K 220.1 e

KCF 1

Color Camera for ENG/EFP Operation



BOSCH

Application

The KCF 1 is an ENG/EFP camera with an excellent weight/ performance ratio, and is used on jobs which do not require the many additional system components of a camera such as the KCA 110.

The use of high technology components together with the latest manufacturing methods have produced a camera that achieves the picture quality of conventional $^2/_3$ inch cameras but with considerably reduced investment.

The integrated Genlock SPG also allows the camera to be used on a tripod (as a caption or presenter camera) in the studio or on outside broadcast work.

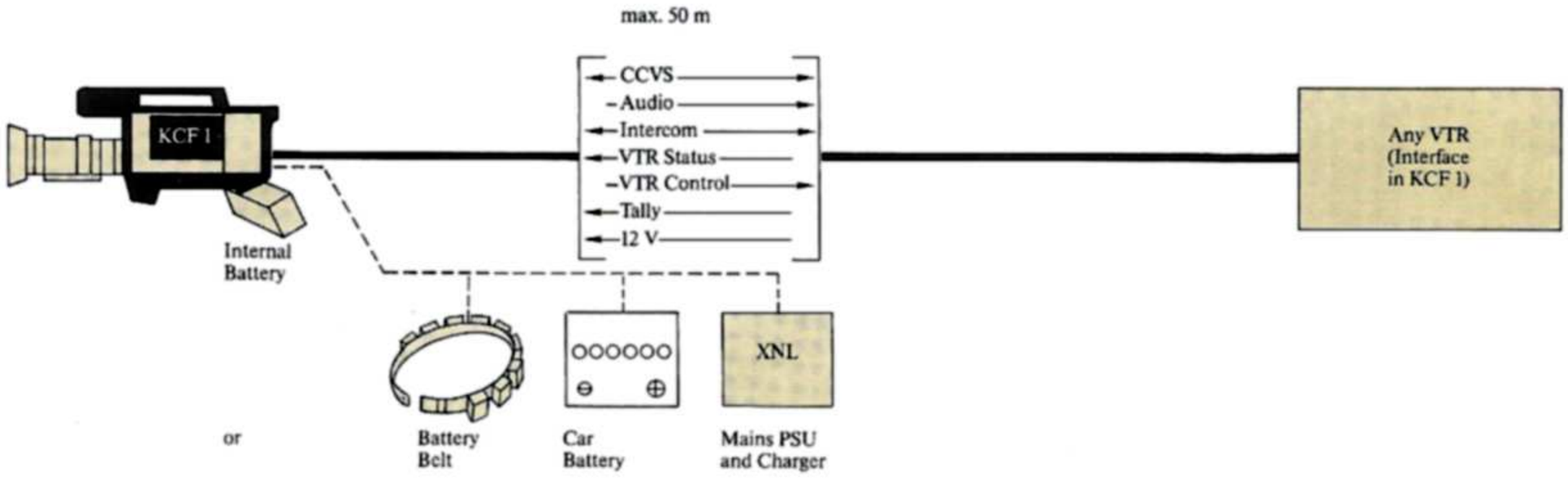
Special Features

- Weight 3.6 kg (7.9 lbs) with viewfinder, without lens and battery
- Compact construction
- No connecting cables between lens, camera viewfinder and battery
- Tiltable 1.5 inch viewfinder with camera and VTR status indications
- Two stage video level indicator in viewfinder
- Integrated battery gives 90 mins operating time
- Three 1/2inch tubes
- Automatic white balance, iris gain and beam control
- Non volatile digital storage of balance values
- Built-in genlock sync pulse generator
- State of the art electrostatically focused tubes-black balance and beam alignment adjustments no longer necessary
- Two line aperture corrector with comb filter and coring
- High resolution over entire picture area
- Exchangeable integrated VTR interface for all widely used models
- Common external power supply for BCN 21 and KCF 1
- RFI and water-jet protected head mechanics are dust proof and shock proof
- VTR or remote control can be up to 50 m (160 ft) away
- Available in all TV standards

