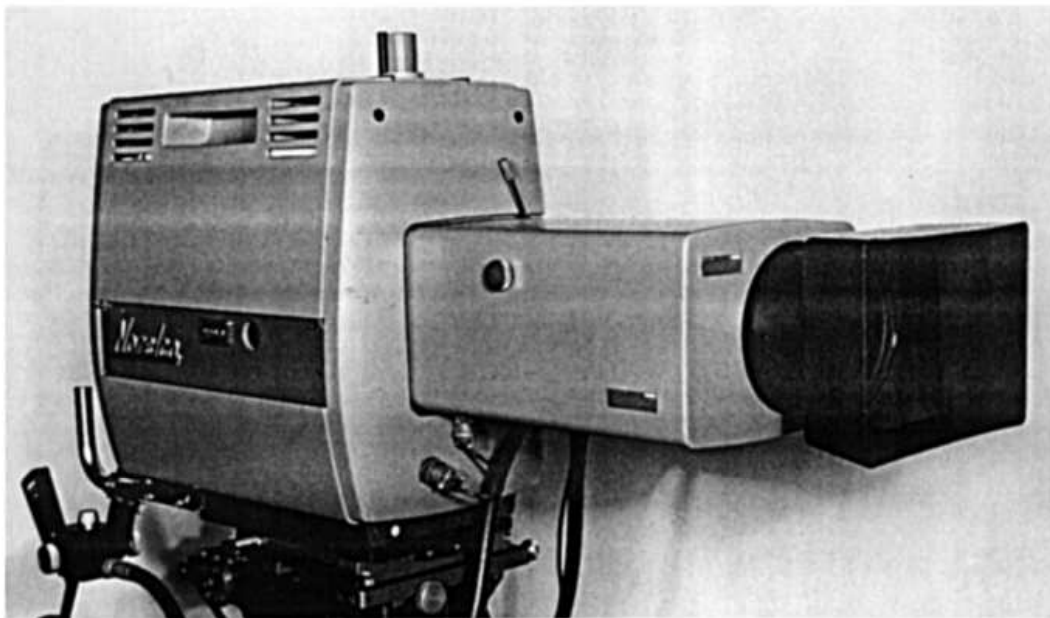


Norelco[®]

**PLUMBICON* COLOR
TELEVISION CAMERA
PC-70S-3**

FEATURES:

- 48 dB signal-to-noise FET PreAmps for quieter pictures in low light.
- Comb Filtered Contour Enhancement.
- "Varichrome" variable matrix gives complete control of hue and saturation of primary and secondary colors with no change to gray scale.
- Shading correction in all channels (H & V-Saw and Parabola) to balance out pick-up tube variances.
- Separate mesh Plumbicon tubes provide wide margin of highlight handling capability.
- Extended red sensitivity Plumbicon gives faithful rendition of saturated reds.
- Large choice of zoom lenses available, easily interchanged.
- Two remotely controlled filter wheels provide large selection of color correction and N.D. combinations plus optical cap.
- Operates to full specification with 3,000 ft. of regular or 1,000 ft. of mini-cable.
- New cable compensation design provides equalization for mixed runs of regular and "mini" camera cables.



Among all the major networks, group and independent stations and videotape production companies the Norelco Plumbicon Color TV Camera has won unprecedented acceptance as the ultimate in modern color cameras. More than 700 Norelco Color Cameras are in studio and mobile van service throughout the United States.

Foremost among many reasons for the swing to Norelco Color Cameras is the sharper and more faithful color picture produced by the unique Norelco Three-Plumbicon tube system — a system perfected through continuous Philips research which provides a camera that is inherently stable, more reliable, simpler to operate and easier to maintain.

The Philips Plumbicon tube is characterized by its ability to produce noise-free pictures. New FET pre-amplifiers with improved signal-to-noise ratio keep these pictures quiet even in the low light areas.

Color pictures from the PC-70S-3 are further improved by an electronic edge enhancement system which incorporates level-dependent comb filtered correction signals.

Shading correction signals are available to change modulation shading in all channels. This compensates for sensitivity variances in pick-up tube targets. Sawtooth and parabola corrections are made at both Horizontal and Vertical sweep rates.

