LDK 100IT(W) 12-bit digital production camera

- **High-end technology with 12-bit A-to-D and 22-bit DSP**
- **Advanced ergonomics and lightweight yet durable design**
- **Future proof and flexible design**
- **Extensive range of adapters and accessories**
- **Cost-effective yet out-performing IT(W) CCD sensors**
- **Quick and easy set-up of both operational and advanced technical settings**

The Digital 'Companion'

Have you ever encountered a camera that meets everyone's needs while still making good business sense? Now you have! The LDK 100 Series cameras are designed with all of your requirements in mind, regardless of whether you are a producer, camera operator or engineer, making it the ultimate 'companion' for everyone in the digital broadcast world.

Video production, whether in the studio or on location, is teamwork that produces favorable results only if everybody is given the chance to fully exploit his or her skills. No surprise then that we sat together with a large group of respected people in the video industry to find out how to serve everybody with a companion that doesn't limit them in getting the best out of themselves, or, even better, to push their limits.

LDK 100 Series Digital Cameras
The result is a series of camera heads and adapters that allow you to create the ideal tool to do your job. Feature wise, technology wise, and budget wise, and always with a host of benefits that makes working with the LDK 100 Series cameras a pleasure. All LDK 100 Series Digital Cameras are equipped with the unsurpassed digital technology common to high-end broadcast cameras.

They all feature 12-bit A-to-D conversion and dynamically managed 22-bit digital signal processing. This fully digital path ensures that whatever you shoot is reproduced naturally by applying digital knee, gamma, matrixing and contour, including Dual Skin Contour Circuits with Automatic Skin Tone Selection. On top of this it allows vision engineers to manipulate the picture to suit the ambience of a program or to introduce special effects like sepia or film-like images by using optional Smart-Touch™ software*.

You will experience levels of picture performance and accuracy that are not attainable with 10-bit technology.

DVCPRO

THOMSON MULTIMEDIA
BROADCAST SOLUTIONS

Ergonomics that make handheld shooting fun

How often did you or your operators feel exhausted after only a few hours of carrying a portable camera? Pick-up an LDK 100 IT(W) and feel the difference. Not only does it's light weight design make it a favorite, the convenient shape, easily adjustable shoulder pad and optional unique integrated zoom grip also make it possible for operators to fully focus their energy on creative shooting.

**A full-fledged member of the LDK Series Camera Family**

LDK 100 IT(W) users enjoy the benefit of universally applicable accessories that are available for the entire LDK Series. Whether it is the Camera control system, the range of viewfinders or the SuperXPander large lens adapter, your LDK 100IT(W) is a passport to a world of flexible solutions that meet the requirements of every assignment. Customers with LDK Series cameras already in their studios or mobile facilities enjoy the seamless integration of the LDK 100IT(W) in their existing infrastructure while making optimum use of previous investments. Others will find that the LDK 100IT(W) optimizes the financial effectiveness of their operation by mixing and matching the different 'building blocks' of the LDK 100 Series, including DVCPRO and DVCPRO50 recorders and Betacam SP™ adapters.

The LDK 100IT(W): your ticket to the future

The modular design of the LDK 100 Series makes your investment future proof over an extended period of time. As your needs change, or technology advances and new recording formats are introduced, you may swiftly adopt your outfit to the 'flavor of the day'. This feature alone is surely invaluable, especially in a time of rapid and unexpected change.
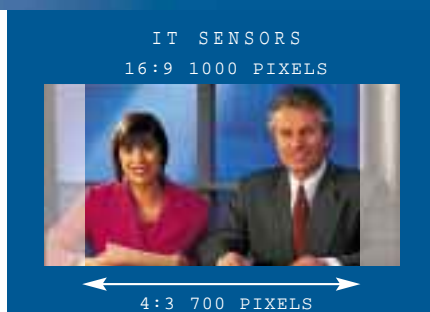
Suited for your applications

Equipped with Ultra Low Smear IT(W) CCDs, the LDK 100IT(W) will feel just perfect in a variety of situations and program styles, from talk shows and regional stations, to news studios and parliamentary studio's. Acquisition in wide screen is performed by the industry standard 'side-panel method' thus getting the maximum out of your camera system.

