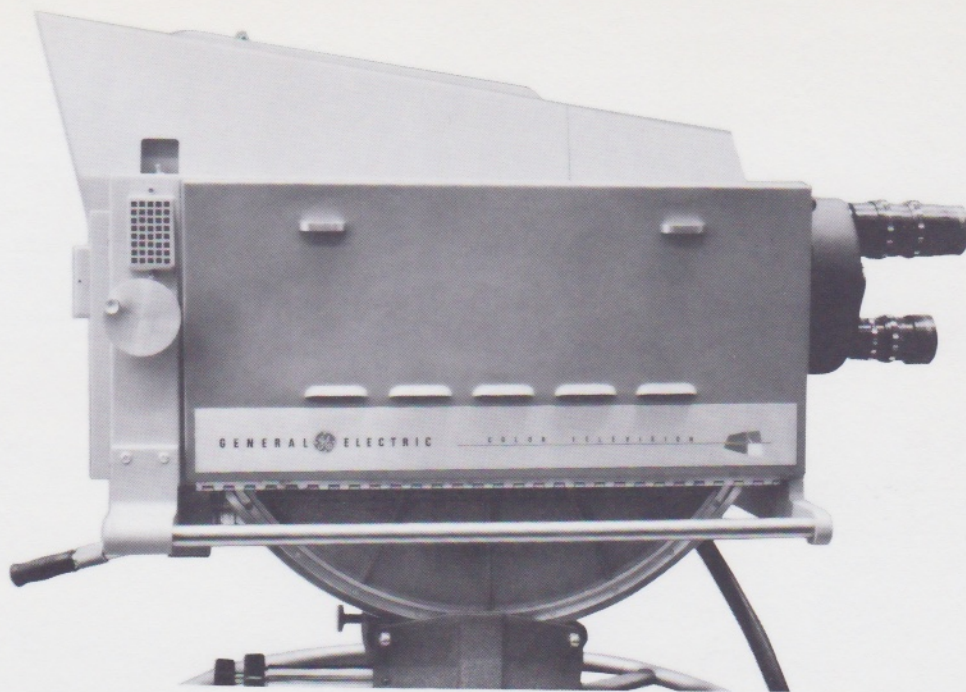


Television's Most Advanced 3-I.O. Studio Color Camera
Unmatched Stability—Excellent Color Registration

GENERAL  ELECTRIC



Extensively Transistorized G-E Color Camera — the Best Way to Get Good Color Pictures, Every Time You Want Them.

The PE-25-A, General Electric's newest studio color camera system, is designed to produce consistently sharp, true and clear pictures of live performances both inside and outside the studio with a minimum of adjustment and maintenance.

Why is the 3-I.O. camera best for color studio work?

First — The high sensitivity of proven I.O. tubes makes them well suited for studio production.

Second — While future developments in vidicon tubes may allow their use in color studio work, their effectiveness at present is limited by their lag when operated at high sensitivity levels. (This is no problem in color film pickup, where high light levels allow vidicons to be operated at low sensitivity and low lag.)

In view of the sensitivity and unquestioned studio performance of image orthicon tubes, General Electric believes that the 3-I.O. studio camera represents maximum value, performance and operating efficiency for the television broadcaster.

Design innovations on the PE-25-A in 7 areas contribute significantly to its superior performance: (1) A refined optical system; (2) Extensive use of circuit boards and transistors in the video preamplifiers; (3) A swing-out chassis and a "Lazy Susan" I.O. mounting bed; (4) Use of difference signals; (5) Convenient arrangement of controls to facilitate alignment and registration; (6) Use of constant-current techniques in centering circuits to stabilize registration; (7) A single 1 $\frac{1}{16}$ " lightweight cable to provide the camera with more maneuverability.

These factors provide the PE-25-A with unsurpassed stability; outstanding video performance; easy, positive operation and fast, simple maintenance. Specifics are covered on the following pages.

UNSURPASSED STABILITY

Virtually no day-to-day drift because of highly stable circuits.

Camera is extensively transistorized for greater operating stability . . . including a transistorized short-proof 20 V power supply and a transistorized focus current regulator.

Less heat . . . because of transistorized circuits . . . plus an improved cooling system contribute to overall reliability and component life

OUTSTANDING VIDEO PERFORMANCE

Sharp linear pictures from corner to corner because of matched optical and electronic systems.

Color fidelity is produced and maintained through the use of field-proven circuits and components.

Registration, geometry, and shading improved by new precision-wound yokes.

