



VERT. HOLD    HORIZ. HOLD    PHOSPHOR    CONTRAST

POWER    ON    OFF    R    G    B    G-R    G-B    V-F    IRIS    LOCAL    RETURN    REMOTE

MASTER FOCUS    MASTER BEAM    OVERSCAN    LOCAL IRIS CONTROL

HORIZONTAL CENTERING    P/L    INTERPHONE A    PROGRAM    R-BEAM    G-FOCUS    B

VERTICAL CENTERING    P/L    INTERPHONE B    PROGRAM    ALIGN X    ALIGN Y    WIDTH    HEIGHT    SKEW

**BC-230B**  
Color Studio/Remote Camera





Ampex introduces the first domestic broadcast television camera with automatic centering . . . not to mention a bias lighted prism, extended red Plumbicon tube, return viewfinder feed, and other features you need for uncompromising broadcast quality, in any camera, regardless of size.

# BC-230B

Standard features include:

- Automatic centering
- Bias-lighted prism
- Extended red Plumbicon\*
- Return viewfinder feed
- Adjustable viewfinder hood

Superlative performance under extremes of lighting conditions  
Exceptional long-term stability  
Accepts a variety of zoom lenses  
Easy to handle  
Improved reliability

\*T.M. N. V. Philips





Never before has any camera offered so much in so compact a package, at such a low price.

In all respects other than size, the BC-230B is a "big" camera. It offers a full range of professional features which leave the operator free to concentrate on technique without having to make constant adjustments of camera controls, and it performs with flying colors in any light from low studio lighting to the blaze of high noon.

No other camera in its price range can match its versatility or performance.

### Automatic centering

Until now, automatic centering has been available only in heavier, imported cameras in the industry's highest price range. With the BC-230B, Ampex puts it into your hands in an easily maneuverable camera at a tremendous saving.

After normal setup procedures, the auto centering system uses the green raster as a reference to center blue and red both vertically and horizontally. The unit will detect and automatically correct any drift errors within  $\pm 0.8\%$  (per picture height), far exceeding the range of normal drift error.

With the auto centering electronics as standard equipment, the BC-230B sets the highest standards for long-term stability of any camera in the world. No camera, of any size or price, exceeds it.

### Red is red

An extended red Plumbicon tube, usually included as optional equipment on competitive cameras, is standard with the BC-230B. This tube is your assurance of true reds regardless of lighting conditions, indoors or out. It is sensitive to low studio light, and maintains color accuracy in bright sunlight.

### Reduced Plumbicon lag

A bias-lighted prism, also standard equipment on the BC-230B, means fewer problems with image lag when panning or photographing moving objects even in the dimmest studio light. Since lag is a problem typically associated with aging tubes, the bias light also prolongs effective tube life in the BC-230B.

### Lens choices

The BC-230B offers a variety of options for zoom lenses. The Angénieux 10/1 is standard, while the Canon 10/1 and the Angénieux 15/1 are optional.

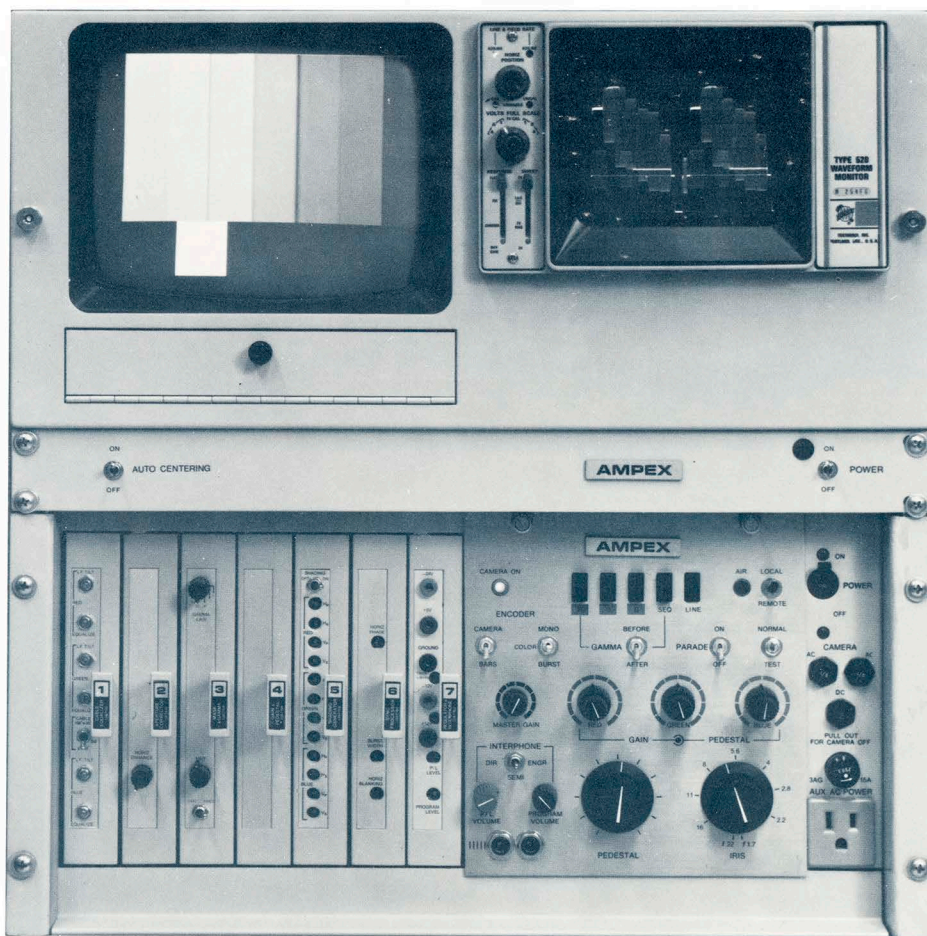


Photo does not include Encoder and Image Enhancer

### A pleasure to use

It takes a multitude of features to make a camera a pleasure to operate under widely varied broadcast conditions, and the BC-230B has them all.