Quick and easy setting-up of operational and technical parameters

The LDK 100IT(W) features a host of intelligent automatics too, including continuous auto-black, which gives you perfect black levels and shading without the need for a black balancing control. A specially adjusted matrix is also provided to help ensure excellent color reproduction when working under fluorescent lights. In addition, the LDK 100IT(W) has 'Intel Inside'. This powerful processor manages the automatics, and video DSPs, as well as the built-in self-diagnostics and self-calibration circuits. As camera software advances and new features become available, software upgrades can easily be downloaded from a PC via the standard serial RS-232 link, even by means of E-mail!

Your personal camera in less than a second

The LDK 100IT(W) makes use of a credit card style Smart Card which stores up to 4 Scene Files and two -so-called - Operator Files. The Operator File contains all operational settings of the camera, such as, viewfinder information, tally settings and zebra, allowing an individual operator to turn any LDK 100IT(W) into his or her preferred camera. Join the family of LDK 100 Series users and experience these benefits and more. Whether you're an operator, engineer, producer or financial controller, you'll see that the LDK 100IT(W) will be the digital 'companion' for everyone in your facility.
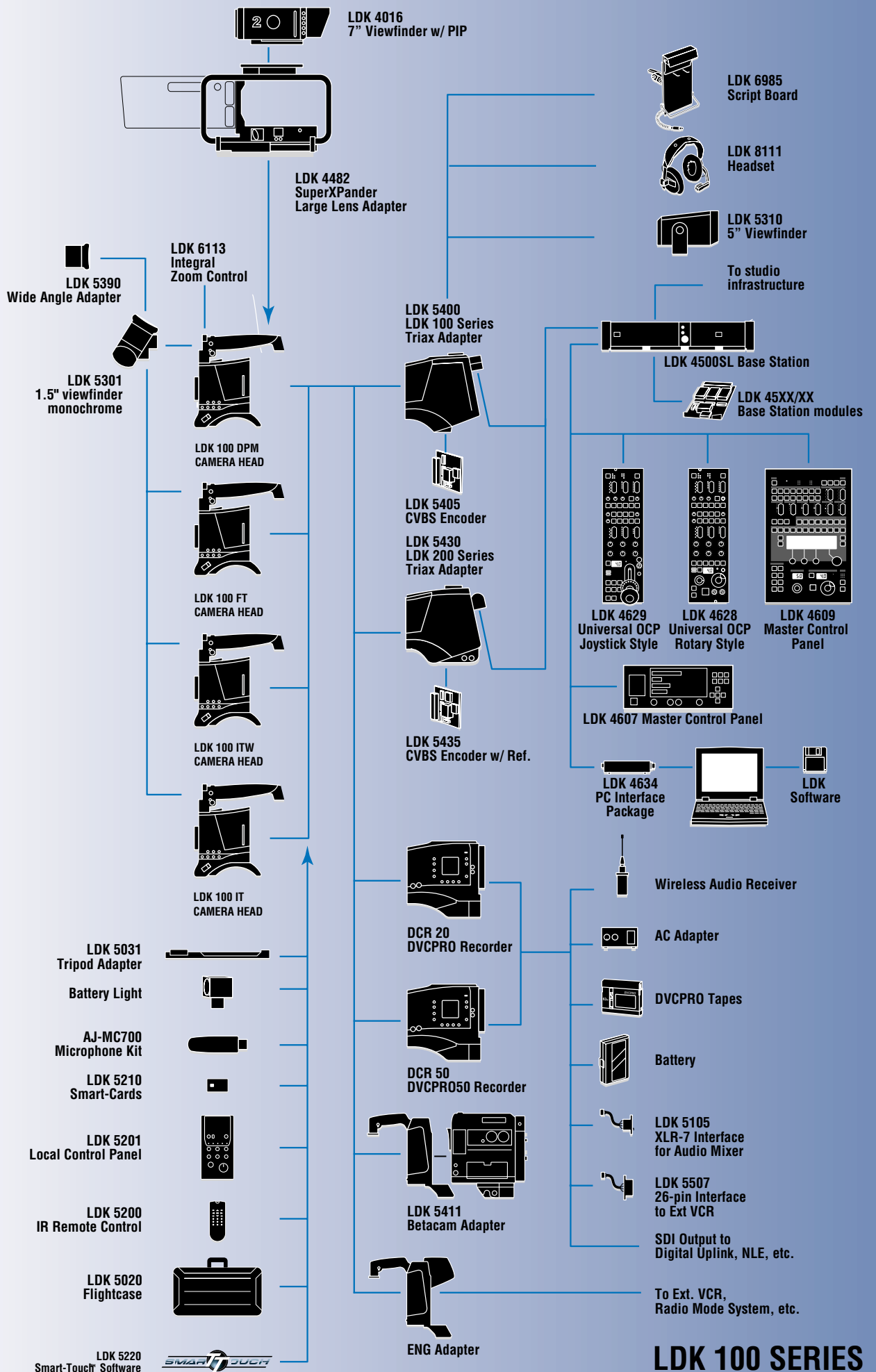
LDK 4500SL Series SlimLine SDTV
Camera Base Station

