BTS

LDK 91

FRAME

TRANSFER

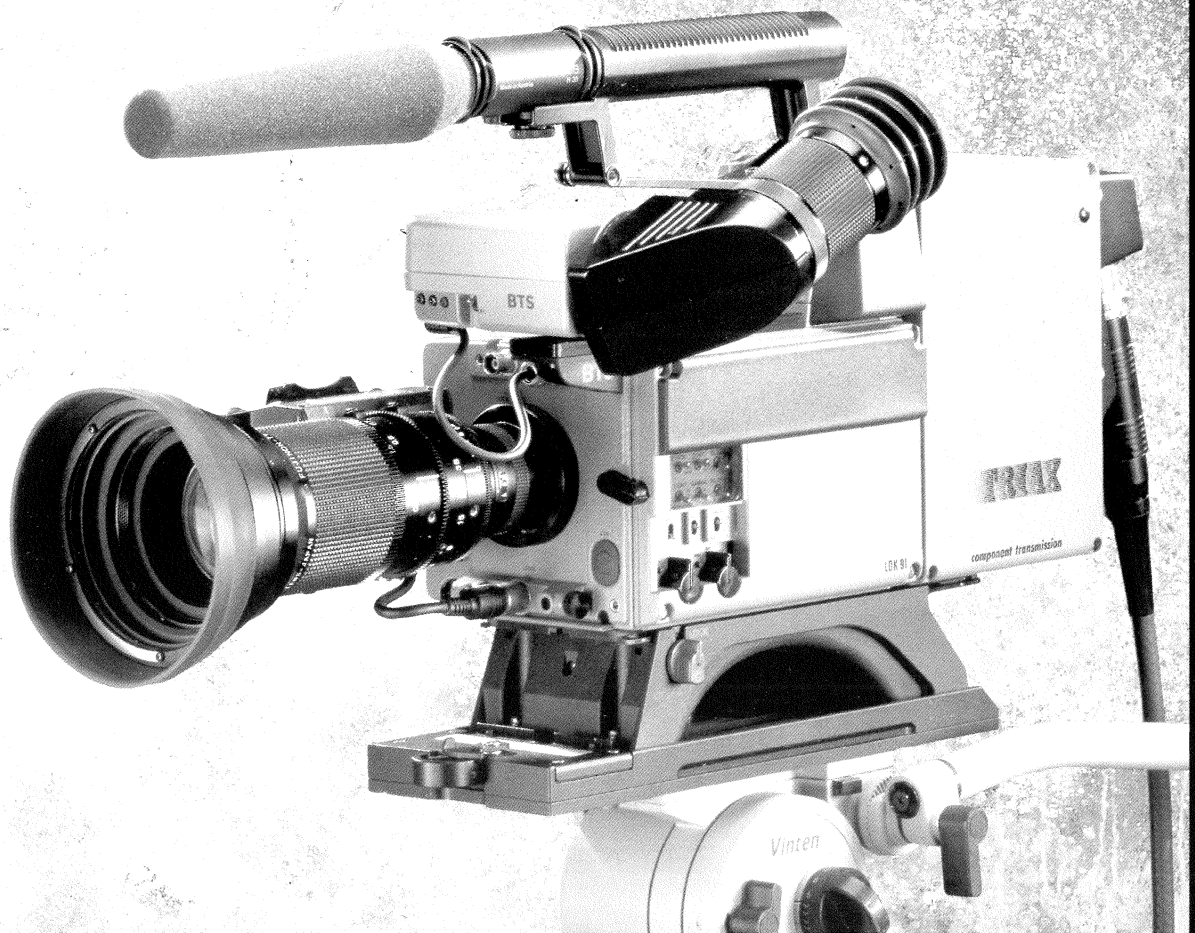
CCD

Multi-role

CAMERA

SYSTEM

....



BTS



LDK 91 Frame Transfer CCD multi-role camera combines no-compromise broadcast quality with unrivaled versatility, setting standards that comfortably exceed all current TV system demands. Its new-generation high-resolution sensors match - and often exceed - previous camera performance. And they are linked to processing circuitry that delivers clean, artifact-free video signals with film-like transient response.

Camera operation is simple, due to an array of ergonomically designed features developed with the co-operation of world-renowned camera operators. There's also no faster camera than the LDK 91. It needs no warm-up, no maintenance and no technical setting up. Automatic features allow shooting in both daylight and artificial light without recourse to optical filter changes. And there are no routine replacements.

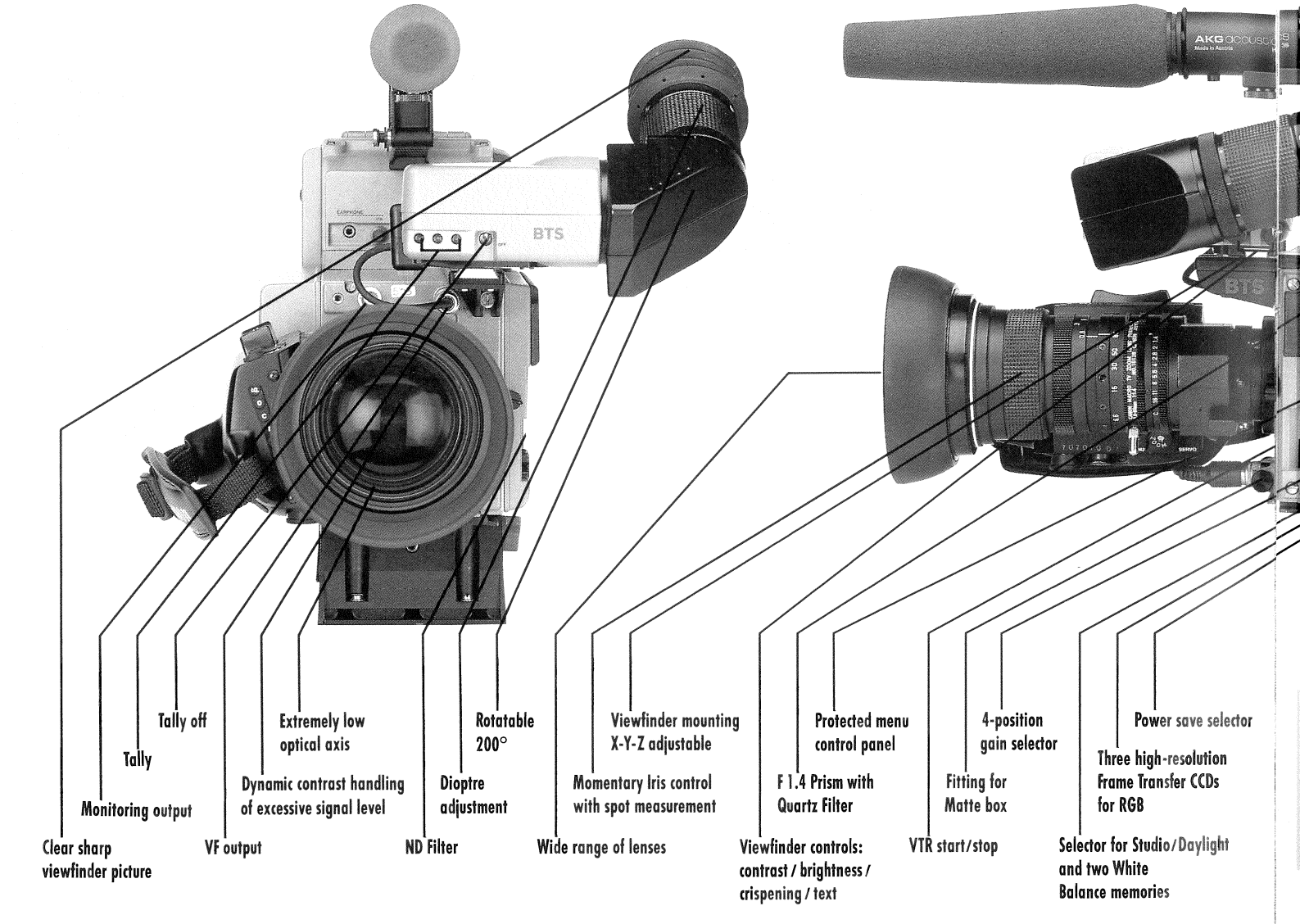
In ENG, EFP and studio, the LDK 91 provides the right answer. Within seconds you can convert to any mode of operation, and the large lens adaptor handles lenses up to 55 times zoom range and more. The LDK 91 also interfaces with the exclusive BTS Series 9000 universal remote control system, which provides extensive alternative remote control for BTS triax cameras. Whether you are shooting with Betacam SP or MII, triax or multicore, remote or local operation, the LDK 91 outperforms any rival.

