

The Ampex BCC-21 Digicam Studio/Field Production Camera

Major Features

- A top quality camera which can be readily used for ENG or EFP without any performance compromise. Available as a complete camera or an assembly for use with an existing BCC-20.
- Superior setup and operational characteristics made possible by use of Spatial Error Correction and an on-board Z-80 microprocessor and software.
- Superb picture quality.
- Full automatic setup capability.
- Full remote setup and control capability
- Spatial Error Correction system

- enables .05% (virtually perfect) registration in all three registration zones, plus superior geometry, and shading.
- Options include triax, multicore and fiberoptic cable.
- Uses % inch diode gun Plumbicon*, standard lead-oxide or Saticon** tubes.

The Ampex BCC-21 is a multi-faceted, versatile camera based upon the BCC-20. It can be used as a full studio/field camera with all those performance characteristics while at the same time permitting quick and easy conversion for ENG or EFP with

total lens, base station and cable flexibility. The BCC-21 also retains the BCC-20's ability for upgrading from a cost-effective initial analog version to a full-facility Digicam.

The BCC-21 Digicam is a member of a family of Ampex cameras. Both the BCC-21 and BCC-20 are products of years of innovative research and development. The Digicam family of high-performance cameras has been developed by Ampex and is manufactured by the company at its Cupertino, California facilities.

AMPEX

^{*~}N. V. Philips

^{***} Hitachi

The BCC-21 gets your job done automatically

All electrical adjustments in the BCC-21 may be performed either manually or automatically. Using the Automatic Setup Unit (ASU), multiple cameras can be automatically setup in a few minutes. The Master Setup Panel (MSP) performs the same adjustments manually.

As a final confidence measure, the Manual Memory Update controls in the camera head allow readjustment in the field. The MSP and ASU can setup to eight BCC-21 cameras (or a mix of BCC-20s and 21s), or via an external switch, multiple groups of eight cameras.

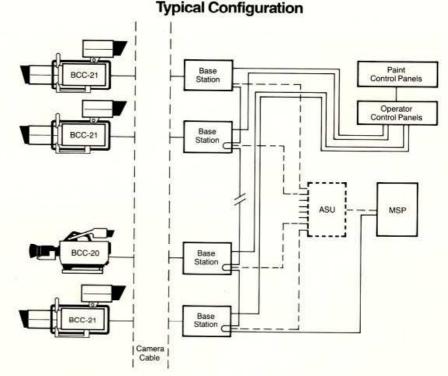
Full remote operational control is provided by Operator and Paint Match control panels. The MSP also offers the operator access to all operational adjustments.

Spatial Error Correction (SEC)...a dramatic breakthrough in camera technology

Until the introduction of the BCC-20 and SEC, camera performance was limited by geometry, registration and shading errors. Registration errors result in loss of picture sharpness, as well as annoying color fringing.

The BCC-21's SEC divides the picture into 182 individual picture areas, each of which can be adjusted to minimize all of these errors, either manually or with an ASU. The MSP uses algorithms designed into the BCC-21's Z-80 microprocessor-based digital correction system to dramatically simplify and speed manual set-up of the 182 picture areas. The ASU addresses each of the 182 areas separately and provides correction for each.

For additional information about the Ampex BCC-20 Digicam, refer to the Ampex BCC-20 brochure.



BCC-21 Specifications

Camera Tubes

Rear Loading

3/3" lead oxide (standard or diode gun) or Saticon

Optics

f1.4 prism with bias light; dual filter wheel

Signal-to-Noise

NTSC/PAL-M 53 db, PAL/SECAM 51 db

(Gamma and all corrections off, 200 nA signal current in green)

Sensitivity

Full output is obtained with 200 foot candles at f4, 200nA in green, 60% reflective chart.

(6fc with 12 dB added gain at f-1.4)

Registration

Digital Camera 0.05% All Zones

Geometry

0.1% All Zones

1.0%

0.5%

Shading*

White — absolute and differential

Black — absolute and differential

*Over center 90% picture

Resolution/Modulation Depth

(Uncorrected; average green tube)

Diode Gun Plumbicon 50% @ 400 TVL

Standard Plumbicon; Leddicon;

Saticon

40% @ 400 TVL

Limiting horizontal resolution at center 700 TVL

Systems

NTSC/PAL/PAL-M/SECAM

Size

w/o viewfinder w/ viewfinder H - 15.6" (39.7 cm) 20.75" (52.7 cm) L - 30.75" (78.1 cm) 43" (109.2 cm) W - 14.7" (37.5 cm)

Weight

37.5 lbs. (17 kg.)

Temperature

Operating: -20°C to +50°C Stable over ±10°C range

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