

BCC-14

E.N.G./E.F.P.

Color
Camera

AMPEX



BCC-14: THE CAMERA FOR

Superior Performance

- Superior high light handling with Auto Beam Control
- FET amplifier inside yoke—unsurpassed SNR 50 dB at 180 NA
- High sensitivity 2/3" Plumbicon* pickup tube with f1.4 optical system, 6 or 12 dB added gain—full output at 7.0 ft. candles (75 lux.)
- Bias light
- Two line aperture correction
- Black stretch
- Masking for optimum color fidelity

More Automatics

- White balance
- Black balance
- Auto centering
- Auto iris
- Momentary Iris Switch locks to any operator—desired setting
- Auto beam control



*T.M. N.V. Philips

Convenience

- Light weight—only 12 lbs including viewfinder but less lens—lighter than conventional ENG cameras
- Low power consumption—only 27 watts; 90 minutes from standard battery belt
- Viewfinder indicators are:
 - Color balance
 - Auto centering
 - Iris
 - Tally/VTR running
 - Battery condition
- Viewfinder flexibility offering adjustable left or right mounting

Features

- ENG/EFP flexibility
- Gen lock—local or remote
- Intercom & effects mike
- Broad lens range availability with quick release bayonet mounting
- Rugged cast magnesium case
- Rain proof
- 5 position filter wheel

Full Studio Compatibility

- Remote Control Unit (RCU) for studio use
- Optional 5" viewfinder
- Full black/white chroma key

Electronic News Gathering (ENG) and Electronic Field Production (EFP) place some special demands on a portable TV camera, all of which boil down to a lot of capability in a very small package. Now, Ampex offers an optimum combination of operating features, picture quality, and rugged construction in a state-of-the-art portable color camera, the BCC-14.

Whether it's the rugged shock and rain proof design needed to survive rough assignments or the uncompromising color picture quality demanded of a field produced award winning program—the BCC-14 has it all. Minimum set up time is aided by features such as auto white

ALL REASONS

and black balance, auto iris, auto beam control and auto centering. Indicators inside the viewfinder keep the operator fully informed of equipment status while shooting.

The BCC-14's light weight (12 pounds without lens) and low power consumption, combined with automatics, and superior high light handling characteristics (automatic beam control), provide the best combination for excellent results on location. Camera operators can concentrate on technique and content, without having to worry about camera capabilities.

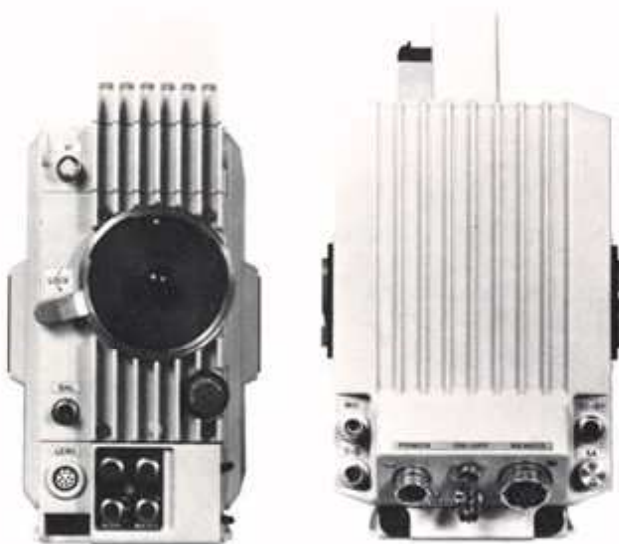
Full Studio Compatibility

With its remote control unit and 5 inch EFP or studio viewfinder the BCC-14 rivals larger studio cameras for full capability and performance. But it's ready in moments for a remote assignment, delivering the same excellent performance under difficult conditions.

Your BCC-14 is convenient to use anywhere, since it can be powered by a battery belt, a vehicle battery, or from a conventional AC supply. It's ideal for use with all portable VTRs, with quality to match the Ampex VPR-20 portable 1" helical recorder, for example.

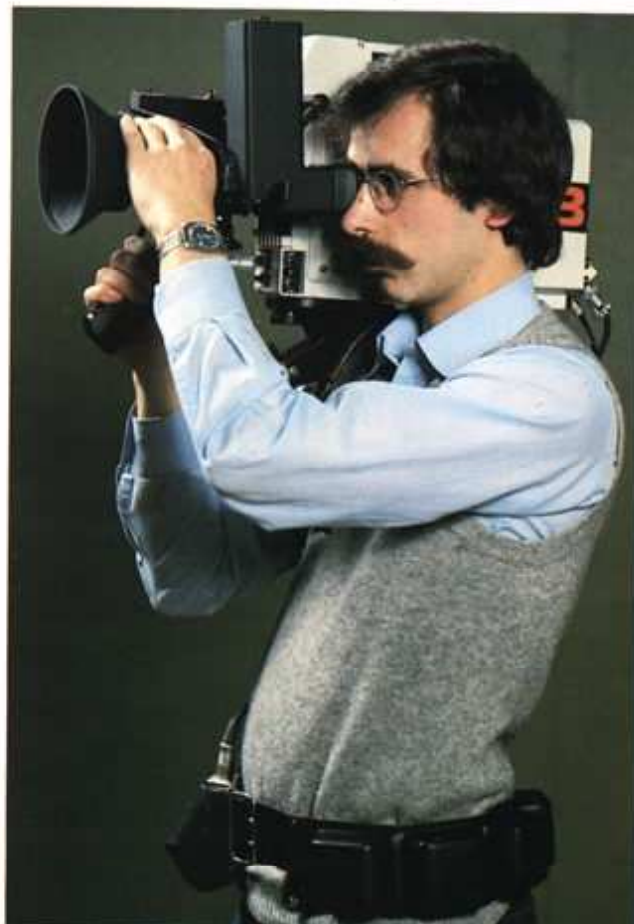
Sophisticated Features. Condensed for Convenience