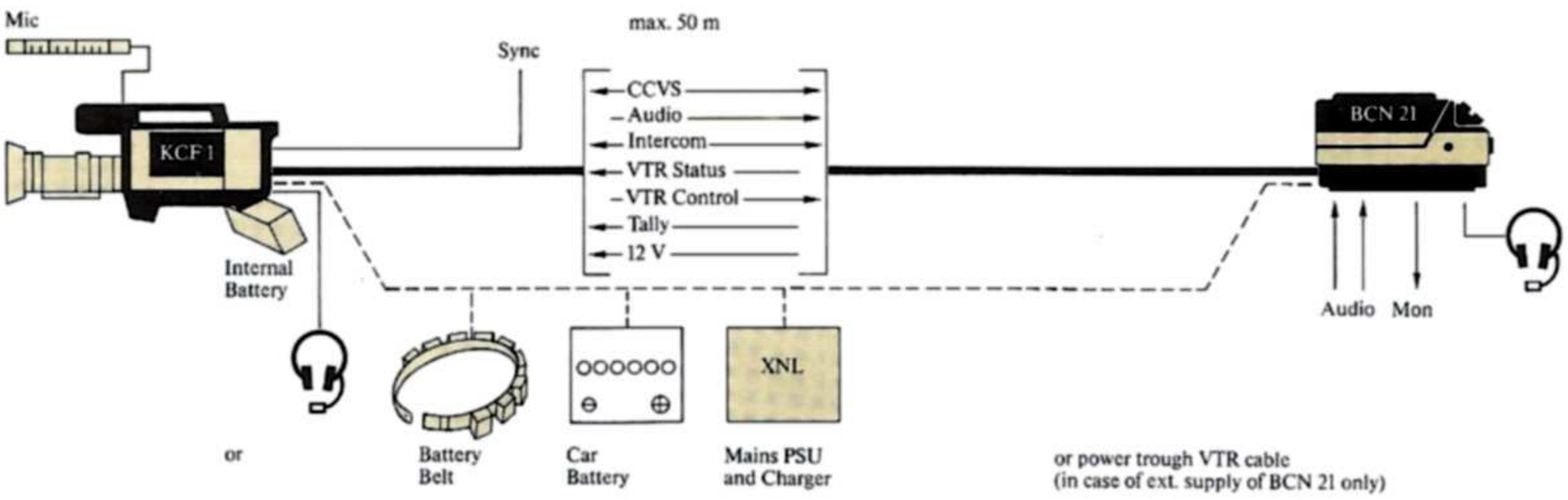
www.tvcameramuseum.org
Cover picture: 82/26521 F