Color pictures from the new PC-70S-3, when equipped with "Varichrome" will allow independent control of hue and saturation of the primary colors red, blue and green plus the secondary colors yellow, cyan and magenta. A panel for remote control of these functions can also be added.

In the patented Norelco separation system which employs a single sealed prism, attendant degradation associated with complex combinations of beam splitter, relay optics and dichroic mirrors is eliminated.

PC-70S-3 SPECIFICATIONS

General

Scanning System: EIA, 525 lines, 60 fields per second or 625 lines, 50 fields per second.

A.C. Power Input, less picture and waveform monitors: 105-117-130 volts, 60 cycles, 375 watts or 210-234-280 volts, 50 cycles, 375 watts.

Sensitivity/Signal to Noise Ratio: Not less than 48db p-p signal to rms noise over a 4.2 MHz band width with the camera viewing 60% reflectance white at 125 ft./candles 3200°K light, iris set at F.4.0 and output of camera adjusted for 0.7V p-p video. Applied gamma is 0.5 and no aperture correction.

Viewfinder Display Size: 6 inch picture diagonal.

Viewfinder Brightness: Better than 150 ft.-lamberts.

Viewfinder Limiting Resolution: 700 lines horizontal.

Camera Cables: Use up to 3,000 feet of standard camera cable or 1,000 ft. lightweight, small "mini" camera cable.

Input Signals

Horizontal Drive: 4.0 ± 2.0 volts neg. p-p across 75 ohms loop through.

Vertical Drive: 4.0 ± 2.0 volts neg. p-p across 75 ohms loop through.

Blanking: 4.0 ± 2.0 volts neg. p-p across 75 ohms loop through.

Sync: 4.0 ± 2.0 volts neg. p-p across 75 ohms loop through.

Subcarrier: 2.0 ± 1.0 volts peak to peak across 75 ohms (loop through).

Test Video: 1.0 ± 0.5 volts peak to peak non-composite. Internally, terminated in 75 ohms.

Crosshatch: 1.0 ± 0.5 volts peak to peak non-composite across 75 ohms (loop through).

External Viewfinder Video: 1.0 ± 0.5 volts peak to peak non-composite across 75 ohms (loop through).

Video Outputs Two each.

Red Video: 0.7v non-composite across 75 ohms.

Blue Video: 0.7v non-composite across 75 ohms.

Green Video: 0.7v non-composite across 75 ohms.

NTSC Encoded: Three NTSC composite color signals 1.0v; or non-composite 0.7v (internal strapping) across 75 ohms.

Picture Quality

Horizontal Resolution: 100% modulation at 400 TV lines in center in Y channel.

Limiting Horizontal Resolution: 700 TV lines in individual channels.

Signal-to-noise Ratio: Better than 48 dB in each channel.

Amplitude Transfer Characteristic (Gamma): Adjustable to any value between 0.45 and 1.0.

Registration Accuracy: In a circle equal to 0.8 picture height (Zone 1) it is possible to superimpose all points on the three channels within 0.05% of picture height. In a circle equal to picture width (Zone 2) it is possible to superimpose all points within 0.1% of picture height. Outside Zone 2 (Zone 3) 0.2% of picture height.

Geometry: No point will depart from its true position by, in Zone 1 more than 0.5% picture height; in Zone 2 1% of picture height; in Zone 3, 2% of picture height.

Stability: After 30 minutes of operation, no set-up adjustments will be required over a period of 8 hours if there is a temperature change of $\pm 10^{\circ}\text{C}$ within an ambient temperature range of -20°C to $+45^{\circ}\text{C}$.

Weights and Dimensions



PC-70S-3 Camera:

Height: 19¼ inches

Width: 14 inches

Length: 35 inches including lens;

20½ inches without lens

Weight: 110 pounds excluding lens; (less than 140 pounds with manual drive lens)



Electronics Unit:

Height: 15¾ inches

Width: 19 inches

Depth: 18½ inches (including connectors)

Weight: 100 pounds



Registration Panel:

Height: 5¼ inches

Width: 19 inches

Depth: 4 inches (excluding connectors)

Weight: 7 pounds



Operating Panel:

Height: 5¼ inches

Width: 19 inches

Depth: 4 inches (excluding connectors)

Weight: 6 pounds

Data subject to change without notice.

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