For ENG, lenses are available with a momentary iris switch for making spot automatic exposure measurements. Another example of the BCC-14's operator oriented design is its ability to memorize the color balance and centering settings when power is in standby or off. This time saving feature is of great value in those "on and off" type of shooting assignments when repeated set ups use valuable time or worse, cause the action to be missed. Indication of signal level, color bar on, tape remaining and battery reload indication are all provided through the viewfinder. These are just some of the features that let the operator concentrate on the action.



State-of-the-art design delivers outstanding picture quality. High sensitivity 2/3" Plumbicon pickup tubes combine with a full f1.4 optical system to provide 12 dB added gain with full output at 7.0 foot candles (75 lux). Two line aperture correction, auto exposure freeze, and auto beam control all work together for a broadcast quality picture.

For a balanced selection of design features that provide ease of handling and high picture quality, you can't make a better choice than the Ampex BCC-14.



BCC-14: Specifications

Power Input

11 to 17 V DC; 27 watts
Standby—6 watts

Input Signals

Reference signal—1V P-P composite
Ext VF signal—1V P-P composite
Test signal input 1V P-P composite
Microphone input
On-air/VTR recording
Tape remaining

Output Signals

Video 1V P-P composite
Switchable video monitor channel 1V P-P
VTR Start/Stop
Microphone audio output

Systems

NTSC 525 line, 60 field/sec.
PAL 625 line, 50 field/sec.
PAL-M 525 line, 60 field/sec.
SECAM 625 line, 50 field/sec.
Using system dependent plug-in modules

Sensitivity

110 foot candles (1200 lux) for a signal to noise ratio of 50 dB-NTSC (48 dB-PAL) unweighted, lens iris f2.8, reflection factor 60% with matrix in and gamma and contours off at 180 na signal current in the green channel.

Limiting Sensitivity

7.0 foot candles (75 lux), gain +12 dB and a signal to noise ratio of 40 dB NTSC (39 dB-PAL)

Resolution

Depth of modulation at 400 TV lines, uncorrected 40%. Limiting resolution equal to or greater than 600 TV lines

Color Registration

Horizontal and vertical deviations of Red and Blue with respect to Green
Zone I (circle 80% of picture height) 40 nsec. (.1%)
Zone II (circle of picture width) 80 nsec. (.2%)
Zone III (rest of picture area) 150 nsec. (.4%)

Geometric Distortion

Excluding lens errors less than 1.5% at any point in the picture area.

Gain Control

Master selector for 0 dB, +6 dB, and +12 dB;
individual controls for Plus or Minus 3 dB in Red and Blue.

Filter Wheel

5 position—clear; 0.6 ND; 85B, 85B plus 0.9 ND and CAP

Gamma Correction

Gamma: 0.5 and black stretch on/off
Gamma Tracking: better than 0.5%

Black Level Adjustment

Master black level: +20% and -50% of the nominal white level.

Contour Correction

2-line in band contour correction—positive contour before gamma and negative contours after gamma, level dependency, comb filtering and level dependent set features included.

Test Signals

Sawtooth in overlay with -G to calibrate Green gain.
Color Bar: split/field and EBU.

Warm-up and Stability

Usable pictures will be obtained from standby in two seconds. Will meet specs within 15 minutes warm-up from cold start.

Gen Lock Timing

Horizontal $\pm 3 \mu$ sec. remote DC controlled.
Subcarrier more than 360 degrees.

Operational Ambient Temperature Range

(Excluding batteries) -20°C to +45°C

Weight

Camera Head with viewfinder 5.5 kg (12.1 lb)
Typical ENG Lens 1.5 kg (3.3 lb)
Battery Belt (Cine 60) 2.7 kg (6 lb)

Dimensions

Camera	ENG Viewfinder	EFP Studio Viewfinder (w/o Hood)
Length 132 mm (5.2 in)	Length 190 mm (7.5 in)	Length 245 mm (9.6 in)
Width 348 mm (13.7 in)	Width 55 mm (2.2 in)	Width 134 mm (5.3 in)
Height 267 mm (10.5 in)	Height 100 mm (3.9 in)	Height 124 mm (4.9 in)

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