LDK 91 outperforms other multi-role cameras, however tough the job



- ☐ Smear-free FT-5 Frame Transfer CCD sensors
- ☐ Optional FT-5 HS sensors for virtually double previous sensitivity
- ☐ Outstanding performance in ENG, EFP and studio
- ☐ Fully integrated automatics - no auto setup necessary
- ☐ Automatic black shading and balance
- ☐ Electronic white balance covers all lighting situations, eliminating the need for color conversion filters
- ☐ Highlight compression (600%) circuitry for TV pictures with film-like quality
- ☐ Choice of precision high-brightness, high-resolution (650 TV lines) 1.5-inch and 5-inch viewfinders for ENG and EFP use
- ☐ Large lens adaptor accepts lenses up to 55 times zoom range and more
- ☐ Reliable, economical triax cable operation, with maximum full-bandwidth performance up to 2,400 meters/7,875 feet
- ☐ Performance compatible companion for LDK 9/LDK 910
- ☐ Full range of service items and BTS support worldwide

LDK 91 System Overview



Clear sharp viewfinder picture

Monitoring output

Tally

Tally off

VF output

Dynamic contrast handling of excessive signal level

Extremely low optical axis

ND Filter

Dioptre adjustment

Rotatable 200°

Wide range of lenses

Momentary Iris control with spot measurement

Viewfinder mounting X-Y-Z adjustable

Viewfinder controls: contrast / brightness / crispening / text

F 1.4 Prism with Quartz Filter

Protected menu control panel

VTR start/stop

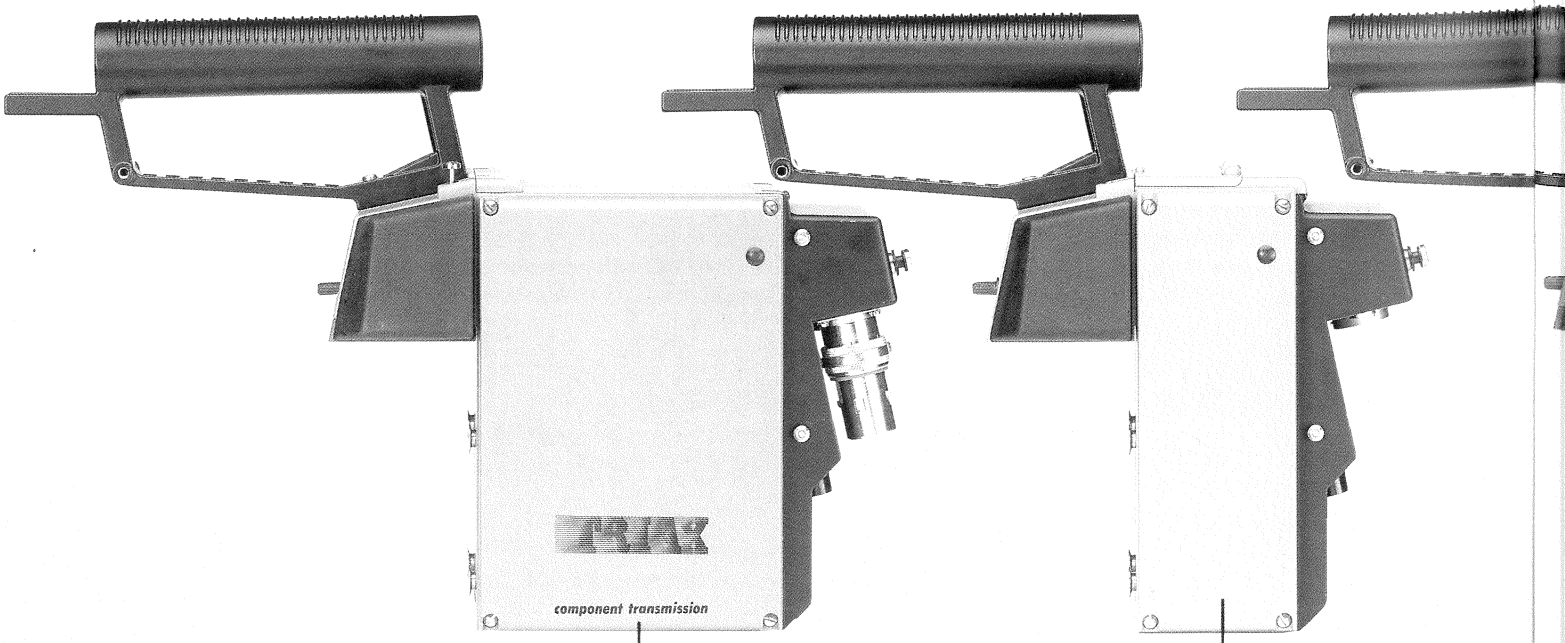
Fitting for Matte box

4-position gain selector

Selector for Studio/Daylight and two White Balance memories

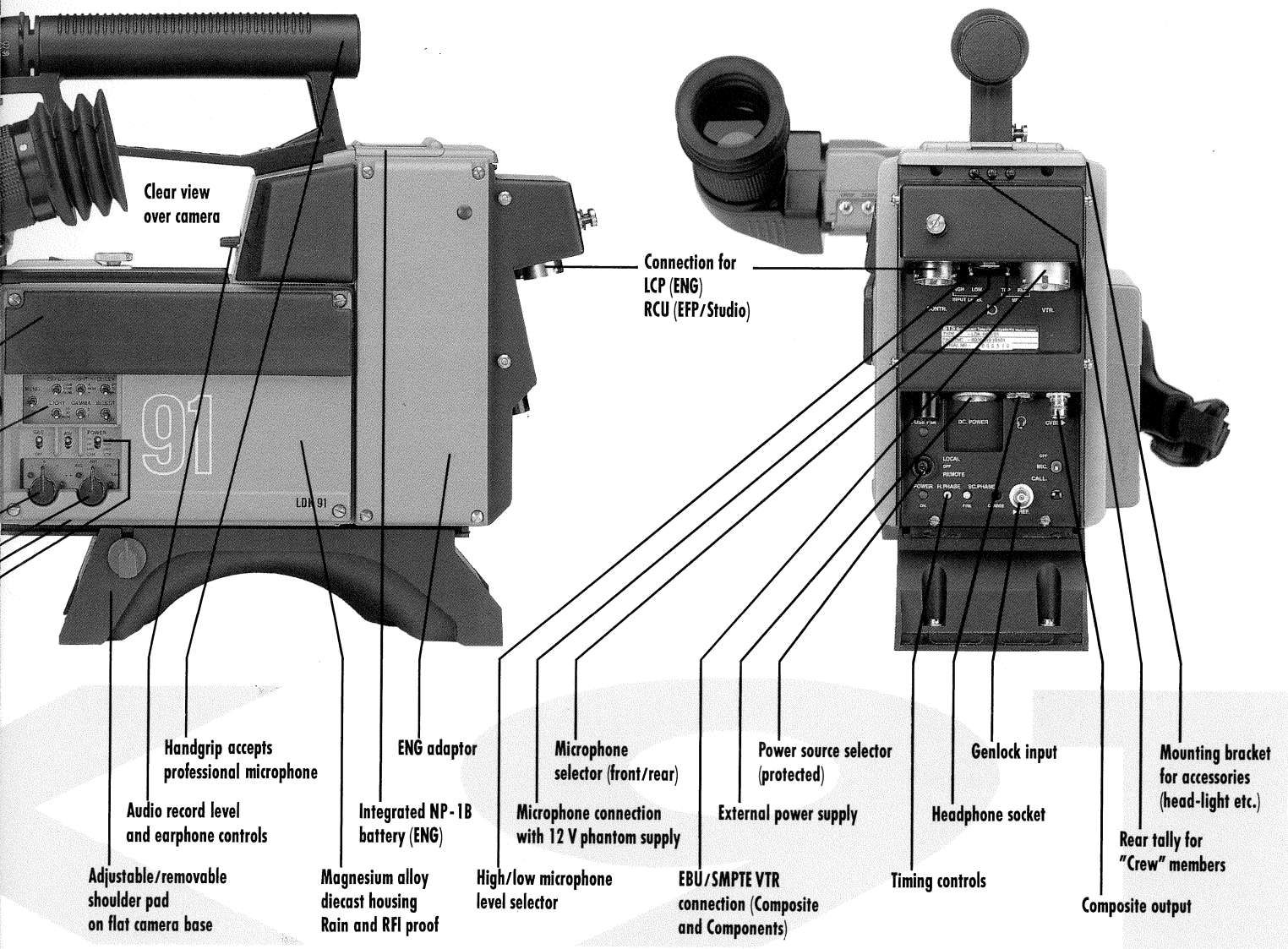
Three high-resolution Frame Transfer CCDs for RGB