System Configurations

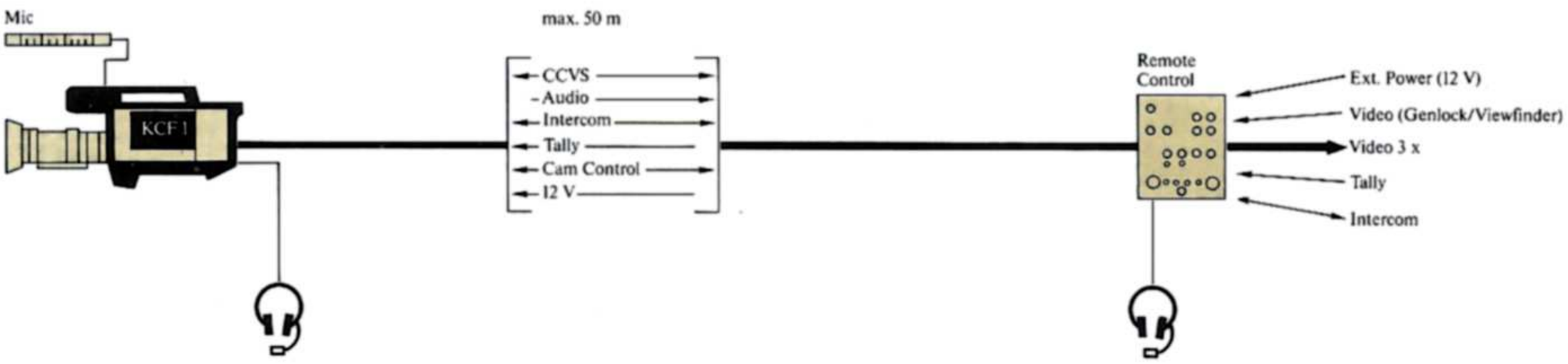
ENG

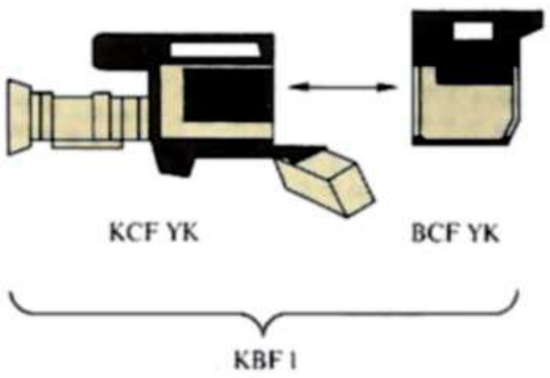


ENG



EFP



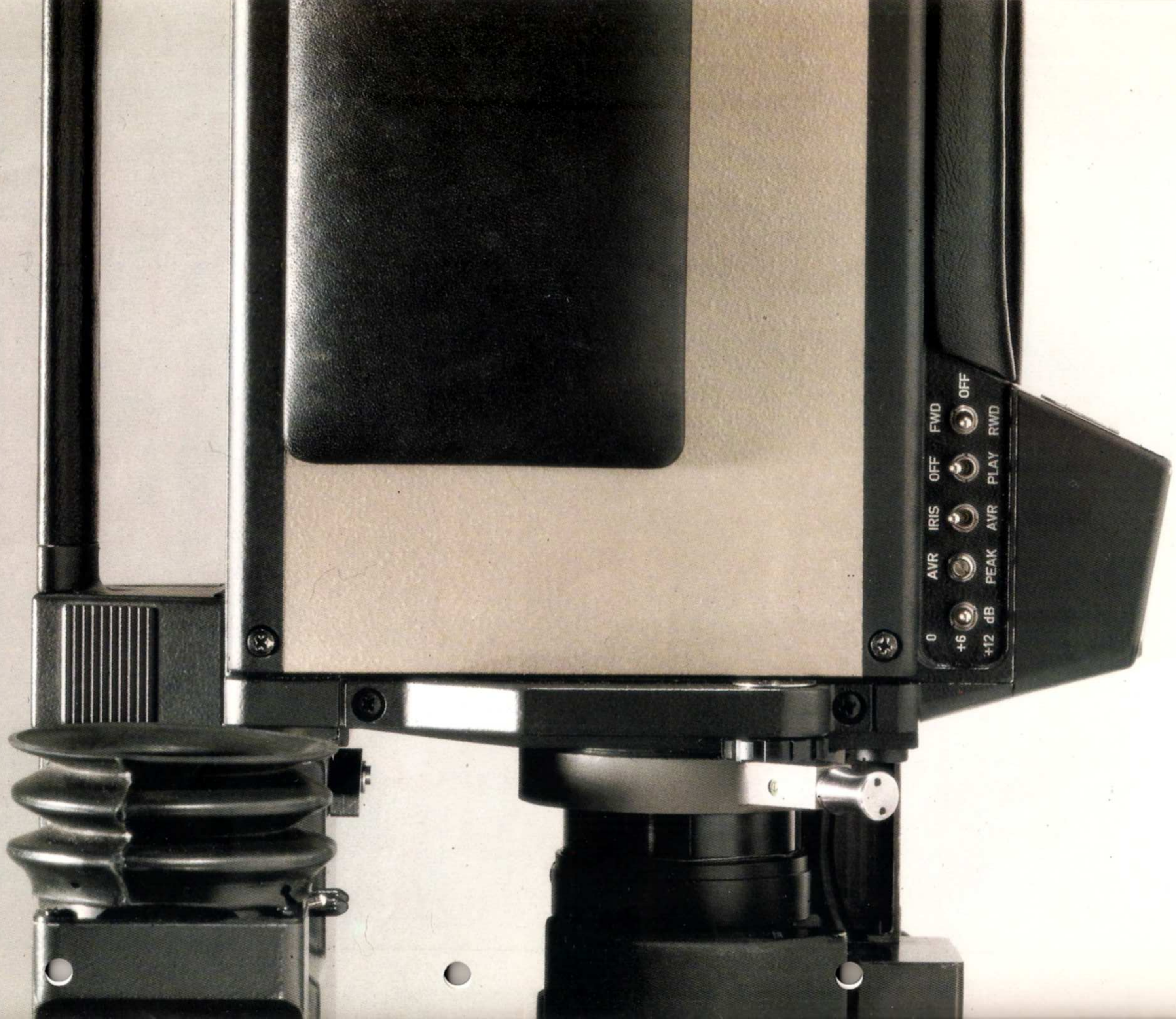


KCF 1

ENG-/EFP-Camera
EB-/EAP-Kamera

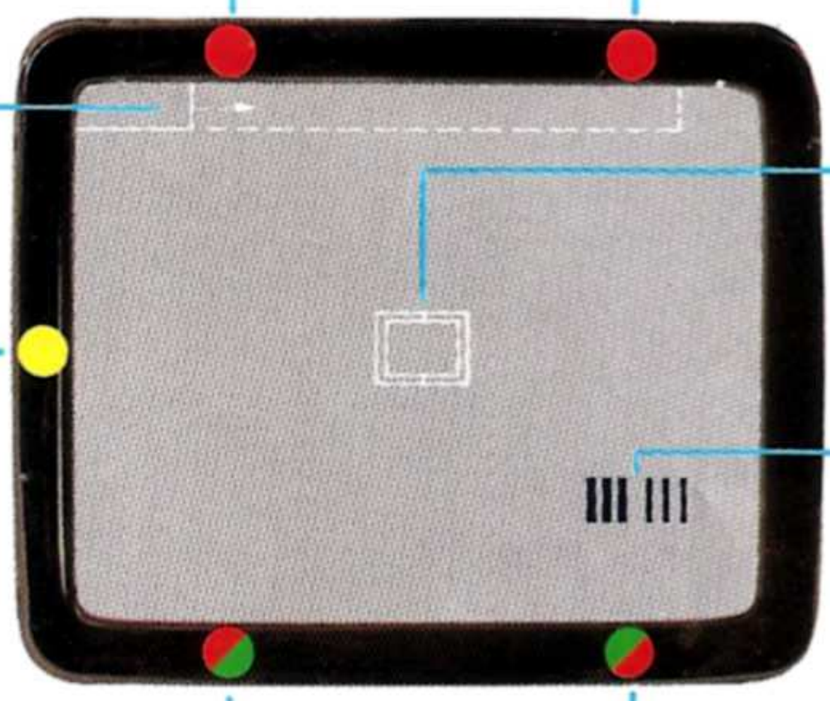


Maßstab/Scale: 1 : 1


0
+6
+12 dB
AVR
PEAK
IRIS
AVR
OFF
PLAY
FWD
RWD
OFF

BOSCH

Viewfinder Indication



Audio 1-LED

Audio 2-LED

Light-up when limiter is in use

Tape length (KBF 1)

Fault LED,
continues yellow
for VTR,
blinks for battery warning

Red/green LED,
green for standby,
red for recording/on air,
blinks red
during VTR lock-up

One percent
window appears for
white balance, iris
spot measurement,
filter error, iris limit.

