

**CEI-280
BROADCAST COLOR
TELEVISION CAMERA**

Lightweight/heavyweight
professional camera



CEI-280

THE ONE MAN GANG STUDIO CAMERA

Comparing the CEI-280 camera to others on the market is a somewhat difficult proposition. No other professional broadcast color camera combines these features in such a practical, lightweight package and certainly not at such low cost.

For example:

- Full remote control—all operating engineering controls located at the remote set-up panel.
- High performance at low light level with state-of-the-art FET preamplifiers.
- Rugged, compact, modular construction.

- Two channels of intercom and external video feeds to camera head.
- Fast warm-up; long term stability.

The cost of operation and maintaining a fully staffed and equipped broadcast studio has long been a major concern to station management. Until recently, the few available camera options only served to dilute the professional capabilities of the studio. Just buying a "cheaper" camera was not the answer.



The CEI•280 dramatically solved this problem. Here is an NTSC broadcast color camera that matches or exceeds the tough demands of television engineers and production management, yet weighs only 50 pounds. One man can carry, mount and otherwise easily manage this compact unit. CEI•280's lightweight packaging and precisely integrated components offer a superb option to the purchase of more costly equipment.

Operating Characteristics

The CEI•280 is in a class of its own having an exceptionally high signal-to-noise ratio, 600 lines luminance resolution and extremely accurate color rendition. This high standard of performance can be attributed to the three Plumbicon* tubes which have been combined with a uniquely efficient dichroic beam splitting system.

Set up and operating adjustments are simplified and completely remote controlled. Lens iris may be adjusted at either the camera or the remote control position. After initial set up, the camera will maintain its rated performance specifications for extended periods of both continuous and interrupted service.

A peak video level indicator on the picture monitor is provided to permit the operator to control lens iris without a waveform monitor. System facilities include provision to monitor external video with the camera viewfinder, an essential feature in special effects production.

In summation: The CEI•280 provides full professional broadcast color capabilities in either a studio or remote environment.

*TM N. V. Philips



Camera Operating Control Unit



Camera Control Unit

Camera Operating Control Unit

The CEI•280 Operating Control Unit occupies only 1¾" of rack space and may be located anywhere. The unit combines all operating controls in one package.

Camera Control Unit

The CEI camera control unit differs from most in that the camera power supply, set-up controls and all other controls, plus all camera electronics, are combined in a single package. Furthermore, it weighs just 50 pounds and is housed in a 7" high rack mounted cabinet.

Other significant features are: □ All circuit boards are plug-in □ Designed with provision for plug-in enhancer and lockable pulse generator □ All components labeled for easy reference □ Stable gain performance with horizontal interval white pulse/AGC loop □ NTSC encoder—internal color bar generator □ System check with white test pulse preamplifier □ Standby position for economy of operation □ Cover provided to protect all controls.



OTHER CEI VIDEO PRODUCTS



- Broadcast Color Film Chain Camera Systems
- Hand Held Broadcast Color Camera Systems
- Low Light Level Broadcast Color Camera System
- Color Videoscope System
- Medical Color Television System
- Enhancers
- Encoders

CEI-280 SPECIFICATIONS

STANDARDS

Scanning	EIA 525/60 CCIR 625/50
Encoding	NTSC, PAL or SECAM
Power	105-130v; 57-63Hz 210-260v; 47-53Hz

CAMERA TUBES

Green & Blue	1 inch Plumbicon* XQ 1070 or XQ 1071
Red	XQ 1073R or XQ 1074R or silicon diode

PERFORMANCE

Horizontal Resolution	500 lines minimum
Signal-to-noise ratio	50dB at 50 foot candles at f/2.8
Maximum Sensitivity	100% video at 15 foot candles (12dB gain)

CONTOUR ENHANCEMENT

Contours-from-green 2-line enhancer for vertical aperture equalization plus horizontal aperture boost

OPTICS

Various 10:1 zoom lenses, extenders and accessories available
Lens flare compensation provided

Shading adjustment

Horizontal and vertical sawtooth and parabola for each channel

Intercom

Two circuits provided

VIEWFINDER

Detachable, plug in type

Screen Size

5" diagonal

Resolution

600 lines

Detachable, plug in type

Feeds

Y,R,G,B, encoded
R-G, B-G, 2-external

CONTROLS

Set up and operating controls at camera control unit and operating control unit

CAMERA CABLE

Timing

Automatic pulse advance

Maximum length

Lightweight — 1000'
TV 81 — 2500'

INPUTS

Pulse

None with lockable pulse generator installed, otherwise — sync, blanking, H drive, V drive, subcarrier, all bridging.

Video

For external viewfinder feeds
2-bridging, -composite inputs.
For lockable pulse generator — composite video

OUTPUTS

Program

2—non-composite
2—composite or non-composite

Monitoring

2—non-composite

Chroma key

R,G,B non-composite



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