PANAVISION
ELECTRONICS

Introduces the
cei FOTON

The sensible microprocessor controlled "Large Format" studio/field camera.

The CEI FOTON is a new large format, three-tube, color studio camera featuring a built-in microprocessor dedicated to each camera so as to provide continuous automatic registration control utilizing picture detail during camera operation. No Diascope is required. The camera contains a 9-inch viewfinder for the camera operator with a unique zoom frame indication, and built-in safe picture area and center line displays. It also features interactive viewfinder displayed adjustment procedures. The CCU to camera head distance may be up to 2200 feet without requiring the Triax adaptor.

The camera is without parallel in the number and versatility of features which are included: auto black, auto white, tone capture, continuous automatic registration, auto pedestal, black stretch, adjustable white clip, integral safe area and safe title generator, interactive graphics, built-in time code generator, dynamic beam optimization, zoom indicator in the viewfinder, RGB output, and self-diagnostics.

SPECIFICATIONS

(Subject to change without notice)

September 10, 1982

SPECIFICATIONS

Sensitivity/signal-to-noise
A 58dB S/N ratio in encoded luminance channel, gamma at unity, no aperture correction, and a 4.2 MHz bandwidth will be achieved at an aperture of f/2.8 80 foot candles, 3200°K illumination incident on a 60% reflective white whilst using low capacitance Plumbicon** tubes.

Maximum sensitivity
Minimum incident light for full output at f/1.6 and + 12dB gain inserted is 6 foot candles.

Resolution/modulation depth
Correctable to 100% response at 500 TVL.
Limiting resolution > 700 TVL

Registration accuracy
Zone 1: Circle equal to 0.8 picture heights, 0.1%
Zone 2: Circle equal to picture width, 0.2%
Zone 3: Elsewhere, 0.3%

Geometry
Distortion less than ± 1% excluding lens distortions.

Gamma correction
Switchable: Unity, 0.45 and preset position variable from .35 to unity.

Shading provisions
Multiplicative H and V sawtooth and parabola white level shading.
Individual R, G, and B flare correction, plus bias light shading.

Pickup tubes
25mm or 30mm, diode gun lead oxide or Saticon*

Dynamic Beam Optimization
Standard with any of above pickup tubes. Allowing up to 4f stops of overload without objectionable highlight sticking.

Cable
Up to 2200 feet of lightweight .45 inch diameter cable. Built-in a test signal generator for compensation adjustment.

Aperture correction
H and V enhancement: detail signal from green channel output. V and H contour amplitude and coring depth adjustable.

Masking
Six matrix adjustments and masking off switch.

Color standards
NTSC, RS170A
PAL I and PAL M

System power
AC: 95/250V, 48 to 63 Hz, 250 VA approx.

Inputs
One-volt p-p black burst or composite color video for genlock.
Prompter video.

Outputs
Two composite encoded video. RGB.
One monitor output, switchable. Composite encoded, R, G, B, and − G.R, G, and B video.

Optical system
Bias lighted, high index glass prism with R, G, and B split. I.R stop, and output trim filters. Two built-in filter wheels with cap, color filters, ND filters, clear glass elements, and star filter, etc.

Viewfinder
9" high brightness, sun shade, adjustable peaking.

Intercom
Two channel intercom.
2 wire RTS interface.

Environmental
Ambient temperature range: − 15°C to + 45°C.
Storage: − 30°C to + 50°C
Altitude: to 10,000 feet
Relative humidity: to 90%, noncondensing.

Viewfinder signals
R, Y, B, and − G or external 1V p-p composite feed, selected at viewfinder.

Automatic functions
Auto white balance.
Auto black balance.
Auto iris with iris window.
Auto iris on any captured tone.
Automatic pedestal.
Automatic change to genlock when black burst is present.***

Information display
The following information can be shown in viewfinder.

1. Status of Wht and Blk balance
2. Safe area generator***
3. Time code time
4. User bits selected
5. Drop frame or normal
6. Sample points for automatics
7. Self diagnosis information for microprocessor system
8. Zoom frame
9. Out-of-voltage condition
10. Lens iris position
11. Picture video level

SMPTE time code
Output for tape recorder. Numerical display if desired in viewfinder and monitor. Set hours, set minutes, reset, hold, drop frame/non drop frame controls. All 32 user bits user selectable.

*TM Hitachi
**TM Phillips
***Not available in PAL

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