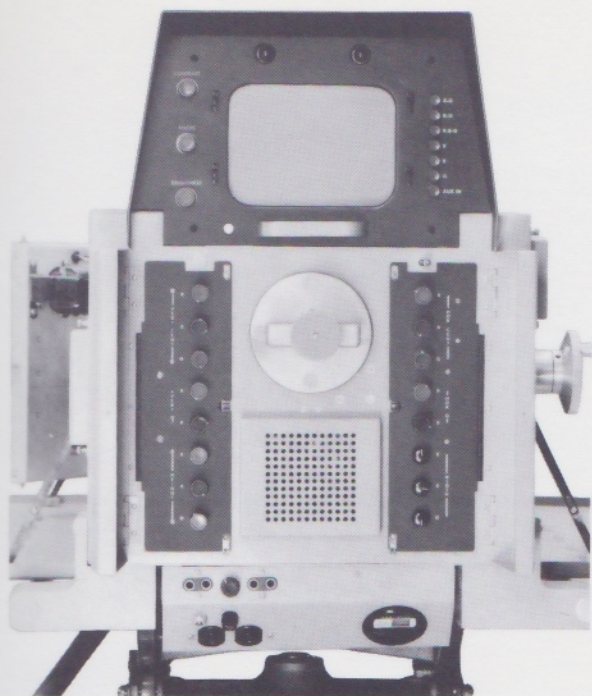
Uses new high-output, low-noise preamplifiers.

Highly-linear yoke drive power produced by sweep generator.

Resolution improved by phaseless aperture corrector.

EASY, POSITIVE OPERATION

New 8" viewfinder, extensively transistorized, has



Eight-inch Viewfinder Simplifies Operation.

150 ft.-lamberts brightness from 16KV regulated power supply and aluminized picture tube.

Precise indication of color registration at camera accomplished by difference-type signals.

Encoded picture provided for selection at viewfinder.

Precision registration adjustments are made quickly by new vernier-type controls.

Operation simplified by push-button selector of viewfinder presentation.

Fast and positive optical focusing from non-linear focus mechanism.

Maneuverability of camera enhanced by single 1½" diameter cable.

Unique positioning of optical elements eliminates astigmatism, spherical aberration, ghosts and color shading.

FAST, SIMPLE MAINTENANCE

Convenient servicing allowed by swing-out circuit boards.

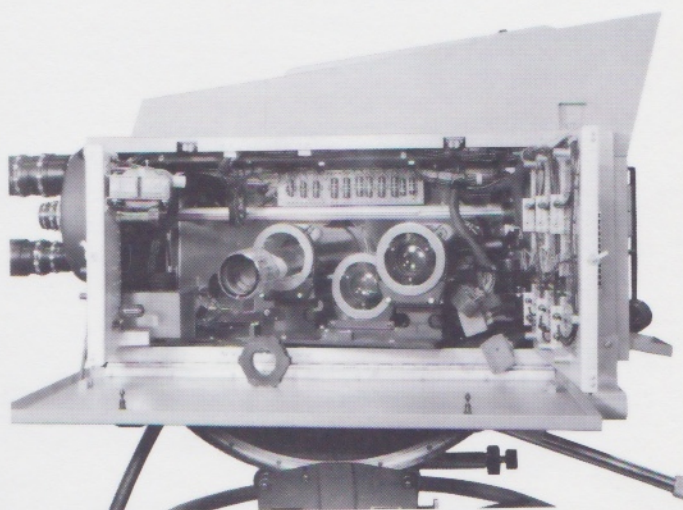
Fast, accurate I.O. replacement provided by unitized optical box and swing-out I.O. assembly.

Checking and servicing simplified by plug-in camera circuits.

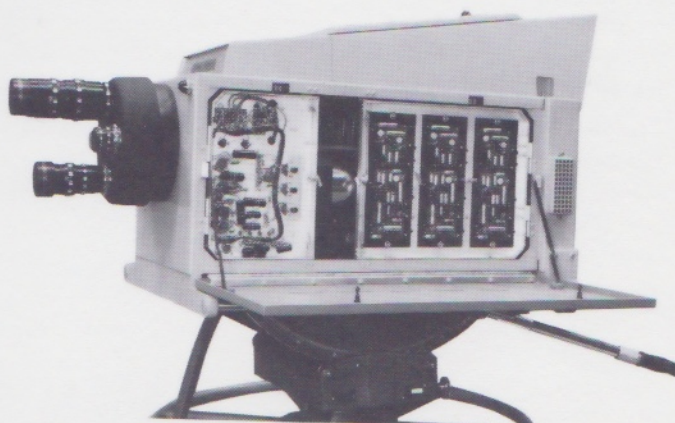
Dust accumulation minimized by use of filtered cooling air.

Camera handling facilitated by convenient carrying handles at camera bottom.

Quick, convenient access to all video processor components provided by pull-out chassis.