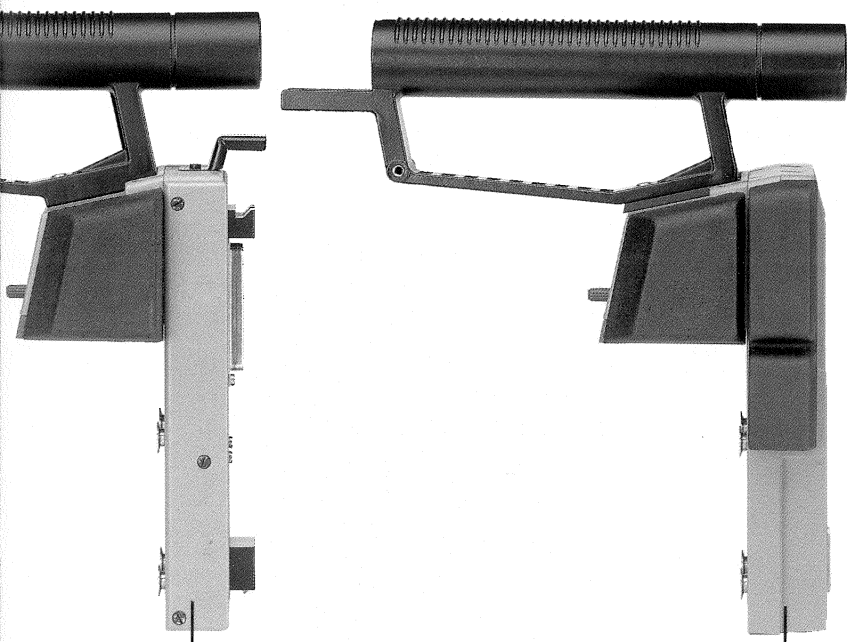
Power save selector



Triax adaptor

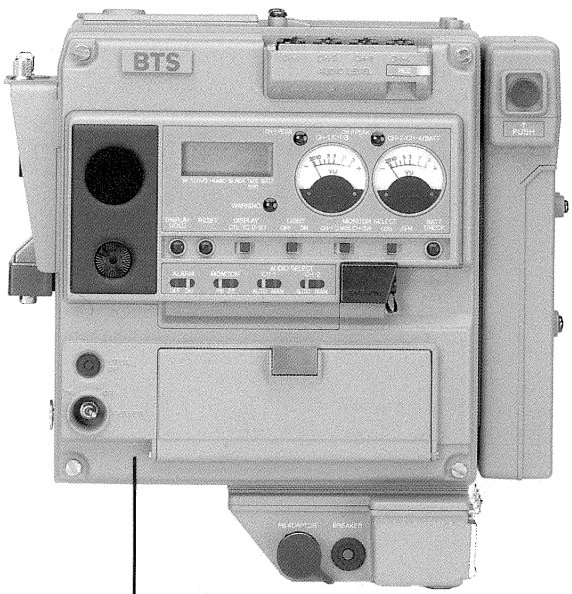
EFP adaptor





MII adaptor

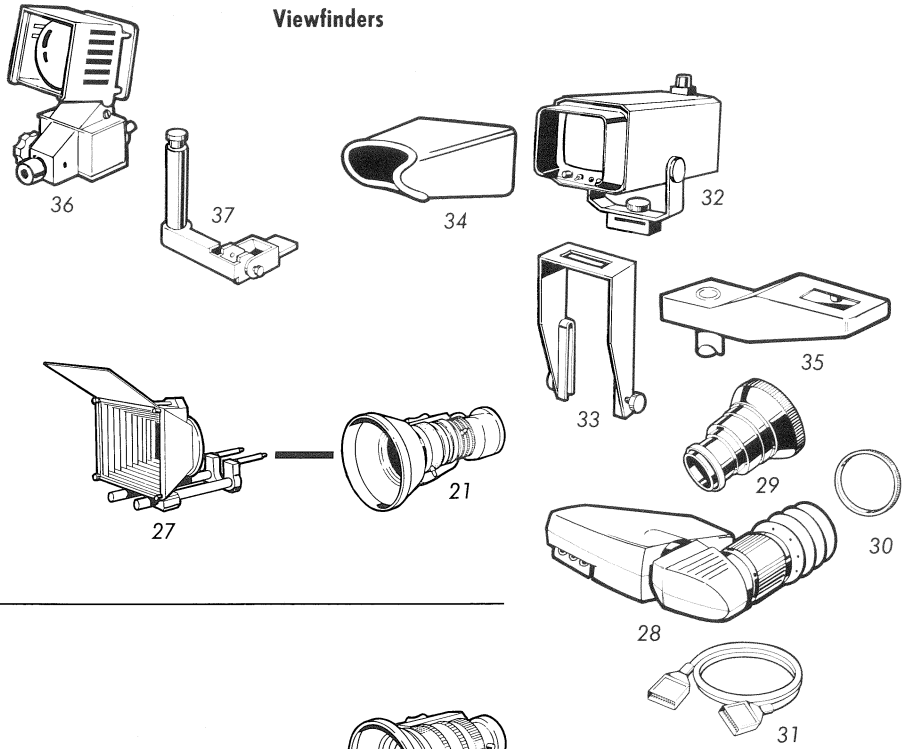
Betacam adaptor



BCB 5 Betacam SP

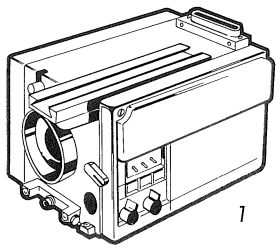
LDK 91 System Overview

1 LDK 91/00 (50 Hz) Camera Head
LDK 91/50 (60 Hz) Camera Head
2 LDK 4490 ENG Adaptor
3 LDK 6505/91 On-camera Battery Case for NP-1B (for ENG and EFP Adaptors)
4 LDK 4619/00 Hand-held Local Control Panel (incl. 1.5 m cable)
5 VTR Cable for camera-to-VTR connection
6 Betacam or MII VTR
7 NP-1B NiCd Battery
8 Battery Charger BC 1 WB (for max. 4 x NP-1B)
9 LDK 4495 MII Adaptor
LDK 4496 Betacam Adaptor
10 BCB 5 Betacam SP Recorder
MII Recorder System (on request)
11 VA 500 I-P/-NI Playback Adaptor (for color monitoring)
12 LDK 4491 EFP Multicore Adaptor
13 Multicore Camera Cable
LDK 8190/01 (10 m)
LDK 8190/05 (50 m)
LDK 8190/10 (100 m)
N.B. Max. distance camera-to-RCU: 300 m
14 LDK 4493/01 Remote Control Unit
15 LDK 4623/00 Desk-mounted Mono Knob Local Control Panel
16 LDK 4498 Triax Adaptor
17 Triax Cable
LDK 8107/xx 8 mm (max. 675 m/2,215 ft)
LDK 8109/xx 11 mm (max. 1,200 m/3,940 ft)
LDK 8112/xx 14 mm (max. 2,000 m/6,560 ft)
LDK 81../xx 16 mm (max. 2,400 m/7,875 ft)
with Fischer connectors (others on request)
/xx is
/01 for 10 m cable
/05 for 50 m cable
/10 for 100 m cable
/15 for 150 m cable
/20 for 200 m cable
/30 for 300 m cable
18 LDK 4054 Triax Base Station
19 LDK 8192/01 Connection Cable (standard length 10 m)
N.B. Max. distance Base Station-to-OCP: 350 m
20 LDK 4622/01 Operational Control Panel
21 Angénieux Lenses
LDK 6114/10 (14 x 7)
LDK 6114/11 (14 x 6)
22 Canon Lenses
LDK 6114/21 (PH 15 x 7)
LDK 6114/22 (PH 8 x 4.4)
LDK 6114/23 (PH 18 x 6.2)
LDK 6114/24 (PH 14a x 6.6)
23 Fujinon Lenses
LDK 6114/30 (S 7 x 5.4)
LDK 6114/35 (S 8.5 x 4.2)
LDK 6114/36 (S 14 x 6.4)
LDK 6114/37 (S 3.5 x 4.8)
LDK 6114/38 (S 24 x 8.8)
LDK 6114/39 (S 18 x 6.4)
24 Large Lenses - Angénieux
LDK 6116/10 (40 x 7.8)
LDK 6116/11 (20 x 7)
LDK 6116/12 (15 x 5)