Zebra strips (can be
overridden) appear for two
separate video levels: fine
68-72 percent, coarse
greater than 100 percent.

Gain LED
Green for +6 dB
Red for +12 dB
Blinks red/green
for high contrast

Rear View



Standard XLR 3 microphone
input cable directly to VTR
socket

Lights up if internal fuse
blown

Main switch with indicator

Intercom to VTR

External power input (battery
belt, mains psu, car battery)
10.5 – 17 V negative earth.

VTR connector
the same
cable can also be used for
remote control, (power, gen-
lock, sensitivity switch
(0. +6, +12 dB) black level,
white level, matching, master
black, iris/auto, intercom
and tally).

CCVS input (genlock) LED
lights up if CCVS-signal
present at genlock input.

Parallel viewfinder output for
monitoring (CVS)

CCVS out

Internal battery connector

www.tvcameramuseum.org

Technical Specifications

Color standards	PAL, NTSC, PAL-M, SECAM
Tubes	3 x $^1/_2$" LOC-Plumbicon® Type 80 XG, RGB or equ.
S/N, typical* γ = 1, R + S-Method, without aperture correction, signal current	52 dB (PAL, SECAM) 54 dB (NTSC, PAL-M) G = 150 nA
Resolution* at 4 MHz	G = ≧ 40%
Sensitivity*	900 Lx f:2.0 Gain 0dB, Reflection coefficient 70% color temp. 3200 K
Max. Sensitivity*	110 Lx f:1.4 + 12 dB
Max. Aperture Camera input	1 : 1.4
Raster Geometry (Excluding lens distortion)	Zone 1 ± 0.5% Zone 2 ± 1%
Registration Accuracy	Zone 1 < 40 nS Zone 2 < 80 nS
Gain Control	0, + 6 dB, + 12 dB

* Variations may be caused by tube tolerances

Inputs

1 x DC (ext.)	10.5 – 17 VDC
1 x Genlock	1 V_{pp} CCVS, 75 Ω
1 x Mic.	– 60 dBm/600 Ω