The LDK 4500SL SlimLine Camera Base Station is the perfect interface between the LDK 200 Series cameras and the rest of your system. A heavy-duty base station with state-of-the-art technology has never been available in such a small cabinet – yet it still provides the quality and functionality expected from a broadcast product. The very high level of modularity of this base station guarantees ideal matching with any type of application. Whether you will use it in a studio or for mobile field production. A dedicated brochure of the LDK 4500SL series basestation is available from your sales representation.

LDK 4016
7" Viewfinder w/ PIP

LDK 6985
Script Board

LDK 8111
Headset

LDK 5310
5" Viewfinder

LDK 4482
SuperXPander
Large Lens Adapter

LDK 6113
Integral
Zoom Control

LDK 5390
Wide Angle Adapter

LDK 5400
LDK 100 Series
Triax Adapter

To studio
infrastructure

LDK 4500SL Base Station

LDK 45XX/XX
Base Station modules

LDK 5301
1.5" viewfinder
monochrome

LDK 100 DPM
CAMERA HEAD

LDK 5405
CVBS Encoder

LDK 5430
LDK 200 Series
Triax Adapter

LDK 4629
Universal OCP
Joystick Style

LDK 4628
Universal OCP
Rotary Style

LDK 4609
Master Control
Panel

LDK 100 FT
CAMERA HEAD

LDK 100 ITW
CAMERA HEAD

LDK 5435
CVBS Encoder w/ Ref.

LDK 4607 Master Control Panel

LDK 4634
PC Interface
Package

LDK
Software

LDK 100 IT
CAMERA HEAD

Wireless Audio Receiver

LDK 5031
Tripod Adapter

AC Adapter

Battery Light

DCR 20
DVCPRO Recorder

DVCPRO Tapes

AJ-MC700
Microphone Kit

LDK 5210
Smart-Cards

Battery

LDK 5201
Local Control Panel

DCR 50
DVCPRO50 Recorder

LDK 5105
XLR-7 Interface
for Audio Mixer

LDK 5200
IR Remote Control

LDK 5507
26-pin Interface
to Ext VCR

LDK 5020
Flightcase

LDK 5411
Betacam Adapter

SDI Output to
Digital Uplink, NLE, etc.

To Ext. VCR,
Radio Mode System, etc.

LDK 5220
Smart-Touch Software

ENG Adapter

LDK 100 SERIES
CAMERA SYSTEM

TECHNICAL SPECIFICATIONS

GENERAL
Power requirements	Triax powered or DC 12V
Power consumption	20 W (incl. optional viewfinder and triax adaptor)
Operating temperature	-20ºC to 45ºC (-4ºF to 113ºF)
Storage temperature	-20ºC to 60ºC (-4ºF to 140ºF)
Weight	4.9 kg (including viewfinder and triax adaptor)
Triax cable length	RGB transmission max. 3000 m with 14mm cable (9900ft with 0,55" cable)
Digital quantization	12 bits A/D
Digital signal	processing 18 MHz and 36 MHz, >22 bits accuracy
Exposure control	down to 1/2000 sec
Clean scanning	NTSC: 60.1 - 151.0 Hz PAL: 50.1 - 103.0 Hz
Optical system	F1.4 with quartz filter
Optical filters	clear, 1/4 ND, 1/16 ND, 1/64 ND
Vertical Resolution	NTSC: 400 TV lines (450 TV lines in EVR) PAL: 480 TV lines (530 TV lines in EVR) (EVR = Extended Vertical Resolution mode)
Registration	<0.05% (all zones, without lens)
Dynamic Range	500% (Typical)