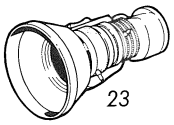


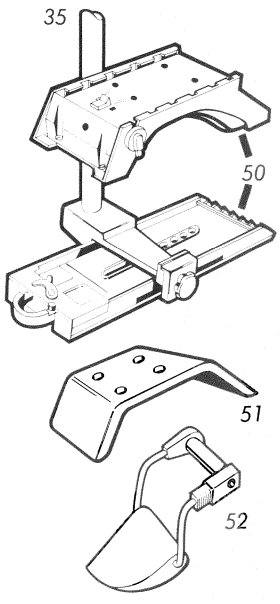
Viewfinders



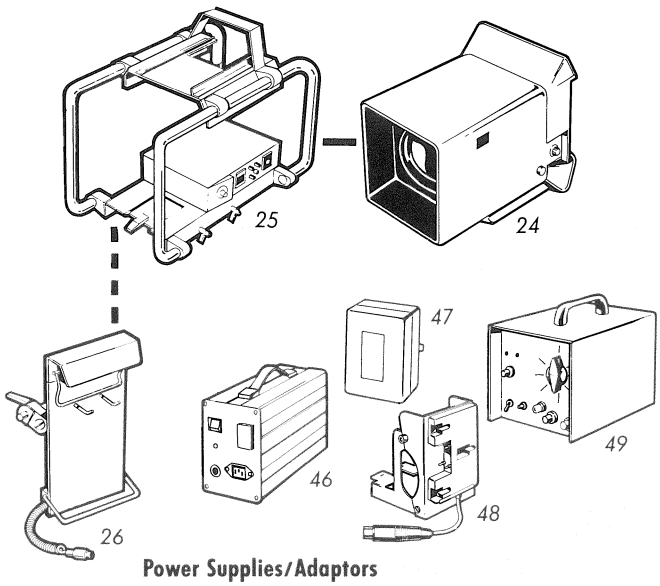


LDK 91 CAMERA HEAD

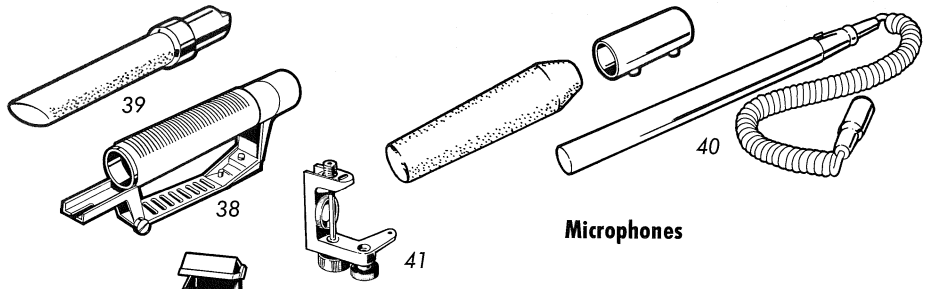




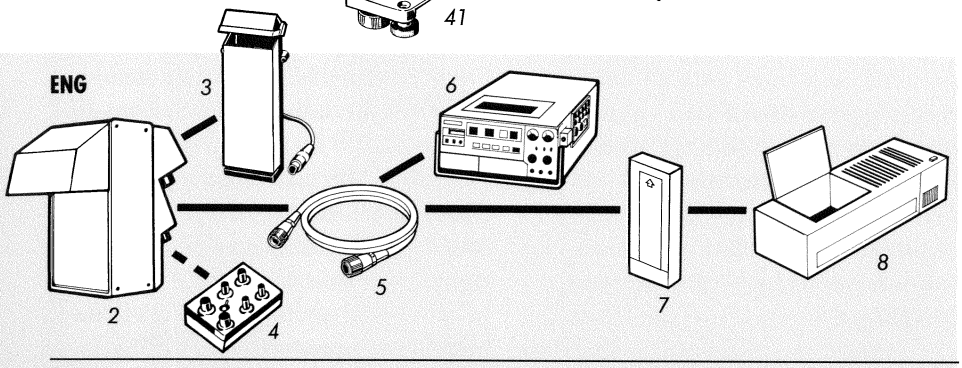
Camera Supports

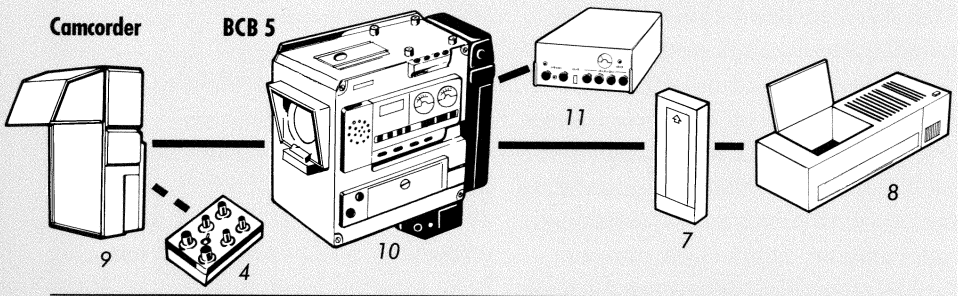


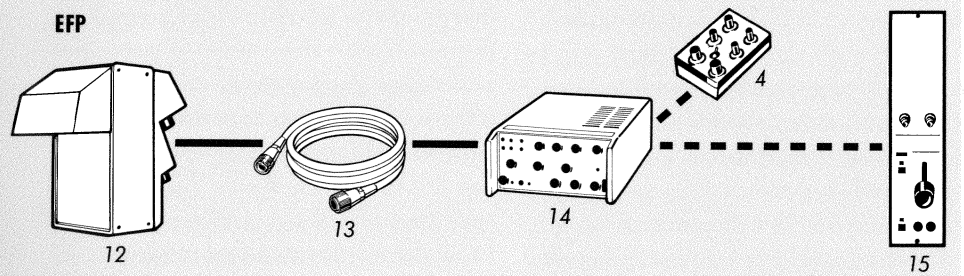
Power Supplies/Adaptors

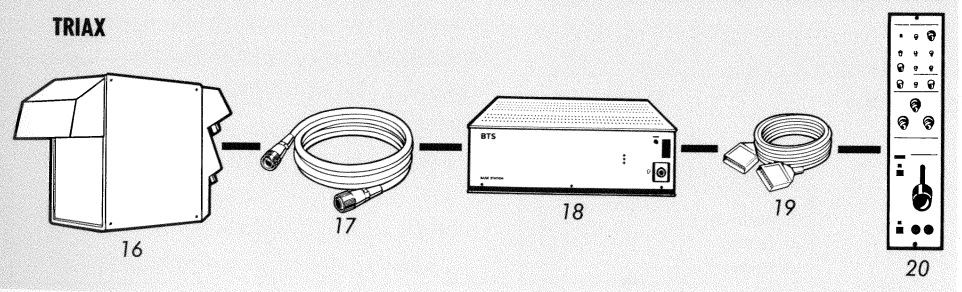


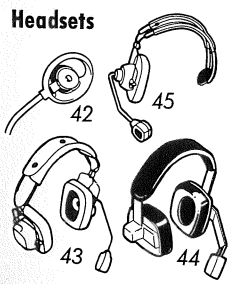
Microphones

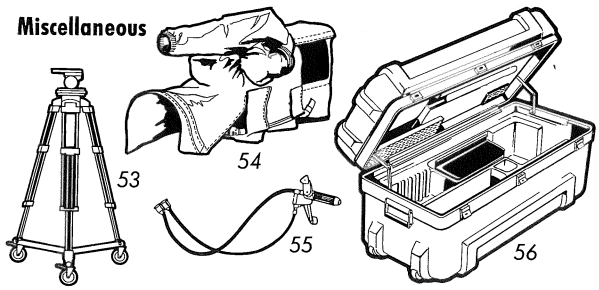












Large Lenses - Canon
LDK 6116/21 (PH 50 x 7.3)
LDK 6116/23 (PH 20 x 6.0)
LDK 6116/24 (PH 55 x 7.0)
LDK 6116/25 (PH 16 x 6.4)
Large Lenses - Fujinon
LDK 6116/33 (S 44 x 7.3)
LDK 6116/34 (S 55 x 7.3)
LDK 6116/36 (S 18 x 6.0)
LDK 6116/37 (S 20 x 5.4)
LDK 6116/38 (S 34 x 8.0)

25 LDK 4499 Large Lens Adaptor
26 LDK 6985/01 Script Board
27 LDK 6997 Matte Box System Grosziel Film-Technik
28 LDK 4304 1.5" Viewfinder, incl. mounting
29 LDK 6108/01 Wide-angle Adaptor
30 LDK 6108/90 Anti-mist Optics
31 LDK 8193/00 Camera Adaptor Remote Cable (2.5 m)
32 LDK 4309/01 5" Viewfinder, incl. mounting
33 Supplied with 5" Viewfinder
34 LDK 6992/02 Sunhood
35 LDK 6506/40 Top/Side Mount
36 Bauer Light System (12 V)
Single bulb
Double bulb
37 LDK 6505/11 Stand-off for light
(retractable for transport)
38 Handgrip (supplied with adaptor)
39 LDK 8332/00 Lightweight Microphone
40 LDK 8330/00 AKG Condenser Microphone
41 LDK 6505/09 Mounting Bracket for accessories
42 LBB 3176/00 Mini-jack Earphone
43 LDK 8111/33 Headset (Double-muff)
RTS Connector
44 LDK 8111/35 Headset (Double-muff)
Tuchel Connector
LDK 8111/37 Headset (Double-muff)
XLR 5 Connector
45 LDK 8111/34 Headset (Single-muff)
RTS Connector
46 LDK 4377/30 AC Power Supply
(incl. 5 m connection cable)
47 Bauer Battery Pack - Propac 13
48 LDK 6505/10 Snaplock Adaptor
Frezzolini/Bauer Battery Pack
(for ENG and EFP Adaptors only)
49 LDK 4376/50 Universal Charger - Frezzolini
LSQ 4 E Bauer Charger - 4 x Propac
50 LDK 6508/40 Shoulder Mount Tripod Adaptor
51 LDK 6990/20 Shoulder Padding (wide)
52 LDK 6990/30 Chest Support
53 Tripods (on request)
54 LDK 6999/00 Rain Cover
Camera/recorder combination
LDK 6999/01 Rain Cover
ENG/EFP/Triax Camera with 5" Viewfinder
55 LDK 6115/.. Lens Remote Control Kits
56 LDK 6995/92 Transport Case
(Camera, Recorder)
LDK 6995/91 Carrying Bag
(Camera/recorder combination)
LDK 6995/95 Transport Case (Accessories)

BTS Frame Transfer technology gives you the best picture quality

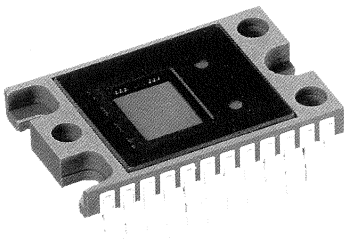
FT-5 sensors - CCD performance and no smear

Over 20 years' experience in research and development of CCD technology has resulted in the FT-5, a high-resolution Frame Transfer sensor that enables the LDK 91 to perform better than any previous camera in its class. Of all CCD sensors, only the Frame Transfer sensor, with its accompanying shutter, eliminates smear under all conditions.