Outputs

1 x CCVS	1 V_{pp}/75 Ω
1 x VTR/Remote	Multiwire
1 x Monitoring	1 V_{pp}/75 Ω

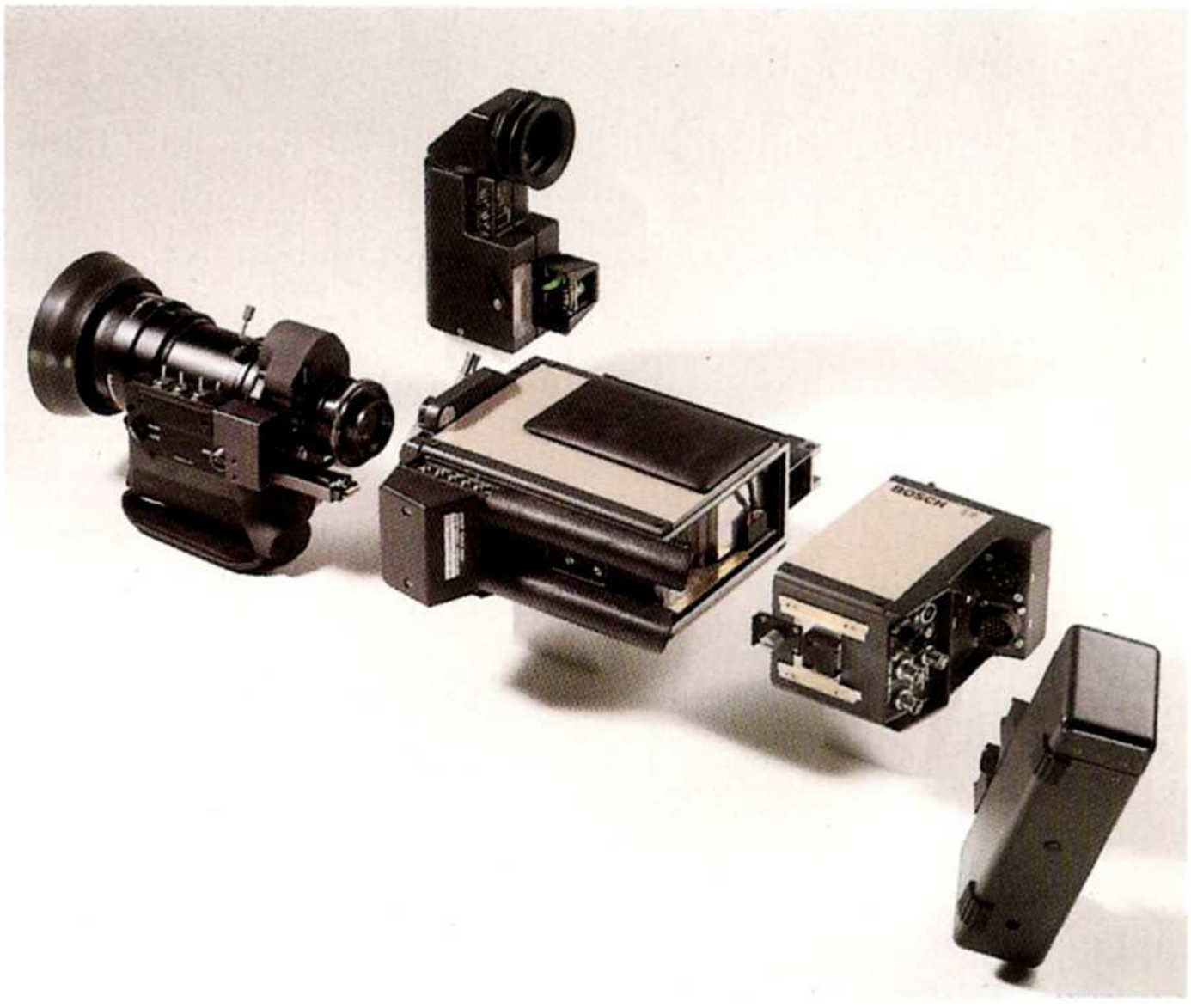
General

Supply voltage 10.5 – 17 VDC, negative earth
(12 VDC nominal)
Power consumption approx. 19 W (at 12 V) incl. VF, without lens
Battery capacity 1.5 h operating time
Ambient operating temperature range – 25°C to + 45°C
Weight (incl. VF, without lens and battery 3.6 kg)

Dimensions (excluding lens)