A *return viewfinder feed* eliminates any need for guesswork on the part of the operator as to just what is happening back at the control unit. A touch of a button, and the operator receives the same picture on his viewfinder as the director sees on the control monitor.

A *new and improved viewfinder hood* may be tilted to any angle to reduce overhead glare without getting in the operator's way. The edge is sculptured and padded for the operator's comfort.

The *viewfinder* is an improved design, featuring better geometry, a solid state rectifier, and a lower temperature rise than comparable units.

A *new intercom system* is more powerful and provides greater flexibility than systems previously available on comparable cameras.

The *tally light* on top can be seen in full view from any angle, and it is bright enough to catch attention even in sunlight.

A *script clip* may seem like a small matter, but it is one of those details that makes a big difference when needed.

*Dimensions* of the camera are 23" x 17" x 9½", making the camera the smallest of its class.

*Weight* is a mere 67 pounds, without lens and viewfinder.

*Convenient dual carrying handles*, one at either end of the head, make setup, takedown and transport easier than ever.

*The finish* of camera surfaces exposed to the operator during use are professional black. No glare. The sides are blue and silver. Elegant.

*The camera cable* measures half an inch in diameter, and weighs only 13½ pounds per 100 feet including connectors. It's easy to move around. By contrast, a standard cable of the same length weighs 100 pounds.





## SPECIFICATIONS\*

### Power

95–130V rms or 190–260V rms;  
47–63Hz @  $\approx$  500 VA

### Scans

EIA ..... 525/60 fields/s  
CCIR ..... 625/50 fields/s

### Color Standards

NTSC, PAL, or PAL-M

### Inputs

EIA/CCIR composite sync and subcarrier,  
and 7.8kHz square wave or PAL P-pulse.

### Outputs

Composite video 1V pk-pk 75 $\Omega$  NTSC or PAL

### Registration Accuracy

Zone 1 (circle equal to 0.8 picture  
height) 0.1%  
Zone 2 (circle equal to picture width) 0.2%  
Zone 3 (elsewhere) 0.4%

### Geometry

Zone 1 less than 0.5%  
Zone 2 less than 1.0%  
Zone 3 less than 2.0%

### Sensitivity/Signal-to-Noise

A 45-dB signal-to-noise ratio in encoded  
luminance channel (measured with 0.5  
gamma at 50% peak white, no aperture  
correction and a 5-MHz bandwidth) will  
be achieved under the following conditions:

Iris f4 (equivalent depth of field of an I.O. at  
f10) 140-footcandles, 3200°K, illumination  
incident on a 60% reflective white

or

full aperture f1.7 at 25-footcandles incident,  
using Plumbicon tubes of average sensitivity  
and an XQ 1073 in red channel.

### Environmental

Temperature range

Camera ..... –15°C to +45°C  
CCU ..... 0°C to +45°C

### Stability

Camera Head: All controls stable over  
–20°C to +45°C (auto centering on)  
after 10 minute warmup period and over any  
1000-hour interval.

CCU: All controls stable over 0°C to +45°C  
after 10-minute warmup period and over any  
1000-hour interval.

### Mechanical

#### 1. Camera

- a. Camera head: L-23 in. (58.4 cm), W-9.5 in. (24 cm), H-17 in. (43.2 cm), weight 67 lb (30.4 kg)
- b. Viewfinder: L-9 in. (23 cm), W-8 in. (20.3 cm), H-8 in. (20.3 cm), weight 11 lb (5 kg)
- c. Lens: Angénieux 10:1 f1.7 zoom lens, weight 34 lb (15.4 kg)  
Canon 10:1 f2.0 zoom lens, weight 13 lb (5.9 kg)

#### 2. CCU

- a. CCU Electronics and PSU 19-inch (48 cm) rack-mount, 8 $\frac{3}{4}$  in. (22 cm) high, weight 45 lb (20.4 kg)
- b. Encoder: 19-inch (48 cm) rack-mount, 1 $\frac{3}{4}$  in. (4.5 cm) high, weight 14 lb (6.6 kg)
- c. Enhancer: 19-inch (48 cm) rack-mount, 1 $\frac{3}{4}$  in. (4.5 cm) high, weight 10 lb (4.6 kg)
- d. Picture and Waveform Monitor: 19-inch (48 cm) rack-mount, 8 $\frac{3}{4}$  in. (22 cm) high, weight 55 lb (25 kg)
- e. Auto Centering Chassis: 19-inch (48 cm) rack-mount, 1 $\frac{3}{4}$  in. (4.5 cm) high, weight 7 lb (3.2 kg)

\*Subject to change without notice.



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