The FT-5 sensor has a photosensitive area with 474,000 pixels (50 Hz) or 406,000 pixels (60 Hz). Each separate image is transferred to storage before a new image takes its place. The shutter is timed to operate during the transfer, and interrupts exposure during the frame shift. Each frame is therefore clean and independent of previous frames and highlights with no smear effects whatsoever.

In addition, a shorter exposure time (integration time) gives higher dynamic resolution - important when shooting fast moving objects for slow-motion replay.

Unlike other CCD sensors, the FT-5 has no image gates and overflow drains in the light path. This means a high number of relatively large sensor elements can be packed into a small area without



large gaps between them. Aliasing is reduced, as is fixed pattern noise, resulting in clean pictures even at high camera gain settings. And the FT-5 provides accurate and permanent geometry and registration, excellent dynamic resolution - and no lag under any conditions.

The FT-5 in the LDK 91 - top quality under all conditions

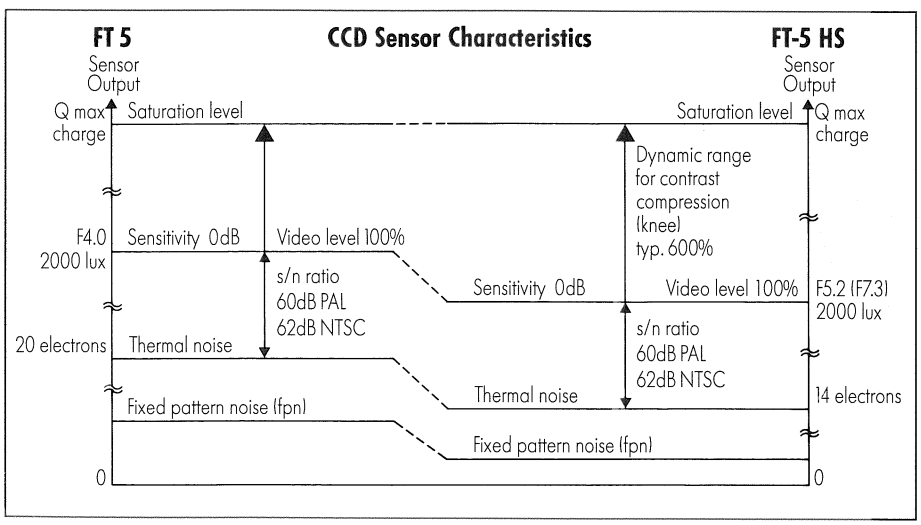
The 1/2-inch FT-5 Frame Transfer sensor features over 800 pixels per line providing high sensitivity and high resolution. Such miniaturization means small prism optics, resulting in a compact, lightweight camera. And to maximize the potential of the FT-5 sensor, BTS has provided the LDK 91 with the best in high-technology processing circuits. Processed video signals are artifact-free, with a film-like transient response. As a result, you can be sure that the LDK 91 will produce broadcast quality pictures under all operating conditions.

Optional FT-5 HS sensor practically doubles previous sensitivity

The LDK 91 is now available with a new, even higher sensitivity option - the BTS Frame Transfer CCD FT-5 HS sensor. This achieves practically double previous sensitivity (without using on-chip lenses with their non-linear sensitivity/resolution ratio). The FT-5 HS allows you to shoot at F5.2 at 2,000 Lux - equivalent to F7.3 in 2/3" format - with a minimum illumination of just 9 Lux at F1.4. And it still maintains an impressive signal to noise ratio of 60 dB PAL, 62 dB NTSC while providing all the benefits unique to the BTS FT-5 series sensor.

Lower noise and wider dynamic range

Considerable improvement in performance has been achieved by reducing both thermal and fixed pattern noise. Thermal noise has been lowered by changes to the design of the on-chip output amplifier to counter the effects of parasitic and active capacitances. And to improve fixed pattern noise, carefully chosen dopant implants are used to decrease electric fields in specific parts of the sensor.
In addition to virtually doubling sensitivity, the overall noise reduction also increases the dynamic range (typically > 600%) of the sensor by the same amount as the noise reduction.



Intelligent design provides peak performance under all conditions

The LDK 91 has a variety of features that check and continuously optimize signal quality. These features guarantee that the LDK 91 is easier and faster to use than other cameras, and ensure top-quality pictures all the time and under all operating conditions. In addition, the fully integrated automatics help you to become operational quickly, without the need for auto setup procedures.

Automatic Black Shading and Black Balance

In the LDK 91, a temperature dependent correction is continuously applied to the video signal from the pre-processor to compensate for thermal variations in the sensor. The correction is derived from the black reference signal of the FT sensor, which gives an accurate indication of temperature changes, and is carried out for every picture line. In this way you can be sure that black shading and black balance are always correct.

Electronic White Balance

Electronic color compensation covers all lighting situations from daylight to studio lighting, so color conversion filters are unnecessary. In daylight color temperatures, this results in one more F-stop of sensitivity. A choice of four easily selected gain positions covers all eventualities. With high light levels, selection of low gain gives extremely high signal to noise performance with minimum depth of field. Alternatively, a higher gain can be selected for low light operation.

Adaptive Variable Highlight Compression for film-like pictures

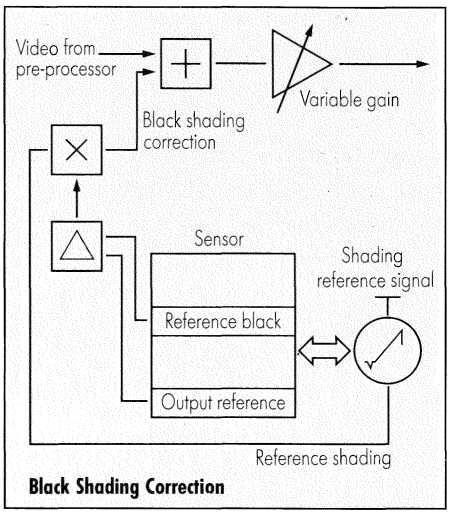
For a TV camera to achieve film-like quality, it must emulate the softly limiting S-shaped transfer characteristic of film. This is done by compressing the TV camera's near-linear characteristic above a certain point, the "knee".

In the LDK 91, a "pivoting knee" circuit adapts both the knee point and the compression ratio according to the highlight content of the picture. Significant highlights lower the knee point to give more room for compression, while minor highlights only affect the upper part of the transfer characteristic. Signals below the knee point remain unaffected.

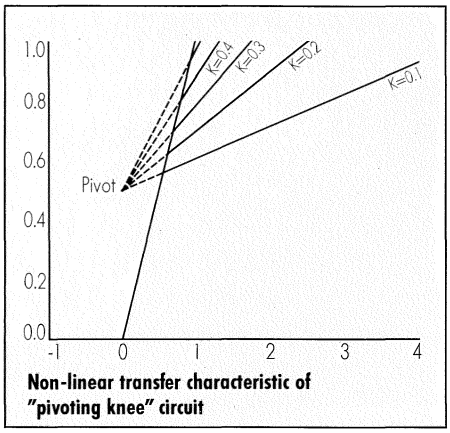
As a result, compression is only applied where necessary and in proportion to the highlight. And the pictures obtained have a true, film-like quality.

Excellent colorimetry

LDK 91 features the excellent levels of colorimetry traditionally associated with BTS cameras. Each camera is supplied with three plug-in matrices to suit different applications. When changing matrices, no camera adjustment is needed. The plug-in units also ensure fast and highly accurate matching of cameras.



Black Shading Correction



Non-linear transfer characteristic of "pivoting knee" circuit

LDK 91 - full creative freedom in studio or on location

Whatever your application - ENG, EFP, studio or field work - the LDK 91 can be optimized to meet it without loss of flexibility or performance in any mode. Careful design, in conjunction with professional end users, has resulted in a practical, sturdy camera that's more than a match for the most demanding working conditions.

Adjustable Shoulder Mount
Unique to the LDK 91 is an adjustable shoulder mount that ensures the most comfortable setting and allows perfect balance for any camera/lens/recorder combination.

Precision viewfinders
A choice of two comprehensively specified, high-brightness, high-resolution viewfinders covers ENG and EFP applications.

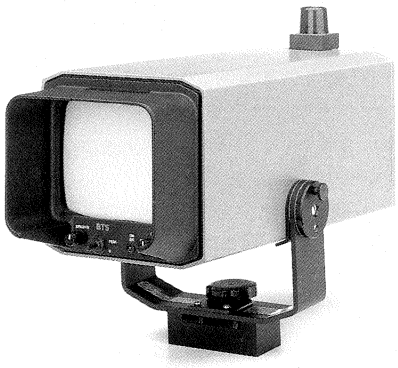
The 1.5-inch viewfinder, rotatable and x-y-z adjustable, is sturdily mounted for hand-held use.
It accepts standard 42 mm personal eye correction lenses and has a fully adjustable dioptre. Anti-mist optics and a wide angle ocular for two-eye viewing are available as options. Centre cross and electronic safe area indicators are also provided.