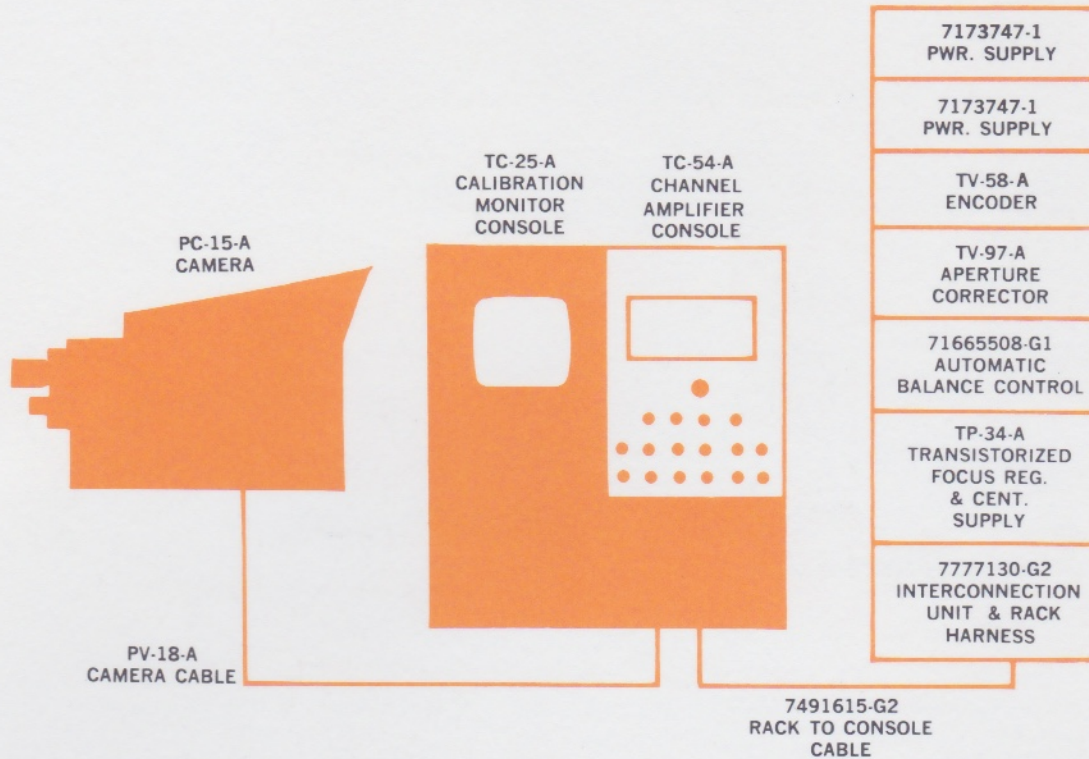


Swing-out I.O. Assembly and Plug-in Chassis, Speed Maintenance.



Extensive Transistorization For Optimum Reliability.

Color Camera Channel



The camera channel is composed of camera, control console (containing color channel amplifiers), waveform and picture monitor, and one partially filled cabinet rack.

PE-25-A SPECIFICATIONS

Performance

Resolution: 600 lines horizontal resolution.

Bandwidth: Individual Channel Flat to 8 MC $\pm$ 1 db

Low frequency response: Less than 2% tilt on 60 cycle square wave

Geometric distortion: Less than 2% of picture height

Precise Sweep Yokes: plus series-current feed to all focus yokes provide accurate, stable registration.

Electrical

Power: 110/117/125 Volts $\pm$ 5% single phase 2300 watts (not including the color monitor)

Signal Inputs: standard EIA H and V drive, Blanking, and Sync plus 3.58 MC Sub-carrier at 2.0 to 5.0 volts peak to peak

Two Signal Outputs (Source terminated in 75 ohms.) : These may both be either composite up to 1.4 volts peak to peak or non-composite up to 1.0 volts peak to peak.

Environmental

Temperature (Ambient temperature): -20°C to 40°C

Maximum Relative Humidity: 95%

Maximum Altitude: 7,500 feet

The General Electric Company manufactures a complete line of television equipment for broadcast and other applications. For further information, contact your General Electric Television Sales Representative, or: General Electric Company, Visual Communication Products, 212 West Division Street, Syracuse, New York 13204. (In Canada, Canadian General Electric Company, Ltd., Broadcast Sales, 830 Lansdowne Ave., Toronto 4, Ontario; Outside the U.S.A. and Canada, International General Electric Company, Electronic Sales, 159 Madison Avenue, New York 10016, N. Y., U.S.A.)

Visual Communication Products

GENERAL  ELECTRIC

212 West Division Street, Syracuse, N. Y. 13204