CAMERA SECTION LDK 100 IT
Pick-up device	3 x 2/3" Interline Transfer CCD,
Aspect Ratio	4:3
Picture elements	NTSC: 813 (H) x 503 (V) PAL: 813 (H) x 585 (V)
Smear	-120 dB (typical)
Sensitivity	2000 lux at F11 (typical)
Minimum illumination	approx. 0.25 lux (F1.4 lens, +42 dB gain)
Modulation depth	50 % typical at 5 MHz (equals Hor. Resolution of 700 TV lines)
S/N ratio	NTSC: 63 dB (typical) PAL: 61 dB (typical)
Gain	-6 dB to +42 dB in 3 dB steps (user defined presets)

CAMERA SECTION LDK 110 ITW
Pick-up device	3 x 2/3" Interline Transfer CCD,
Aspect Ratio	switchable 16:9 and 4:3
Picture elements	NTSC: 1038 (H) x 504 (V) PAL: 1038 (H) x 594 (V)
Smear	-125 dB (typical)
Sensitivity	2000 lux at F11 (typical) in both 16:9 and 4:3 mode

Minimum illumination	approx. 0.5 lux (F1.4 lens, +36 dB gain)
Modulation depth	16:9 mode 70 % typical at 5 MHz (equals Hor. Resolution of 700 TV lines in both 4:3 and 16:9) 4:3 mode 50 % typical at 5 MHz (equals Hor. Resolution of 700 TV lines in both 4:3 and 16:9)
S/N ratio	NTSC: > typical 63 dB in both 16:9 and 4:3 mode PAL: > typical 61 dB in both 16:9 and 4:3 mode
Gain	-6 dB to +36 dB in 3 dB steps (user defined presets) 5" viewfinder (optional)

1.5" VIEWFINDER (optional)
CRT	1.5" monochrome
Resolution	>600 TV lines (center)
Features	Controls for Brightness, Contrast, Zebra and Dioptry indicators for Tally, Gain, Col. Yemp., Battery, Tape End and Filters.

INPUTS with LDK 5400 Triax adapter
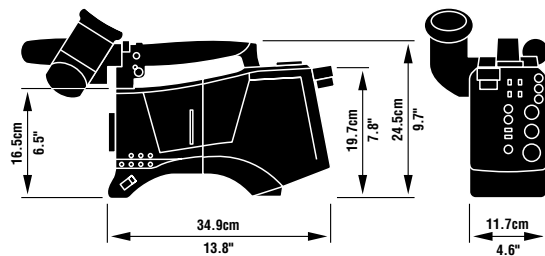|	
Front mic	1 x XLR 3, balanced, +48 V
Mic	1 x XLR 3, balanced, +48 V selectable (1 Ch. to Base Station)
DC-12 V	XLR 4
Control input	9 pin, RS-232 compatible

OUTPUTS with LDK 5400 Triax adapter
Triax Option	Fischer/ARD/Lemo/Trilock
Video (CVBS)	BNC (1.0 Vp-p, 75 Ohm), using optional encoder LDK 5405
Viewfinder	20 pin
Monitor (Y)	BNC (1.0 Vp-p, 75 Ohm), viewfinder signal or ext. video (from base station)
Script light	12 V, 0.25 A, 3 pin Fisher
Lens	12 pin
Head set	option XLR 5, Tuchel (intercom channels ENG/PROD/PROGR)

SUPPLIED ACCESSORIES
1.5" viewfinder (optional)
User manual
Owner Card (1x)
User Card (2x)
Rain cover
Smart Touch™ (optional)

For more information on Accessories, Smart Touch™ and Triax Basestation see separate brochures: Camera and Camcorder Accessories, Smart Touch™ and LDK 4500SL SlimLine Basestation.

16.5cm / 6.5"
19.7cm / 7.8"
24.5cm / 9.7"
34.9cm / 13.8"
11.7cm / 4.6"

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