Height	182 mm
Width	84 mm
Length	310 mm

Order Information



82/26522 F

Doc Number	Unit Type-Description	Order Number
K-220.01.01	KCF 1 A 1 PAL ENG-camera, complete consisting of: compactcamera with integrated shoulder pad, battery housing incl. battery, 4 cm viewfinder, $^1/_2$" plumbicons 80 XQ ASS, Fujinon 1.4/12 x 7 srew-mounted, carrying case, service-set A, manual and add-on unit for PAL standard.	0 114 090 000
K-220-01.02	KCF 1 A 2 NTSC ENG-camera, complete	0 114 100 000
K-220.01.03	KCF 1 A 3 SECAM ENG-camera, complete	0 114 110 000
K-220.01.04	KCF 1 A 4 PAL-M ENG-camera, complete	0 114 120 000
K-220.02.01	KV 333 (15 m) VTR-connection cable, 15 m long	0 797 910 100
K-220.02.02	KV 442 (3 m) VTR-connection cable, 3 m long	0 799 000 100
K-220.03.01	Pedestal adapter with mini-wedge plate for "touch & go-system" of Messrs. Sachtler.	2 106 030 115
K-220.03.02	Pedestal adapter with mini-wedge plate for pedestals of Messrs. Vinten.	2 106 030 116
K-220.04.11	SERVICE-SET B Spare part kit p.c. boards (not depending on standard)	0 807 700 200
K-220.04.21	SERVICE-SET C 1 Spare part kit p.c. boards for add-on unit PAL	0 807 700 300
K-220.04.22	SERVICE-SET C 2 Spare part kit p.c. boards for add-on unit NTSC	0 807 700 400
K-220.04.23	SERVICE-SET C 3 Spare part kit p.c. boards for add-on unit SECAM	0 807 700 500
K-220.04.24	SERVICE-SET C 4 Spare part kit p.c. boards for add-on unit PAL-M	0 807 700 600
K-220.91	B 22 KC 9 A Transport case to accept 5 batteries (X 183) 1 mains power supply and battery-charger (X NL 9-001) and associated connection cable, 1 car battery adapter cable, and 1 multi-battery-adapter.	0 168 630 000
K-220.91.15	X 183 Battery	0 105 879 700
K-220.91.25	X NL 9–001 Mains power supply and battery-charger	0 673 320 000
K-220.91.26	KV 319 (2 m) Connection cable beetwen mains power supply and charger (X NL 9-001) and the camera (KCF/KBF 1).	0 797 750 100
K-220.91.27	X LA 9-001 Multi-battery-adapter for X NL 9-001 to charge simultaneously up to 5 batteries X 183 from mains power supply and battery charger.	0 673 550 000
K-220.91.35	KV 288 (8 m) Car adapter cable	0 797 300 100

Doc Number	Unit Type-Description	Order Number
K-231-01	Microphone support for MKE 803 U	2 106 030 105
K-231.02	MKE 803 U Electric microphone	0 922 470 000
K-231.03	MZS 415 Holder	3 119 100 172
K-231.04	MZW 415 Windscreen	0 922 850 000
K-231.05.11	KV 306 Microphone cable Includes connections and fitting of connectors.	0 797 530 000
K-231.05.21	2 x 0,22 QMM Cable for KV 306	5 000 384 300
K-232.00.01	Test plate	2 015 630 032
K-232.00.02	Test plate set complete, incl. wobbel-test, Siemens-star neutral wedge-, cross-hatch- and grid test pattern	2 015 630 010
K-233	O PP 9 M Test projector (incl. test slides)	2 736 680 000
K-234	Weather cover	2 106 030 130
K-235	Filter turret compl. with star light filter	2 106 030 028
K-236.01	Z KC 9-023 Spare part case incl. p.c. boards adapter for camera, add-on unit and preamplifier, various tools and corresponding components	0 807 700 000
K-236.02	SERVICE-SET B Spare part kit p.c. boards (not depending on standard)	0 807 700 200
K-236.03.01	SERVICE-SET C 1 Spare part kit p.c. boards for add-on unit PAL	0 807 700 300
K-236.03.02	SERVICE-SET C 2 Spare part kit p.c. boards for add-on unit NTSC	0 807 700 400
K-236.03.03	SERVICE-SET C 3 Spare part kit p.c. boards for add-on unit SECAM	0 807 700 500
K-236.03.04	SERVICE-SET C 4 Spare part kit p.c. boards for add-on unit PAL-M	0 807 700 600
K-236.91	SERVICE-SET A Service set tool	0 807 700 100
K-237.00.01	Headphone set (for one ear)	3 119 100 143
K-237.00.02	Headphone set (for both ears)	3 119 100 137
K-238	Sunshade	
K-239.00.01	Pedestal adapter with mini-wedge plate for touch & go system of Messrs. Sachtler.	2 106 030 115
K-239.00.02	Pedestal adapter with mini-wedge plate for pedestals of Messrs. Vinten.	2 106 030 116

Modifications reserved.

KCF 1

Color Camera for ENG/EFP Operation



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