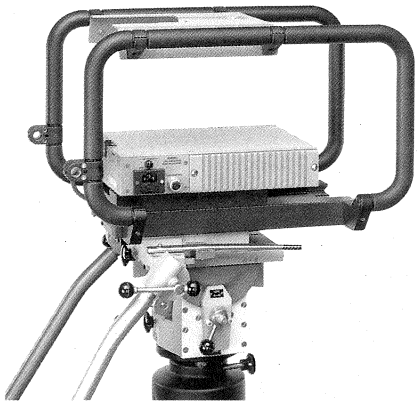
For tripod EFP use, a high-performance 5-inch viewfinder may be top or side mounted. This too provides a full range of indicators, including character display messages such as diagnostics. It also has on-air and tally lights, and front panel controls for contrast, brightness and peaking.

LDK 91 Large Lens Adaptor
To accommodate lenses up to 55 times zoom range – and future lens designs – a Large Lens Adaptor is available as an option. It allows both for local powering and for use with the remote controlled triax cable system. Available lenses cover requirements ranging from manual to full servo operation.



1.5-inch Viewfinder


5-inch Viewfinder


Large Lens Adaptor

Menu Panel

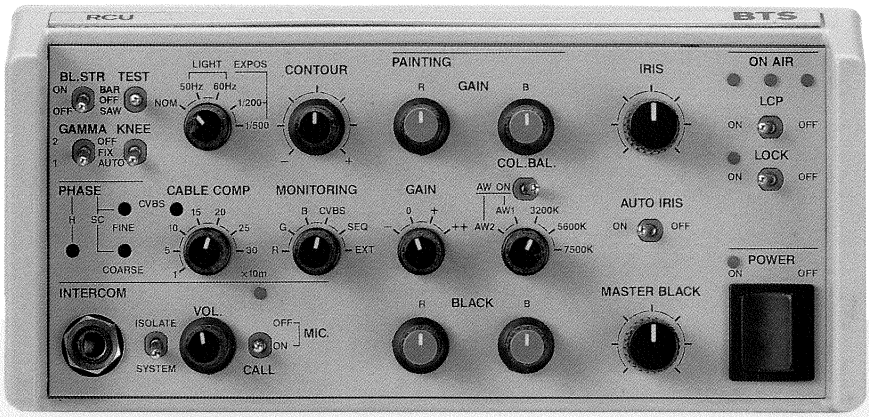
The menu control panel allows a variety of personal camera settings to be pre-set and pushbutton selected. In this way the LDK 91 can be instantly set up for special lighting conditions, e.g. occasions when additional contours are needed (from red and green channels). When working in HMI, or with TL lighting, the "lighting" control can be pre-set for 50 Hz or 60 Hz. Gamma, black stretch and exposure time can also be pre-set to provide instant access as programming demands change.

The menu panel can be used in self-contained modes of operation, including ENG. In fast-action sport, the electronic exposure control can provide clearer pictures for slo-mo or stop- motion replay from VTRs. The value of 1/500 is an optimum compromise between speed of action, operator needs and sensitivity loss.

LDK 91 ENG camera

Ease of use and a wide all-around view when on the shoulder make the LDK 91 ideal for ENG work. Four white balance memories provide instant adjustments to suit lighting changes. Two are factory pre-set for 3,200 K (studio light) and 5,600 K (daylight), and two are available for the operator to pre-set between 2,500 and 20,000 K.

A comprehensive range of accessories includes adaptors for Beta SP and MII on-camera recorders, a range of battery types and an adjustable shoulder pad. For even more flexibility, a small Local Control Panel may be connected to the camera or recorder-camera combination.



Remote Control Unit (RCU)



Hand-held LCP

LDK 91 Remote Control EFP

For studio or field EFP use, multicore cable (up to 300 meters/ 984 feet) and triax (up to 2,400 meters/7,875 feet) remote control options provide extensive production capability.

In multicore operation, the compact RCU provides operator control options that include Iris, Master Black, full Painting (black and white), gamma, knee, contours, gain and comprehensive monitoring. Four- or two-wire intercom communications and the camera audio channel are also available at this unit. The RCU has full bandwidth RGB or component outputs, as well as two composite outputs to suit all system applications. Two control panels are available for painting, Iris and



Desk-mounted Mono Knob LCP

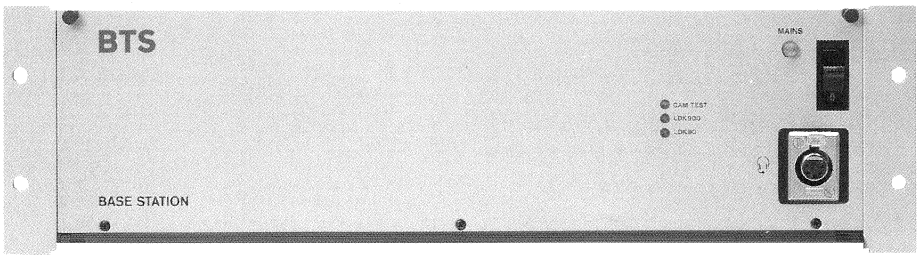
Master Black control: a desk-mounted version with mono knob control, and a hand-held Local Control Panel that can be connected to the RCU. In this EFP mode the system is AC powered.

BTS full bandwidth RGB Triax

The BTS triax system allows remote control of the LDK 91 camera up to a distance of 2,400 meters/7,875 feet. The camera head is linked by triax cable to its Base Station, the interface to the remote control system.

Unlike systems based on luminance (Y) and bandwidth-limited color difference (R-Y, B-Y) signals, the BTS triax system uses full bandwidth R, G and B component signals. This offers several distinct advantages, especially when using chroma key and when very long distances are involved. The double sideband modulation provides elegant and automatic compensation of the amplitude characteristics of each video channel. The result is best possible linearity, lower crosstalk and higher signal to noise over the maximum cable length.

Signal bandwidth also remains constantly high across the maximum cable length, whereas with other systems it can be cut to less than half. Best possible results are also assured with chroma key work since the primary colors are directly available and do not have to be derived from luminance and bandwidth-limited color difference signals.

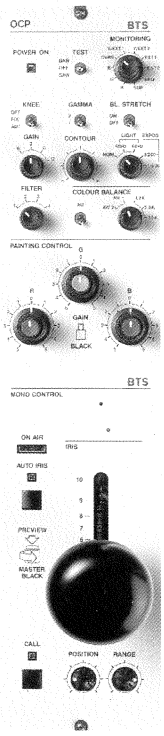


Base station

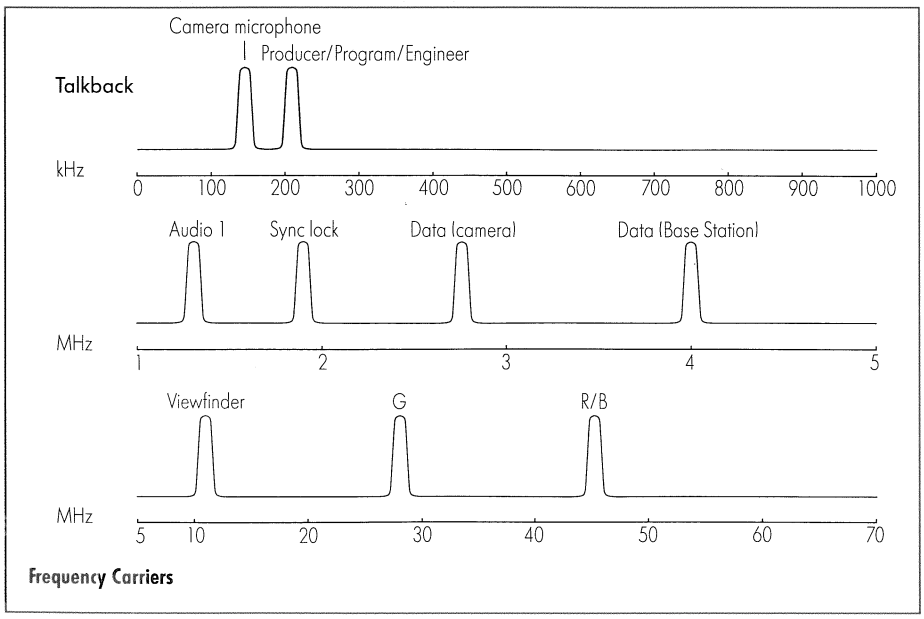
Portable companion to LDK 910 studio camera

The triax EFP version of the LDK 91 is the ideal, fully triax cable compatible companion for the LDK 910 production camera. They both have the same full broadcast picture quality, using identical sensors and processing circuits, and very accurate color matching.

The triax base station and operational control panel are also common to both camera systems, providing a fully integrated, user-friendly system suitable for both studio and outside broadcast use. And camera heads can be readily interchanged.



Operational Control Panel



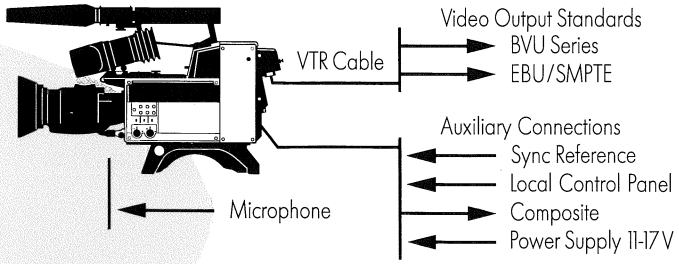
Frequency Carriers

Portable companion to LDK 9 with Series 9000 control

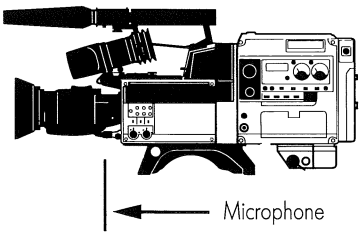
The triax version of the LDK 91 can similarly be used as portable companion to the LDK 9 studio camera. For maximum flexibility, the optional Series 9000 Universal Camera Control System should be used to control both camera systems. Information on the Series 9000 is contained in a separate brochure available on request.

Extensive application possibilities

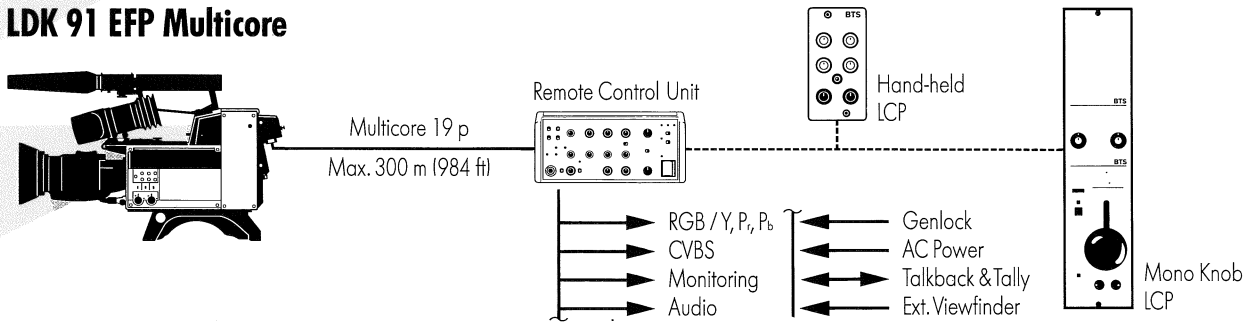
LDK 91 ENG with separate VTR



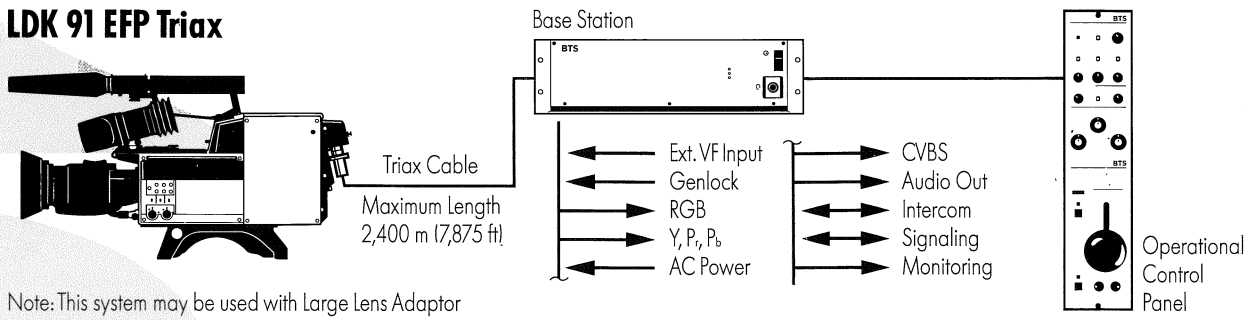
LDK 91 ENG with Betacam SP Recorder



LDK 91 EFP Multicore

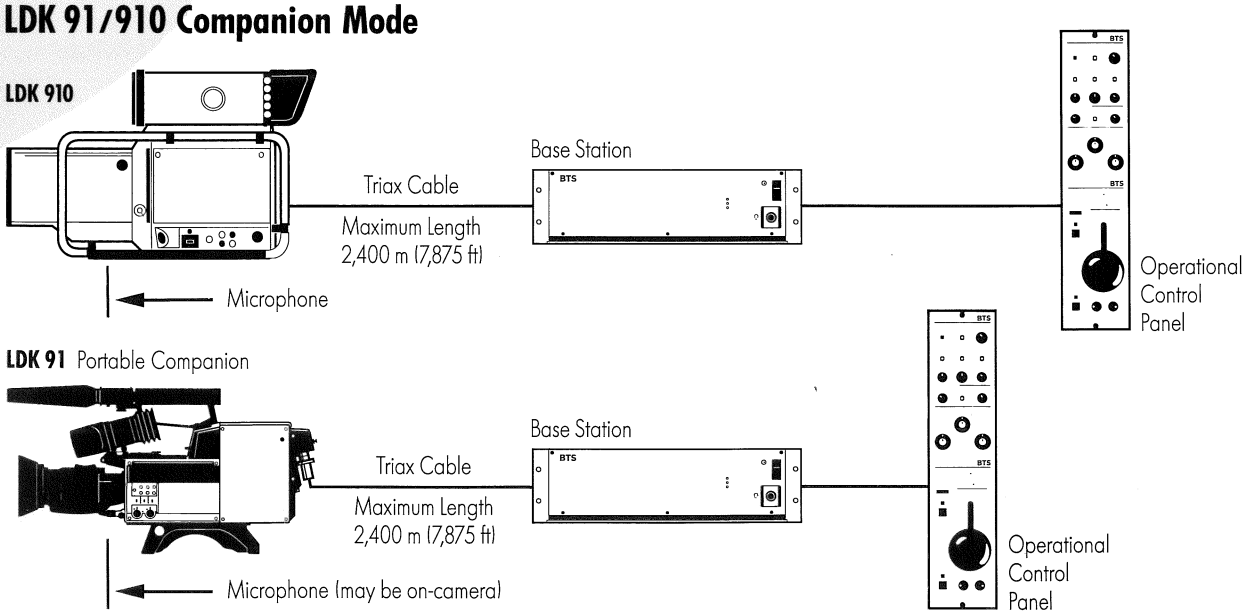


LDK 91 EFP Triax



Note: This system may be used with Large Lens Adaptor

LDK 91/910 Companion Mode



specifications

Basic Camera Head

Transmission system
PAL, PAL-M, NTSC

Power supply
11-17V d.c.

Power consumption
11 watts approx.

Pick-up device
3 Philips Frame Transfer CCDs

Picture elements	Total pixels
790 (h) x 600 (v) PAL	474,000
806 (h) x 504 (v) NTSC	406,000

Optical system
F1.4 prism with quartz filter

Input signals
External video, Reference

Output signals
RGB Video, Monitoring, Test Signal, Color Bars

Sensitivity FT-5
2,000 Lux (176 ft cd)
at F4.0 with 90% reflectance
Optically identical to F5.6
in ⅔" format

Sensitivity FT-5 HS
2,000 Lux (176 ft cd) at F5.2
Optically identical to F7.3 in ⅔" format.
Condition: color temp. 3,000 K,
reflectance 89.9%, 0 dB gain

Maximum Sensitivity FT-5
15 Lux (1.3 ft cd)
at F1.4 and highest gain

Maximum Sensitivity FT-5 HS
Approx. 9 Lux (0.8 ft cd) and F1.4 and highest gain

Signal to Noise Ratio (at normal gain)
60 dB PAL
62 dB NTSC

Modulation Depth
> 55% in RGB, equates to a limiting response of > 700 TV lines

Registration
Less than 25 ns (0.05%) in all three zones
Not including zoom lens errors

Contour correction
Edge of band, and out of band, contours from Red and Green

Geometric distortion
Negligible

Gain control
-3 dB, 0 dB, +9 dB, +18 dB
(+24 dB on request)

Color temperature
Electronic pre-sets for studio (3,200 K)
and for daylight (5,600 K)

White balance
Two selectable memories for auto white balance, ranging from 2,500 - 20,000 K

Gamma correction
0.45 or 0.7
(customer setting)

Contour level
Three selectable levels

Black level
0, -10%, -20%

Black stretch
On/Off

Exposure control
Nominal, 1/200 s, 1/500 s

Lighting control
Nominal, 50 Hz, 60 Hz

} Pre-set via MENU control panel

Lenses
A wide choice of lenses is available from all manufacturers
All LDK 91 lenses are F1.4

Iris control
Manual, Automatic and Momentary with spot measurement

Weight
Basic camera approx. 2.35 kg (5 lb)

Operating temperature
From -20 to +45°C

Storage temperature
From -20 to +50°C

1.5-inch Viewfinder

Resolution
650 TV Lines

Weight
0.75 kg (1.65 lb)

Power consumption
1.6 watts approx.

Indicators
Camera, Iris, VTR, and Audio functions

Accessories
Wide angle occular
Anti-mist optics
Personal correction glasses

5-inch Viewfinder

Resolution
650 TV lines

Power supply
11-17V d.c. (from camera)

Power consumption
10 watts approx.

Weight
3.5 kg (7.7 lb)

Dimensions (L x H x W)
328 x 125 x 135 mm (12.9 x 4.9 x 5.3 inches)

Accessories
Viewfinder hood
Rain cover
Top/side mount

ENG Adaptor

Power input
11-17V d.c.

Power consumption
2.3 watts approx.

External input
Genlock reference

Controls
Timing
Headphone and earphone level

Connectors
EBU/SMPTE VTR (Composite and Components)
Composite video
Headphone
Earphone
Local Control Panel
Microphone with 12V phantom powering

Battery
Integrated compartment for NP1-B;
12V, 2.3 AH

Weight
1.4 kg (3 lb)

Dimensions (L x H x W)
80/115 x 195 x 120 mm (3.1/4.5 x 7.7 x 4.7 inches)

Betacam Adaptor

Interface between camera and Betacam VTR

Inputs	*Outputs*
Genlock reference (via VTR)	Composite, Component Video to VTR

Controls
Timing
Audio recording level

specifications

Connectors
Camera
Betacam recorder
Local Control Panel
Power consumption
0.9 watts approx.
Weight
0.80 kg (1.8 lb)
Dimensions (L x H x W)
34/95 x 195 x 100 mm (1.3/3.7 x 7.7 x 3.9 inches)

EFP Adaptor
Power input
11 - 17 V d.c.
Controls
Headset and earphone level
Connectors
Camera cable to RCU (Composite and RGB/Components)
EBU/SMPTE VTR (Composite and Components)
Composite video
Earphone
Microphone with 12 V phantom powering
Headset
Battery
External with battery case LDK 6505/91 for NP1-B
Weight
1.5 kg (3.3 lb)
Dimensions
as ENG adaptor

Triax Adaptor
Power input (Triax)
100V d.c.
Power input (local)
10.5 - 17V d.c.
Controls
Headset and earphone level
Connectors
Triax camera cable to Base Station
EBU/SMPTE VTR (Composite and Components)
Composite video
Microphone with 12V phantom powering
Headset
Cable lengths (full facilities)

8 mm triax	675 m (2,215 ft)
11 mm triax	1,200 m (3,940 ft)
14 mm triax	2,000 m (6,560 ft)
16 mm triax	2,400 m (7,875 ft)

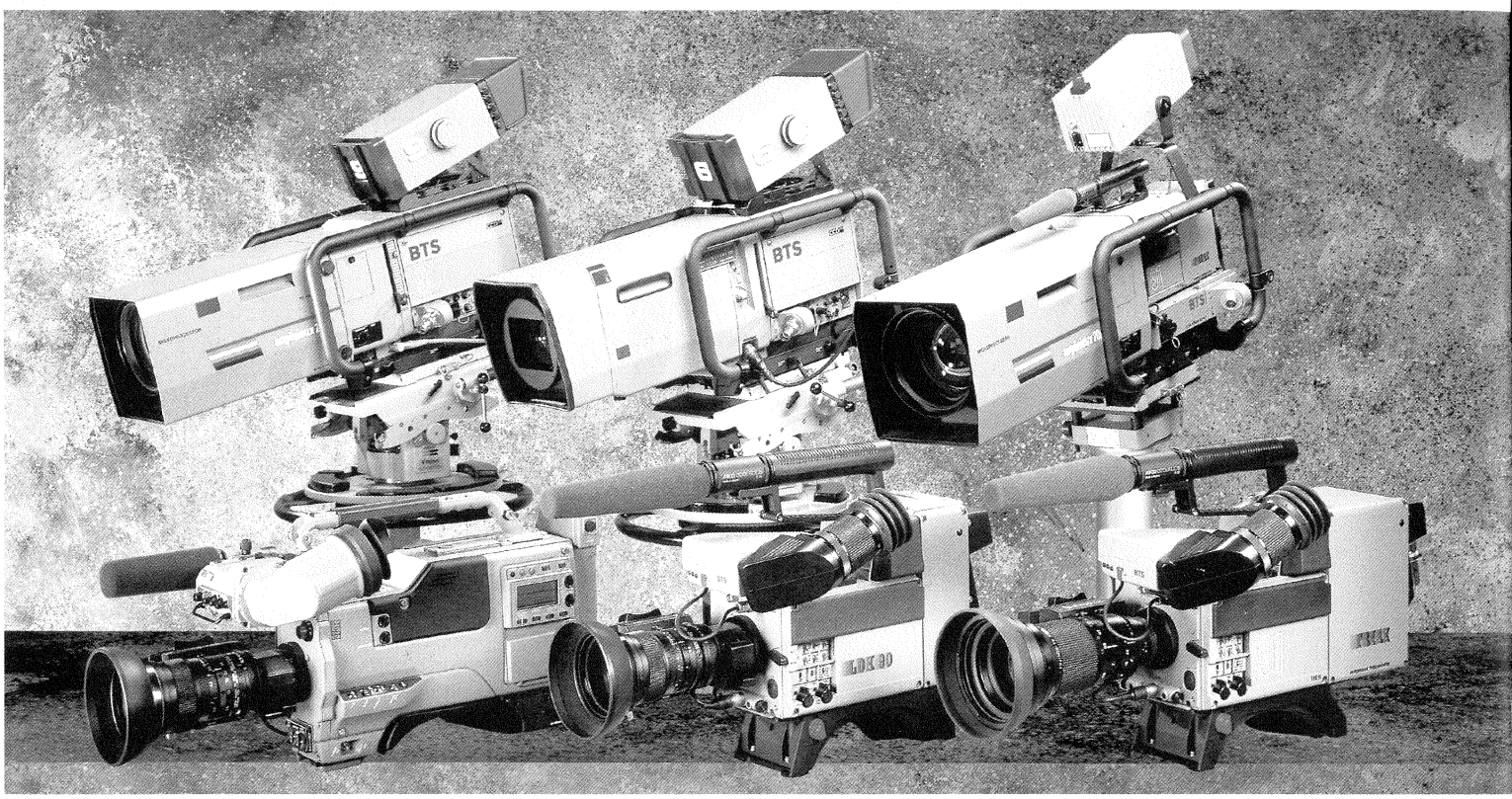
Dimensions (L x H x W)
145/195 x 195 x 120 mm (5.7/7.7 x 7.7 x 4.7 inches)
Weight
2.4 kg (5.28 lb)

Large Lens Adaptor LDK 4499
Connections
Script light; a.c. power; utility outlet 70-200 VA depending on cable length; lens controls
Dimensions (L x H x W)
540 x 310 / 400 x 350 mm
(21.3 x 12.2 / 15.8 x 13.8 inches)

Remote Control Unit (RCU)
Transmission system
PAL, PAL-M, NTSC
Power supply
110/120 and 220/240V a.c. ±10%
48 to 410 Hz
Power consumption
Approx. 65 watts with camera and 5-inch viewfinder
Input signals
Genlock reference (loop through)
Auxiliary video (loop through)
Program audio
Output signals
Composite (x2)
RGB or Components (selectable)
Monitoring/Test
Camera Microphone Audio
Connectors
Camera cable
Local Control Panel (LCP)
Communications:
- Intercom (2- or 4-wire)
- Tally
- Waveform Monitor
Camera cable length
Maximum 300 m (984 ft)
Weight
4.1 kg (9 lb)
Dimensions (L x H x W)
282 x 105 x 210 mm (11.1 x 4.1 x 8.3 inches)
Accessories for RCU
Local Control Panel with mono knob LDK 4623
Dimensions (L x H x W) 320 x 100 x 80 mm
(12.6 x 3.9 x 3.2 inches)
Local Control Panel (hand-held) LDK 4619
Dimensions (L x H x W) 132 x 25 x 69 mm
(5.2 x 1.0 x 2.7 inches)

Base Station
Transmission system
PAL, PAL-M, NTSC and SECAM
Power supply
110/120 and 220/240 V a.c.
48 to 410 Hz
Power consumption
110 watts approx.
Input signals
External Video
Video reference
Output signals
Composite, Components (Y, P_r, P_b) and RGB
Picture monitor (PXM)
Waveform monitor (WFM)
Audio channel (1)
Intercom
2- or 4-wire system (internal selection)
Dimensions (L x H x W)
482 x 132 x 482 mm (19 x 5.2 x 19 inches)
Weight
>25 kg (55 lb)
Accessories for Base Station
Operational Control Panel LDK 4622/01
Dimensions (L x H x W)
320 x 100 x 80 mm (12.6 x 3.9 x 3.2 inches)

These typical specifications are subject to change without notice



BTS Broadcast Television Systems, a Philips and Bosch company, combines an unrivalled 60 years of experience in every aspect of broadcast technology with a record of leadership in technical advancement second to none. First to develop CCD technology 20 years ago, BTS still leads the field with the only Frame Transfer sensor technology which totally eliminates the basic problem of smear, and which combines this achievement with outstanding dynamic resolution.

BTS products are distributed in more than 120 countries, and backed by a comprehensive network of sales and service agencies to assist and advise customers throughout the world.

BTS supplies a range of products from individual cameras to complete studio systems and comprehensive installations for major international events. BTS has five decades of experience in managing complete "turnkey" projects and constructing mobile outside broadcast vehicles.

BTS products, used throughout the broadcast television and production fields, include cameras, video tape recorders, telecines, production switchers, master control switchers, routing switchers, studio automation systems, computer graphics, and multi-signal processing and distribution systems.

In addition, major research and development resources are committed to the development of products for the coming age of high definition television (HDTV) systems.

Is it any wonder more people are getting behind us?

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